TENNESSEE VALLEY AUTHORITY

Resource Development
River Basin Operations
Water Resources

TVA/WR/WQ--90/9

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COMPENDIUM OF ORDINANCES
FOR GROUNDWATER
PROTECTION

TVA/WR/WQ-90/9

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JMR
MASTER

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COMPENDIUM OF ORDINANCES FOR
GROUNDWATER PROTECTION

INTRODUCTION

Groundwater is an extremely important resource in the Tennessee Valley. Nearly two-thirds of the Tennessee Valley's residents rely, at least in part, on groundwater supplies for drinking water. In rural areas, approximately ninety-five percent of residents rely on groundwater for domestic supplies.

A large supply of usable groundwater can help spur economic development and provide for the needs of a growing population. Without adequate planning and controls, however, economic development and population pressures can cause a gradual degradation of groundwater which, in turn, can hinder further industrial recruitment or economic expansion and residential development.

Population growth and economic development increase the volume and kinds of wastes requiring disposal which can lead to groundwater contamination. In addition to disposal problems associated with increases in conventional wastewater and solid wastes, technological advancements in recent decades have resulted in new chemicals and increased usage in agriculture, industry, and the home. Unfortunately, there has not been comparable progress in identifying the potential long-term effects of these chemicals, in managing them to prevent contamination of groundwater, or in developing treatment technologies for removing them from water once contamination has occurred.

The challenge facing residence of the Tennessee Valley is to manage growth and economic and technological development in ways that will avoid polluting the groundwater resource. Once groundwater has been contaminated, cleanup is almost always very costly and is sometimes impractical or technically infeasible. Therefore, prevention of contamination--not remedial treatment--is the key to continued availability of usable groundwater.

Tennessee Valley local governments must become actively involved in groundwater management and protection. They should not depend upon State or Federal government agencies to manage the resource for them but take an active interest in doing what they can at the local level to complement the broader statewide programs. Although groundwater resources may extend across local and State boundaries, groundwater is usually considered a local resource. In fact, communities that depend on the local groundwater resource have the greatest stake in its quality. Because of the slow movement of groundwater (several feet per day to as little as inches per century), all groundwater pollutants are, by nature, local, in effect, and the main land use decisions that affect groundwater are local decisions. There are many opportunities for local government to protect groundwater, but taking action requires a plan.

Enactment of local ordinances for protecting groundwater resources has been successful in many locations in the United States. This document provides a compilation of a number of these ordinances from various states, counties, cities, and other forms of local government.

The ordinances included demonstrate a wide variety of groundwater protection techniques. To facilitate use of the collection, they have been grouped into nine categories: hazardous materials, land use regulations, septic tanks and wastewater disposal, general groundwater protection programs, sinkhole protection, well construction and abandonment regulations, conservation district ordinances, site development regulations, and erosion control. Many of the ordinances, however, are broad in scope and may overlap categories. They are generally grouped by the major provisions contained. While many types of regulations are described, the collection is not comprehensive--many other useful ordinances may exist. Some of these are listed in appendix A.

Of the 33 ordinances presented, 22 represent measures which have been implemented by 17 local governments. Eleven are model ordinances developed by organizations with an interest in promoting local groundwater protection.

The ordinances are provided to document approaches which have been tried in various areas to assist local governments in developing their own groundwater protection plans. The similarity of language in some of the ordinances demonstrates their applicability as models. It is hoped that local officials will find assistance here which will address local protection needs within the limits of their local and state laws. Since ordinances may have met with varying degrees of success, local leaders will want to review the strengths and weaknesses of each before embarking on any course of action. Obviously, legal counsel is prerequisite to developing and implementing such ordinances.

CHAPTER 20.04

GENERAL PROVISIONS

- Sections: 20.04.010 Purpose
20.04.020 General Obligation--Safety and Care
20.04.030 Specific Obligation
20.04.040 Definitions
20.04.050 Professional Assistance for City Determinations

Section 20.04.010 Purpose

The purpose of this title is the protection of health, life, resources, and property through prevention and control of unauthorized discharges of hazardous materials (Ord. 2056-83 § 1 [part]).

Section 20.04.020 General Obligation--Safety and Care

- A. No person, firm, or corporation shall cause, suffer, or permit the storage of hazardous materials:
1. In a manner which violates a provision of this title or any other local, Federal, or State statute, code, rule, or regulation relating to hazardous materials; or
 2. In a manner which causes an unauthorized discharge of hazardous materials or poses a significant risk of such unauthorized discharge.
- B. City shall have discretion to exempt an applicant from any specific requirements of this title, other than the requirement for secondary containment in underground storage facilities, except as provided in Section 20.12.020.C.4, or to require applicant to meet additional or modified requirements, where such action would be appropriate and consistent with achieving the general obligation of this title for protecting public health, safety, and welfare (Ord. 2087-83 § 1; Ord. 2056-83 § 1 [part]).

Section 20.04.030 Specific Obligation

- A. Any person, firm, or corporation which stores any material regulated by Section 20.08.010 which is not excluded by Section 20.08.020 shall obtain and keep current a Hazardous Material Storage Permit.
- B. All such hazardous materials shall be contained in conformity with Chapter 20.12.
- C. The storage of such hazardous materials shall be in conformance with the approved Hazardous Materials Management Plan.

- D. The city shall apply for, and the officer consider and issue where appropriate, a permit in conformity with this title, for the storage of hazardous materials by city in an underground storage tank, as those terms are defined in Chapter 6.7 of Division 20 of the California Health and Safety Code, wherever the city's storage facility may be situated. Any other city, county, district or department, or agency of the State which stores any hazardous substance in an underground storage tank, as those terms are defined in Chapter 6.7, in this city without a permit meeting the requirements of said Chapter 6.7 issued by such other local agency, shall obtain and keep current a permit from city which conforms at a minimum to Sections 25284 and 25284.1 of the Health and Safety Code (Ord. 2087-83 § 2; Ord. 2056-83 § 1 [part]).

Section 20.04.040 Definitions

Unless otherwise expressly stated, whenever used in this title, the following terms shall have the meanings set forth below:

- A. Abandoned--when referring to a storage facility, means out of service and not safe-guarded in compliance with this title.
- B. Facility--means a building or buildings, appurtenant structures, and surrounding land area used by a single business entity at a single location or site.
- C. Hazard class--means Explosives A, Explosives B, Explosives C, Blasting agents, Flammable liquids, Combustible liquids, Flammable solids, Oxidizers, Organic peroxides, Corrosive materials, Flammable gases, Poisons A, Poisons B, Irritating materials, Etiologic agents, Radioactive materials, Other Regulated Materials (ORM) A, B, C, D, and E. For purposes of this chapter, the U.S. Department of Transportation (DOT) definitions in 49 CFR Part 173, as amended, shall be utilized; however, whenever the definitions in 49 CFR 173 refer to transportation or hazards associated with transportation, they shall be deemed to refer to storage or other regulated activity under this title.
- D. Hazardous material--means any material which is subject to regulation pursuant to Chapter 20.08. A mixture shall be deemed to be a hazardous material if it either is a waste and contains any material regulated pursuant to Chapter 20.08, or is a nonwaste and contains one percent (1%) by volume or more of any material regulated pursuant to Chapter 20.08.
- E. Officer--means the employee assigned by city to administer this title, or any designee of such employee.
- F. Permit--means any Hazardous Materials Storage Permit issued pursuant to this title, as well as any additional approvals thereto.
- G. Permit quantity limit--means the maximum amount of hazardous material that can be stored in a storage facility. Separate permit quantity

limits will be set for each storage facility for which a permit is obtained in accordance with the requirements of this title.

- H. Permittee--means any person, firm, or corporation to whom a permit is issued pursuant to this title, and any authorized representative, agent, or designee of such person, firm, or corporation.
- I. Pipes--means pipeline systems which are used in connection with the storage of hazardous materials exclusively within the confines of a facility and which are not intended to transport hazardous materials in interstate or intrastate commerce or to transfer hazardous materials in bulk to or from a marine vessel.
- J. Primary containment--means the first level of containment, i.e., the inside portion of that container which comes into immediate contact on its inner surface with the hazardous material being contained.
- K. Product-tight--means impervious to the hazardous material which is contained, or is to be contained, so as to prevent the seepage of the hazardous material from the primary containment. To be product-tight, the container shall be made of a material that is not subject to physical or chemical deterioration by the hazardous material being contained.
- L. Secondary containment--means the level of containment external to and separate from the primary containment.
- M. Single-walled--means construction with walls made of but one thickness of material. Laminated, coated, or clad materials shall be considered as single-walled.
- N. Storage facility--means any one or combination of tanks, sumps, wet floors, waste treatment facilities, pipes, vaults, or other portable or fixed containers, used, or designed to be used, for the storage of hazardous materials at a facility.
- O. Sump--means a pit or well in which liquids collect.
- P. Unauthorized discharge--means any release or emission of any hazardous material which does not conform to the provisions of this title, unless such release is in accordance with the release regulations of the Bay Area Air Quality Management District and California Air Resources Board, with a National Pollutant Discharge Elimination System Permit, with waste discharge requirements established by the Regional Water Quality Control Board pursuant to the Porter Cologne Water Quality Act, or with local sewer pretreatment requirements for Publicly Owned Treatment Works.
- Q. Wet floor--means a floor which is used to routinely collect, contain, or maintain standing liquids or to transmit standing liquids on a more or less continuous basis (Ord. 2056-83 § 1 [part]).

Section 2.04.050 Professional Assistance for City Determinations

Whenever the approval or satisfaction of the city may be required in this title for a design, monitoring, testing, or other technical submittal by an applicant or permittee, city may, in its discretion, require such applicant or permittee at such applicant's or permittee's sole cost and expense, to retain a suitably qualified independent engineer, or chemist, or other appropriate professional consultant, acceptable to city for the purpose of evaluating and rendering a professional opinion respecting the adequacy of such submittal to achieve the purposes of this title. City shall be entitled to rely on such evaluation and/or opinion of such engineer, chemist, or professional consultant in making the relevant determinations provided for in this title (Ord. 2056-83 § 1 [part]).

CHAPTER 20.08

MATERIALS REGULATED

Sections: 20.08.010 Materials Regulated
20.08.020 Exclusions
20.08.030 Underground Tanks

Section 20.08.010 Materials Regulated

The materials regulated by this title shall consist of the following:

- A. Any material listed as a hazardous and/or extremely hazardous material or hazardous and/or extremely hazardous waste in Sections 66680 and 66685 of Title 22 of the California Administrative Code, as amended, whether such material is stored or handled in waste or nonwaste form; or
- B. Any material which is listed on the list of the Environmental Protection Agency (EPA) pollutants, 40 Code of Federal Regulations, Section 401.15, as amended; or
- C. Any material which is classified by the National Fire Protection Association (NFPA) as either a flammable liquid, a Class II combustible liquid, or a Class IIIA combustible liquid; or
- D. Any material which is listed by the Director of the Department of Industrial Relations in Title 8, California Administrative Code, Section 339, as amended, excluding all footnotes thereto and subject to the exclusions specified in this subsection. Such exclusions shall apply only to materials which are not otherwise regulated pursuant to this section. These exclusions shall be as follows:
 1. Materials recognized in the official United States, Pharmacopeia, official Homeopathic Pharmacopeia of the United States, or official National Formulary, or any supplement to any of them if such materials are intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; hormones; enzymes; and aflatoxins;
 2. Aluminum salts; Asphalt fumes; Atrazine; Benomyl; Bis(dimethylthiocarbamoyl) disulfide; Boron oxide; 4-tert-Butyl-2-chlorophenylmethyl methylphosphoramidate; Camphor; Carbon black; 2-Chloro-6 (trichloromethyl) pyridine; Clopidol; Coal tar pitch volatiles; Cotton dust; Dibenzoyl peroxide (Benzoyl peroxide); Dicyclopentadienyl iron; 3,5-Dinitro-o-toluamide; 2,6-Di-tert-butyl-p-cresol; Ferbam; Fumaric acid; Glass, fibrous or dust; Graphite; Helium; Iron oxide; Iron salts; Magnesium oxide; Mica; Mineral wool fiber; Oil mist; Phenothiazine; Phenyl ether; Phenyl ether-diphenyl (eutectic mixture), vapor; Phtalic anhydride; m-Phtalodinitrile;

Polytetrafluoroethylene D-composition products; Rhodium salts; Ronnel; Rosin core solder; Rotenone, commercial; silica; Soapstone; Talc; Tantalum oxide; Terphenyls; 4-4'-Thiobis (6-tert-butyl-m-cresol).

- E. Any material which has been determined to be hazardous based upon any appraisal or assessment by or on behalf of the party storing this material in compliance with the requirements of the EPA or the California Department of Health Service, or which should have been, but was not determined to be hazardous due to the deliberate failure of the party storing the material to comply with the requirements of the EPA and/or the Department of Health Services; or
- F. Any material which has been determined by the party storing it, through testing or other objective means, to be likely to create a significant potential or actual hazard to public health, safety, or welfare. This subsection shall not establish a requirement to test for the purposes of this title (Ord. 2067-83 § 1; Ord. 2056-83 § 1 [part]).

20.08.020 Exclusions

This title does not apply to the following:

A. Certain Elemental Metals

The following elemental metals included within the purview of Section 20.08.010 shall not be considered hazardous materials for purposes of this title unless they are stored in a friable, powdered, or finely divided state: beryllium, cadmium, chromium, copper, lead, nickel, and silver.

B. Retail Products

Hazardous materials when contained solely in consumer products packaged for distribution to, and use by, the general public or commercial products used at the facility solely for janitorial or minor maintenance purposes such as paint thinner or wax strippers.

C. Feed

Hazardous materials when contained in a substance intended for use as animal feed.

D. Work Station

Hazardous materials located at a work station in a quantity reasonably required for use as determined by city under the circumstances.

E. Exemption

The city shall exempt any material from the requirements of this title where it has been demonstrated to the satisfaction of city

that the material in the quantity and/or solution stored does not present a significant actual or potential hazard to the public health, safety, or welfare (Ord. 2067-83 §§ 2, 3; Ord. 2056-83 § 1(part)).

Section 20.08.030 Underground Tanks

Notwithstanding Section 20.08.020 above, and in addition to those materials regulated pursuant to Section 20.08.010 above, a permit shall be required for the storage in an underground storage tank as defined by California Health and Safety Code Section 25281(r), as amended, of any material defined as a hazardous substance, in accordance with California Health and Safety Code Section 25281(d), as amended (Ord. 2134-84 § 1; Ord. 2087-83 § 3).

CHAPTER 20.12

CONTAINMENT STANDARDS

Sections:	20.12.010	Containment of Hazardous Materials
	20.12.020	New Storage Facilities
	20.12.030	Existing Storage Facilities
	20.12.040	Out of Service Storage Facilities
	20.12.050	Monitoring
	20.12.060	Maintenance, Repair, or Replacement
	20.12.070	Handling
	20.12.080	Secured Facilities
	20.12.090	Emergency Equipment
	20.12.100	Posting of Emergency Procedures

Section 20.12.010 Containment of Hazardous Materials

No person, firm, or corporation shall store any hazardous materials regulated by this title until a permit or approval has been issued pursuant to this title. No permit or approval shall be granted pursuant to this title unless permit applicant demonstrates to the satisfaction of city, by the submission of appropriate plans and other information, that the design and construction of the storage facility will result in a suitable manner of storage for the hazardous material or materials to be contained therein.

All installation, construction, repair or modification, closure, and removal shall be to the satisfaction of city. City shall have the discretion to exempt an applicant from any specific requirements, except that the discretion with regard to underground storage facilities shall be exercised in accordance with subsection 20.12.020.C. 4 and 5 below; or to impose reasonable additional or different requirements in order to better secure the purpose and general obligation of this title for protection of public health, safety, and welfare. The guidelines approved pursuant to Section 20.52.020 shall serve as an interpretation of the provisions of this title addressed in such guidelines (Ord. 2087-83 § 4; Ord. 2067-83 § 4; Ord. 2056-83 § 1 [part]).

20.12.020 New Storage Facilities

A. No person, firm, or corporation shall construct or install any new storage facility until a permit or approval has been issued pursuant to this title.

B. Monitoring Capability

All new storage facilities intended for the storage of hazardous materials which are liquids or solids at standard temperature and pressure (STP) shall be designed and constructed with a monitoring system capable of detecting that the hazardous material stored in the primary containment has entered the secondary containment.

Visual inspection of the primary containment is the preferred method; however, other means of monitoring may be required by city. Where secondary containment may be subject to the intrusion of water, a means of monitoring for such water shall be provided. Where secondary containment of an underground storage facility may be subject to the intrusion of water, a method for safely removing the water shall also be provided.

Whenever monitoring devices are provided, they shall, where applicable, be connected to attention-getting visual and/or audible alarms.

C. Containment Requirements

Primary and secondary levels of containment shall be required for all new storage facilities intended for the storage of hazardous materials which are liquids or solids at standard temperature and pressure (STP), unless exempted by city.

1. All primary containment shall be product-tight:
2. Secondary containment:
 - a. All secondary containment shall be constructed of materials of sufficient thickness, density, and composition so as not to be structurally weakened as a result of contact with the discharged hazardous materials and so as to be capable of containing hazardous materials discharged from a primary container for a period of time equal to or longer than the maximum anticipated time sufficient to allow recovery of the discharged hazardous material.
 - b. In the case of an installation with one primary container, the secondary containment shall be large enough to contain at least 110% of the volume of the primary container.
 - c. In the case of a storage facility with multiple primary containers, the secondary container shall be large enough to contain 150% of the volume of the largest primary container placed in it, or 10% of the aggregate internal volume of all primary containers in the storage facility, whichever is greater.
 - d. If the storage facility is open to rainfall, then the secondary containment shall be able to additionally accommodate the volume of a twenty-four (24) hour rainfall as determined by a one-hundred (100) year storm history.
3. Laminated, coated, or clad materials shall be considered single-walled and shall not be construed to fulfill the requirements of both primary and secondary containment.

4. Variance

- a. A variance from the requirement for secondary containment for an underground storage facility may be granted upon a written finding by the officer issuing the permit, which has been reviewed and approved by the city council that based on the special circumstances:
 - (1) The requirement of secondary containment creates an unusual and particular hardship; and
 - (2) An equivalent degree of protection is provided by the proposed alternative; and
 - (3) The proposed alternative has been appropriately certified as providing an equivalent degree of protection, by an independent consultant retained in accordance with Section 20.04.050, or has been specified as potentially appropriate for a variance in the guidelines approved pursuant to Section 20.52.020.
- b. The city council shall consider the variance, at a public meeting, at which oral or written presentation on the matter may be made. A notice which includes a statement that a variance from secondary containment for hazardous materials will be considered, and which specifies the address of the facility seeking the variance, and the time and place of the meeting shall be given in the following manner:
 - (1) The city clerk shall cause a copy of the notice to be published once in a newspaper of general circulation in the city not less than ten (10) days prior to the meeting; and
 - (2) The city clerk shall cause a copy of the notice to be mailed at least ten (10) days prior to the meeting to any party who files a written request with the city clerk for mailed notice of meetings at which such variance is to be considered. Such written request for notice shall be valid for one (1) year from the date on which it is filed unless a renewal request is filed. Renewal requests for such mailed notices shall be filed on or before April 1st of each year.

5. Variance--Construction and Monitoring Requirements

Underground storage tanks may be granted a variance from the standards for construction and monitoring set forth in this subsection, other than from the requirement for double containment, only upon a written finding by the officer issuing the permit that the applicant has demonstrated by clear and convincing evidence:

- a. That because of special circumstances not generally applicable to other property or facilities, including size, shape, design, topography, location, or surroundings, the strict application of the standards of this title would be unnecessary to adequately protect the soil and beneficial uses of the waters of the State from an unauthorized release; or
- b. That strict application of this title would create practical difficulties not generally applicable to other facilities or property; and that the proposed alternative will adequately protect the soil and beneficial uses of the waters of the State from an unauthorized release.

D. Overfill Protection

Means of overfill protection may be required for any primary container. This may be an overfill prevention device and/or an attention-getting high level alarm.

E. Separation of Materials

Materials that in combination may cause a fire or explosion, or the production of a flammable, toxic, or poisonous gas, or the deterioration of a primary or secondary container shall be separated in both the primary and secondary containment so as to avoid potential intermixing.

F. Drainage System

Drainage of precipitation from within a storage facility containing hazardous materials which are liquids or solids at STP shall be controlled in a manner approved by the city so as to prevent hazardous materials from being discharged. No drainage system will be approved unless the flow of the drain can be controlled.

With regard to underground storage facilities, if water could enter into the secondary containment by precipitation or infiltration, the underground storage facility shall contain a means of removing the water by the owner or operator. This removal system shall also prevent uncontrolled removal of this water. Water removed by such removal system shall be analyzed for hazardous substance contamination, and disposed of, if so contaminated, at an authorized disposal facility.

G. Storage Tank Testing for Underground Storage Tanks

1. Before an underground storage tank is covered, enclosed, or placed in use, the standard installation testing for requirements for underground storage systems specified in Section 2-7 of the Flammable and Combustible Liquids Code, adopted by the National Fire Protection Association (NFPA 30) as amended and published in the respective edition of the Uniform Fire Code, shall be followed.

2. Before the underground storage tank is placed in service, the underground storage systems shall be tested in operating condition using a precision test as defined in National Fire Protection Association Pamphlet 329 "Recommended Practice of Handling Underground Leakage of Flammable and Combustible Liquids," as amended, for proving the integrity of an underground storage tank.

H. Excess Water Removal for Underground Storage Tanks

If the underground storage tank is designed to maintain a water level in the secondary containment, the tank shall be equipped with a safe method of removing any excess water to a holding facility and the owner or operator shall inspect the holding facility monthly for the presence of excess water overflow. If excess water is present in the holding facility, the permit holder shall provide a means to analyze the water for hazardous substance contamination and a means to dispose of the water, if so contaminated, at an authorized disposal facility (Ord. 2134-84 §§ 2, 3, and 4; Ord. 2091-83 §§ 1-3; Ord. 2087-83 §§ 5.6; Ord. 2067-83 §§ 5, 6; Ord. 2056-83 § 1 [part]).

20.12.030 Existing Storage Facilities

Any storage facility in existence as of the effective date of this title, or any storage facility for which a building permit was issued prior to the effective date of this title which does not meet the standards of Section 20.12.020 may be permitted pursuant to this title as long as it is providing suitable storage for hazardous materials. In addition, storage facilities which contain hazardous materials which are liquids or solids at standard temperature and pressure (STP) must be monitored in accordance with a plan approved by city as set forth herein.

- A. A monitoring plan for each such storage facility containing hazardous materials which are liquids or solids at STP, shall be submitted to city as part of the Hazardous Materials Management Plan.
- B. Monitoring under such plan shall include visual inspection of the primary containment wherever practical; however, if the visual inspection is not practical, an alternative method of monitoring each storage facility on a semiannual or more frequent basis may be approved by city, except for underground storage facilities, for which monitoring by alternative methods on a monthly or more frequent basis may be required.
- C. Alternative method(s) of monitoring may include but are not limited to: pressure testing, vacuum testing, or hydrostatic testing of piping systems, groundwater monitoring well(s) which are downgradient and adjacent to the storage facility; vapor analysis within the well(s) where appropriate; and analysis of the soil boring(s) at the time of initial installation of the well(s). The number of well(s), depth of well(s), location of well(s), and sampling frequency shall be approved by the city.

- D. Such monitoring devices and methods as approved by city shall be installed and operating within six (6) months of the issuance of a provisional permit in accordance with Section 20.32.050 and Section 20.56.010.B.1. City may grant an extension of this compliance date; however, such extension shall not exceed one (1) additional year. The full-term permit may be issued when compliance with this subsection has been achieved.

Notwithstanding the foregoing, with regard to underground storage facilities, on or before January 1, 1985, or the deadline set forth in Health and Safety Code Section 25284.1, as the same shall be amended, whichever is later, such facilities shall be outfitted with a monitoring system as approved by city capable of detecting unauthorized releases of any hazardous substances stored in such underground storage facility, and thereafter shall be monitored in accordance with a monitoring plan submitted and approved by the city.

- E. The continued use of, and permit approval for, existing storage facilities is subject to review and modification or termination by city whenever there has been any unauthorized discharge. It shall also be reviewed by the city each time the permit is renewed. In determining whether continued storage in such storage facility is suitable, city shall consider the age of the storage facility, the methods of containment, the methods of monitoring, the feasibility of the required retrofit, the concentration of the hazardous materials contained, the severity of potential unauthorized discharge, and the suitability of other long-term preventive measures which meet the intent of this title.
- F. Existing storage facilities which are not approved in accordance with this section must be upgraded to comply with this title or be closed in accordance with Section 20.12.040 below within one (1) year of a decision not to issue a full-term permit. An extension of time for compliance with this subsection, not to exceed one (1) additional year may be granted by city (Ord. 2091-83 § 4; Ord. 2087-83 § 7; Ord. 2056-83 § 1 [part]).

20.12.040 Out of Service Storage Facilities

- A. No storage facility shall be abandoned.
- B. Storage facilities which are temporarily out of service, and are intended to be returned to use, must continue to be monitored and inspected.
- C. Any storage facility which is not being monitored and inspected in accordance with this title must be closed or removed in a manner approved by city in accordance with Section 20.32.080.
- D. Any person, firm, or corporation having an interest, including a leasehold interest, in real property and having reason to believe that an abandoned storage facility is located upon such property

shall make a reasonable effort to locate such storage facility within six (6) months of the effective date of this title.

- E. Whenever an abandoned storage facility is located, a plan for the closing or removing or the upgrading and permitting of such storage facility shall be filed within ninety (90) days of its discovery. A closure plan shall conform to the standards specified in Section 20.32.080 (Ord. 2056-83 § 1 [part]).

20.12.050 Monitoring

A. Monitoring Methods

Monitoring methods shall include at least one system for detecting leakage from the primary container. A monitoring system capable of detecting that the hazardous material stored in the primary containment has entered the secondary containment shall be provided. Visual inspection of the primary containment is the preferred method; however, other means of monitoring may be required by city. Where secondary containment may be subject to the intrusion of water, a means of monitoring for such water shall be provided.

Whenever monitoring devices are provided, they shall, where applicable, be connected to attention-getting visual and/or audible alarms.

B. Monitoring, Testing and Inspection

Every permittee under this title shall provide testing, monitoring (if applicable) and inspections in compliance with the Hazardous Materials Management Plan and shall maintain records adequate to demonstrate compliance therewith (Ord. 2056-83 § 1 [part]).

20.12.060 Maintenance, Repair, or Replacement

- A. Permittee shall carry out maintenance, ordinary upkeep, and minor repairs in a careful and safe manner. No permit or other approval will be required for such maintenance and upkeep.
- B. Any substantial modification or repair of a storage facility other than minor repairs or emergency repairs shall be in accordance with plans to be submitted to the city and approved in accordance with Section 20.32.080 prior to the initiation of such work.
- C. Permittee may make emergency repairs to a storage facility in advance of seeking an additional permit approval whenever an immediate repair is required to prevent or contain an unauthorized discharge or to protect the integrity of the containment. However, within five (5) working days after such emergency repairs have been started, permittee shall seek approval pursuant to Section 20.32.080 by submitting drawings or other information adequate to describe the repairs to city.

- D. Replacement of any storage facility for hazardous materials which are liquids or solids at STP, must be in accordance with the new installation standards of Section 20.12.020 (Ord. 2056-83 § 1 [part]).

20.12.070 Handling

- A. Dispensing and mixing of hazardous materials must not be done in such a manner as to substantially increase the risk of an unauthorized discharge.
- B. When hazardous materials are moved into or out of a storage facility, they shall remain in the travel path only for the time reasonably necessary to transport the hazardous material and such movement shall be in a manner which will not substantially increase the risk of an unauthorized discharge (Ord. 2056-83 § 1 [part]).

20.12.080 Secured Facilities

Access to the storage facilities shall be secured by means of fences and/or locks. The access to the storage facilities shall be kept securely locked when unattended (Ord. 2056-83 § 1 [part]).

20.12.090 Emergency Equipment

Emergency equipment shall be provided which is reasonable and appropriate for potential emergencies presented by the stored hazardous materials. Such equipment shall be regularly tested and adequately maintained (Ord. 2056-83 § 1 [part]).

20.12.100 Posting of Emergency Procedures

Simplified emergency procedures shall be posted conspicuously in locations where hazardous materials are stored (Ord. 2056-83 § 1 [part]).

CHAPTER 20.16

HAZARDOUS MATERIALS MANAGEMENT PLAN

- Sections: 20.16.010 Hazardous Materials Management Plan
20.16.020 Standard Form HMMP
20.16.030 Short Form HMMP--Minimal Storage Site
20.16.040 Supplemental Requirements for Emergency Response Plans

Section 20.16.010 Hazardous Materials Management Plan

Each applicant for a permit pursuant to this title shall file a written plan, for city's approval, to be known as a Hazardous Materials Management Plan (HMMP), which shall demonstrate the suitable storage of hazardous materials. The HMMP may be amended at any time with the consent of the city. The HMMP shall be a public record except as otherwise specified. Approval of the HMMP shall mean that the HMMP has provided adequate information for the purposes of evaluating the permit approval. Such approval shall not be understood to mean that the city has made an independent determination of the adequacy of that which is described in the HMMP (Ord. 2056-83 § 1 [part]).

Section 20.16.020 Standard Form HMMP

The standard form Hazardous Materials Management Plan must be submitted unless the facility qualifies as a minimal storage site under Section 20.16.030 below. The HMMP shall include the following:

A. Facility Description

1. General Information

The HMMP shall contain the name and address of the facility and business phone number of applicant, the name and titles and emergency phone numbers of the primary response person and an alternate, the number of employees, number of shifts, hours of operation, and principal business activity.

2. General Facility Description

The HMMP shall contain a map drawn at a legible scale and in a format and detail determined by city. It shall show the location of all buildings and structures, chemical loading areas, parking lots, internal roads, storm and sewer drains, and shall specify the uses of adjacent properties.

The city may also require information as to the location of wells, flood plans, earthquake faults, surface water bodies, and/or general land uses (schools, hospitals, institutions, residential areas) within one mile of the facility boundaries.

3. Facility Storage Map

- a. The HMMP shall contain a Facility Storage Map at a legible scale for licensing and enforcement purposes. The information in this section is provided for purposes of ensuring the suitable and secure storage of hazardous materials and for the protection and safety of emergency response personnel of city. City shall take reasonable precautions to ensure the confidentiality of the information provided pursuant to this subsection.

The Facilities Storage Map shall indicate the location of each hazardous materials storage facility, including all interior, exterior, and underground storage facilities, and access to such storage facilities. In addition, the map shall indicate the location of emergency equipment related to each storage facility, and the general purpose of the other areas within each facility.

For each storage facility, the map shall contain information as described below except that where the hazardous material being stored is a trade secret, it shall be identified in a coded manner (together with its key) and not in a manner which would reveal trade secret information.

- (1) A floor plan to scale and the permit quantity limit;
- (2) For each nonwaste hazardous material which is stored in a quantity greater than the quantities specified in Section 20.20.020.A, the general chemical name, common/trade name, major constituents for mixtures, United Nations (UN) or North America (NA) number, if available, and physical state. For each waste hazardous material stored in any quantity within the storage facility, the presence of wastes shall also be indicated;
- (3) For all hazardous materials, including wastes, stored in each storage facility, the hazard class or classes and the quantity range for each such class, aggregated within each storage facility, in the following ranges:

Quantity Range Number	Range Amounts
1	Less than 500 pounds for solids, 55 gallons for liquids, 200 cubic feet at STP for compressed gases;
2	Between 500 and 5,000 pounds for solids, 55 and 550 gallons for liquids, 200 and 2,000 cubic feet at STP for compressed gases;

Quantity Range Number	Range Amounts
3	Between 5,000 and 25,000 pounds for solids, 550 and 2,750 gallons for liquids, and 2,000 to 10,000 cubic feet at STP for compressed gases;
4	Between 25,000 and 50,000 pounds for solids, 2,750 and 5,500 gallons for liquids, 10,000 and 20,000 cubic feet at STP for compressed gases;
5	More than 50,000 pounds for solids, 5,500 gallons for liquids, and 20,000 cubic feet at STP for compressed gases;

- (4) For materials not regulated under this title, but regulated under the Uniform Fire Code, such as radioactives or cryogens, or for materials stored in storage facilities exempted by Section 20.52.040 A and B, the city may require that the hazard class or classes and the quantity range of each such hazard class, using the quantity ranges listed in subsection (3) above, be provided;
 - (5) For tanks, the capacity limit of each tank, and the hazardous material contained in each tank by general chemical name, common/trade name, major constituents for mixtures, United Nations (UN) or North America (NA) number, if available, and physical state.
- b. Due to the threat to the security of the facility posed by the disclosure of the information in the Facility Storage Map, this information shall be maintained by city for law enforcement purposes only and shall not be made public. Public disclosure of this information could endanger the security of the facility or present a clear danger to public health and safety. City shall not disclose this information to the public without the consent of the permittee or permit applicant unless ordered to do so by a court of competent jurisdiction. Permittee or permit applicant shall be deemed a real party in interest in any such action. Prompt notice of a law suit to compel disclosure shall be given by city to permittee or permit applicant. However, city shall be under no duty to prevent disclosures where there has been any unauthorized discharge of hazardous materials stored in storage facility(s) shown on such map or where such disclosure arises out of any official emergency response relating to the storage facility(s).

- c. The Facility Storage Map shall be updated annually or whenever an additional approval is required for the facility or whenever the Hazardous Materials Inventory Statement is required to be amended pursuant to Section 20.20.010.

B. Hazardous Materials Inventory Statement

A Hazardous Materials Inventory Statement shall be filed in accordance with Chapter 20.20.

C. Separation of Materials

The HMMP shall contain a description of the methods to be utilized to ensure separation and protection of stored hazardous materials from factors which may cause a fire or explosion, or production of a flammable, toxic, or poisonous gas, or the deterioration of the primary or secondary containment.

D. Monitoring Program

The HMMP shall contain a description of the location, type, manufacturer specifications (if applicable), and suitability of monitoring methods to be used in each storage facility storing hazardous materials which are liquids or solids at STP. It shall also specify the frequency of inspections of storage facilities which will be conducted by the permittee.

E. Record Keeping Forms

The HMMP shall contain an inspection check sheet or log designed to be used in conjunction with routine inspections. The check sheet or log shall provide for the recording of the date and time of inspection, and for monitoring activity the date and time of any corrective action taken, the name of the inspector, and the counter signature of the designated safety manager for the facility or the responsible official as designated in the HMMP.

F. Emergency Equipment

The HMMP shall describe emergency equipment availability, testing, and maintenance.

G. Variation in Information.

1. Additional information may be required for the HMMP where such information is reasonably necessary to meet the intent of this title.
2. Whenever permittee has submitted a plan which includes substantially the same information as is required for any component(s) of the HMMP to any other public agency regulating hazardous materials, such plan may be submitted to city in lieu of such component(s). The city may give deference to

any approval of such plan by the other public agency
(Ord. 2195-86 §§ 2, 3; Ord. 2056-83 § 1 (part)).

Section 20.16.030 Short Form HMMP--Minimal Storage Site

A. Facility Description

A facility shall qualify as a minimal storage site if the quantity of each hazardous materials stored in one or more facilities in an aggregate quantity for the facility is less than 500 pounds for solids, 55 gallons for liquids, or 200 cubic feet at STP for compressed gases.

B. The applicant for a permit for a facility which qualifies as a minimal storage site may opt to file the short form Hazardous Material Management Plan. Such plan shall include the following components:

1. General application information;
2. A simple line drawing of the facility showing the location of the storage facilities and indicating the hazard class or classes and physical state of the hazardous materials being stored and whether any of the material is a waste;
3. The short form HMMP shall also include a carcinogen identification form which shall indicate the storage of any quantity of any carcinogen listed in Sections 5208-5215 and Section 5219 of Title 8 of the California Administrative Code, as amended. This provision will be satisfied by the submittal to city of a copy of the Carcinogen Registration form submitted to the California Department of Industrial Relations in accordance with the above cited sections of Title 8 of the California Administrative Code, as amended;
4. Information describing the hazardous materials will be stored in a suitable manner and will be appropriately contained, separated, and monitored;
5. Description of emergency equipment to be maintained;
6. Assurance that the disposal of any hazardous materials will be in an appropriate manner (Ord. 2195-86 § 4; Ord. 2067-83 § 7; Ord. 2056-83 § 1 (part)).

Section 20.16.040 Supplement Requirements for Emergency Response Plans

- A. In addition to the HMMP requirements set forth in this chapter, any person, firm, or corporation which handles a hazardous material or a mixture containing a hazardous material which has a quantity at any one time during the reporting year equal to, or greater than a total weight of 500 pounds, or a total volume of 55 gallons, or 200 cubic feet at standard temperature and pressure for compressed gas, shall establish and implement a plan for emergency response to a release or

threatened release of a hazardous material pursuant to this section. Said plan, including the Hazardous Materials Inventory Statement (HMIS) described in Chapter 20.20, shall comprise the "business plan" for purposes of Chapter 6.95 of Title 20 of the Health and Safety Code.

- B. Unless the facility qualifies as a minimal storage site under Section 20.16.030, or the material is otherwise exempt pursuant to Section 20.08.020, the following information shall be provided:
 - 1. Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material shall include, but not be limited to, the following:
 - a. Immediate notification to city, to the city department of public safety, and to the State Office of Emergency Services.
 - b. Procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment.
 - c. Evacuation plans and procedures for the business site, including immediate audible notice and warning to all persons on the site.
- C. Training shall be provided for all new employees, and annual training, including refresher courses, for all employees in safety procedures to be utilized in the event of a release or threatened release of a hazardous material. Such training shall include, but not be limited to, familiarity with the plans and procedures specified above. These training programs may take into consideration the technical and managerial responsibilities of each employee.
- D. Any business required to file a pipeline operations contingency plan in accordance with the California Pipeline Safety Act of 1981 (Chapter 5.5 commencing with Section 51010 of Part 3 of Division 1 of Title 5 of the Government Code) and the regulations of the Department of Transportation, found in Part 195 of Title 49 of the Code of Federal Regulations, may file a copy of those plans with the city instead of filing an emergency response plan specified in subdivision A.
- E. Any business operating a farm exempted by paragraph (5) of subdivision (b) of Section 25503.5 of the Health and Safety Code from filing the information specified in subdivisions B and C shall, notwithstanding this exemption, provide the training programs specified in subdivision C.
- F. The city shall maintain records of all emergency response plans and procedures received and shall index them by street address and company name. Such plans and revisions thereto shall be available for public inspection during regular working hours, except for

those portions of such plan, including any maps of the facility as described in Section 20.16.020 A.3, specifying the precise location where hazardous materials are stored and handled onsite. The city is required by Health and Safety Code Section 25506 to transmit copies of the entire emergency response plan or any information contained therein to any requesting State or local agency (Ord. 2195-86 § 5).

CHAPTER 20.20

HAZARDOUS MATERIALS INVENTORY

Sections: 20.20.010 Hazardous Materials Inventory Statement
20.20.020 Information Required
20.20.030 Public Records
20.20.040 Trade Secrets

Section 20.20.010 Hazardous Materials Inventory Statement

A Hazardous Materials Inventory Statement (HMIS) shall be filed annually with city in accordance with this chapter. Any person, firm, or corporation which stores or handles any hazardous material in an amount which is equal to or greater than the quantities specified in Section 20.20.020.A is required to file an HMIS. Such person, firm, or corporation shall amend the HMIS within thirty (30) days of the storage or handling of any hazardous material not listed thereon but required to be listed by Section 20.20.020.A, or of an increase of one hundred percent or more in the quantity of a previously disclosed material or change in business address, ownership, or business name (Ord. 2195-86 § 6; Ord. 2067-83 § 8; Ord. 2056-82 § 1 [part]).

Section 20.020 Information Required

- A. Information shall be included in the HMIS for each hazardous material stored or handled in a facility (aggregate over all such material stored in one or more storage facilities) where the aggregate quantity throughout the facility is greater than five hundred (500) pounds (lb.) or more in weight for solids, greater than fifty-five (55) gallons or more for liquids, or two hundred (200) cubic feet or more at standard temperature and pressure (STP) for compressed gases.
- B. The information in the HMIS shall include either:
1. For nonwastes: The general chemical name, common/trade name, major constituents for mixtures, the manufacturer, United Nations (UN) or North America (NA) number, if available, and the hazard class or classes, and the Material Safety Data Sheets (MSDS) or equivalent information as required by city.
 2. For wastes: The Department of Health Services manifest for wastes or equivalent information, including the general chemical and mineral composition of the waste listed by probable maximum and minimum concentration, and the hazard class or classes.
 3. A listing of the chemical name and common names of every other hazardous material handled by the business which is not otherwise listed pursuant to paragraphs 1 or 2.

4. The maximum amount of each hazardous material or mixture containing a hazardous material or mixture containing a hazardous material disclosed in paragraphs 1, 2, and 3, which is handled at any one time by the business over the course of the year.
 5. Sufficient information on how and where the hazardous material disclosed in paragraphs 1, 2, and 3 are handled by the business to allow fire, safety, health, and other appropriate personnel to prepare adequate emergency response to potential releases of the hazardous materials.
 6. The SIC Code number of the business, if applicable.
 7. The name and 24-hour phone numbers of the person representing the business who is able to assist emergency personnel in the event of an emergency involving the business during nonbusiness hours.
- C. The HMIS may report the amount of hazardous material under this section by ranges, rather than a specific amount, employing the ranges set forth in Section 20.16.020.A.3.a(3) as long as those ranges provide the information needed to meet the needs of emergency rescue personnel, to determine the potential hazard from a release of the materials and meets the purposes of this chapter.
- D. The HMIS shall also include a carcinogen identification form which shall indicate the storage of any quantity of any carcinogen listed in Sections 5208-5215 and Section 5219 of Title 8 of the California Administrative Code, as amended. This provision will be satisfied by the submittal to city of a copy of the Carcinogen Registration form submitted to the California Department of Industrial Relations in accordance with the above cited sections of Title 8 of the California Administrative Code, as amended.
- E. Where a claim for trade secret protection is made for any hazardous material pursuant to Section 20.20.040, the HMIS to be publicly disclosed shall indicate the number of materials claimed to be trade secrets and the aggregate quantity range stored at the facility for each such hazardous material stated in terms of the quantity ranges set forth in Section 20.16.020.A.3.a(3)[2-5]. Where a claim for trade secret protection is made for any carcinogen identified pursuant to subsection D above, the Carcinogen Registration form to be publicly disclosed shall indicate all carcinogens not claimed to be trade secrets and it shall indicate the number of carcinogens claimed to be trade secrets (Ord. 2195-86 § 7; Ord. 2067-83 § 9; Ord. 2056-83 § 1 [part]).

Section 20.20.030 Public Records

The HMIS is a public record; however, the information contained therein is subject to trade secret protection pursuant to Health and Safety Code Section 2551 (Ord. 2195-86 § 8; Ord. 2056-83 § 1 [part]).

Section 20.20.040 Trade Secrets

- A. Permittee or permit applicant may make a claim for the protection of the identify of any hazardous material which is its trade secret by filing a declaration under penalty of perjury on a form provided by city, signed by the permittee or permit applicant, supporting the trade secret status, for each such hazardous material asserted to be a trade secret. The name of the hazardous material shall not be disclosed on said declaration.
- B. The exact name of the trade secret material, its quantity range by storage facility, and all other information required under Section 20.20.020.B must, subject to the approval of city, be placed in a double keyed lockbox and maintained in at least two locations at the facility. One key shall be provided to city at the time the permit becomes effective. The other key shall be maintained onsite at all times, and readily accessible to permittee's designated emergency response person. Such emergency response person shall cooperate with city in opening the lockbox at any time city responds to an emergency or unauthorized discharge on the site involving the storage facility in which the trade secret material is contained. In the event that the permittee's designated emergency response person is not immediately available to assist city emergency response personnel to open the lockbox, such city personnel are authorized to break the lockbox.
- C. In addition to providing the lockboxes, the permittee or permit applicant shall provide information to the city under one of the following alternatives:
 1. Alternative One. In lieu of submitting the exact chemical name of said trade secret material, permittee or permit applicant may submit a description of the hazardous material including, but not limited to, the chemical and physical properties, hazard class, reactivity characteristics, fire and explosion characteristics, of the trade secret material, at a level of specificity satisfactory to city, and on a form provided by city. The description must include health hazard information including remedies and countermeasures appropriate for emergency response and, in case of human exposure, to the trade secret material. Such description must be adequate to enable city to assess the suitability of the proposed containment and the proposed monitoring plan. The description must be certified as accurate, in writing, by a chemist or chemical engineer; or
 2. Alternative Two. Instead of submitting the name of the trade secret to city, the trade secret information, together with all submittals pursuant to this title, may be submitted to an independent chemical engineer or equivalent licensed professional, subject to approval by the city, who shall certify, in writing, the suitability of the containment design, the monitoring methods and plans, and separation of materials, and the accuracy of the facility storage map with regard to the information relevant to

the trade secret. All such submittals remain subject to city's review and approval under this title; or

3. Alternative Three. The trade secret information sought to be protected, may be submitted to city on a separate form or forms, clearly and conspicuously marked or labeled as containing trade secret information, and said form or forms must be submitted only to a city official designated by city to receive trade secret information. If this method of protecting the trade secret information is chosen by permittee or permit applicant, such party shall also submit a waiver, relieving city of any and all liability resulting from disclosure of the trade secret in violation of this chapter.
 - a. The city official shall endeavor to protect from disclosure any and all trade secrets which come into the city's possession pursuant to this subsection. If an action is instituted under California Public Records Act for the release of such trade secrets, the permittee or permit applicant shall be deemed a real party in interest in any such action. Notice of a lawsuit to compel disclosure shall be given by city to permittee or permit applicant promptly upon receipt of such notice by city. The permittee or permit applicant shall have the option to defend city in any such action. The permittee or permit applicant shall indemnify the city in any such action. The permittee or permit applicant shall indemnify the city for all of city's attorneys' fees, costs, and expenses incurred in any proceeding related to this section, as well as for any judgment imposed pursuant to California Government Code Section 6259.
 - b. Any information reported to the city officer under this subsection, which is exempt from disclosure pursuant to this section, shall not be disclosed to anyone other than as required by law, except an officer or employee of the city in connection with the official duties of such officer or employee under any law for the protection of health, or to contractors with the city and their employees if, in the opinion of the city officer, such disclosure is necessary and required for the satisfactory performance of a contract for performance of work.
 - c. Any person who by virtue of employment, contractual relationship or official position has obtained possession of or has had access to information, the disclosure of which is prohibited by this section, and who knowing that disclosure of the information is prohibited, intentionally or recklessly discloses the information in any manner to any person not entitled to receive it, or uses the information for his or her own use or advantage, shall be guilty of a misdemeanor.

- d. Information certified by appropriate officials of the United States, as necessarily kept secret for national defense purposes, shall be accorded the full protections against disclosure as specified by such official or in accordance with the laws of the United States.
- e. The city council shall, by resolution, adopt a procedure designed to prevent knowing or negligent disclosure of trade secret information. Such procedure shall identify which officials shall have access to the information, and the means by which access will be controlled and monitored. Trade secret information shall be maintained in secured facilities which are designed to prevent inadvertent or unauthorized access or disclosure.
- f. The confidential treatment pursuant to this subsection, of the identify of such trade secret disclosed to the city does not apply where there has been any unauthorized discharge related to such trade secret material which is reportable in compliance with Section 20.24.010 or where such disclosure arises out of any official emergency response relating to the storage facility(s) involving such trade secret information by public safety personnel of city (Ord. 2056-83 § 1 [part]).

CHAPTER 20.24

RESPONSIBILITY

Sections: 20.24.010 Reporting Unauthorized Discharge
20.24.020 Cleanup Responsibility
20.24.030 Indemnification

Section 20.24.010 Reporting Unauthorized Discharge

A. Liquids and Solids at STP

As soon as any person in charge of a storage facility or responsible for emergency response for a facility has knowledge of any confirmed or unconfirmed unauthorized discharge of a hazardous material which is liquid or solid at STP, such person shall take all necessary steps to ensure the discovery and containment and cleanup of such discharge and shall notify city of the occurrence as required by this section.

1. Confirmed Unauthorized Discharge

a. Recordable Unauthorized Discharge

Any recordable unauthorized discharge shall be contained and safely disposed of in an appropriate manner by permittee and such occurrence and the response thereto shall be recorded in the permittee's monitoring records. A recordable unauthorized discharge is any unauthorized discharge of a hazardous material which meets all of the following criteria:

- (1) The discharge is from a primary containment to a secondary containment or to a rigid above ground surface covering capable of containing the discharge until cleanup of the hazardous material is completed; and
- (2) The permittee is able to adequately clean up the discharge before it escapes from such secondary containment or such above ground surface, but if the cleanup requires more than eight (8) hours, it becomes a reportable discharge in accordance with subsection b below;
- (3) There is no increase in the hazard of fire or explosion, nor is there any production of a flammable or poisonous gas, nor is there any deterioration of such secondary containment or such rigid above ground surface;
- (4) An otherwise recordable unauthorized discharge does not need to be recorded if the discharge is not the result of the deterioration or failure of the primary container

and the quantity discharged is less than one ounce by weight, and can be cleaned up within fifteen minutes.

b. Reportable Unauthorized Discharge

Any unauthorized discharge which is not determined to be recordable under subsection a above, must be reported to city immediately. The reporting party shall provide information to city relating to the ability of permittee to contain and dispose of the hazardous material, the estimated time it will take to complete containment and disposal, and the degree of hazard created. City may verify that the hazardous material is being contained and appropriately disposed. City, at any time upon a determination that permittee is not adequately containing and disposing of such hazardous material, shall have the power and authority to undertake and direct an emergency response in order to protect the public health and/or safety.

2. Unconfirmed Unauthorized Discharge

a. Indication of Loss in Inventory Records

Whenever a material balance or other inventory record, employed as a monitoring technique under the HMMP, indicates a loss of hazardous material, and no unauthorized discharge has been confirmed by other means, permittee shall have five (5) working days to determine whether or not there has been an unauthorized discharge. If before the end of such period, it is determined that there has been no unauthorized discharge, an entry explaining the occurrence shall be made in permittee's monitoring records. Where permittee has not been able, within such period, to determine that there has been no unauthorized discharge, an unauthorized discharge is deemed confirmed and permittee shall proceed in accordance with subsection 1.b above.

b. Test Results

Whenever any test results suggest a possible unauthorized discharge, and no unauthorized discharge has been confirmed by other means, the permittee shall have five (5) working days to retest. If second test results obtained within that period establish that there has been no unauthorized discharge, the results of both tests shall be recorded in permittee's monitoring records. If it has not been established within such period that there has been no unauthorized discharge, an unauthorized discharge is deemed confirmed and permittee shall proceed in accordance with subsection 1.b above.

B. Gases at STP

Any person in charge of a storage facility or responsible for emergency response for a storage facility, who has knowledge of any unauthorized discharge of a hazardous material which is a gas at STP, must immediately report such discharge to the city if such discharge presents a threat of imminent danger to public health and safety.

C. Office of Emergency Services

The city shall submit a written report to the Office of Emergency Services within ten (10) working days from the date that the city is notified of an unauthorized discharge from an underground storage tank (Ord. 2087-83 § 8; Ord. 2056-83 § 1 [part]).

Section 20.24.020 Cleanup Responsibility

Any person, firm, or corporation responsible for storing the hazardous material shall institute and complete all actions necessary to remedy the effects of any unauthorized discharge, whether sudden or gradual. City shall undertake actions to remedy the effects of such unauthorized discharge itself, only if it determines that it is reasonably necessary under the circumstances for the city to do so. The responsible party shall be liable to reimburse city for all costs incurred by city in remedying the effects of such unauthorized discharge, including the costs of fighting fires to the extent allowed by law. This responsibility is not conditioned upon evidence of willfulness or negligence of the party storing the hazardous material(s) in causing or allowing such discharge. Any responsible party who undertakes action to remedy the effects of unauthorized discharge(s) shall not be barred by this title from seeking to recover appropriate costs and expenditures from other responsible parties except as provided by Section 20.24.030 (Ord. 2056-83 § 1 [part]).

Section 20.24.030 Indemnification

The permittee shall indemnify, hold harmless and defend the city against any claim, cause of action, disability, loss, liability, damage, cost, or expense, howsoever arising, which occurs by reason of an unauthorized discharge in connection with permittee's operations under this permit except as arises from city's sole willful act or sole active negligence (Ord. 2056-83 § 1 [part]).

CHAPTER 20.28

INSPECTIONS AND RECORDS

Sections: 20.28.010 Inspections by City
20.28.020 Inspections by Permittee
20.28.030 Special Inspections
20.28.040 Substituted Inspections
20.28.050 Maintenance of Records

Section 20.28.010 Inspections by City

City may conduct inspections, at its discretion, for the purpose of ascertaining compliance with this title and causing to be corrected any conditions which would constitute any violation of this title or any other statute, code, rule, or regulation affecting the storage of hazardous materials.

Permittees are not required to disclose the identity of hazardous materials protected as trade secrets pursuant to Section 20.20.040 to anyone other than the official designated for that purpose pursuant to Section 20.20.040 except in the case of an emergency response or an unauthorized discharge related to the storage facility in which the trade secret material is contained. Therefore, permittee may put temporary coverings over the labels of trade secret materials during the course of city inspections conducted by other than the city official so designated.

A. Right of Entry

Whenever necessary for the purpose of investigating or enforcing the provisions of this title, or whenever any enforcement officer has reasonable cause to believe that there exists in any structure or upon any premises, any condition which constitutes a violation of this title, said officers may enter such structure or premises at all reasonable times to inspect the same, or to perform any duty imposed upon any of said respective officers by law; provided that if such structure or premises be occupied, the officer shall first present proper credentials and request entry, and further provided, that if such structure or premises is unoccupied, the officer shall first make a reasonable attempt to contact a responsible person from such firm or corporation and request entry, except in emergency circumstances. If such entry is refused, the officer seeking entry shall have recourse to every remedy provided by law to secure entry.

B. Inspections by City--Discretionary

All inspections specified herein shall be at the discretion of the city and nothing in this title shall be construed as requiring the city to conduct any such inspection nor shall any actual inspection made imply a duty to conduct any other inspection. Furthermore, nothing in this title shall be construed to hold the city or any

officer, employee, or representative of the city responsible for any damage to persons or property by reason of making an inadequate or negligent inspection or by reason of any failure to make an inspection or reinspection (Ord. 2056-83 § 1 [part]).

Section 20.28.020 Inspections by Permittee

The permittee shall conduct regular inspections of its own facilities to assure compliance with this title and shall maintain logs or file reports in accordance with its Hazardous Materials Management Plan. The inspector conducting such inspections shall be qualified to conduct such inspections (Ord. 2056-83 § 1 [part]).

Section 20.28.030 Special Inspections

In addition to the inspections specified above, city may require the periodic employment of special inspectors to conduct an audit or assessment of permittee's facility to make a hazardous material safety evaluation and to determine compliance with the provisions of this title.

- A. The special inspector shall be a qualified person or firm who shall demonstrate expertise to the satisfaction of the city.
- B. The special inspection report shall include an evaluation of the facilities and recommendations consistent with the provisions of this title where appropriate. A copy of the report shall be filed with city at the same time that it is submitted to permittee.
- C. Permittee shall, within thirty (30) days of said report, file with city a plan to implement all recommendations, or shall demonstrate to the satisfaction of city why such recommendations shall not be implemented (Ord. 2056-83 § 1 [part]).

Section 20.28.040 Substituted Inspections

An inspection by an employee of any other public agency may be deemed by the city as a substitute for any requirement above (Ord. 2056-83 § 1 [part]).

Section 20.28.050 Maintenance of Records

All records required by this title shall be maintained by the permittee for a period not less than three (3) years. Said records shall be made available to city during normal working hours and upon reasonable notice (Ord. 2056-83 § 1 [part]).

CHAPTER 20.32

APPLICATION FOR PERMIT

Sections:	20.32.010	Permit
	20.32.020	Application for Permit
	20.32.030	Investigation
	20.32.040	Approval of Permit
	20.32.050	Provisional Permit
	20.32.060	Temporary Permit
	20.32.070	Issuance of Permits
	20.32.080	Additional Approvals
	20.32.090	Term
	20.32.100	Renewal
	20.32.110	Determination
	20.32.120	Fees
	20.32.130	Transfer of Permit
	20.32.140	Effective Date of Permit

Section 20.20.010 Permit

Any person, firm, or corporation which stores any hazardous material shall obtain and keep current a Hazardous Materials Storage Permit issued pursuant to this title. One such permit shall be issued for a single facility. Additional approvals shall be obtained for any storage facility thereafter connected, installed, constructed, repaired as required by Section 20.12.060, substantially modified, replaced, closed, or removed, or for any change or addition in hazardous materials stored, not in accordance with the prior approval. Notwithstanding the above, permittee shall have thirty (30) days to apply for an additional approval for the storing of new or different hazardous material with the same hazard class as stated on the existing permit approvals where such storage does not increase the hazard of fire or explosion or the hazard of the production of flammable or poisonous gas. Storage of new or different hazardous materials, not meeting all of these criteria, shall require the prior additional approval (Ord. 2056-83 § 1 [part]).

Section 20.32.020 Application for Permit

Application for a new, amended, or renewed permit or an additional approval shall be made to the designated officer on the form provided by city. In addition to the information required by such form, applicant shall submit the Hazardous Materials Management Plan required by Section 20.16.010 and construction plans, if any, in conformity with Section 20.12.010. Applicant shall specify the permit quantity limit requested to be permitted for each storage facility (Ord. 2056-83 § 1 [part]).

Section 20.32.030 Investigation

The officer to whom an application for a new or renewed permit is made may make such investigation of the applicant and the proposed facility or activity as such officer deems necessary to carry out the purposes of this title (Ord. 2056-83 § 1 [part]).

Section 20.32.040 Approval of Permit

A permit shall not be approved until the issuing officer is satisfied that the storage approved adequately conforms to the provisions of this title (Ord. 2056-83 § 1 [part]).

Section 20.32.050 Provisional Permit

If the officer to whom application has been made finds that the proposal does not completely conform to the provisions of this title, the officer may approve a provisional permit, subject to conditions to be imposed by the officer, when such a provisional permit is feasible and does not appear to be detrimental to the public interest, and further provided, that with regard to underground storage facilities, the minimum requirements of Section 25284 and 25284.1 of Chapter 6.7 of Division 20 of the Health and Safety Code have been complied with. The applicant must be informed in writing of the reasons why a full-term permit was not issued (Ord. 2091-83 § 5; 2056-83 § 1 [part]).

Section 20.32.060 Temporary Permit

A Temporary Permit for storage may be issued where storage does not exceed thirty (30) days and occurs no more frequently than every six (6) months. The Containment Standards of Chapter 20.12, the Hazardous Materials Management Plan of Chapter 20.16 and the Inspection and Records Requirements of Chapter 20.28 may be modified as appropriate under these circumstances for the storage of hazardous materials on a nonregular temporary basis (2056-83 § 1 [part]).

Section 20.32.070 Issuance of Permits

A. Issuance

Upon the approval of a temporary, provisional, or full-term permit by the officer and upon the payment of any applicable fee, the officer shall issue and deliver the permit to the applicant. Such permit shall contain the following information:

1. The name and address of the permittee for purposes of notice and service of process;
2. The address of the facility for which the permit is issued;
3. Authorization of the storage facility(s) approved under the permit, the permit quantity limit(s) and the approved hazard class or classes for the storage facility(s);
4. The date the permit is effective;
5. The date of expiration;

6. When applicable, a designation that the permit is provisional or temporary;
7. Any special conditions of the permit

B. Records

The officer shall keep a record of all permits issued and all conditions attached thereto (Ord. 2056-83 § 1 [part]).

Section 20.32.080 Additional Approvals

- A. When a request for an additional approval is filed as required by Section 20.32.010, the procedures set forth in this title for an application for a permit shall also apply to an application for an additional approval. Each application for additional approval shall be accompanied by an appropriate amendment to the HMMP.
- B. If the additional approval request is for closure of a storage facility, permittee shall apply for approval to close such storage facility not less than thirty (30) days prior to the termination of the storage of hazardous materials at the storage facility. Such closure shall be in accordance with a closure plan which describes procedures for terminating the storage of hazardous materials in each storage facility in a manner that:
 1. Minimizes the need for further maintenance; and
 2. Controls to the extent that a threat to public health or safety or to the environment from residual hazardous materials in the storage facility is minimized or eliminated; and
 3. Demonstrates that hazardous materials that were stored in the storage facility will be removed, disposed of, neutralized, or reused in an appropriate manner. This thirty (30) day period may be waived by city if there are special circumstances requiring such waiver (Ord. 2056-83 § 1 [part]).

Section 20.32.090 Term

A permit may be issued for a term of five (5) years, excepting provisional permits which may be issued for any period of time up to six (6) months and temporary permits which may be issued for no longer than thirty (30) days (Ord. 2056-83 § 1 [part]).

Section 20.32.100 Renewal

Every application for the renewal of a permit or extension of a provisional permit shall be made at least thirty (30) days prior to the expiration date of such permit. If a timely application for renewal has been submitted, the permit shall remain in effect until the city has made its determination pursuant to Section 20.32.110 and any administrative appeal pursuant to Chapter 20.36 has been exhausted (Ord. 2056-83 § 1 [part]).

Section 20.32.110 Determination

City shall make a determination with regard to any application for a permit, an additional approval, or a renewal, within ninety (90) days from the date that the application has been completed or compliance with the appropriate provisions of the California Environmental Quality Act (CEQA), has been completed, whichever occurs later. This time limit may be further extended by mutual agreement between city and applicant, unless such extension would delay the installation of a monitoring system for an underground storage facility in existence on January 1, 1984, beyond the date of January 1, 1985, or such later date as is established by Health and Safety Code Section 25284.1 as the same may be amended (Ord. 2091-83 § 6; Ord. 2056-83 § 1 [part]).

Section 20.32.120 Fees

City shall establish fees sufficient to recover its costs in administering this title and no application shall be accepted unless and until the fees have been paid.

A. Delinquent Fees

All permit fees delinquent for thirty (30) days or more shall be subject to an additional charge to be determined by city, which shall be added to the amount of the fee collected.

B. Refund of Fees

No refund or rebate of a permit fee shall be allowed by reason of the fact that the permit is denied or the permittee discontinues the activity or use of a facility prior to the expiration of the term or that the permit is suspended or revoked prior to the expiration of the term (Ord. 2056-83 § 1 [part]).

Section 20.32.130 Transfer of Permit

The permit may be transferred to new owners of the same business only if the new owners accept responsibility for all obligations under this title at the time of the transfer of the business and document such transfer on a form provided by city within thirty (30) days of transfer of ownership of the business. Such transfer shall be subject to the approval of city (Ord. 2056-83 § 1 [part]).

Section 20.32.140 Effective Date of Permit

No permit shall become effective until the permit has been signed and accepted by the permittee. Where the permittee is a company, firm, or corporation, the acceptance must be signed by a person having the legal authority to bind the permittee (Ord. 2056-83 § 1 [part]).

CHAPTER 20.36

DENIAL

Sections: 20.36.010 Denial of Application
20.36.020 Grounds for Denial
20.36.030 Transmittal of Decision
20.36.040 Appeal to Board of Decision
20.36.050 Hearing on Appeal
20.36.060 Disposition of Appeal

Section 20.36.010 Denial of Application

If the officer to whom application has been made has cause to deny the application and determines that it would not be feasible or in the public interest to approve a temporary or provisional permit, then the officer shall deny the application (Ord. 2056-83 § 1 [part]).

Section 20.36.020 Grounds for Denial

A permit shall be denied if the applicant fails to demonstrate adequate conformity to the provisions of this title. In addition, a permit can be denied for any of the grounds upon which the permit would be subject to revocation pursuant to Chapter 20.40 (Ord. 2056-83 § 1 [part]).

Section 20.36.030 Transmittal of Decision

The decision to deny the application shall be given to the applicant in writing, setting forth the findings upon which the decision is based (Ord. 2056-83 § 1 [part]).

Section 20.36.040 Appeal to Board of Appeals

Within thirty (30) days from the date of deposit of the decision in the mail in accordance with Section 20.36.020, the applicant may appeal, in writing to the board of appeals setting forth with particularity the ground or grounds for the appeal. For purposes of this title the board of appeals shall be the building code board of appeals, as defined in Section 16.04.040(1) of this code (Ord. 2056-83 § 1 [part]).

Section 20.36.050 Hearing on Appeal

The board of appeals shall set a time and place for the hearing on the appeal and shall notify the applicant, in writing, of such date and time, not later than ten (10) working days from the date the appeal was received by the board of appeals. The hearing shall be conducted within thirty (30) days from the date the appeal was received by the board of appeals (Ord. 2056-83 § 1 [part]).

Section 20.36.060 Disposition of Appeal

After the hearing on the appeal, the board of appeals may refer the matter back to the originating officer for a new investigation and decision, may affirm the decision of the originating officer, may approve a provisional permit as provided in Section 20.32.050, or may approve the application with or without conditions. The decision of the board of appeals shall be the final administrative determination and is subject to judicial review (Ord. 2056-83 § 1 [part]).

CHAPTER 20.40

REMEDIAL ACTION

Sections:	20.40.010	Grounds for Remedial Action
	20.40.020	Notice of Noncompliance
	20.40.030	Notice of Hearing
	20.40.040	Suspension Prior to Hearing
	20.40.050	Remedial Action
	20.40.060	Transmittal of Decision
	20.40.070	Authority After Suspension, Revocation, or Expiration
	20.40.080	Return of Permit

Section 20.40.010 Grounds for Remedial Action

A permit may be subjected to remedial action for any of the following causes, arising from the acts or omissions of the permittee, either before or after a permit is issued:

- A. Fraud, willful misrepresentation, or any willful, inaccurate, or false statement in applying for a new or renewed permit;
- B. Fraud, willful misrepresentation, or any willful, inaccurate, or false statement in any report required by this title;
- C. Failure to abate, correct, or rectify any noncompliance within the time specified in the notice of noncompliance;
- D. Failure to correct conditions constituting an unreasonable risk of an unauthorized discharge of hazardous materials within a reasonable time after notice from a governmental entity;
- E. Failure to abide by the remedial action imposed by the city (Ord. 2056-83 § 1 [part]).

Section 20.40.020 Notice of Noncompliance

Unless the director of public safety finds that an immediate suspension under Section 20.40.040 is necessary to protect the public health or safety from imminent danger, the officer shall issue a notice of noncompliance for failure to comply with the provisions of this title, any permit conditions or any provisions of the Hazardous Materials Management Plan, prior to taking remedial action on the grounds of Section 20.40.010.D. Such notice shall be sent by certified mail to permittee. If the noncompliance is not abated, corrected, or rectified within the time specified, remedial action may be taken (Ord. 2056-83 § 1 [part]).

Section 20.40.030 Notice of Hearing

A notice of hearing shall be given to the permittee by the director of public safety, in writing, setting forth the time and place of the hearing, the ground or grounds upon which the remedial action is based, the pertinent code section or sections, and a brief statement of the factual matters in support thereof. The notice shall be given at least fifteen (15) days prior to the hearing date (Ord. 2056-83 § 1 [part]).

Section 20.40.040 Suspension Prior To Hearing

Whenever the director of public safety finds that suspension of a permit prior to a hearing for remedial action is necessary to protect the public health or safety from imminent danger, the director of public safety may immediately suspend any permit pending the hearing for remedial action. The director of public safety shall immediately notify the permittee of such suspension by having a written notice of the suspension personally served on the permittee. Permittee shall have the opportunity for a preliminary hearing with regard to such prehearing suspension within three (3) working days of receiving written notice of such suspension (Ord. 2056-83 § 1 [part]).

Section 20.40.050 Remedial Action

If the director of public safety, after the hearing, finds that cause exists for remedial action, the director of public safety shall impose one or more of the following:

- A. A warning;
- B. An order to correct the particular noncompliance specified in the notice issued pursuant to Section 20.40.020;
- C. A revocation of the permit for the facility or for a storage facility and approval of a provisional permit;
- D. Suspension of the permit for the facility or for a storage facility for a specified period not to exceed six (6) months;
- E. Modification or addition of conditions of the permit;
- F. Revocation of the permit with no reapplication permitted for a specified period not to exceed five (5) years.

If the grounds for remedial action are based on Section 20.40.010.C, D, or E and if such grounds are limited to one storage facility, the remedial action taken shall be limited to that storage facility (Ord. 2056-83 § 1 [part]).

Section 20.40.060 Transmittal of Decision

Within ten (10) days of the hearing the director of public safety shall render a written opinion, stating the findings upon which the decision is based and the action taken, if any. The decision of the director of public safety shall be the final administrative determination and is subject to judicial review (Ord. 2056-83 § 1 [part]).

Section 20.40.070 Authority After Suspension, Revocation, or Expiration

The suspension, revocation, or expiration of a permit issued under this title shall not prevent any proceedings to investigate such permit, any remedial action against such permittee (Ord. 2056-83 § 1 [part]).

Section 20.40.080 Return of Permit

In the event that a permit issued under the provisions of this title is suspended or revoked, the permittee shall forward it to the issuing officer not later than the end of the third business day after notification of such suspension or revocation (Ord. 2056-83 § 1 [part]).

CHAPTER 20.44

HEARING PROCEDURE

Sections: 20.44.010 Hearing Rules
20.44.020 Hearing Notices

Section 20.44.010 Hearing Rules

In any hearing under this title, all parties involved shall have the right to offer testimonial, documentary, and tangible evidence bearing on the issues, to be represented by counsel, and to confront and cross-examine any witnesses against them. Any hearing under this title may be continued by the person conducting the hearing for a reasonable time for the convenience of a party or a witness (Ord. 2056-83 § 1 [part]).

Section 20.44.020 Hearing Notices

All notices required by this chapter shall be sent by certified mail, postage prepaid, to the applicant or permittee at the address given for purposes of notice on the application or permit or delivered to the permittee personally (Ord. 2056-83 § 1 [part]).

CHAPTER 20.48

ENFORCEMENT

Sections: 20.48.010 Criminal Penalties
20.48.020 Civil Penalties
20.48.030 Remedies Not Exclusive
20.48.040 Civil Action for Retaliation

Section 20.48.010 Criminal Penalties

As provided under Chapter 1.04, violations of the provisions of this title shall be subject to criminal sanctions (Ord. 2056-83 § 1 [part]).

Section 20.48.010 Civil Penalties

- A. Except as is set forth in subsection "B" below, any person, firm, or corporation who intentionally or negligently violates any provision of this title (except that an unauthorized discharge which is recordable and recorded in compliance with Section 20.24.010, shall not be a violation of this title for purposes of this section), or who fails to comply with any order issued thereunder, shall be liable for a civil penalty not to exceed five hundred dollars per day for each violation, which shall be assessed and recovered in a civil action brought in the name of the people by the city attorney.
- B. Notwithstanding subsection "A" above, any person, firm, or corporation which stores any hazardous material regulated under this title, in an underground storage facility shall be liable for a civil penalty of not less than five hundred dollars or more than five thousand dollars per day for any of the following:
1. Operating an underground storage facility for the storage of hazardous materials regulated under this title, which has not been issued a permit in accordance with this title;
 2. Failure to monitor the underground storage facility as required by the permit and in accordance with the HMMP;
 3. Failure to maintain records as required by Section 20.28.050 herein;
 4. Failure to report a reportable unauthorized release, as required by Section 20.24.010;
 5. Failure to repair an underground storage facility in accordance with the provisions of this title;
 6. Abandonment or improper closure of any underground storage facility subject to the provisions of this title.

- C. Any person, firm, or corporation which falsifies any monitoring records required by this title, or which knowingly fails to report a reportable unauthorized discharge in accordance with this title, shall be liable for a civil penalty of not less than five thousand dollars or more than ten thousand dollars.
- D. In any civil action brought pursuant hereto, in which the city prevails, the court shall determine and impose reasonable expenses, including attorneys' fees, incurred by the city in the investigation and prosecution of the action.
- E. In determining the penalty, the court shall consider all the relevant circumstances including, but not limited to, the following:
 - 1. The extent of harm or potential harm caused by the violation;
 - 2. The nature and persistence of the violation;
 - 3. The length of time over which the violation occurred;
 - 4. The frequency of past violations;
 - 5. The permittee's record of maintenance;
 - 6. Corrective action, if any, taken by the permittee (Ord. 2087-83 § 10; Ord. 2056-83 § 1 [part]).

Section 20.48.030 Remedies Not Exclusive

Remedies under this chapter are in addition and do not supersede or limit any and all other remedies, civil or criminal (Ord. 2056-83 § 1 [part]).

Section 20.48.040 Civil Action for Retaliation

A civil action may be instituted against any employer by an employee who has been discharged, demoted, suspended, or in any other manner discriminated against in terms or conditions of employment, or threatened with any such retaliation, because such employee has, in good faith, made any oral or written report or complaint related to the enforcement of this title to any company official, public official, or union official, or has testified in any proceeding in any way related thereto. In addition to any actual damages which may be awarded, damages shall include costs and attorney's fees. The court may award punitive damages in a proper case (Ord. 2056-83 § 1 [part]).

CHAPTER 20.52

MISCELLANEOUS

Sections:	20.52.010	Disclaimer of Liability
	20.52.020	Guidelines
	20.52.030	Duties Are Discretionary
	20.52.040	Conflict With Other Laws
	20.52.050	Severability
	20.52.060	Report to the State Water Resources Control Board

Section 20.52.010 Disclaimer of Liability

- A. The degree of protection required by this title is considered reasonable for regulatory purposes. The standards set forth herein are minimal standards and this title does not imply that compliance will ensure that there will be no unauthorized discharge of hazardous material. This title shall not create liability on the part of the city, any officer or employee thereof for any damages that result from reliance on this title or any administrative decision lawfully made thereunder. All persons handling, storing, using, processing, and disposing of hazardous materials within the city should be and are advised to determine to their own satisfaction the level of protection in addition to that required by this title necessary or desirable to ensure that there is no unauthorized discharge of hazardous materials.
- B. This title is not intended to create any different standard or obligation for the storage of carcinogens than is imposed for the storage of other hazardous materials. Hazardous materials are identified as carcinogens herein for public record purposes only and the identification of a material as a carcinogen shall not require a different or stricter application of the provisions of this title, nor notice to any person under any circumstances other than those expressly specified in this title, nor shall such identification create any other duty or obligation upon city different from or additional to those duties or obligations applicable to the storage of other hazardous materials (Ord. 2067-83 § 10; Ord. 2056-83 § 1 [part]).

Section 20.52-020 Guidelines

Guidelines approved by the director of public safety shall be maintained in the office of the city clerk. Such guidelines, in the areas addressed therein, shall serve as an advisory interpretation of this title (Ord. 2056-83 § 1 [part]).

Section 20.52-030 Duties Are Discretionary

Subject to the limitations of due process, notwithstanding any other provision of this code whenever the words "shall" or "must" are used

in establishing a responsibility or duty of the city, its elected or appointed officers, employees, or agents, it is the legislative intent that such words establish a discretionary responsibility or duty requiring the exercise of judgment and discretion (Ord. 2056-83 § 1 [part]).

Section 20.52.040 Conflict With Other Laws

Notwithstanding any other provision of this title:

- A. A storage facility regulated by any State or Federal agency will be exempted from any conflicting provision of this title.
- B. If the storage facility is required to have a permit from the Department of Health Services under Health and Safety Code Section 25100, et seq., it shall be exempted from any provision of this title which is covered by the regulations adopted under the above cited statute.
- C. Whenever any provision of this title conflicts with the Fire Code as adopted by city, the stricter shall prevail (Ord. 2056-83 § 1 [part]).

Section 20.52.050 Severability

If any section, subsection, sentence, clause, or phrase of this title is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the title. The city council hereby declares that it would have passed this title and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the title would be subsequently declared invalid or unconstitutional (Ord. 2056-83 § 1 [part]).

Section 20.52.060 Report to the State Water Resources Control Board

The city will require its permit applicants and permittees to fill out, in addition to forms required for city's own purposes under this title, standardized forms based on the application form and annual report form prepared by the State Water Resources Control Board as specified by California Health and Safety Code Section 25283.2, and city will forward these forms to the State Water Resources Control Board.

However, where any of the information required on such standardized forms is claimed by the permit applicant or permittee to be a trade secret, the permit applicant or permittee shall leave that portion of the form submitted to city blank, except to indicate the words "trade secret," and the permit applicant or permittee shall thereafter, within ten (10) days of submitting the incomplete form to city, submit the completed form including the trade secret information directly to the State Water

Resources Control Board. City shall have no obligation to protect as a trade secret any information which is furnished to it for forwarding to the State Water Resources Control Board on these standardized forms (Ord. 2087-83 § 9).

CHAPTER 20.56

COMPLIANCE SCHEDULE

Section: 20.56.010 Time Table for Initial Compliance

Section 20.56.010 Time Table for Initial Compliance

A. New Storage Facilities

1. As of the effective date of this title, a Hazardous Materials Storage Permit for a facility must be obtained prior to the installation or use of any new storage facility unless a building permit for such new storage facility was issued prior to such date.
2. The Hazardous Material Management Plan must be filed at the time of application for a Hazardous Materials Storage Permit.

B. Existing Storage Facilities

1. A facility which has any existing hazardous materials storage facilities or had obtained a building permit for such a storage facility prior to the effective date of this title and to which no new storage facility is added shall have one (1) year from such effective date to file a completed application for a Hazardous Materials Storage Permit, including a monitoring plan in accordance with Section 20.12.030. The time limitation for determination specified in Section 20.32.110 shall not apply but the applicant shall be deemed to have a provisional permit of indefinite term, until city makes such determination.
2. Notwithstanding the above, a Hazardous Material Inventory Statement, if applicable, must be filed within ninety (90) days of the effective date of this title (Ord. 2056-83 § 1 [part]).

ORDINANCE NO. 81-23

ORDINANCE CREATING SECTION 24.1 OF THE CODE OF METROPOLITAN DADE COUNTY, FLORIDA, REGULATING LAND USES WITHIN CONES OF INFLUENCE; ENTITLED "POTABLE WATER SUPPLY WELL PROTECTION ORDINANCE"; PROVIDING MAPS OF CONES OF INFLUENCE; REGULATING SEPTIC TANKS, SANITARY SEWERS, STORMWATER DISPOSAL AND WASTEWATER DISPOSAL AND WASTEWATER EFFLUENTS WITHIN CONES OF INFLUENCE; PROHIBITING HAZARDOUS MATERIALS WITHIN CONES OF INFLUENCE; AMENDING SECTION 18-3 OF THE CODE OF METROPOLITAN DADE COUNTY TO ALLOW THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES MANAGEMENT TO PETITION FOR SPECIAL TAXING DISTRICT; AMENDING SECTION 24-3 OF THE CODE OF METROPOLITAN DADE COUNTY TO PROVIDE ADDITIONAL DEFINITIONS; PROVIDING SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE.

Whereas, there is an urgent need to further protect existing and future potable water supply wells from the irreversible and adverse effects of bacterial, viral, and chemical contamination; and

Whereas, the replacement cost of each public utility potable water supply well is approximately one million dollars and the cost of replacement of a major wellfield is in excess of thirty million dollars; and

Whereas, the report prepared by the Department of Environmental Resources Management entitled "Protection of Potable Water Supply Wells", dated December 30, 1980, contains the most recent data concerning the characteristics of the Biscayne Aquifer, sources of aquifer pollution and the disposition of pollutants in the aquifer and the findings of said report are hereby incorporated herein by reference hereto; and

Whereas, the Biscayne Aquifer has been declared by the United States Environmental Protection Agency to be a "sole source aquifer", i.e., the only practical source of drinking water for the residents of Dade County; and

Whereas, Section 24-5(8) of the Metropolitan Dade County Code requires the Director of the Department of Environmental Resources Management to publish and disseminate information to the public concerning water pollution and recommended methods for decreasing and eliminating water pollution; and

Whereas, Section 24-11(3) of the Code of Metropolitan Dade County makes it unlawful for any person to discharge any wastes into the waters (including but not limited to canals) of Dade County in such quantities and of such characteristics as to cause water pollution.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF DADE COUNTY, FLORIDA:

1. Words stricken through shall be deleted. Underscored words constitute the amendment proposed. Remaining provisions are now in effect and remain unchanged.

Section 1

The foregoing recitations are hereby incorporated into this ordinance.

Section 2

Section 24-12.1 of the Code of Metropolitan Dade County, Florida, is hereby enacted as follows:

Section 24-12.1 Protection of Potable Water Supply Wells

A. Legislative Intent

The intent and purpose of this ordinance is to safeguard the public health, safety, and welfare by providing scientifically established standards for land uses within the cones of influence thereby protecting potable water supply wells from contamination.

B. Short Title, Applicability, Construction

This ordinance shall be known as the "Potable Water Supply Well Protection Ordinance." The provisions of this ordinance shall be effective in the incorporated and unincorporated areas of Dade County and shall be liberally construed to effect the purpose set forth herein.

C. Maps of Cones of Influence

The Director of the Department of Environmental Resources Management (DERM) shall maintain maps of cones of influence of public utility potable water supply wells. The cone of influence maps dated December 30, 1980, as may be amended from time to time, prepared by the Department of Environmental Resources Management are incorporated herein by reference hereto. Any changes, additions, or deletions to said maps shall be approved by the Board of County Commissioners by ordinance.

D. Septic Tanks, Sanitary Sewers, Stormwater Disposal, and Wastewater Disposal Within Cones of Influence

Notwithstanding any provision of this code, no county or municipal officer, agent, employee, or board shall approve or issue any building permit, certificate of use and occupancy (except for more changes in ownership), municipal occupational license, plat, or zoning for any land use served to be served by a septic tank, sanitary, sewage, stormwater disposal method, or wastewater disposal method, and which is located within a cone of influence, until the county or municipal officer, agent, employee or board has obtained the prior written approval of the DERM. The director shall issue his written approval only if he finds:

Septic Tanks:

1. that the septic tank sewage loadings will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in tables A-1, A-2, A-3 and A-4; or

that the property served or to be served by septic tanks is residential, uses a public water supply, was zoned and platted prior to the effective date of this ordinance, and is in compliance with Section 24-13;

notwithstanding the provisions of (4)(a), there shall be required in all cones of influence a minimum separation equivalent to ten (10) days travel time between any potable water supply well (other than a public utility potable water supply well) and any septic tank or drainfield.

Sanitary Sewers:

2. that the sewage loading into sanitary sewers will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in table B-1; or

that the property served or to be served by sanitary sewers is residential, uses a public water supply, was zoned and platted prior to the effective date of this ordinance, and is in compliance with Section 24-11(9).

Stormwater Disposal Methods:

3. that the stormwater disposal methods utilized or to be utilized will be limited as set forth in table C-1.

Wastewater Effluents and Disposal Methods:

4. that the wastewater effluents and disposal methods (other than septic tanks and sanitary sewers) utilized or to be utilized will be limited as set forth in table D-1.

E. Prohibition of Hazardous Materials Within Cones of Influence

Notwithstanding any provision of this code, no county or municipal officer, agent, employee, or board shall approve or issue any building permit, certificate of use and occupancy (except for more changes in ownership), municipal occupational license, plat or zoning for any nonresidential land use, other than a bona fide agricultural land use or a public water supply facilities use, within two hundred and ten (210) days travel time from a public utility potable water supply well without obtaining the prior written approval of the DERM. The director shall issue his written approval only after the owner of the property submits to the director an executed covenant running with the land in favor of Metropolitan Dade County which provides that hazardous materials shall not be used, generated,

Table A-1. Residential property served by septic tank and using public water supply

Travel time in days or distance in feet from closest point of property to nearest public utility potable water supply well	Maximum allowable sewage loading for property not moving indigenous sandy substrata (gallons per day per unsubmerged acre)	Maximum allowable sewage loading for property having indigenous sandy substrata (gallons per day per unsubmerged acre)
More than 100 days but not exceeding 210 days	850	As allowed by Section 24-13
More than 30 days but not exceeding 100 days	600	850
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of class II silica sand under drainfield	600 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of class II silica sand under drainfield	350 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

Table A-2. Residential property served by septic tank and not using public water supply

Travel time in days or distance in feet from closest point of property to nearest public utility potable water supply well	Maximum allowable sewage loading for property not having indigenous sandy substrata (gallons per day per unsubmerged acre)	Maximum allowable sewage loading for property having indigenous sandy substrata (gallons per day per unsubmerged acre)
More than 100 days	750 with minimum of 24 inches of class II silica sand under drainfield	750 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
More than 30 days but not exceeding 100 days	600 with minimum of 24 inches of class II silica sand under drainfield	750 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of class II silica sand under drainfield	600 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of class II silica sand under drainfield	350 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

Table A-3. Nonresidential property served by septic tank using public water supply, and not using, generating, handling, disposing, discharging, or storing hazardous materials

Travel time in days or distance in feet from closest point of property to nearest public utility potable water supply well	Maximum allowable sewage loading for property not having indigenous sandy substrata (gallons per day per unsubmerged acre)	Maximum allowable sewage loading for property having indigenous sandy substrata (gallons per day per unsubmerged acre)
More than 100 days but not exceeding 210 days	850	1500
More than 30 days but not exceeding 100 days	600	850
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of class II silica sand under drainfield	600 with minimum of 24 inches class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of class II silica sand under drainfield	350 with minimum of 24 inches class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

Table A-4. Nonresidential property served by septic tank not using public water supply, and not using, generating, handling, disposing, discharging, or storing hazardous materials

Travel time in days or distance in feet from closest point of property to nearest public utility potable water supply well	Maximum allowable sewage loading for property not having indigenous sandy substrata (gallons per day per unsubmerged acre)	Maximum allowable sewage loading for property having indigenous sandy substrata (gallons per day per unsubmerged acre)
More than 100 days	750 with minimum of 24 inches of class II silica sand under drainfield	750 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
More than 30 days but not exceeding 100 days	600 with minimum of 24 inches of class II silica sand under drainfield	750 with minimum of 24 inches of class II silica sand or indigenous sand under drainfield
More than 10 days but not exceeding 30 days	350 with minimum of 24 inches of class II silica sand under drainfield	600 with minimum of 24 inches class II silica sand or indigenous sand under drainfield
More than 100 feet but not exceeding 10 days	140 with minimum of 24 inches of class II silica sand under drainfield	350 with minimum of 24 inches class II silica sand or indigenous sand under drainfield
100 feet or less	0	0

Table B-1. Nonresidential property served by sanitary sewers and not using, generating, handling, disposing, discharging, or storing hazardous materials

Travel time in days or distance in feet from closest point of property to nearest public utility potable water supply well	Maximum allowable sewage loading for property not having indigenous sandy substrata (gallons per day per unsubmerged acre)	Maximum allowable sewage loading for property having indigenous sandy substrata (gallons per day per unsubmerged acre)
More than 30 days	No additional restrictions	No additional restrictions
More than 10 days but not exceeding 30 days	1600	No additional restrictions
More than 100 feet but not exceeding 10 days	850	1600
100 feet or less	0	0

Table C-1. Allowable stormwater disposal methods for residential and nonresidential property

Travel time in days or distance in feet from closet point of property to nearest public utility potable water supply well	Allowable methods for stormwater disposal
More than 30 days but not exceeding 210 days	Infiltration or seepage or overflow outfalls only
More than 10 days but not exceeding 30 days	Infiltration or seepage only
More than 100 feet but not exceeding 10 days	Infiltration only
100 feet or less	None

Table D-1. Allowable wastewater effluents and disposal methods
for residential and nonresidential property

Travel time in days or distance in feet from closest point of property to nearest public utility potable water supply well	Allowable wastewater effluents and disposal methods (other than septic tanks and sanitary sewers)
More than 100 days but not exceeding 210 days	Industrial or domestic effluents treated as required by sections 24-11 and disposed by seepage only; noncontact cooling water disposed by gravity injection, infiltration or seepage only
More than 30 days but not exceeding 100 days	Noncontact cooling water disposed by gravity injection, seepage or infiltration only
30 days or less	None

handled, disposed of, discharged, or stored on the property. Said covenants shall be in a form(s) prescribed by the director and approved by the Board of County Commissioners. The covenants shall be recorded by the Department of Environmental Resources Management at the expense of the owner of the property.

Section 1

Section 18-3 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:¹

A. Proceedings for creation and establishment of districts.

The proceedings for the creation and establishment of a district under the provisions of this article shall be as follows:

1. Petition. There shall be filed with the clerk of the board a petition requesting the creation and establishment of a special taxing district under the provisions of this article, signed by the planning director or by the DERM or by fifty (50) percent of the resident owners of property embraced within the proposed district. Opposite each such signature of owners of property there shall be inserted his post office address and a brief reference to the property within the proposed district which is owned by such signer, and such reference shall be sufficient to identify any property involved and shall set forth the folio number of the county tax bill covering such property. For the purposes of any such petition of owners of property, the rights of mortgagees and lienors shall not be considered and the signature of any person holding a fee interest in the property shall be sufficient, and either the signature of the husband or the wife shall be sufficient in cases where the property is owned by both husband and wife. In addition to the foregoing, such petition shall also contain and set forth the following:

- a. the boundaries or other description sufficient to identify the property embraced in the proposed district, together with a survey sketch showing the location of the proposed district; and
- b. a brief description of the project requested to be constructed, acquired, reconstructed, or installed.

Section 24-1 of the Code of Metropolitan Dade County, Florida, is hereby amended to read as follows:

Section 24-3. Definitions

In construing the provisions of this chapter, where the context will permit and no definition is provided herein, the definitions provided in Chapter 67-436, Laws of Florida 1967, and in rules and regulations promulgated thereunder shall apply. The following words and phrases when used in this chapter shall have the meaning ascribed to them in this section.

(6/2) (1) A Cooling Pond--a body of water enclosed by natural or constructed restraints which has been approved by the Florida Department of Pollution Control (DPC) for purposes of controlling heat dissipation from thermal discharges.

(31) (2) Adequate Protection by Natural Means--one or more of the following processes of nature that produces water consistently meeting the requirements of the standards in this chapter: Dilution, storage, sedimentation, sunlight, aeration, and the associated physical and biological processes which tend to accomplish natural purification in surface waters and, in the case of groundwaters, the natural purification of water by infiltration through soil and percolation through underlying material and storage below the groundwater table, as may be approved by the DERM.

(40) (3) Adequate Protection by Treatment--complete or full treatment which is the combination of the controlled processes of coagulation, sedimentation, absorption, filtration, disinfection, or other processes which produce a water consistently meeting the potable water standards including processes which are appropriate to the quality of the raw water supply; works which are of adequate capacity to meet maximum demands without creating health hazards, and which are located, designed, and constructed to eliminate or prevent pollution; and conscientious operation by well-trained and competent personnel whose qualifications are commensurate with the responsibilities of the position and acceptable to the DERM.

(7) (4) Agricultural Operation--the growing of crops, the raising of fowl, animals or bees, as a gainful occupation, but shall not include such activities engaged in as a hobby or truck farming in residential areas.

(2) (5) Air Contaminants--a particulate, gas or odor, including but not limited to, smoke, charred paper, dust, soot, grime, carbon, or any particulate matter or irritating, malodorous, or noxious acids, fumes or gases, or any combination thereof, but shall not include uncombined water vapor.

(13) (6) Air Pollution--the presence in the outdoor atmosphere of one or more air contaminants or combination thereof in such quantities and of such duration which are injurious to human, plant, or animal life, or property, or which unreasonably interfere with the comfortable enjoyment of life or property or the conduct of business.

(3/1) (7) Ambient (Natural) Temperature--the existing temperature of the receiving water at a location which is unaffected by manmade thermal discharges and a location which is also of a depth and exposure to winds and currents which typify the most environmentally stable portions of the receiving bodies of water.

(9/1) (8) An Existing Heat Source--any thermal discharge:

- (a) which is presently taking place, or
- (b) for which a construction or operating permit has been issued prior to the effective date of these rules.

(48) (9) Annular Space--the space between two (2) casings or between the outer casing and the wall of the well hole.

(13/2) (10) Asbestos--a fibrous, rockforming mineral including, but not limited to, such amphibole varieties as tremilite, actinolite, anthophyllite, grunerite, richterite, edenite, amosite, crocitolite, and such serpentine varieties as amianthus and chrysotile, as well as synthetic asbestos fibers including, but not limited to, fluor-tremilite, fluor-richterite, and fluor-edenite.

(47) (11) Casing--the tubular material utilized to shut off or exclude a stratum or strata other than the source bed and conduct water from only the source bed to the surface.

(13/3) (12) Coastal Waters--all waters in the State which are not classified as fresh water.

(1/4) (13) Combustion Contaminants--particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state.

(1/3) (14) Combustible Refuse--any combustible waste material containing carbon in a free or combined state.

(1/6) (15) Condensed Fumes--minute solid particles generated by the condensation of vapors from solid matter volatilization from the molten state, or may be generated by chemical processes, operations or reactions, when these processes create airborne particles.

(16) Cone of Influence--a localized depression or drawdown of the groundwater due to water supply well pumpage.

(43) (17) Cross-Connection--any physical connection or arrangement whereby contamination may enter a water supply system; such as two (2) otherwise separate piping systems, one of which contains or is designed to contain potable water and the other wastewater or other fluids or material of unknown or questionable safety, where intermixing may occur depending on the pressure or temperature differential between the two (2) systems.

(13) (18) DERM--the director, environmental resources management, with duties created pursuant to Section 24-4 of the code.

(13) (19) Department--the department of environmental resources management.

~~(17)~~ (20) Drainage Well--any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the artificial recharge of groundwater, or the intentional introduction of water into any underground formation.

~~(10)~~ (21) Dust--minute solid particles, released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, etc.

(9) (22) Emission--the act of passing into the atmosphere an air contaminant or gas stream which contains or may contain an air contaminant; or the material so passed to the atmosphere.

~~(32)~~ (23) Facility--anything that is built or purchased to make an action or operation easier or to serve a special purpose.

~~(10)~~ (24) Flue--any duct or passage for air, gases, or airborne materials, such as a stack or chimney.

~~(10/1)~~ (25) Fresh Waters--all waters of the State which are contained in lakes and ponds, or are in flowing streams above the zone in which tidal actions influence the salinity of the water and where the concentration of chloride ions is normally less than five hundred (500) mg/l.

~~(49)~~ (26) Free Chlorine--chlorine existing in water as hypochlorous acid, hypochlorite ions, and molecular chlorine.

~~(11)~~ (27) Gas--a formless fluid which occupies space and which can be changed to a liquid or solid state only by increasing pressure with decreased or controlled temperature, or by decreased temperature with increased or controlled pressure.

(28) Gravity Injection--the introduction of water into a well from which the water enters the groundwater without any force other than the force of gravity. Said well shall be in excess of two (2) feet below the average yearly highest groundwater elevation as specified in the Dade County Public Works Manual as same may be amended from time to time.

(29) Hazardous Materials--any waste product, substance, or combination or breakdown product thereof which, because of its biological or chemical characteristics, is harmful or which is potentially harmful to human beings, animals, or to the environment.

~~(11/1)~~ (30) Heated Water Discharge--effluents from commercial or industrial activities or processes in which water is used for the purpose of transporting waste heat.

~~(12)~~ (31) Health Hazards--any conditions, devices, or practices in a water supply system or its operation which create a possible danger to the health and well-being of the water consumer. (An example of a health hazard is structural defect in the water supply system, whether of location, design, or construction, which may regularly or occasionally

prevent satisfactory purification of water supply or cause it to be polluted from extraneous sources).

(32) Infiltration--the distribution of water on the surface of land to permit the water to soak through the vegetation and soil into the groundwater.

~~(30)~~ (33) Individual Water Supply--a well or wells or other source of water, and pump and piping if any, located on the premises served for supplying twenty-five (25) persons or less.

~~(38)~~ (34) Maximum Contaminant Level--the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.

~~(12)~~ (35) Mist--a suspension of any finely divided liquid in any gas.

~~(13)~~ (36) Multiple-Chamber Incinerator--article, machine, equipment, contrivance, structure, or part of a structure, used to dispose of combustible refuse by burning, consisting of three (3) or more refractory-lined combustion chambers in a series, physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned.

The refractories shall have a pyrometric cone equivalent of at least seventeen (17), tested according to the method described in the American Society for Testing Materials, Method C-24.

~~(14)~~ (37) Nuisance--means and includes the use of any property, facilities, equipment, processes, products, or compounds, or the commission of any acts, that cause, or materially contribute to:

- A. The emission into the outdoor air of dust, fume, gas, mist, odor, smoke or vapor, or any combination thereof, of a character and in a quantity as to be detectable by a considerable number of persons or the public, at any point beyond the property limits of the premises occupied or used by the persons responsible for the source thereof, so as to interfere with their health, repose of safety, or cause severe annoyance or discomfort, or tends to lessen normal food and water intake, or produces irritation of the upper respiratory tract, or produces symptoms of nausea, or is offensive or objectionable to normal persons because of inherent chemical or physical properties, or causes injury or damage to real property, personal property or human, animal or plant life of any kind, or which interferes with normal conduct of business, or is detrimental or harmful to the health, comfort, living conditions, welfare, and safety of the inhabitants of this county.
- B. The discharge into any of the waters of this county of any organic or inorganic matter or deleterious substance or chemical compounds,

or any effluent containing the foregoing, in such quantities, proportions or accumulations as to be detectable at any point beyond the property limits of the premises occupied or used by the person responsible for the source thereof, so as to interfere with the health, repose, or safety of any considerable number of persons or the public, or to cause severe annoyance or discomfort, or which tends to lessen normal food and water intake, or produces symptoms of nausea, or is offensive or objectionable to normal persons because of inherent chemical or physical properties, or causes injury or damage to real property, personal property, human, plant, or animal life of any kind, or which interferes with normal conduct of business, or is detrimental or harmful to the health, comfort, living conditions, welfare, and safety of the inhabitants of this county.

- C. Any violation of provisions of this chapter which becomes detrimental to health or threatens danger to the safety of persons or property, or gives offense to, is injurious to, or endangers the public health and welfare, or prevents the reasonable and comfortable use and enjoyment of property by any considerable number of the public.

~~(15)~~ (38) Odor--that property of a substance which materially offends the sense of smell.

~~(16)~~ (39) Oil-Effluent Water Separator--any tank, box, sump, or other container in which any petroleum or product thereof, floating on or entrained or contained in water entering such tank, box, sump, or other container, is physically separated, and removed from such water prior to outfall, drainage, or recovery of such water.

~~(17)~~ (40) Open Outdoor Fire--any combustion of combustible material of any type outdoors, in the open, not in any approved enclosure or device, where the products of combustion are not directed through a flue.

(41) Overflow Outfall--a pipe, conduit, or vessel which discharges excess stormwater into surface waters. The entire stormwater flow from a given drainage area shall be retained onsite if possible. If conditions do not permit full onsite retention of the designated storm then, at a minimum, the first inch of runoff shall be retained and the excess may be discharged to surface waters.

~~(18)~~ (42) ppm (vol.)--parts per million by volume.

~~(19)~~ (43) ppm (wt.)--parts per million by weight and is equivalent to milligrams per liter.

~~(20)~~ (44) Particulate Matter--any material which at standard conditions, is emitted into the atmosphere in a finely divided form as liquid or solid or both, but shall not include uncombined water vapor.

~~(21)~~ (45) Person--any natural person, individual, public or private corporation, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, or any other entity whatsoever, or any combination of such, jointly or severally.

(143) (46) Pollution--the presence of any foreign substance (organic, inorganic, radiological, biological or thermal) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

(222) (47) Process Weight Per Hour--Process weight is the total weight of all materials except uncombined water, introduced into any unit process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels, combustion air, excess air, infiltrated, and other air added to the process, will not be so considered. The process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.

(399) (48) Potable Water--water that is satisfactory for drinking, culinary and domestic purposes meeting the quality standards defined in this chapter.

(377) (49) Public Water System--a system for the provision to the public of piped water for human consumption, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least three (3) months of the year. Such term includes:

- A. any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and
- B. any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.

(223) (50) Ringlemann Chart--the method of estimating smoke density described in U.S. Bureau of Mines Information Circular 7718.

(223/1) (51) Sanitary Nuisance--the commission of any action, by an individual, municipality, organization, or corporation, or the keeping, maintaining, propagation, existence, or premission of anything, by an individual, municipality, organization, or corporation by which health or life of an individual or the health or life of individuals, may be threatened or impaired or by which or through which, directly or indirectly, disease may be caused.

(344) (52) Sanitary Sewer--any conduit which is designed to carry wastewater generated by households and industries.

(53) Seepage--the introduction of water into a subsurface excavation from which the water enters the groundwater. Said excavation shall not exceed a depth of two (2) feet below the average yearly highest groundwater elevation described in the Dade County Public Works Manual as same may be amended from time to time.

~~(54)~~ (54) Sewage Loading--the estimated average amount of wastewater generated by the actual and projected use of a property as a function of the unsubmerged area of said property. Abutting easements and rights-of-way shall be included to the centerlines thereof in calculating the unsubmerged area of the property.

~~(24)~~ (55) Smoke--the solid particles produced by incomplete combustion or organic substances, including, but not limited to, particles, fly ash, cinders, tarry matter, soot, and carbon.

~~(46)~~ (56) Source Bed--the stratum or strata from which water is drawn in the well.

~~(23)~~ (57) Source Gas Volume--the volume, in standard cubic feet, of all gases leaving a source operation; and the boundary of a source operation is that point or surface at which the separation of the air contaminants from the process materials, or the conversion of the process materials into air contaminants, is essentially complete.

~~(26)~~ (58) Source Operation--the last operation preceding the emission of air contaminant which operation:

A. results in the separation of the air contaminant from the process material or in the conversion of the process materials into air contaminants, as in the case of combustion fuel; and

B. is not an air pollution abatement operation.

~~(27)~~ (59) Standard Conditions--a pressure of fourteen and seven-tenths (14.7) pounds per square inch, absolute, and a temperature of sixty (60) degrees Fahrenheit. Results of all analyses and tests shall be calculated or reported at this gas temperature and pressure.

~~(28)~~ (60) Standard Methods--the "Standard Methods for the Examination of Water and Waste Water," according to the most recent edition, as published jointly by the American Public Health Association (APHA), American Water Works Association (AWWA), and Water Pollution Control Federation (WPCF). Technical terms used in this chapter are those defined in the "Glossary-Water and Sewage Control Engineering" published jointly by APHA, American Society of Civil Engineers (ASCE), AWWA, and WPCF, latest edition, and the "Condensed Chemical Dictionary," published by Reinhold, latest edition.

~~(41)~~ (61) Storm Sewer--any conduit which is designed to carry stormwater runoff.

~~(33)~~ (62) The Coliform Group--all organisms considered in the coliform group as set forth in "Standard Methods for the Examination of Water and Waste Water," current edition, prepared and published jointly by the APHA, AWWA, and WPCF.

~~(211)~~ (63) The Point of Discharge (POD) (for a heated water discharge)--either that point at which the effluent physically leaves its carrying conduit (open or closed) and discharges into the waters of the State, or a specific point designated by the Florida DPC for that particular thermal discharge.

~~(44)~~ (64) The Standard Sample--that for the bacteriological test it shall consist of:

A. for the bacteriological fermentation tube test five (5) standard portions of either:

1. ten milliliters (10 ml), or
2. one hundred milliliters (100 ml);

B. for the membrane filter techniques not less than fifty milliliters (50 ml).

(65) Travel Time--the period of time in days or equivalent distance in feet for groundwater to travel from one point in an aquifer to another point in the aquifer.

(66) Unsubmerged Land--any land which meets or exceeds the minimum elevation required by Metropolitan Dade County flood criteria.

~~(29)~~ (67) Vapor--any mixed material in a gaseous state which is formed from a substance, usually a liquid, by increased temperature.

~~(30)~~ (68) Waste Discharge--any outfall, ditch, pipe, soakage, pit, drainage well, drainfield, or any other method or device by which treated or untreated sewage, industrial waste, or other wastes can enter the surface waters, tidal salt waters, or groundwaters, so as to cause water pollution as herein defined.

~~(31)~~ (69) Water Pollution--the introduction in any surface or underground water, or tidal salt water, of any organic or inorganic matter or deleterious substance in such quantities, proportions, or accumulations which are injurious to human, plant, animal, fish, and other aquatic life, or property, or which unreasonably interferes with the comfortable enjoyment of life or property, or the conduct of business.

~~(32)~~ (70) Water System--a system which supplies water for drinking, culinary, fire, industrial, commercial, or domestic purposes (Ordinance No. 67-95, § 1, 12-19-67; Ordinance No. 72-76, § 1, 10-31-72; Ordinance No. 75-27, § 1, 5-7-75).

Section 5

If any section, subsection, sentence, clause, or provision of this ordinance is held invalid, the remainder of this ordinance shall not be affected by such invalidity.

Section 6

It is the intention of this Board of County Commissioners, and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Metropolitan Dade County, Florida. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "articles," or other appropriate word.

Section 7

This ordinance shall become effective ten (10) days after the date of its enactment, except that this ordinance shall not become effective as to those lands which are within the medley Wellfield cone of influence until thirty-five (35) days from the date of the enactment of this ordinance.

PASSED AND ADOPTED: March 3, 1981

Approved by County Attorney
as to form and legal
sufficiency.

Prepared by:

ORDINANCE No. 83-82

ORDINANCE AMENDING MAP OF CONE OF INFLUENCE FOR NORTHWEST (FORMERLY THREE SQUARE MILE) WELLFIELD AND SECTIONS 24-12.1(4) and (5), 24-3(33), 24-3, AND 24-13 OF THE CODE OF METROPOLITAN DADE COUNTY, FLORIDA, RELATING TO POTABLE WATER SUPPLY WELLS, NORTHWEST WELLFIELD CONE OF INFLUENCE, SEPTIC TANKS, ROCKMINING, AND NONRESIDENTIAL LAND USES SERVED BY WASTEWATER DISPOSAL AND TREATMENT METHODS OTHER THAN SANITARY SEWERS; PROVIDING DEFINITIONS; PROVIDING FOR COVENANTS RUNNING WITH THE LAND; PROVIDING SEVERABILITY, INCLUSION IN AND EXCLUSION FROM THE CODE; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF DADE COUNTY, FLORIDA:

Section 1

The cone of influence map dated December 30, 1980, as amended effective June 1, 1983, for the Northwest (formerly Three Square Mile) Wellfield is hereby amended as set forth in the cone of influence map, a copy of which is attached hereto and made a part hereof.

Section 2

Sections 24-12.1(4) and (5) of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:¹

Section 24.12.1. Protection of Potable Water Supply Wells

4. Septic tanks, sanitary sewers, stormwater disposal, and wastewater disposal within cones of influence. Notwithstanding any provision of this code, no county or municipal officer, agent, employee, or board shall approve, grant, or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), plat, or zoning for any land use served or to be served by a septic tank, sanitary sewer, stormwater disposal method, or wastewater disposal method, and which is located within the cone of influence of the Northwest (formerly Three Square Mile) Wellfield or within two hundred and ten days' travel time from any public utility potable water supply well, until the county or municipal officer, agent, employee, or board has obtained the prior written approval of the director of the department or his designee. The director or his designee shall issue his written approval only if he finds that all septic tanks, septic tank drainfields, stormwater disposal methods, and wastewater disposal methods will be installed upon the property as far away as is reasonably possible from all potable water supply wells, and:

-
1. Words stricken through shall be deleted. Underscored words constitute the amendment proposed. Remaining provisions are now in effect and remain unchanged.

a. Septic tanks:

that the septic tank sewage loadings will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in tables A-1, A-2, A-3 and A-4, except that neither the director nor his designee shall issue his written approval for any land use served or to be served by a septic tank within the cone of influence of the Northwest (formerly Three Square Mile) Wellfield unless the septic tank was installed prior to the effective date of this ordinance, or

that the property served or to be served by septic tanks is residential, uses a public water supply, was zoned and platted prior to the effective date of this section, and is in compliance with Section 24-13, or

that the owner of the property served or to be served by septic tanks is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, or, in the case of the Northwest (formerly Three Square Mile) Wellfield, obtained prior to the effective date of this ordinance, which permit has been valid and continuously in full force and effect since its issuance.

b. Sanitary sewers:

that the sewage loading into sanitary sewers will not exceed the number of gallons per day for each unsubmerged acre of land as set forth in table B-1;

that the property served or to be served by sanitary sewers is residential, uses a public water supply, was zoned and platted prior to the effective date of this section and is in compliance with Section 24-11(9); or

that the owner of the property served or to be served by sanitary sewers is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, or, in the case of the Northwest (formerly Three Square Mile) Wellfield, obtained prior to the effective date of this ordinance, which permit has been valid and continuously in full force and effect since its issuance.

c. Wastewater effluents and disposal methods: That the waste- water effluents and disposal methods (other than septic tanks and sanitary sewers) utilized or to be utilized will be limited as set forth in table D-1, except that neither the director nor his designee shall issue his written approval for any land use served or to be served by any such wastewater effluents and

disposal methods of any kind (except sanitary sewers) within the cone of influence of the Northwest (formerly Three Square Mile) Wellfield, unless said wastewater effluent and disposal method was installed prior to the effective date of this ordinance.

5. Prohibition of hazardous materials within cones of influence.
Notwithstanding any provisions of this code, no county or municipal officer, agent, employee, or board shall approve, grant or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), plat or zoning for any nonresidential land use, other than a bona fide agricultural land use, a public sewer facilities use, or a public water supply facilities use, within the cone of influence of the Northwest (formerly Three Square Mile) Wellfield or within two hundred and ten (210) days' travel time from a any public utility potable water supply well without obtaining the prior written approval of the director of the department of environmental resources management or his designee. The director or his designee shall issue his written approval only if all potential sources of pollution will be installed upon the property as far away as is reasonably possible from all potable water supply wells, and only:
- a. After the owner of the property submits to the director or his designee an executed covenant running with the land for the property in favor of Metropolitan Dade County which provides that hazardous materials shall not be used, generated, handled, disposed of, discharged or stored on that portion of the property located within the cone of influence of the Northwest (formerly Three Square Mile) Wellfield or within two hundred and ten (210) days' travel time from a any public utility potable water supply well. Said covenants shall be in a form(s) prescribed by the director and approved by the board of county commissioners. The covenants shall be recorded in the public records of Dade County, Florida, by the department of environmental resources management at the expense of the owner of the property, or
- b. If the director or his designee determines that the owner of the property is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to June 1, 1983, or, in the case of the Northwest (formerly Three Square Mile) Wellfield, obtained prior to the effective date of this ordinance, which permit has been valid and continuously in full force and effect since its issuance, or
- (d)c. If the director or his designee determine:
7. Notwithstanding any provision of this code no county or municipal officer, agent, employee, or board shall approve, grant, or issue any permit of any kind whatsoever, certificate of completion, plat, or zoning for rockmining within thirty (30) days' travel time from any public utility potable water supply well.

Section 3

Section 24-3 (33) of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

- (33) Hazardous materials means any waste product, substance, or combination, or breakdown product thereof which, because of its biological or chemical characteristics,
is/harmful/or/which/is/potentially/harmful/to/human/beings//
animals/or/the/environment/
If introduced into a potable public water supply well will impair the potability of the water withdrawn by the potable public water supply well or which will be harmful or potentially harmful to human, plant, animal life, or property, or the conduct of business, or which will increase the cost of operation of public water supply treatment facilities or which will increase the reliance by consumers of potable water from such potable public water supply wells on the operation of public water supply treatment facilities to provide potable water which is not harmful or potentially harmful to human, plant, animal life, or property, or the conduct of business.

Section 4

Section 24-3 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-3. Definitions

- (95) Septic tank shall mean any settling tank in which the settled sludge is in immediate contact with sewage flowing through the tank thereby allowing the organic solids to be partially decomposed by putrefaction, i.e., anaerobic bacterial action.
- (96) Domestic sewage shall mean wastewater from toilets, showers, sinks, baths, and other facilities designed for human sanitation whether located within residential or nonresidential land uses.

Section 5

Section 24-13 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-13. Septic tanks

- (1) The/word/'septic/tank'/as/used/in/this/section/shall/mean/any settling/tank/in/which/the/settled/sludge/is/in/immediate/contact/with/sewage/flowing/through/the/tank,/while/the/organic/solids/are/decomposed/by/anaerobic/bacterial/action/putrefaction/

(2) (1) Intent. The board of county commissioners finds that the proliferation of septic tanks in Dade County may be a menace to the health and safety of the people of Dade County in that septic tanks may be insufficient in the treatment of waste matter and may threaten the water supply of Dade County. It is the intent of the board of county commissioners to moderate the use of septic tanks in Dade County. The intent and purpose of this section is to safeguard the public health, safety, and welfare by regulating wastewater disposal and treatment methods other than sanitary sewers.

(2)(a) Where public water supply is used, no septic tank shall be installed, and no permit for the installation of any septic tank shall be issued by any agency, county or municipality where greater than one thousand five hundred (1,500) gallons per day per unsubmerged acre of land will be generated by the actual and projected use. Where public water supply is not used, no septic tank shall be installed, and no permit for the installation of any septic tank shall be issued by any agency, county or municipality where greater than seven hundred fifty (750) gallons per day per unsubmerged acre of land will be generated by the actual and projected use. This section is not to be construed as authorizing the use of septic tanks where the issuance of a permit therefor is otherwise prohibited by law. Notwithstanding any other size criteria of section 2A-12 for septic tanks where a public water supply is available, the minimum lot size for a single-family residence is fifteen thousand (15,000) square feet and the minimum lot size for a duplex residence is twenty thousand (20,000) square feet. Abutting easements and rights-of-way shall be considered to the centerlines thereof in calculating the square footage of lots. The provisions of this section relating to single-family residential lots, and duplex residential lots, where public water supply is available, apply to new and existing subdivisions.

(b) The standards for determining the minimum quantity of effluent discharge from such facilities for septic tank usage includes, but is not limited to the following types of building usages:

Residential:

Single //////////////////////////////////////350/gpd*
Duplex //////////////////////////////////////250/gpd
Apartments over two (2) units //////////////////////////////////75/gpd**
Hotels and motels //////////////////////////////////30/gpd
Restaurants See South Florida
Building Code, section 4613.1(c)
Bars and cocktail lounge //////////////////////////////////5/gpd

Trailer/parks//////////150/gpd/trailer
 Day/schools/with/cafeteria/
 gym//and/showers//////////1115/gpd
 Day/schools/with/cafeteria/
 no/gym/or/showers//////////015/gpd
 Boarding/schools//////////75/gpd
 Day/workers/at/schools/and/offices//////////10/gpd
 Hospitals/with/laundry//////////300/gpd
 Hospitals/without/laundry//////////150/gpd
 Nursing/homes//////////150/gpd
 Public/institutions/other/than/hospitals//////////75/gpd
 Type/of/building/usages/
 Factories/(no/showers)//////////10/gpd/100/sq./ft./
 Country/clubs/per/resident/member//////////100/gpd
 Country/clubs/per/member/present//////////25/gpd
 Drive/in/theater/(per/car/space)//////////5/gpd
 Movie/theaters/auditoriums/churches
 (per/cost)//////////2/gpd
 Stores/without/kitchen/wastes//////////5/gpd/100/sq./ft./
 Bowling/alley/(toilet/wastes/
 only/per/lane)//////////100/gpd
 Stadiums/frontons/ball/parks/etc./
 (per/seat)//////////3/gpd
 Speculation/buildings//////////10/gpd/100/sq./ft./
 Warehouses//////////30/gpd/plus
 10/gal./1000/sq./ft./

*gpd///+/Gallons/per/day

**gpd/+Gallons/per/capita/per/day

(A) Where a property owner owns a track of land which fails to meet the minimum lot size requirements of subsection (3)(a) and (b) hereof, and where a public water supply exists and he wishes to use said track for a single family residence or a duplex residence the director, environmental resources management, may in his discretion authorize the issuance of a building permit for the use of a septic tank for such residential purpose if he finds the following:

(a) That no additional property abutting said track is owned by the property owner, and

(b) That the legal subdivision by plot creating such track of land occurred prior to the effective date of this subsection.

(3) Facilities in actual use an operation as of the date of the enactment of this section which exceed the criteria set forth in subsection (3) hereof, certified by a competent state or county agency as a present or potential health hazard, shall be designated by the director, environmental resources management, as priority sewerage areas. Upon such designation the Board County

Water and Sewer Authority and the county manager shall initiate proceedings for the creation of a special tanking district for sewerage systems for the elimination of the septic tanks therein or take such other commensurate steps as to assure the elimination of the septic tanks therein on a timely basis.

- (2) No person shall discharge or cause, allow, permit, or suffer to be discharged any wastewater or other substance of any kind whatsoever into a septic tank other than domestic sewage.
- (3) Notwithstanding any provision of this code, no county or municipal officer, agent, employee, or board shall approve, grant, or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), plat, or zoning for any residential land use served or to be served by a septic tank until the county or municipal officer, agent, employee, or board affirmatively determines that the residential land use will comply with one or more of the following:
 - (a) Where public water is used:
 - (i) the minimum lot size for a single-family residence shall be 15,000 square feet of unsubmerged land;
 - (ii) the minimum lot size for a duplex residence shall be 20,000 square feet of unsubmerged land;
 - (iii) the maximum sewage loading for all other residential uses shall be 1,500 gallons per day per unsubmerged acre; or
 - (b) Where public water is not used:
 - (i) the minimum lot size for a single-family residence shall be 20,328 square feet of unsubmerged land;
 - (ii) the minimum lot size for a duplex residence shall be 29,040 square feet of unsubmerged land; and
 - (iii) the maximum sewage loading for all other residential uses shall be 750 gallons per day per unsubmerged acre; or
 - (c) In the case of a property owner who has requested to use a tract of land for a single-family residence or duplex residence but which tract of land fails to comply with the minimum lot size requirements of subsections (3)(a)(i) or (3)(a)(ii) hereof and upon which tract of land a public water supply exists, the director of the department of environmental resources management or his designee has issued his written approval for the use of a septic tank for such single-family residence or duplex residence. The director or his designee shall issue his written approval only if he finds the following:

- (i) that the property owner, individually or otherwise, neither owns nor has any legal, beneficial, or equitable interest in any real property abutting said tract or land; and
- (ii) that said tract of land was created by deed prior to January 1, 1958, or was created by plat approved by the governmental authorities having jurisdiction prior to January 1, 1972, provided that said tract of land, as created by the originally recorded plat or originally recorded deed, has continuously remained in the same form as set forth in the originally recorded plat or deed.

Abutting easements and rights-of-way shall be considered to the centerlines thereof in calculating the square footage of lots.

4. Notwithstanding any provision of this code, no county or municipal officer, agent, employee, or board shall approve, grant, or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), plat, or zoning for any nonresidential land use served or to be served by a septic tank without obtaining the prior written approval of the director of the department of environmental resources management or his designee. The director or his designee shall issue his written approval only:

- (a) After the owner of the property submits to the director or his designee an executed covenant running with the land in favor of Metropolitan Dade County which provides that the only wastewater (excluding stormwater) which shall be generated, disposed of, discharged, or stored on the property shall be domestic sewage discharged into a septic tank. Said covenants shall be in a form(s) prescribed by the director and approved by the board of county commissioners. The covenants shall be recorded by the department of environmental resources management at the expense of the owner of the property, and
- (b) If the director or his designee determines that the proposed nonresidential land use is in accordance with the following:
 - (i) where public water is used the maximum allowable sewage loading shall be 1,500 gallons per day per unsubmerged acre, or
 - (ii) where public water is not used the maximum allowable sewage loading shall be 750 gallons per day per unsubmerged acre.

Abutting easements and rights-of-way shall be considered to the centerlines thereof in calculating the square footage of lots.

5. The following table shall be utilized to determine the maximum allowable sewage loading requirements set forth in this chapter. This table shall not be utilized for the sizing of septic tanks. Sizing of septic tanks shall be in accordance with Section 4615 of the South Florida Building Code.

Type of Land Use

Gallons Per Day (gpd)

Residential Land Uses

<u>Single-family residence</u>	350 (gpd/unit)
<u>Townhouse residence</u>	250 (gpd/unit)
<u>Apartment residence</u>	200 (gpd/unit)
<u>Mobile home residence</u>	300 (gpd/unit)
<u>Duplex or twin home residence</u>	250 (gpd/unit)

Commercial Land Uses

<u>Barber shop</u>	10/100 (gpd/sq. ft.)
<u>Beauty salon or hair boutique</u>	200 (gpd/chair)
<u>Bowling alley</u>	100 (gpd/lane)
<u>Dentist's office (a) per dentist</u>	250 (gpd/dentist)
(b) per wet chair	200 (gpd/chair)
<u>Physician's office</u>	250 (gpd/physician)
<u>Full service restaurant (350 gpd minimum)</u>	50 (gpd/seat)
<u>Bar or cocktail lounge</u>	15 (gpd/seat)
<u>Fast food restaurant (350 gpd minimum)</u>	35 (gpd/seat)
<u>Take-out restaurant (350 gpd minimum)</u>	50/100 (gpd/sq. ft.)
<u>Hotel or motel</u>	100 (gpd/rcom)
<u>Self-service laundry/laundromat</u>	400 (gpd/washer)
<u>Office building</u>	10/100 (gpd/sq. ft.)
<u>Motor vehicle service station</u>	10/100 (gpd/sq. ft.)
<u>Shopping center</u>	10/100 (gpd/sq. ft.)
<u>Stadium, racetrack, ballpark</u>	3 (gpd/seat)
<u>Store without food service</u>	10/100 (gpd/sq. ft.)
<u>Theater (a) Indoor auditorium</u>	3 (gpd/seat)
(b) Outdoor drive-in	5 (gpd/space)
<u>Camper or trailer park</u>	150 (gpd/space)

Industrial Land Use

<u>Factory without showers</u>	10/100 (gpd/sq. ft.)
<u>Factory with showers</u>	20/100 (gpd/sq. ft.)
<u>Airport</u>	5 (gpd/passenger)
.	10 (gpd/employee)
<u>House of worship</u>	3 (gpd/seat)
<u>Hospital</u>	250 (gpd/bed)
<u>Convalescent or nursing home</u>	150 (gpd/bed)
<u>Park (a) with toilets only</u>	5 (gpd/person)
(b) with showers and toilets	10 (gpd/person)

<u>Other residential institution or facility</u>	<u>100 (gpd/person)</u>
<u>School</u>	<u>10 (gpd/person)</u>
<u>Public swimming facility</u>	<u>10 (gpd/person)</u>
<u>Warehouse/industrial speculation building</u>	<u>5/100 (gpd/sq. ft.)</u>
<u>Storage warehouse or miniwarehouse</u>	<u>10/1000 (gpd/sq. ft.)</u>

6. Notwithstanding any provision of this code, no county or municipal officer, agent, employee, or board shall approve, grant, or issue any building permit, certificate of use and occupancy (except for changes in ownership), municipal occupational license (except for changes in ownership), plat, or zoning for any nonresidential land use served or to be served by any wastewater disposal or treatment method other than sanitary sewers without obtaining the prior written approval of the director of the department of environmental resources management or his designee. The director or his designee shall issue his written approval only if:

- (a) The director or his designee determines that the Metropolitan Dade County or municipal zoning classification for the property or the Metropolitan Dade County or municipal zoning classification requested by the owner of the property does not permit one or more of the land uses permitted under the following Metropolitan Dade County zoning classifications:
 - (i) BU-1A (excluding those land uses permitted by BU-1);
 - (ii) BU-3 (excluding those land uses permitted by BU-1 and BU-2);
 - (iii) IU-1;
 - (iv) IU-2;
 - (v) IU-3;
 - (vi) IU-C; or
- (b) After the owner of the property, which property does not or will not qualify pursuant to (6)(a) herein for written approval by the director or his designee, submits to the director or his designee an executed covenant running with the land in favor of Metropolitan Dade County which provides that prior to the approval, granting, or issuance of any building permit, certificate of use and occupancy (except for changes in ownership) or municipal occupational license (except for changes in ownership) the property shall be connected to sanitary sewers. Said covenants shall be in a form(s) prescribed by the director and approved by the board of county commissioners. The covenants shall be recorded in the public records of Dade County, Florida, by the department of environmental resources management at the expense of the owner of the property, or

- (c) That the owner of the property served or to be served by any wastewater disposal or treatment method other than sanitary sewers is applying for the original certificate of use and occupancy or original municipal occupational license pursuant to a valid building permit obtained prior to the effective date of this ordinance, which permit has been valid and continuously in full force and effect since its issuance or is applying for a certificate of use and occupancy or municipal occupational license for a land use served or to be served by any wastewater disposal or treatment method (other than sanitary sewers) installed prior to the effective date of this ordinance, or
- (d) The director or his designee determines that the property served or to be served by any wastewater disposal or treatment method other than sanitary sewers uses a public water supply, was zoned and platted prior to the effective date of this ordinance, is in compliance with Section 24-13(4)(a) and (b), and the owner of the property has executed a covenant running with the land in favor of Metropolitan Dade County which provides that the property shall only be used for those uses permitted under Metropolitan Dade County zoning classification BU-1 or IU-1 until such time as the property is connected to sanitary sewers. Said covenants shall be in a form(s) prescribed by the director and approved by the board of county commissioners. The covenants shall be recorded in the public records of Dade County, Florida, by the department of environmental resources management at the expense of the owner of the property.

(6)

7. When an approved sanitary sewer is made available and operative in a public right-of-way or easement abutting the property, any existing individual sewage disposal system, device or equipment shall, within ninety (90) days, be abandoned and the sewage wastes from the residence or building discharged to the sanitary sewer through a properly constructed house sewer.

Section 6

If any section, subsection, sentence, clause, or provision of this ordinance is held invalid, the remainder of this ordinance shall not be affected by such invalidity.

Section 7

It is the intention of the Board of County Commissioners, and it is hereby ordained that this ordinance shall become and be made a part of the Code of Metropolitan Dade County, Florida; provided, however the amended map referred to in Section 1 of this ordinance shall not be codified. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

Section 8

This ordinance shall become effective ten (10) days after the date of its enactment.

PASSED AND ADOPTED: September 20, 1983

Approved by County Attorney
as to form and legal
sufficiency

Prepared by:

ORDINANCE NO. 83-108

ORDINANCE AMENDING SECTIONS 24-3, 24-35.1, 24-55, 24-56, 24-5, 24-57, AND CREATING SECTION 24-12.2 OF THE CODE OF METROPOLITAN DADE COUNTY, FLORIDA, REGULATING THE INSTALLATION, MODIFICATION, REPAIR, REPLACEMENT AND OPERATION OF UNDERGROUND STORAGE FACILITIES FOR HAZARDOUS MATERIALS; PROVIDING DEFINITIONS; REQUIRING OPERATING PERMITS; PROVIDING POWER AND DUTIES FOR DIRECTOR OF DEPARTMENT OF ENVIRONMENTAL RESOURCES MANAGEMENT; PROVIDING FOR DENIAL, SUSPENSION, AND REVOCATION OF OPERATING PERMITS AND CONDITIONS, LIMITATIONS, AND RESTRICTIONS THERETO; PROVIDING FOR ENFORCEMENT, PROCEDURE, REMEDIES, AND PENALTIES; PROVIDING JOINT AND SEVERAL LIABILITY FOR OWNERS OF PERSONAL AND REAL PROPERTY; PROVIDING SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF DADE COUNTY, FLORIDA:

Section 1.0

Section 24-3 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:¹

Section 24-3 Definitions

33. Hazardous materials means any waste, product, substance, or combination, or breakdown product thereof which, because of its biological or chemical characteristics,

~~is/harmful/or/which/is/potentially/harmful/to/human/beings/animals/or/to/the/environment.~~

If introduced into a potable public water supply well will impair the potability of the water withdrawn by the potable public water supply well or which will be harmful or potentially harmful to human, plant, or animal life, or property, or the conduct of business, or which will increase the cost of operation of public water supply treatment facilities or which will increase the reliance by consumers of potable water from such potable public water supply wells on the operation of public water supply treatment facilities to provide potable water which is not harmful or potentially harmful to human, plant, or animal life, or property, or the conduct of business.

118. Secondary containment system shall mean an impervious layer of materials which is installed so that any volume of hazardous materials which may be discharged from an underground storage

1. Word stricken through shall be deleted. Underscored words constitute the amendment proposed. Remaining provisions are now in effect and remain unchanged.

facility will be prevented from contacting the environment outside said impervious layer for the period of time necessary to detect and recover all the discharged hazardous materials.

119. Underground storage facility shall mean a tank, pipe, vessel or other container, or any combination of any of the foregoing, used or designed to be used for the underground storage or underground transmission of hazardous materials, excluding sanitary sewers, septic tanks, septic tank drainfields, and the primary pipeline transmitting jet fuel from Port Everglades to Homestead Air Force Base.

Section 2

Section 24-35.1 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-35.1 Operating permits

No person shall operate a public water system, public sewerage system, or any of the following pollution sources without a valid operating permit issued by the Director of the Department of Environmental Resources Management, or his designee or in violation of any condition, limitation, or restriction which is part of an operating permit.

The criterion for issuance of an operating permit pursuant to this section is compliance with Chapter 24, Dade County Code. The Director of the Department of Environmental Resources Management or his designee, at his discretion, may require conditions, limitations, or restrictions as part of the operating permit if said conditions, limitations and restrictions are consistent with the requirements of this chapter.

The Director of the Department of Environmental Resources Management or his designee may deny the issuance of an operating permit if the public water system, public sewerage system, or pollution source does not comply with the provisions of this chapter.

The Director of the Department of Environmental Resources Management or his designee may suspend or revoke an operating permit if the public water system, public sewerage system or pollution source does not comply with the provisions of this chapter.

Such operating permits shall not be required for the aforesaid facilities, systems, and plants existing on the effective date of this section until one hundred twenty (120) days from the effective date of this section.

This section shall not be immediately applicable to air pollution sources with valid air pollution control operating permits on the effective date of this section. However, said air pollution sources shall comply with this section by obtaining the operating permit required by this section

no later than one hundred eighty (180) days from the effective date of this section.

Notwithstanding anything in this chapter to the contrary, such operating permits shall not be required for underground storage facilities until ninety (90) days from the effective date of this ordinance.

All applications for permits issued pursuant to this section shall be on a form prescribed by the director and accompanied by a fee which shall be established by administrative order of the county manager and approved by the board of county commissioners.

The permit fee payable hereunder shall be deposited in a separate county fund and shall be used exclusively by the Department of Environmental Resources Management to pay for the costs of the following environmental services to, and environmental regulation of, the aforesaid facilities, systems and plants.

Section 3

Section 24-55 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-55 Enforcement, Procedure, Remedies

It shall be unlawful for any person to violate any of the provisions of this chapter, ~~or~~ any lawful rules and regulations promulgated under this chapter, any lawful order of the director of the department of any condition, limitation or restriction which is part of an operating permit. It shall be the duty of all county and municipal officials and employees to enforce the provisions of this chapter. No building permit shall be issued for the installation of any improvements or facilities governed by the provisions of this chapter without the prior approval of the Director, Environmental Resources Management, or his designee. In addition to any other remedies provided by this chapter, the Director, Environmental Resources Management, shall have the following judicial remedies available to him for violations of this chapter, ~~or~~ any lawful rule or regulation promulgated under this chapter, and lawful order of the Director of the Department of Environmental Resources Management or his designee, or any condition, limitation or restriction which is part of an operating permit:

- C. The Director, Environmental Resources Management, may institute a civil action in a court of competent jurisdiction to seek injunctive relief to enforce compliance with or prohibit the violation of this chapter, ~~or~~ any lawful rule or regulation promulgated under this chapter, ~~or~~ any lawful order of the Director, Environmental Resources Management, to enjoin any violation or his designee, or any condition, limitation or restriction which is part of an operating permit; and to seek injunctive relief to prevent ~~irreparable~~ injury to the air, waters, and property, including animal, plant, and aquatic life of

the county, and to protect human health, safety, and welfare caused or threatened by any violation.

Section 4

Section 24-56 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-56 Penalties generally

If any person shall fail or refuse to obey or comply with, or violates any of the provisions of this chapter, or any lawful rule or regulation promulgated hereunder, or any lawful order of the Director, Environmental Resources Management, or his designee, or any condition, limitation or restriction which is part of an operating permit, issued or rendered under and pursuant to the provisions of this chapter, such person, upon conviction of such offense, shall be punished by a fine not to exceed five hundred dollars (\$500.00), or by imprisonment not to exceed sixty (60) days in the county jail, or both in the discretion of the court. Each day of continued violation shall be considered as a separate offense.

Section 5

Section 24-12.2 of the Code of Metropolitan Dade County, Florida, is hereby enacted as follows:

Section 24-12.2 Regulation of underground storage facilities

1. Legislative intent. The intent and purpose of this section is to safeguard the public health, safety, and welfare by regulating underground storage facilities.
2. Short title; applicability; construction. This ordinance shall be known as the "Underground Storage Facilities Ordinance." The provisions of this ordinance shall be effective in the incorporated and unincorporated areas of Dade County and shall be liberally construed to effect the purposes set forth herein.
3. Notwithstanding any provisions of this code, no county or municipal officer, agent, employee or board shall approve, grant, or issue any permit or license of any kind whatsoever for any work involving the installation, modification, repair, expansion, or replacement (except the repair or replacement of a pump, line leak detector, or valve) of an underground storage facility until the county or municipal officer, agent, employee or board has obtained the prior written approval of the Director of the Department of Environmental Resources Management or his designee. The director or his designee shall issue his written approval only if:
 - a. The director or his designee determines that the work shall be performed in accordance with the standards and practices, as may be applicable, set forth in:

- (1) The South Florida Building Code
- (2) Publication 1615, "Installation of Underground Petroleum Storage Systems," American Petroleum Institute, November 1979, Wash. DC.
- (3) NFPA 30 "Flammable And Combustible Liquids Code 1981," National Fire Protection Association, November 20, 1980, Quincy, Mass, and

b. If the director or his designee receives and approves the following:

- (1) Plans for the proposed installation, modification, repair, expansion, or replacement of the underground storage facility which are prepared by a professional engineer registered in the State of Florida and to which plans are affixed the signature, seal, and registration number of said engineer.

The plans required herein shall include the following:

- (a) All underground storage facilities regardless of location in Dade County: Plans for a line leak detector for detection of leaks in lines between tanks and dispensers excluding vacuum line systems. Plans for a matrix of no less than four (4) monitoring wells of design and at locations approved by the Department of Environmental Resources Management, based upon an assessment of the capability of the proposed monitoring wells to detect discharges of hazardous materials from the underground storage facility to the environment outside of said facility.
- (b) Underground storage facilities located within the cone of influence of Northwest Wellfield or within two hundred and ten (210) days' travel time from any public utility potable water supply well or where public water is not available; plans for a continuous automatic leak detection system of design and location approved by the Department of Environmental Resources Management, based upon an assessment of the capability of the system to immediately detect any and all discharges of hazardous materials from the underground storage facility to the environment. Plans for a secondary containment system approved by the Department of Environmental Resources Management, based upon an assessment of the capability of the proposed secondary containment system to prevent discharged hazardous materials from contacting the environment outside said system for the period of time necessary to detect and recover all discharged hazardous materials capable of being discharged from the underground storage facility.

- (2) A written verified statement by the operator of the underground storage facility that said operator will retain the services of a professional engineer registered in the State of Florida who shall: supervise and inspect the installation, modification, repair, expansion, or modification, repair, expansion, or replacement of the underground storage facility; supervise the installation, testing, and calibration of any monitoring equipment required by this ordinance; and supervise the pressure testing required by this ordinance.
4. No person shall be issued the operating permit required by Section 24-35.1 of this code for any underground storage facility which has been installed, modified, repaired, expanded, or replaced after the effective date of this ordinance and no person shall use or operate said facility after the effective date of this ordinance unless:
- a. Said underground storage facility has been pressure-tested and has been determined not to discharge, during such test, any substance in the underground storage facility to the environment outside of said facility. Said testing shall be conducted with no less than three pounds of pressure per square inch for an underground storage facility which is not a pipe or other container used to transmit hazardous materials. Said testing shall be conducted with no less than one hundred and fifty (150) percent of the anticipated working pressure for an underground storage facility which is a pipe or other container used to transmit hazardous materials, and
 - b. The testing required by D.1 herein shall be performed according to the methods set forth in NFPA 329, "Underground Leakage of Flammable and Combustible Liquids, 1977," National Fire Protection Association, Boston, Mass.
 - c. The testing required by D.1 herein has been performed by a qualified person, and
 - d. The results of the testing required by D.1 have been submitted to, reviewed, and approved by the Department of Environmental Resources Management. The department shall approve said results only if the testing was performed in accordance with the requirements of this ordinance and the testing affirmatively shows that the underground storage facility tested did not, during such test, discharge any substance in the underground storage facility to the environment outside of said facility, and
 - e. The professional engineer retained by the operator pursuant to C.2.a herein certifies that the underground storage facility was installed, modified, repaired, expanded, or replaced, and the line leak detector, monitoring wells,

continuous automatic leak detection system, or secondary containment system was installed in accordance with the plans required by C.2.a herein and said professional engineer has affixed his signature, seal, and registration number to said certification and said certification has been submitted to the department.

5. All persons operating or using an underground storage facility which has been installed, modified, repaired, expanded or replaced after the effective date of this ordinance shall comply with the following:

a. All underground storage facilities regardless of location in Dade County:

(1) The operator of the underground storage facility shall maintain a daily accounting of the inventory of the hazardous materials stored or transmitted within the underground storage facility, in accordance with the methods and practices set forth in Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," Third Edition, American Petroleum Institute, 1977, Washington, DC, Appendix A" of the aforesaid publication or the equivalent thereof shall be completed by the operator on a daily basis, shall be kept and maintained within Dade County by the operator of the underground storage facility, and shall be made available for inspection and copying by employees of the Department of Environmental Resources Management upon twenty-four (24) hours' notice by the department to the operator, and

b. All underground storage facilities which are not located within the cone of influence of Northwest Wellfield, which are not within two hundred and ten (210) days' travel time from any public utility potable water supply well, and which are not located where public water is not available:

(1) The operator of the underground storage facility shall test or cause to be tested the monitoring wells required by this ordinance for the presence of hazardous materials no less than once per week. Those underground storage facilities storing or transmitting hydrocarbons shall use gasoline-finding paste or electronic hydrocarbon detectors, or other comparable method, and

c. All underground storage facilities located within the cone of influence of Northwest Wellfield or within two hundred and ten (210) days' travel time from any public utility potable water supply well or where public water is not available:

- (1) The operator of the underground storage facility shall test or cause to be tested the continuous automatic leak detection system daily for proper maintenance and operation.
6. All persons operating an underground storage facility which was installed prior to the effective date of this ordinance shall comply with the following:
 - a. All underground storage facilities regardless of location in Dade County:
 - (1) The operator of the underground storage facility shall comply with the requirements of E.1.a herein, and
 - b. All underground storage facilities located within the cone of influence of Northwest Wellfield or within two hundred and ten (210) days' travel time from any public utility potable water supply well or where public water is not available:
 - (1) Underground storage facilities which were originally installed fifteen (15) years or more before the effective date of this ordinance shall comply with the following:
 - (a) Within one hundred and eighty (180) days from the effective date of this ordinance, the operator shall install a continuous automatic leak detection system of design and location approved by the Department of Environmental Resources Management. Prior to such installation the operator shall submit to the department plans for said installation prepared by a professional engineer registered in the State of Florida for review and approval by the department. Approval by the department shall be based upon an assessment of the capability of the system to immediately detect any and all leaks of hazardous materials from the underground storage facility to the environment outside of said facility, and
 - (b) Within three (3) years from the effective date of this ordinance, the operator shall install a secondary containment system approved by the department. Prior to such installation the operator shall submit to the department plans for such installation prepared by a professional engineer registered in the State of Florida for review and approval by the department. Approval by the department shall be based upon an assessment of the capability of the proposed secondary containment system to prevent discharged hazardous

materials from contacting the environment outside said system for the period of time necessary to detect and recover all discharged hazardous materials capable of being discharged from the underground storage facility, and

(2) Underground storage facilities which were originally installed less than fifteen (15) years before the effective date of this ordinance shall comply with the following:

(a) Within one (1) year from the effective date of this ordinance the operator shall comply with the requirements set forth in F.2.b(a) herein, and

(b) Within five (5) years from the effective date of this ordinance the operator shall comply with the requirements set forth in F.2.a(2) herein.

(c) All underground storage facilities which are not located within the cone of influence of Northwest Wellfield which are not within two hundred and ten (210) days' travel time from any public utility potable water supply well, and which are not located where public water is not available:

(1) Within two (2) years from the effective date of this ordinance, the operator shall install a matrix of no less than four (4) monitoring wells of design and at locations approved by the Department of Environmental Resources Management, based upon an assessment of the capability of the proposed monitoring wells to detect discharges of hazardous materials from the underground storage facility to the environment outside of said facility. Prior to such installation the operator shall submit to the department plans for such installation prepared by a professional engineer registered in the State of Florida for such approval by the department.

7. Underground storage facilities of less than 1,100 gallons capacity and the operators thereof shall be exempt from compliance with the requirements of subsections C, D, E, and F of this ordinance.

8. Upon the determination by the Department of Environmental Resources Management that hazardous materials have been or may have been discharged from an underground storage facility to the environment outside of said facility, the department may require immediate testing of the underground storage facility by the operator or owner thereof, or by the owner of the real property

upon which said underground storage facility is located, to determine whether the underground storage facility has discharged or is discharging hazardous materials into the environment outside of said facility.

9. Operators of underground storage facilities as well as any persons, individually or otherwise, having a legal, beneficial, or equitable interest in the underground storage facilities or in the real property upon which said underground storage facilities are located shall be jointly and severally liable and responsible for immediately accomplishing the following when the underground storage facility has discharged or is discharging any hazardous materials of any quantity whatsoever into the environment outside of said facility:
 - a. Locating and determining the cause of the discharge.
 - b. Stopping and preventing any further discharges.
 - c. Detecting, extracting, and recovering all hazardous materials which have been discharged in accordance with the methods and practices set forth in Publication 1628, "Underground Spill Cleanup Manual," First Edition, June 1980, American Petroleum Institute, Washington, DC.
 - d. Notifying the department of environmental resources management of such discharge within four (4) hours of any such discharge.
10. All operators or underground storage facilities shall notify, in writing, the Department of Environmental Resources Management of any loss of hazardous materials from the underground storage facility which loss cannot be attributed to either the theft of the hazardous materials or normal changes in the volume of the hazardous materials due to temperature changes. Such written notification shall be accomplished no later than twenty-four (24) hours after any such loss.

Section 6

Section 24-5 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-5 Same--Duties and Powers

The duties, functions, powers, and responsibilities of the Director, Environmental Resources Management, shall include the following:

28. Order testing by any person who is or may be responsible for a violation of this chapter, or who installs, modifies, repairs, expands, replaces, or operates any facility under the provisions of this chapter. The design and nature of such testing shall be approved by the Department of Environmental Resources Management

prior to implementation of the testing. Said testing shall be accomplished and the results thereof submitted to the department for review no later than such time as determined by the department.

Section 7

Section 24-57 of the Code of Metropolitan Dade County, Florida, is hereby amended as follows:

Section 24-57 Civil liability; joint and several liability.

- g. Whenever a violation of this chapter occurs or exists, any person, individually or otherwise, who has a legal, beneficial, or equitable interest in the facility or instrumentality causing or contributing to the violation or who has a legal, beneficial, or equitable interest in the real property upon which such facility or instrumentality is located shall be jointly and severally liable for said violation regardless of fault and regardless of knowledge of the violation. This provision shall be construed to impose joint and several liability, regardless of fault and regardless of knowledge of the violation, upon all persons, individually or otherwise, who, although no longer having any such legal, beneficial, or equitable interest in said facility or instrumentality or real property, did have such an interest at any time during which such violation existed or occurred or continued to exist or to occur. This provision shall be liberally construed to protect the public health, safety, and welfare and to accomplish the purposes of this chapter.

Section 8

If any section, subsection, sentence, clause, or provision of this ordinance is held invalid, the remainder of this ordinance shall not be affected thereby.

Section 9

It is the intention of the Board of County Commissioners, and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Metropolitan Dade County, Florida; and that the sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

Section 10

The provisions of this ordinance shall become effective ten (10) days after the date of its enactment.

PASSED AND ADOPTED: NOV 15, 1983

Approved by County Attorney as
to form and legal sufficiency.

Prepared by:

ORDINANCE NO. 84-60

An ordinance relating to the prohibition and regulation of hazardous and toxic substances within zones of influence at public utility water supply wellfields within Broward County, Florida; providing for creation of the "potable water supply wellfield protection ordinance"; providing for a title; providing for intent; providing for definitions; providing for maps of zones of influence in Broward County; providing for prohibition, regulation and permitting within zones of influence; providing for protection of future wellfields; providing for a list of hazardous and toxic substances to be included in the rules and regulations set forth in the Broward County Administrative Code; providing for exemptions; providing for determination of location within zones; providing for transfer or assignment of wellfield protection permits; providing for permit fees; providing for wellfield protection enforcement; providing for inspections; providing for notice of violations and hearing; providing for injunctive relief; providing for penalties; providing for severability; providing for inclusion in the code; and providing for an effective date.

(Sponsored by Board of County Commissioners)

Whereas, there is an urgent need to protect existing and future public utility potable water supply wells in Broward County, Florida, from the irreversible and adverse effects of bacterial and chemical contamination;

Whereas, it is the intent and policy of the Broward County Board of County Commissioners to ensure, under this ordinance, the continued economic growth and well-being of the county by precluding to the greatest extent feasible from consideration for future wellfield site areas designated as industrial land use;

Whereas, the replacement cost of a major wellfield is substantial;

Whereas, the Biscayne Aquifer was designated by the United States Environmental Protection Agency (EPA) as a "sole source aquifer," on October 11, 1979, which means it is the only practical source of drinking water for the residents of Broward County;

Whereas, the report prepared pursuant to the agreement between Broward County and the State of Florida Department of Environmental Regulation, completed in December 1983, contains the current data concerning the characteristics of the Biscayne Aquifer, sources of Biscayne Aquifer pollution and the disposition of pollutants in the Biscayne Aquifer;

Whereas, there is a need to approach wellfield protection in a comprehensive manner by controlling the storage, handling, use, or production of hazardous or toxic substances within Zones of Influence of wellfields;

Whereas, authority is granted to the Board of County Commissioners, pursuant to Section 8.04 of the Broward County Charter to protect the resources of the county, which includes the potable water supply; and

Whereas, Section 1.03 of the Broward County Charter and Chapter 125, Florida Statutes, provide the authority for Broward County to establish regulatory programs needed to protect the health, safety, and general welfare of the residents of, and visitors to, Broward County; NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA:

Section 1 Short Title; Applicability; Construction

- A. This ordinance shall be known as the "Potable Water Supply Wellfield Protection Ordinance." The provisions of this ordinance shall be effective countywide within Broward County, Florida, and shall set prohibitions and restrictions to prevent public utility potable water supply contamination by hazardous or toxic substances, and protect against the destruction of the resources of the county belonging to the general public, pursuant to Section 8.04 of the Broward County Charter. This ordinance shall be liberally construed to effect the purposes set forth herein.

Section 2 Legislative Intent

- A. The intent and purpose of this ordinance is to safeguard the public health, safety, and welfare of the residents of Broward County, Florida, by providing scientifically established criteria for regulation of the storage, handling, use, or production of hazardous or toxic substances within identified zones of influence surrounding wellfields, thereby protecting public utility potable water supply wells from contamination.
- B. Each of the substances to be regulated has one or more of the following characteristics:
1. known hazardous and toxic properties such as those listed by the EPA in Federal regulations in 40 CFR 302;
 2. listed as a priority toxic pollutant by the EPA in Federal regulations in 40 CFR 122.21;
 3. a degradation product which is toxic; or
 4. on Restricted Use Pesticide List promulgated pursuant to Chapter 487, Florida Statutes, set forth in Chapters 5E-2 and 5E-9, Florida Administrative Code.

As well as the following physical characteristics:

5. prone to be persistent in the environment; and
6. water soluble or prone to pass downward through surface soils, to enter into and mix with groundwater, and to be transported by the movement of groundwater to water supply wells.

Section 3 Definitions

- A. The following definitions apply within this ordinance:
1. Administering county agency--the Broward County Water Resources Management Division, charged by the board of county commissioners with administering and enforcing this ordinance and the regulations promulgated pursuant hereto.

2. Aquifer--a groundwater bearing geologic formation, or formations, that contain enough saturated permeable material to yield significant quantities of water.
3. Biscayne Aquifer--the aquifer underlying Dade, Broward, and Palm Beach Counties which supplies these counties with potable water.
4. Broward County Water Resources Management Division (WRMD)--division of county government charged with responsibility for management, control, regulation, and planning in relation to water resources.
5. Closure--the termination of any nonresidential activity covered by this ordinance and the regulations promulgated hereunder.
6. Contamination--the presence of any harmful or deleterious substances in the water supply.
7. Continuous transit--the nonstop movement of a mobile vehicle.
8. EP (extraction procedure) toxic material--a substance determined to be toxic as defined under EPA Resource Conservation and Recovery Act criteria (40 CFR 261.24).
9. EPA--the United States Environmental Protection Agency.
10. Groundwater--water that fills all the unblocked pores of underlying material below the water table, which is the upper limit of saturation, or water which is held in the unsaturated zone by capillarity.
11. Hazardous substance--a substance that has one or more of the following characteristics: ignitable, corrosive, reactive, EP Toxic, or toxic.
12. Nonresidential activity--any activity which occurs in any building, structure, or open area which is not used primarily as a private residence or dwelling.
13. One-foot drawdown contour--the locus of points around a well or wellfield where the free water elevation is lowered by one (1) foot due to the pumping of the well or wellfield.
14. Permitted pumping capacity--the amount of water authorized by the South Florida Water Management District to be pumped from a well, expressed as gallons per day.
15. Person--any natural person, individual, public, or private corporation, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer or any other entity whatsoever or any combination of such, jointly or severally.

16. Pollutant travel time--the time required by pollutants to travel from one point to another.
17. Pollution--the presence of any substance (organic, inorganic, radiological, or biological) or condition (temperature, pH, turbidity) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.
18. Potable water--water that is satisfactory for drinking, culinary, and domestic purposes, meeting current State and Federal drinking water standards.
19. Public utility--any privately owned, municipally owned, or county-owned system providing water or wastewater service to the public which has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily for at least sixty (60) days of the year.
20. Regulated substances--a list of hazardous and toxic substances regulated under this ordinance and set forth in the regulations promulgated pursuant hereto.
21. Toxic substance--a chemical or mixture that presents an unreasonable risk of injury to health or the environment.
22. Travel time contour--the locus of points from which water takes an equal amount of time to reach a given destination such as a well or wellfield.
23. Travel time zones--the area bounded by travel time contours.
24. Well--a pit or hole sunk into the earth to reach a resource supply such as water.
25. Wellfield--a tract of land which contains a number of wells for supplying water.
26. Wellfield Protection Operating Permit--authorization to operate issued by the administering county agency to a person that operates an activity that stores, handles, uses, or produces regulated substances, which indicates compliance with this ordinance and the regulations promulgated pursuant hereto.
27. WRMD--see Broward County Water Resources Management Division.
28. Zones of Influence--zones delineated by isotravel time contours around wellfields, within which toxic substances will be regulated to protect the quality of the groundwater resource. These zones are calculated, based on the rate of movement of groundwaters in the vicinity of wells with an allowance for the dispersion of a pollutant entering into and moving with the groundwater.

Section 4 Maps of Zones of Influence

- A. The Zones of Influence maps developed as described in subsection 4.02, and completed in January 1984 are incorporated and made a part of this ordinance. These maps shall be on file and be maintained by the WRMD. Any amendments, additions, or deletions to said maps shall be approved by the board of county commissioners of Broward County. Said maps shall be provided to the Office of Planning, the Building and Zoning Enforcement Division, the Broward County Health Department, the Broward County Planning Council, the Environmental Quality Control Board, and any other agency requesting said maps.
- B. The Zones of Influence maps are based upon travel time contours and one-foot drawdown contours. They were generated using a random walk mass transport computer model that simulated pollutant movement using particles released around wells in an inverted head/velocity field. The head/velocity field is calculated by using finite difference computer modeling techniques that incorporate the effects of an extensive canal system and year 2020 build out pumping rates. The pumping rates were determined by first projecting population figures for the year 2020 for each utility service area and multiplying this by a per capita consumption rate determined by the South Florida Water Management District. The Zones of Influence maps were finalized in January 1984.
- C. The Zones of Influence maps may be updated pursuant to the provisions of this ordinance on an annual basis. The basis for such an update may include, but is not limited to, the following:
1. changes in the technical knowledge concerning the Biscayne Aquifer;
 2. changes in pumping rate of wellfields;
 3. wellfield reconfiguration; and
 4. designation of new wellfields.
- D. The Zones of Influence indicated on the Zones of Influence maps are as follows:
1. Zone 1
The land area situated between the well(s) and the ten (10) day travel time contour.
 2. Zone 2
The land area situated between the ten (10) day and the thirty (30) day travel time contours.

3. Zone 3

The land area situated between the thirty (30) day and the two hundred ten (210) day travel time contours, or the thirty (30) day and the one-foot drawdown contours, whichever is greater.

Section 5 Prohibitions, Restrictions,
and Permitting Within Zones of Influence

A. Zone 1

1. Within Zone One (1) no nonresidential activity which includes the storage, handling, usage, or production of any regulated substances shall be permitted except as provided herein.
2. All persons who presently engage in nonresidential activities within Zone One (1) who store, handle, use, or produce any regulated substances shall cease to do so within two (2) years from the effective date of this ordinance except as provided herein.
3. Regulations shall be promulgated to establish an administrative procedure wherein those persons conducting activities affected by this section shall appear before the board of county commissioners in an administrative hearing for a determination as to the effect of this ordinance on those activities and the issue of compensation. Said administrative procedure shall be a condition precedent to filing a cause of action in a court of competent jurisdiction.

B. Zone 2

1. Within Zone Two (2) any nonresidential activity which includes the storage, handling, use, or production of any regulated substances in existence on the effective date of this ordinance, or any new activity established thereafter, shall be permitted provided that:
 - a. The activity is in compliance with the provisions of this ordinance and the regulations promulgated pursuant hereto.
 - b. The raw water from each and every well designated on the Zones of Influence maps shall be monitored on a quarterly basis for the regulated substances listed in the Wellfield Protection Operating Permit(s) issued to the activities in the Zone Two (2) for that particular well.
 - c. The monitoring of regulated substances in the raw water from potable water wells shall be the responsibility of the public utility operating the well, but the cost of the monitoring shall be borne by all of the activities located in Zone One (1) or Zone Two (2) of that particular well.

The cost shall be borne as set forth in the regulations promulgated pursuant hereto.

- d. Every activity regulated by this ordinance, and the regulations promulgated pursuant hereto, shall install one or more groundwater monitoring wells as determined by and in a manner approved by the administering county agency, at its own expense. The administering county agency shall have the right to inspect and sample the monitoring wells. Certified analytical results of the quantity present in each monitoring well of each of the regulated substances listed in the activity's Wellfield Protection Operating Permit shall be filed quarterly with the administering county agency. The presence of any of the regulated substances in a monitoring well shall be used to ascertain the source of any accumulation appearing in a potable water well. However, the absence of the regulated substances in a monitoring well shall not be used as the basis to exempt any activity from the mandatory actions set forth in subsection 5.02(c) 1 or 2 below.
 - e. Three (3) years from the effective date of this ordinance the administering county agency shall make a determination of the accumulation of each the regulated substances in each of the potable water wells. Accumulation shall mean an average annual increase of ten (10) percent over the amount of substance present one (1) year earlier.
2. In the event that an accumulation of one or more of the regulated substances listed in the Wellfield Protection Operating Permit shall appear in a potable water well at any time, then one of the following actions shall become mandatory:
- a. All persons who engage in nonresidential activities within the affected Zone Two (2) who store, handle, use, or produce the regulated substance(s) which show evidence of accumulation shall cease to do so within three (3) years of written notification from the county. If the source of the regulated substances appearing in the potable water well can be identified, then only that activity shall be subject to these mandatory actions. If the owner or operator of an activity can present acceptable technical data that substantiates it is not the source of the regulated substances appearing in the potable water well, that activity shall not be subject to these mandatory actions. In complying with this subsection no new regulated substances(s) may be introduced in the place of the regulated substance removed to comply with cessation.
 - b. The affected well(s) shall be reconfigured within three (3) years by change of pumping rate or relocation such that the affected activity is no longer within Zone Two (2).

- c. Monitoring of all regulated substances shall be an ongoing activity and in the event an accumulation, as defined in subsection 5.02(a)5, shall occur, the mandatory provisions of subsection 5.02(b)1 or 2, shall apply.
- d. Within one hundred eighty (180) days from the effective date of this ordinance all persons shall obtain a Wellfield Protection Operating Permit from the administering county agency and shall comply with the provisions of this ordinance and the regulations promulgated pursuant hereto. If after one hundred eighty (180) days all the requirements for compliance necessary for the issuance of a Wellfield Protection Operating Permit have not been completed, and the applicant has made a diligent effort to do so, a Wellfield Protection Operating Permit may be issued contingent on compliance within a certain time. All Wellfield Protection Operating Permits shall be renewed annually.

C. Zone 3

- 1. The storage, handling, use, or production of regulated substances which exist on the effective date of this ordinance, or any new activity established thereafter, shall be allowed within a Zone Three (3) as indicated on the Zones of Influence maps upon compliance within the provisions of this ordinance and the regulations promulgated pursuant hereto, as provided hereunder.
- 2. Within one hundred eighty (180) days of the effective date of this ordinance all persons who engage in nonresidential activities within a Zone Three (3) who store, handle, use, or produce any regulated substances shall obtain a Wellfield Protection Operating Permit from the administering county agency and shall comply with the provision of this ordinance and the regulations promulgated pursuant hereto. All Wellfield Protection Operating Permits shall be renewed annually.

Section 6 List of Hazardous and Toxic Substances

- A. A list of the hazardous and toxic substances regulated under this ordinance (hereinafter referred to as "regulated substances") shall be included in the regulations promulgated pursuant hereto. Such list shall be reviewed annually and revised from time to time as necessary. Any changes, additions to, or deletions from the list of regulated substances shall be approved by formal amendment to the regulations promulgated hereto.

Section 7 Exemptions

- A. Exemption for Public Utilities in Zones One (1) and Two (2)

Public Utilities as defined herein shall be exempt from Zone One (1) and Zone Two (2) prohibitions as set forth in Sections 5.01(a) and (b) and 5.02(b). However, all such utilities in Zone One (1) and

Zone Two (2) shall comply with all provisions of Section 5.02(a) 1 through 4. The permit exemption set forth in Section 7.08 for regulated substances contained in storage tanks and licensed under Regulation 27-10 of the Environmental Quality Control Board shall apply. However, compliance in Zone One (1) and Zone Two (2) with the requirements set forth in Regulation 27-10 shall be completed within two (2) years of the date of this ordinance.

B. Exemption for Continuous Transit

The transportation of any regulated substance through Zone One (1) shall be allowed provided the transporting vehicle is in continuous transit.

C. Exemption for Vehicular Fuel and Lubricant Use

The use of any regulated substance solely as fuel in a vehicle fuel tank or as lubricant in a vehicle shall be exempt from the provisions of this ordinance.

D. Exemption for Use of Certain Regulated Substances

The use of certain of the regulated substances such as pesticides, herbicides, and fungicides in recreational, agricultural, pest control, and aquatic weed control activities shall be allowed provided that:

1. In all zones, the use is in strict conformity with the use requirements as set forth in the substances EPA registers and as indicated on the containers in which the substances are sold; and
2. in all zones, use is in strict conformity with the requirements as set forth in Chapters 482 and 487, Florida Statutes, and Chapters 5E-2 and 5E-9, Florida Administrative Code.
3. In Zone One (1), the use of any of the regulated substances shall be flagged in the records of the certified operator supervising the use. The certified operator shall provide specific notification in writing to the applicator's under his or her supervision that they are working at a site located in Zone One (1) for which particular care is required. Records shall be kept of the date and amount of regulated substances used at each location.
4. In Zone One (1) the regulated substances shall not be handled during use in a quantity exceeding seven hundred (700) gallons of formulation.
5. All nonresidential uses of regulated substances in Zone One (1) and Zone Two (2) shall comply with all provisions of Section 5.02. The use of regulated substances on nonresidential landscape areas smaller than five thousand (5,000) square feet

shall be exempted from the provisions of this ordinance. However, commercial or government services in all Zones shall not be required to obtain individual permits for every site at which they use the regulated substances, and these services shall be exempt from the provisions of this ordinance with regard to the sites they serve provided the use is in accordance with (a), (b), (c), and (d) above. However, all records for such sites as required by Chapter 482, Florida Statutes, and Chapter 10D-55, Florida Administrative Code, shall be available for inspection by the administering county agency.

E. Exemption for the Use of Nitrates Contained in Fertilizers

The use of fertilizers containing nitrates shall be allowed in Zone One (1), Zone Two (2), and Zone Three (3) provided that:

1. For recreational activities the application of nitrate containing materials shall be done by a supervised applicator and the amount of fertilizer applied shall neither exceed forty (40) pounds of nitrogen per acre per month average for the total activity nor two (2) pounds per thousand square feet per month for any localized area within the activity.
2. For agricultural activities the application of nitrate containing materials shall be done by a supervised applicator, and the amount of fertilizer applied shall not exceed two hundred (200) pounds of nitrogen per acre per year.
3. The regulated substances shall not be handled in a quantity exceeding seven hundred (700) gallons of formulation in Zone One (1).
4. All nonresidential uses of regulated substances in Zone One (1) and Zone Two (2) shall comply with all provisions of Section 5.02. The use of regulated substances on nonresidential landscape areas smaller than five thousand (5,000) square feet shall be exempted from the provisions of this ordinance. However, commercial services in all Zones shall not be required to obtain individual permits for every site at which they use the regulated substances, and these services shall be exempted from the provisions of this ordinance. However, all records of application for such sites shall be available for inspection by the administering county agency.

F. Exemption for Laboratory or Instrument Use in Zone One (1)

Regulated substances shall be exempted from the prohibitions of Zone One (1) if they are stored, handled, or used in laboratories or instruments in a combined total quantity not to exceed two (2) gallons or sixteen (16) pounds. Those activities covered in this exemption shall obtain a Wellfield Protection Operating Permit and in order to do so shall provide an inventory of regulated substances and a quarterly update.

G. Exemption for Retail Sales Activities

Retail sales establishments in all Zones of Influence that store and handle regulated substances for resale in their original unopened containers of two (2) gallons or sixteen (16) pounds, or less, shall be permitted, provided that those establishments shall obtain a Wellfield Protection Operating Permit. In order to obtain a Wellfield Protection Operating Permit said establishments need only provide an inventory of regulated substances and a quarterly update.

H. Exemption in Zone Two (2) for Storage Tanks

Exemption from the permitting requirements in Zone Two (2) shall be allowed for the storage of regulated substances if such substances are contained in storage tanks and are licensed under the storage tanks regulations as set forth in Regulation 27-10 of the Broward County Environmental Quality Control Board and said activity complies with the provisions of Section 5.02. A certified copy of the license issued pursuant to Regulation 27-10 shall be provided to the administering county agency in order to establish the exemption from the permitting requirement under this ordinance. This exemption applied only to the storage of regulated substances in storage tanks regulated by Regulation 27-10.

I. Exemption in Zone Three (3) for Storage Tanks

Storage tanks in Zone Three (3) which are licensed under Regulation 27.10 of the Broward County Environmental Quality Control Board shall be exempt from this ordinance. This exemption applies only to the storage of regulated substances in storage tanks regulated by Regulation 27-10.

J. Exemption in Zone Three (3) for Automotive Service Accessory Uses at Gasoline Service Stations

Automotive service accessory uses at gasoline service stations in Zone Three (3) shall be exempted from the provisions of this ordinance upon the installation of monitoring wells along the downgradient property line of the gasoline service station. Said monitoring wells shall be monitored and recorded in the same manner as required for the monitoring wells addressed in Environmental Quality Control Board Regulation 27-10. The facility and monitoring wells shall be subject to inspection by the administering county agency.

K. An affected person in Zone One (1) or Zone Two (2) may petition the board of county commissioners for a special exemption from the prohibitions set out in Sections 5.01 and 5.02. In order to obtain such an exemption such person must show:

1. That special or unusual circumstances exist which are peculiar to the particular nonresidential activity which are different than other regulated nonresidential activities; or

2. that adequate technology exists which will isolate the facility or activity from the potable water supply.
3. In granting the special exemption the board of county commissioners may prescribe any additional appropriate conditions and safeguards which are necessary to protect the wellfield.

Section 8 Protection of Future Wellfields

- A. The prohibitions and restrictions set forth in this ordinance and in the regulations promulgated pursuant hereto should comply with the intent and policy of the Broward County Board of County Commissioners as stated herein and shall apply to any new wellfield sites within Broward County. Such prohibitions and restrictions shall become effective upon approval by the board of county commissioners of any changes or additions to the Zones of Influence maps. Prior to final action by the board of county commissioners in specifying the location of new wellfields or changing the Zones of Influence of existing wellfields, all property owners and discernable operating activities within the area affected shall receive written notice of the proposed public hearing at which the action shall be considered.

Section 9 Determination of Location Within Zones

- A. In determining the location of properties within the zones depicted on the Zones of Influence maps, the following rules shall apply:
 1. Properties location wholly within one (1) zone reflected on the applicable Zones of Influence maps shall be governed by the restrictions applicable to that zone.
 2. Properties having parts lying within more than one (1) zone as reflected on the applicable Zones of Influence maps shall be governed by the restrictions applicable to the zone in which the part of the property is located.
 3. Where a travel time contour which delineates the boundary between two (2) Zones of Influence passes through a building, the entire building shall be considered to be in that zone in which more than fifty (50) percent of the floor space of the building is situated as of the effective date of this ordinance.

Section 10 Wellfield Protection Enforcement

- A. The WRMD shall be the administering county agency and shall have the power and authority to administer and enforce the provisions of this ordinance and the regulations promulgated pursuant hereto.

Section 11 Transfer or Assignment of Wellfield Protection Operating Permits

- A. In the event there is a change of ownership, a new lease, or an assignment of a lease, a sublease or any other change in regard

to the person conducting the operation regulated, the administering county agency shall be notified. Upon payment of the appropriate fee and completion of processing of an application by said county agency, the Wellfield Protection Operating Permit shall be transferred.

Section 12 Wellfield Protection Permit Fees

- A. Prior to the issuance of new, renewal, or transfer permits or an application for a special exemption, the applicant shall pay a fee as set forth in the regulations promulgated pursuant hereto. Such fee shall be used to defray the cost of monitoring the compliance with this ordinance and the regulations promulgated pursuant hereto.

Section 13 Inspections

- A. A condition of Wellfield Protection Operating Permit issuance shall be permission for inspection of the premises by an authorized agent of the county.
- B. Agents of Broward County are hereby authorized and empowered to make inspections at reasonable hours of all nonresidential buildings, structures, and land within wellfield Zones of Influence in Broward County Florida, in order to determine whether applicable provisions of the Broward County Code of Ordinances and regulations relating to wellfield protection are being followed.
- C. Inspections may be made without notice, and refusal to allow such an inspection shall be sufficient grounds for consideration of revocation of the Wellfield Protection Operating Permit issued by the administering county agency.
- D. In the event a person who has common authority over a building, structure, or land shall not permit an inspection, the inspection shall be rescheduled and shall be notified by United States certified mail. Failure of such person to thereafter permit an inspection shall be sufficient grounds and probable cause for a court of competent jurisdiction to issue an administrative warrant for the purpose of inspection, surveying, or examining said premises.
- E. In the event a building, structure, or land appears to be vacant or abandoned, and the property owner cannot be readily contacted in order to obtain consent for an inspection, an agent of the county may enter into or upon any open or unsecured portion of the premises in order to conduct an inspection thereof.
- F. Agents of the county shall be provided with official identification and shall exhibit such identification when making any inspection.
- G. It shall be the duty of all law enforcement officers to assist in making inspections when such assistance is requested by the agent of the county.

Section 14 Notice of Violation and Hearing

- A. Whenever it is determined that there is a violation of this ordinance or the regulations promulgated pursuant hereto, the Notice of Violation issued shall:
1. be in writing;
 2. be dated and signed by the authorized county agent making the inspection;
 3. specify the violation or violations;
 4. state that said violation(s) shall be corrected by a date certain as specified in writing by the Notice of Violation; and
 5. state that if the violation is not corrected by said specified date a hearing may be requested before the county enforcing body or its designee.
- B. If the administering county agency determines that a hearing is warranted, the procedure set forth in the regulations promulgated pursuant hereto for holding a formal, public hearing shall be commenced.

Section 15 Injunctive Relief

- A. If any person who engages in nonresidential activity stores, handles, uses, or produces hazardous or toxic substances regulated under this ordinance or the regulations promulgated pursuant hereto, without having obtained a Wellfield Protection Operating Permit as provided for herein or continues to operate in violation of the provisions of this ordinance or the regulations promulgated pursuant hereto, then Broward County may file an action for injunctive relief in the Circuit Court of the Seventeenth Judicial Circuit in and for Broward County, Florida.

Section 16 Penalties

- A. Any person who violates any provisions of this ordinance shall, upon conviction, be punished by a fine not to exceed five hundred (500.00) dollars or by imprisonment in the county jail not to exceed sixty (60) days, or by both; such fine and imprisonment pursuant to the provisions of Section 125.69, Florida Statutes.

Section 17 Severability

- A. If any section, sentence, clause, or phrase of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this ordinance.

Section 18 Inclusion in Code

- A. It is the intention of the board of county commissioners that the provisions of this ordinance shall become and be made a part of the Broward County Code; and that the sections of this ordinance may be renumbered or relettered and the word "ordinance" may be changed to "section," "article," or such other appropriate word or phrase in order to accomplish such intentions.

Section 19 Effective Date

- A. This ordinance shall become effective as provided by law.

ENACTED this 28th day of August, A.D. 1984.

FILED WITH DEPARTMENT OF STATE August 30, 1984.

EFFECTIVE August 30, 1984.

STATE OF FLORIDA
COUNTY OF BROWARD

I HEREBY CERTIFY that the above and foregoing is a true and correct copy of Ordinance No. _____ as recorded in Board of County Commission records.

WITNESS my hand and official seal this _____ day of _____
A.D., 19_____.

F. T. Johnson, County Administrator

By: _____ D.C.

STATE OF FLORIDA)
) SS
COUNTY OF BROWARD)

I, F. T. JOHNSON, County Administrator in and for Broward County, Florida, and Ex-Officio Clerk of the Board of County Commissioners of said County, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of _____ as the same appears of record in the Minutes of a meeting of said Board of County Commissioners held on _____ day of _____, 19 _____.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this _____ day of _____ A.D., 19 _____.

F. T. Johnson
County Administrator

By _____

Deputy

(S E A L)

RESOLUTION 84-2075

A resolution relating to wellfield protection rules and regulations; providing for declaration of intent; providing for a list of regulated hazardous and toxic substances; providing for restrictions within zones of influence; providing for permits, types of permits, application requirements and fee schedules; providing for wellfield protection enforcement; providing for duties and responsibilities of the Broward County Water Resources Management Division; providing for duties and responsibilities of the wellfield protection officer; providing for a hearing officer; providing for inclusion in the administrative code; providing for severability; and providing for an effective date.

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA:

Section 1 Authority

- A. Pursuant to the authority granted by the Potable Water Wellfield Protection Ordinance, Broward County Ordinance No. 84-60, Sections 1.03 and 8.04, Broward County Charter, and Chapter 125, Florida Statutes, the standards, rules, and regulations set forth herein have been promulgated and approved by the Broward County Board of County Commissioners and shall apply to all public utility potable water wellfields in Broward County.

Section 2 Declaration of Intent

- A. In order to properly protect existing and future water supply wellfields in Broward County the Broward County Board of County Commissioners declares that the storage, handling, use, or production of hazardous or toxic substances in close proximity to public utility potable water supply wells is potentially harmful to the drinking water of Broward County and that certain activities involving hazardous or toxic substances are prohibited and regulated within certain defined Zones of Influence of public utility potable water supply wellfields.
- B. The Zones of Influence around potable water supply wellfields shall be delineated by scientifically established criteria relating to the physical characteristics of the water supply aquifer and the transport gradients caused by either natural forces or induced pumpage of the wellfields.

The transport times and the restrictions associated with the zones shall be such as to allow adequate time to carry out mitigating procedures to prevent wellfield contamination in the event of spillage of any regulated substance.

- C. In the event of any conflict between the provisions of Ordinance No. 84-60 and this resolution, the provisions of the ordinance shall prevail.

Section 3 Regulated Hazardous or Toxic Substances

- A. The substances to be regulated include certain known hazardous or toxic substances (hereinafter referred to as "regulated substances").
- B. Each of the substances to be regulated has one or more of the following characteristics:
1. known hazardous and toxic properties such as those listed by the Environmental Protection Agency (EPA) in Federal regulations set forth in 40 CFR 302;
 2. listed as a priority toxic pollutant by the EPA in Federal regulations in 40 CFR 122.21;
 3. a degradation product which is toxic; or
 4. on Restricted Use Pesticide List promulgated pursuant to Chapter 487, Florida Statutes, set forth in Chapter 5E-2 and 5E-9, Florida Administrative Code.

As well as the following characteristics:

5. prone to be persistent in the environment; physical characteristics; and
 6. water soluble or prone to pass downward through surface soils, to enter into and mix with groundwater and to be transported by the movement of groundwater to water supply wells.
- C. The substances to be regulated are those set forth on the list entitled "Wellfield Protection--Regulated Substances," which is attached hereto as Exhibit A and incorporated herein.

Section 4 Restrictions Within Zones of Influence

A. Zone One (1)

All persons who engage in nonresidential activities within Zone One (1) who store, handle, use, or produce any of the regulated substances, except as provided for within the Potable Water Supply Wellfield Protection Ordinance, shall cease to do so within two (2) years pursuant to the prohibition set forth within the Potable Water Supply Wellfield Protection Ordinance. Such persons within Zone One (1) shall be notified in writing, by certified mail, within thirty (30) days of the effective date of the Potable Water Supply Wellfield Protection Ordinance as to its impact on the existing activity. A Closure Permit shall be obtained from the Broward County Water Resources Management Division (hereinafter referred to as WRMD) and a timetable for discontinuance and closure shall be submitted to the Wellfield Protection Officer.

Any activity in Zone One (1) which shall be allowed to continue in accordance with the exemptions set forth in the Potable Water Supply Wellfield Protection Ordinance shall obtain a Wellfield Protection Operating Permit which shall indicate the special conditions to be instituted and the dates on which those conditions shall be instituted. Such activities shall also comply with all Zone Two (2) prohibitions and restrictions as set forth in the exemption provisions in the Potable Water Supply Wellfield Protection Ordinance and any of the conditions set forth below for Zone Two (2) as designated in the Wellfield Protection Operating Permit by the WRMD.

B. Zone Two (2)

Those persons in Zone Two (2) who store, handle, use, or produce any regulated substance on the effective date of Ordinance No. 84-60, or any new activity established thereafter, may continue to do so in accordance with the provisions and exemptions set forth in the Potable Water Supply Wellfield Protection Ordinance upon obtaining a Wellfield Protection Operating Permit. Permitted activities in Zone Two (2) shall be subject to the following conditions:

1. Preparation and Recording of an Inventory of Regulated Substances

An inventory shall be maintained of all regulated substances on a form provided by the WRMD. The inventory shall list the substances and the quantities present and shall be submitted with the application for the Wellfield Protection Operating Permit. Such inventory shall be updated quarterly and forwarded to the WRMD.

2. Containment of Regulated Substances

Leakproof trays, under containers, or floor curbing shall be provided and be of adequate size such that any accidental breakage or spillage will be totally contained and prevented from reaching any storm or sanitary drains or the ground. The presence of such containment devices shall be certified in the Wellfield Protection Operating Permit application.

3. Emergency Collection Devices

Vacuum suction devices or absorbent scavenger materials shall be present onsite in sufficient magnitude so as to control and collect the total quantity of regulated substances present. Emergency containers shall be present of such capacity as to hold the total quantity of regulated substances plus absorbent material. The presence of such emergency collection devices shall be certified in the Wellfield Protection Operating Permit application.

4. Emergency Plan

An emergency plan shall be prepared and filed with the Wellfield Protection Operating Permit indicating the procedures which will

be followed in the event of spillage so as to control and collect all spilled material in such a manner as to prevent it from reaching any storm or sanitary drains or the ground.

5. Daily Monitoring

A responsible person designated by the person who stores, handles, uses, or produces the regulated substances shall on a daily basis, five (5) times per week, check for breakage or leakage of any container containing the regulated substances. Daily monitoring records shall be kept and made available to the Wellfield Protection Office or Inspector at all reasonable times for examination.

6. Proper and Adequate Regular Maintenance of Containment and Emergency Equipment

Procedures shall be established for the quarterly inhouse inspection and maintenance of containment and emergency equipment. Such procedures shall be in writing; a regular schedule of maintenance shall be established; and a log shall be kept of inspections and maintenance. Such logs and records shall be available for inspection by the Wellfield Protection Officer or Inspector.

7. Reporting of Spills

Any spill of a regulated substance in an amount greater than that indicated on Exhibit A shall be reported to the Wellfield Protection Officer by telephone immediately upon discovery of the spill. A full written report including the steps taken to contain the spill shall be submitted to the Wellfield Protection Officer within fifteen (15) days of discovery of the spill.

8. Monitoring for Regulated Substances in the Potable Water Well

Arrangement shall be made with the public utility having cognizance over the potable water well in the Zone Two (2) in which the activity is located to establish a quarterly schedule of raw water analysis. The analysis shall be for all substances which are listed on the Wellfield Protection Operating Permit. It shall be the responsibility of the public utility to provide for the sampling and analyses, but the cost shall be borne by the permitted activity. The first set of analyses shall be completed one hundred eighty-five (185) days after the effective date of the Potable Water Supply Protection Ordinance.

Certified quarterly reports of the analyses for regulated substances shall be submitted to the WRMD for the purpose of determining the accumulation of regulated substances in the potable water well.

9. Monitoring for Regulated Substances in Groundwater Monitoring Wells

One or more groundwater monitoring wells shall be installed at the expense of the permitted activity in a manner approved by the WRMD. Certified analytical results of the quantity present in each monitoring well of each of the regulated substances listed in the activity's Wellfield Protection Operating Permit shall be filed quarterly with the WRMD.

10. Alterations and Expansion

The WRMD shall be notified prior to the expansion, alteration, or modification of an activity holding a Wellfield Protection Operating Permit.

Any such expansion, alteration, or modification shall be in strict conformity with Ordinance No. 84-60 and these regulations. Any existing Wellfield Protection Operating Permit shall be amended to reflect the introduction of any new regulated substances resulting from the change.

11. Reconstruction After Catastrophe

If any structure or building in which there is any activity subject to the provisions of this regulations is damaged by fire, flood, explosion, collapse, wind, war, or other catastrophe any reconstruction shall be in strict conformity with Ordinance No. 84-60 and these regulations.

C. Zone Three (3)

Those activities involving the storage, handling, production, or use of regulated substances in Zone Three (3) in existence on the effective date of Ordinance No. 84-60, or any new activity established thereafter, shall obtain a Wellfield Protection Operating Permit unless specifically exempted by the Potable Water Supply Wellfield Protection Ordinance. Permitted activities in Zone Three (3) shall be subject to the following conditions:

1. Those conditions set forth in subsections 4.02(a), (e), and (g).
2. Within thirty (30) days of any spillage in an amount greater than that indicated on Exhibit A of a regulated substance the Wellfield Protection Operating Permit shall become void and the permittee shall be required to obtain a new Wellfield Protection Operating Permit which shall include the conditions set forth in subsections 4.02(a) through (g).
3. If an activity in Zone Three (3), on its own initiative, has a facility meeting the conditions of Section 4.02(b), (c), (d),

and (f), then its Zone Three (3) Wellfield Protection Operating Permit shall so indicate and the conditions of Section 4.03(b) shall not apply.

Section 5 Permits Required

A. Wellfield Protection Permits

1. This section provides the requirements and procedures for the issuance of any permit required by the Potable Water Supply Wellfield Protection Ordinance.
2. A Wellfield Protection Operating Permit shall be renewed annually.
3. All persons who have obtained a Special Exception pursuant to Section 7.11 of the Potable Water Wellfield Protection Ordinance shall be required to comply only with the permit conditions provided therein.

B. Types of Permits Required

1. Wellfield Protection Operating Permit--Any activity coming under this regulation shall obtain a Wellfield Protection Operating Permit within one hundred eighty (180) days of the effective date of the Potable Water Supply Wellfield Protection Ordinance.

2. Closure Permit

When any activity coming under this regulation is to be or has been permanently terminated, the permittee shall perform a closure of the activities that will remove all regulated substances from the site of the activity. Prior to performing a closure of such activity the permittee shall obtain an activity Closure Permit that shall provide for inspection and certification that all regulated substances have been removed.

C. Permit Applications

1. Wellfield Protection Operating Permit

All applications shall provide the following information:

- a. A list of the regulated substances which are stored, handled, used, or produced in the activity being permitted including their quantities.
- b. A description of the detailed activities that involve the storage, handling, use, or production of the regulated substances indicating the unit quantities in which the substances are contained or manipulated and the square footage of the facility in which the activity is situated.

- c. A description of the inventory record that will be instituted to comply with the restrictions required for Zones Two (2) and Three (3) as set forth above.
- d. A description of the containment, the emergency collection devices and containers and the emergency plan that will be affected to comply with the restrictions required for Zone Two (2) as set forth above. For Zone Three (3) this particular documentation will only be required with the application for a new Wellfield Protection Operating Permit following any spillage.
- e. A description of the daily monitoring records that will be instituted to comply with the restrictions for Zones Two (2) and Three (3) as set forth above.
- f. A description of the proper and adequate regular maintenance of containment and emergency equipment that will be required for Zone Two (2) as set forth above. For Zone Three (3) this particular documentation will only be required with application for a new Wellfield Protection Permit following any spillage.
- g. A description of the groundwater monitoring wells that will be installed and the arrangements made for certified quarterly analyses for regulated substances.
- h. Evidence of arrangements made with the cognizant public utility for quarterly sampling analysis of the raw water from the potable water well.

2. Closure Permit

Closure Permit applications shall provide the following information:

- a. A schedule of events to complete the closure that will include an appointment for an inspection and certification of removal of all regulated substances by the Wellfield Protection Officer or his designated representative.

3. Permit conditions

The permit conditions shall be such as to comply with all the prohibitions and restrictions as set forth in this regulation.

4. Fee Schedule

a. Filing Fee

All applicants for a Wellfield Protection Operating Permit shall pay a nonrefundable filing fee of twenty-five (25.00) dollars. The filing fee shall be applied against other fees

prescribed for the issuance of a permit. The filing fee shall be paid prior to acceptance of the permit application for review.

b. Wellfield Protection Operating Permit Fee

The fee for a Wellfield Protection Operating Permit under this regulation shall be five (5.00) dollars per thousand square feet or fraction thereof of the occupied space in which the activity is taking place with a maximum fee of five hundred (500.00) dollars and a minimum fee of twenty-five (25.00) dollars. A late fee of twenty-five (25.00) dollars shall be applied if application for permit or renewal is late. The Wellfield Protection Operating Permit fee shall be used to defray the cost of monitoring compliance with these regulations.

c. Closure Permit Fee

The fee for a Closure Permit under this regulation shall be one-quarter of the fee for the Wellfield Protection Operating Permit.

d. Permit Transfer Fee

The fee for transfer of a Wellfield Protection Operating Permit shall be twenty-three (23.00) dollars to defray the cost of processing the transfer.

e. Special Exemption Fee

Any person seeking a special exemption shall pay a fee of one hundred (100.00) dollars to defray the cost of processing the exemption request.

Section 6 Wellfield Protection Enforcement

- A. The WRMD shall have the power and authority to administer and enforce the provisions of Ordinance No. 84-60 and the regulations set forth herein.
- B. A Wellfield Protection Officer, within the WRMD, shall be designated by the county administrator to supervise the implementation and enforcement of Ordinance No. 84-60 and the regulations set forth herein. The Wellfield Protection Officer's duties and responsibilities shall be as set forth herein. Such appointee shall be a professional engineer duly licensed and qualified to practice in the State of Florida. In making such an appointment, due consideration shall be given to qualifications and experience in the field of environmental quality control.
- C. The Wellfield Protection Officer shall designate such inspectors as are necessary to enforce Ordinance No. 84-60 and these regulations and have all necessary powers and authority of enforcement.

Section 7 Duties of the Broward County Water Resources Management Division

A. The WRMD shall:

1. Recommend revisions and amendments to the provisions of this resolution for adoption by the board of county commissioners.
2. Make continuing studies and periodic reports and recommendations for the improvement of wellfield protection controls throughout the county and all municipalities therein and to work in cooperation with Federal, State, and local agencies and groups interested in the field of wellfield protection.
3. Recommend revisions and updates to the list of hazardous and toxic substances and the wellfield Zones of Influence maps which are essential documents of this regulation for adoption by the board of county commissioners.
4. Investigate wellfield protection programs and activities in operation in other areas and make recommendations for the improvement of the regulation, administration, and enforcement of wellfield protection.
5. Publicize the importance of adequate wellfield protection, participate in public hearings, discussions, forums, and institutes and arrange programs for the presentation of information by experts in the field of wellfield protection subject to budget limitations.
6. Establish a permitting system for activities subject to this regulation.
7. Perform such other duties, functions, and responsibilities related to wellfield protection that may be assigned from time to time by the Broward Board of County Commissioners.

Section 8 Duties and Powers of the Wellfield Protection Officer

A. The Wellfield Protection Officer shall:

1. Enforce the provisions of Ordinance No. 84-60 and this regulation.
2. Investigate alleged infractions of Ordinance No. 84-60 and this regulation; study and observe conditions; and make recommendations as to the institution of actions necessary for the protection of potable water supply wellfields and as to the prosecution of any violations of Ordinance No. 84-60 and this regulation.
3. Make appropriate surveys, tests, and inspections of property, facilities, equipment, and processes operating under the provisions of Ordinance No. 84-60 and this regulation to determine

whether the provisions of Ordinance No. 84-60 and this regulation are being complied with. Make recommendations for methods by which wellfield protection may be enhanced.

4. Maintain, review, and supervise all operating records required to be filed by persons operating facilities subject to the provisions of Ordinance No. 84-60 and this regulation.
5. Establish technical guidelines and criteria for permitting requirements.
6. Render all possible assistance and technical advice to persons operating facilities, and processes, the use of which may endanger wellfields except that the Wellfield Protection Officer shall not design equipment or facilities for any person.
7. Publish and disseminate information to the public concerning environmental quality and recommend methods for decreasing and eliminating pollution.
8. Render all possible cooperation and assistance to Federal, State, and local agencies for the effective protection of potable water wellfields.
9. Enlist and encourage public support, assistance of civic, technical, scientific, and educational organizations and cooperation of industrial and business enterprises and organizations.
10. Make periodic reports concerning the status of wellfield protection throughout the county and all municipalities located therein.
11. Perform such other administrative duties related to wellfield protection as may be assigned by the WRMD and the board of county commissioners.

Section 9 Inspections

- A. A condition of Wellfield Protection Operating Permit issuance is permission for inspection of the premises by an authorized Broward County Wellfield Protection Officer or Inspector.
- B. The Broward County Wellfield Protection Officer or designated inspectors are thereby authorized and empowered to make inspections at reasonable hours of all nonresidential buildings, structures, and land within wellfield Zones of Influence in Broward County, Florida, in order to determine whether applicable provisions of the Broward County Code of Ordinances and Regulations relating to wellfield protection are being followed.
- C. Inspections may be made without notice, and refusal to allow such an inspection shall be sufficient grounds for consideration of

revocation of the Wellfield Protection Operating Permit issued by the WRMD.

- D. In the event a person who has common authority over a building, structure, or land shall not permit an inspection, the inspection shall be rescheduled and shall be notified by United States certified mail. Failure of such person to thereafter permit an inspection shall be sufficient grounds and probable cause for a court of competent jurisdiction to issue an administrative warrant for the purpose of inspecting, surveying, or examining said premises.
- E. In the event a building, structure, or land appears to be vacant or abandoned, and the property owner cannot be readily contacted in order to obtain consent for an inspection, the Wellfield Protection Officer or Inspector may enter into or upon any open or unsecured portion of the premises in order to conduct an inspection thereof.
- F. The Wellfield Protection Officer or Inspector shall be provided with official identification and shall exhibit such identification when making any inspection.
- G. It shall be the duty of all law enforcement officers to assist in making inspections when such assistance is requested by the Wellfield Protection Officer or Inspector.

Section 10 Hearing Officer

- A. There is hereby created for the purposes of the Potable Water Supply Wellfield Ordinance and this resolution the position of Hearing Officer. The Hearing Officer shall consider violations of Ordinance No. 84-60 and this resolution. The Hearing Officer shall be selected by the county administrator from a list of candidates approved by the board of county commissioners of Broward County. Said Hearing Officer shall be a member in good standing of The Florida Bar engaged in the private practice of law in Broward County.

Section 11 Notice of Violation, Notice of Hearing and Hearing Procedure

- A. Whenever the Wellfield Protection Officer or Inspector determines that there is a violation of Ordinance No. 84-60 or these regulations the Officer or Inspector shall give notice thereof in the manner hereinafter provided.
 - 1. A Notice of Violation shall:
 - a. be in writing;
 - b. be dated and signed by the Wellfield Protection Officer or Inspector;
 - c. specify the violation or violations;
 - d. state that said violation(s) shall be corrected by a certain date as specified in the Notice of Violation; and

- e. state that if the violation is not corrected by said specified date the Wellfield Protection Officer may request a hearing before a Hearing Officer within thirty (30) days from said date stated in the Notice of Violation.
- B. In the event the alleged violator does not comply within the date specified in the Notice of Violation, the Wellfield Protection Officer may schedule a hearing before a Hearing Officer.
- C. Notice of Hearing

Notice of Hearing shall be served upon the violator and property owner, if different, by personal service or certified mail, return receipt requested, no less than ten (10) days prior to the hearing. Said timeframe shall commence from the date of mailing or personal service of said notice. When the owner or responsible individual is not present or is avoiding service of the Notice of Hearing, service shall be by posting copies of the Notice of Hearing in a conspicuous place on the premises of the facility at which the violation exists.

D. Contents of Notice of Hearing

A Notice of Hearing shall contain the following information:

1. name and address of the alleged violator and property owner, if different;
2. description of the facility causing the violation;
3. location of the violation;
4. ordinance section of regulation section alleged to have been violated and the specific violation;
5. time, date, and place of the hearing;
6. the signature of the Wellfield Protection Officer;
7. a statement that "failure to attend may result in an order being issued adverse to your interests";
8. that all parties may be represented by counsel;
9. that all parties shall be given an opportunity to present witnesses and evidence in support of their position; and
10. A statement reflecting the requirements of Chapter 286, Florida Statutes, regarding a verbatim record of the proceedings.

E. Hearing Procedure

1. All testimony shall be under oath and shall be recorded.
2. Assuming proper notice of the hearing as provided in Section 11.03 above, a hearing may proceed in the absence of the alleged violator.
3. All hearings shall be conducted, insofar as is practicable, in accordance with Florida Rules of Civil Procedure and the Florida Evidence Code. However, the general nature of the hearing shall be conducted in an informal manner.
4. Documentary evidence may be received in the form of a copy or excerpt if the original is not readily available.
5. A party shall be permitted to conduct cross-examination when testimony is taken or documents are made a part of the record.
6. The rules of privilege shall be effective to the same extent that they are now, or hereafter may be recognized in civil actions.
7. Each part shall have the following rights:
 - a. to be represented by counsel;
 - b. to call and examine witnesses;
 - c. to introduce exhibits;
 - d. to cross-examine opposing witnesses on any relevant matter, even though the matter was not covered under direct examination;
 - e. to impeach any witnesses regardless of which party first called him or her to testify; and
 - f. to rebut the evidence.
8. Any interested party or person may make application and, upon good cause shown, may be allowed by the Hearing Officer to intervene and appear in a proceeding pending before the Hearing Officer.

Section 12 Orders of the Hearing Officer

- A. After due public hearing, the Hearing Officer shall issue an order based on the greater weight of the evidence. If the Hearing Officer finds a violation of the Potable Water Wellfield Protection Ordinance or this resolution the Hearing Officer shall issue an order revoking the Wellfield Protection Operating Permit, require the party to obtain a permit, or any other remedy deemed necessary. However, the

Hearing Officer may, in his or her discretion, grant an additional period of time to remedy violations prior to issuing a final order. All orders shall be in writing, signed, and dated by the Hearing Officer and shall contain findings of fact and conclusions of law supporting the order.

- B. If, at the conclusion of a hearing, the Hearing Officer orders a dismissal of the complaint and finds no violation, the Hearing Officer shall so state and issue his or her order dismissing the complaint.
- C. An order, decision, or opinion of the Hearing Officer may be appealed by the filing of a Petition for Writ or Certiorari in the Circuit Court of the Seventeenth Judicial Circuit in and for Broward County, Florida, by any party receiving an adverse ruling from the Hearing Officer within the time period prescribed by general law.

Section 13 Inclusion in Administrative Code

- A. It is the intention of the board of county commissioners that the provisions of this resolution shall become and be made a part of the Broward County Administrative Code; and that the sections of this resolution may be renumbered or relettered and the word "resolution" may be changed to "section," "article," or such other appropriate word or phrase in order to accomplish such intentions.

Section 14 Severability

- A. If any section, sentence, clause, or phrase of this resolution is held to be invalid or unconstitutional by any Court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this resolution.

Section 15 Effective Date

- A. The effective date of this resolution shall be the same effective date as Ordinance No. 84-60.

ADOPTED this 28th day of August, A.D. 1984.

EFFECTIVE DATE: August 30, 1984, Ord. 84-60.

EXHIBIT A

WELLFIELD PROTECTION--REGULATED SUBSTANCES

<u>Substance</u>	<u>EPA Toxic Pollutant</u>	<u>EPA Signal Word</u>	<u>AMT Required for Reportable Spill Per Sec. 4.03b</u>	
			<u>Gallons</u>	<u>Pounds</u>
Acenaphthene	*		10	80
Acenaphthylene	*		10	80
Acephate		Caution (III)	50	400
Acrolein	*		10	80
Acrylonitrile	*		10	80
Aldicarb		Danger (I)	10	80
Aldrin	*	Warning (II)	10	80
Allyl alcohol		Warning (II)	10	80
Aluminum phosphide		Danger (I)	10	80
Anthracene	*		10	80
Antimony	*		10	80
Arsenic	*	Danger (I)	10	80
Asbestos (fibrous)	*		10	80
Benzene	*		10	80
Benzidine	*		10	80
Benzo(a)anthracene	*		10	80
Benzo(a)pyrene	*		10	80
3, 4-Benzofluoranthene	*		10	80
Benzo(ghi)perylene	*		10	80
Benzo(k)fluoranthene	*		10	80
Beryllium (total)	*		10	80
BHC-alpha	*	Warning (II)	10	80
BHC-beta	*		10	80
BHC-delta	*		10	80
BHC(lindane)gamma	*	Warning (II)	10	80
bis(2-Chloroethoxy)methane	*		10	80
bis(2-Chloroethyl)ether	*		10	80
bis(2-Chloroisopropyl)ether	*		10	80
bis(2-Ethylhexyl)phthalate	*		10	80
Bromoform	*		10	80
4-Bromophenyl phenyl ether	*		10	80
Butylbenzyl phthalate	*		10	80
Cadmium (total)	*		10	80
Carbaryl	*	Caution (III), Poison	10	80
Carbofuran		Danger (I)	10	80
Carbon tetrachloride	*		50	400
Chlordane	*	Warning (II)	10	80
Chlordecone		Warning (II)	10	80
Chlorfenvinphos		Danger (I), Poison	10	80
Chlorobenzene	*		10	80
p-Chloro-m-cresol	*		10	80

EXHIBIT A

(Continued)

<u>Substance</u>	<u>EPA Toxic Pollutant</u>	<u>EPA Signal Word</u>	<u>AMT Required for Reportable Spill Per Sec. 4.03b</u>	
			<u>Gallons</u>	<u>Pounds</u>
Chlorodibromomethane	*		10	80
Chloroethane	*		10	80
2-Chloroethylvinyl ether	*		10	80
Chloroform	*		50	400
2-Chloronaphthalene	*		10	80
2-Chlorophenol	*		10	80
4-Chlorophenol phenyl ether	*		10	80
Chloropicrin		Danger (I)	10	80
Chromium (total)	*		10	80
Chromium (hexavalent)	*		10	80
Chrysene	*		10	80
Clonitralid			10	80
Copper (excluding elemental metal)	*		10	80
Cyanide (total)	*		10	80
Cycloheximide		Danger (I)	10	80
2,4-D		Warning (II)	10	80
4,4'-DDD	*	Caution (III)	10	80
4,4'-DDE	*		10	80
4,4'-DDT	*	Caution (III)	10	80
Demeton		Danger (I)	10	80
Diazinon		Warning (II)	10	80
Dibenzo(a,h)anthracene	*		10	80
1,2-Dibromo-3-chloropropane		Warning (II)	10	80
1,2-Dichlorobenzene	*		10	80
1,3-Dichlorobenzene	*		10	80
1,4-Dichlorobenzene	*		10	80
3,3'-Dichlorobenzidene	*		10	80
Dichlorobromomethane	*		10	80
1,1-Dichloroethane	*		10	80
1,2-Dichloroethane	*		50	400
1,1-Dichloroethylene	*		50	400
1,2-cis-Dichloroethene			10	80
1,2-trans-Dichloroethylene	*		10	80
2,4-Dichlorophenol	*		10	80
1,2-Dichloropropane	*		10	80
1,3-Dichloropropylene	*	Danger (I)	10	80
Dicrotophos		Danger (I), Poison	10	80
Dieldrin	*	Warning (II)	10	80
Diethyl phthalate	*		10	80
2,4-Dimethylphenol	*		10	80
Dimethyl phthalate	*		10	80
Di-n-butyl phthalate	*		10	80
4,6-Dinitro-o-cresol	*		10	80
2,4-Dinitrophenol	*		10	80

EXHIBIT A

(Continued)

<u>Substance</u>	<u>EPA Toxic Pollutant</u>	<u>EPA Signal Word</u>	<u>AMT Required for Reportable Spill Per Sec. 4.03b</u>	
			<u>Gallons</u>	<u>Pounds</u>
2,4-Dinitrotoluene	*		10	80
2,6-Dinitro totuene	*		10	80
Di-n-octyl phthalate	*		10	80
Dioxathion		Danger (I), Poison	10	80
1,2-Diphenylhydrazine	*		10	80
Disulfoton		Danger (I)	10	80
Endosulfan (alpha)	*	Danger (I)	10	80
Endosulfan (beta)	*	Most Forms are Warning (II)	10	80
Endosulfan sulfate	*		10	80
Endothall (amine formulations)		Warning (II)	10	80
Endrin	*	Danger (I)	10	80
Endrin aldehyde	*		10	80
EPN		Danger (I)	10	80
Ethoprop		Danger (I)	10	80
Ethyl benzene	*		10	80
Ethylene dibromide			50	400
Fenamiphos			10	80
Fensulfothion			10	80
Fenthion		Warning (II)	10	80
Fluoranthene	*		50	400
Fluorene	*		50	400
Fluoroacetamide-1081		Danger (I)	10	80
Fonofos		Danger (I)	10	80
Guthion		Danger (I)	10	80
Heptachlor	*	Warning (II)	10	80
Heptachlor epoxide	*		10	80
Hexachlorobenzene	*		10	80
Hexachlorobutadiene	*		10	80
Hexachlorocyclopentodiene	*		10	80
Hexachloroethane	*		10	80
Hydrocyanic Acid			10	80
Ideno (1,2,3-cd)pyrene	*		10	80
Isophorone	*		10	80
Isopropyl benzene			10	80
Lead (total)	*		10	80
Malathion		Caution (III)	10	80
Mercury (total)	*		10	80
Methamidophos		Danger (I), Poison	10	80
Methidathion		Danger (I)	10	80
Methomyl		Danger (I)	10	80
Methoxychlor		Caution (III)	10	80

EXHIBIT A

(Continued)

<u>Substance</u>	<u>EPA Toxic Pollutant</u>	<u>EPA Signal Word</u>	<u>AMT Required for Reportable Spill Per Sec. 4.03b</u>	
			<u>Gallons</u>	<u>Pounds</u>
Methyl bromide	*	Danger (I)	10	80
Methyl chloride	*		10	80
Methyl parathion		Danger (I)	10	80
Methylene chloride	*		10	80
Mevinphos		Danger (I), Poison	10	80
Mirex		Warning (II)	10	80
Monocrotophos		Danger (I), Poison	10	80
Napthalene	*		50	400
Nickel (excluding elem. metal)	*		10	80
Nicotine		Danger (I)	10	80
Nitrates			50	400
Nitrobenzene	*		50	400
2-Nitrophenol	*		10	80
4-Nitrophenol	*		10	80
N-Nitrosodimethylamine	*		10	80
N-Nitrosodi-n-propylamine	*		10	80
N-Nitrosodiphenylamine	*		10	80
Oxamyl		Danger (I)	10	80
Paraquat		Danger (I), Poison	10	80
Parathion		Danger (I)	10	80
PCB-1242	*		10	80
PCB-1254	*		10	80
PCB-1221	*		10	80
PCB-1232	*		10	80
PCB-1248	*		10	80
PCB-1260	*		10	80
PCB-1016	*		10	80
Pentachlorophenol	*	Danger (I)	10	80
Phenanthrene	*		10	80
Phenol	*		50	400
Phenols (total)	*		10	80
Phorate		Danger (I), Poison	10	80
Phosacetin			10	80
Phosphamidon		Danger (I), Poison	10	80
Phosphorous			10	80
Picloram		Warning (II)	10	80
Pyrene	*		10	80
Selenium (total)	*		10	80
Silver (excluding elem. metal)	*		10	80
Silvex		Caution (III)	10	80

EXHIBIT A

(Continued)

<u>Substance</u>	<u>EPA Toxic Pollutant</u>	<u>EPA Signal Word</u>	<u>AMT Required for Reportable Spill Per Sec. 4.03b</u>	
			<u>Gallons</u>	<u>Pounds</u>
Sodium fluoroacetate		Danger (I)	10	80
Strychnine		Danger (I)	10	80
Styrene			50	400
Sulfotepp			10	80
TEPP		Danger (I)	10	80
Terbufos		Danger (I), Poison	10	80
1,1,1,2-Tetrachloroethane			10	80
1,1,2,2-Tetrachloroethane	*		10	80
Tetrachloroethylene	*		10	80
Thallium (total)	*		10	80
Toluene	*		50	400
Toxaphene	*	Warning (II)	10	80
1,2,4-Trichlorobenzene	*		10	80
1,1,1-Trichloroethane	*		10	80
1,1,2-Trichloroethane	*		10	80
Trichloroethylene	*		50	400
2,4,6-Trichlorophenol	*		10	80
Vinyl chloride	*		10	80
Xylene(s)			10	80
Zinc (excluding elem. metal)	*		10	80
Gasoline	(Contains*)		10	80
Kerosene	(Contains*)		10	80
Microbiological (including total and fecal coliform)				
Petroleum Products which are hazardous or toxic			10	80
Radionuclides				

STATE OF FLORIDA)
) SS
COUNTY OF BROWARD)

I, F. T. JOHNSON, County Administrator in and for Broward County, Florida, and Ex-Officio Clerk of the Board of County Commissioners of said County, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of resolution 84-2025 as the same appears of record in the Minutes of a meeting of said Board of County Commissioners held on 28th day of August, 1984.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 30th day of August A.D., 1984.

F. T. JOHNSON,
County Administrator

By _____
Deputy

(S E A L)

AN ORDINANCE CREATING
AND ESTABLISHING THE ELKHART COUNTY
GROUNDWATER PROTECTION PROGRAM

Whereas, Indiana Code Sections 36-1-3-1 et seq. permit any county in the State of Indiana to exercise any power or perform any function necessary to the public interest in the context of its county or internal affairs, which is not prohibited by the Constitution of the United States or of the State of Indiana, or denied or preempted by any other law or is not expressly granted by any other law to another governmental entity;

Whereas, the Board of Commissioners of Elkhart County and the Elkhart County Board of Health find that it is in the public interest of Elkhart County to establish and create a groundwater protection program;

Whereas, it is desired that the groundwater of Elkhart County be reasonably protected from the improper storage of toxic or hazardous substances;

Whereas, the Elkhart County Board of Health is directed to enforce and observe all State laws and legally promulgated regulations pertaining to the preservation of health and is authorized to adopt such rules and regulations as may be deemed necessary or desirable to protect, promote, or improve public health by Indiana Code Sections 16-1-7-1 et seq.; and

Whereas, pursuant to the authority vested by the Indiana Code Sections 36-1-3-1 et seq., the Board of Commissioners of Elkhart County, Indiana desire to establish and create the Elkhart County Groundwater Protection Program subject to the provisions hereinafter stated;

Now, therefore, be it ordained by the Board of Commissioners of Elkhart County, Indiana as follows:

Section 1 Title

This Elkhart County Ordinance may be referred to as the "Elkhart County Groundwater Protection Ordinance."

Section 2 Purpose

It is the purpose of this ordinance to enhance and preserve the public health, safety, and welfare of persons and property of Elkhart County by protecting the groundwater of Elkhart County from degradation resulting from the improper discharge of toxic or hazardous substances.

Section 3 Definitions

- A. Aboveground storage tank--any nonportable container, excluding all pipes connected thereto, which is used to store an accumulation of toxic or hazardous substances and in which more than ninety (90) percent of the volume of the storage container is at or above the final ground elevation.

- B. Agricultural--of, or pertaining to, property used principally for the production of crops and livestock on a farm. The term "agricultural" does not include the sale or distribution of toxic or hazardous substances.
- C. Board--the Board of Commissioners of Elkhart County, Indiana.
- D. Board of Health--the Elkhart County Board of Health.
- E. CERCLA--the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.
- F. Commercial or industrial--of, or pertaining to, property used principally for purposes of business, commerce, trade, manufacture, or production.
- G. Discharge--any unintentional or intentional spilling, leaking, pumping, pouring, emitting, emptying, releasing, injecting, escaping, leeching, dumping, or disposing into or upon the soil, surface water, or groundwater of Elkhart County.

The term "discharge" when used and applied in this ordinance, does not include the following:

- 1. proper disposal, in accordance with all legal requirements and in accordance with the requirements of the RCRA and regulations thereunder, of hazardous wastes in a facility that has received and maintained all necessary legal approvals for that purpose;
- 2. proper disposal, in accordance with all legal requirements, of any substance including special wastes, as defined in the Indiana Stream Pollution Control Board SPC18 Regulations, as amended, in a sanitary landfill that has received and maintained all necessary legal approval for that purpose;
- 3. proper disposal of any substance in compliance with the terms and provisions of a valid municipal, State, or Federal permit;
- 4. proper disposal, in accordance with all legal requirements, of any substance to a sanitary sewer system that has received and maintained all necessary legal approvals for that purpose;
- 5. proper application of fertilizers and pesticides in accordance with label requirements and in accordance with the guidelines of the Indiana State Chemist's Office;
- 6. proper application of road salts and deicing materials for the purposes of snow and ice control;
- 7. proper disposal, in accordance with all legal requirements, of "sanitary sewage" to subsurface sewage disposal systems as defined and permitted by Rule 410 IAC 6-8, et seq. and by Rule 410 IAC 6-10, et seq. of the Indiana Health Code and regulations, as amended;

8. any discharge of a toxic or hazardous substance in a quantity less than the reportable quantity identified therefor under CERCLA or any discharge of a petroleum substance in a quantity less than five (5) gallons.
- H. Facility--all contiguous land and related structures, appurtenances, and improvements on land with the same operator. A facility may consist of several operations. For these purposes, contiguous land shall include land separated by a public right-of-way so long as such land would otherwise be contiguous.
- I. Health department--the Elkhart County Health Department and also includes any of its authorized agents.
- J. Operator--the person or designee in possession and control of the facility, regardless of whether such person is the owner, lessee, or other possessor.
- K. Person--individuals, firms, corporations, associations, partnerships, consortiums, joint ventures, and any other legal entity. A corporation and its subsidiaries shall be considered one person.
- L. RCRA--the Resource Conservation and Recovery Act of 1976, as amended.
- M. Residential--of, or pertaining to, property used principally for a residence.
- N. Store or storage--holding a substance prior to or after its use; the terms shall not include any associated and connected piping.
- O. Toxic or hazardous substance:
1. any substance defined in Section 101(14) of CERCLA;
 2. petroleum, including crude oil or any fraction thereof, which is liquid at standard conditions of temperature and pressure (60°F and 14.7 lbs. per square inch absolute); or
 3. radioactive and infectious substances as defined by any applicable local, State, or Federal law or regulation.
- P. Underground storage tank--any one or a combination of nonportable containers, excluding all pipes connected thereto, which is used to store an accumulation of toxic or hazardous substances, and the volume of which is ten (10) percent or more beneath the surface of the ground.

Section 4 Prohibitions

The negligent, reckless, knowing, or intentional discharge of toxic or hazardous substances is prohibited.

Section 5 Registration Requirements

A. Commercial/Industrial Onsite Wastewater Disposal Systems.

1. Subject to subsection (2) below, every commercial or industrial facility which possesses an onsite waste water disposal system discharging to the ground including septic systems, dry wells, unlined lagoons, oil water separators, or other field absorption systems shall register with the Health Department.
2. Closed system heat pumps, irrigation systems, stormwater systems, and noncontact cooling water systems are not subject to this registration.
3. The registration shall be submitted by the operator of the facility on forms provided by the Health Department and shall contain at a minimum the following information:
 - a. name of the facility;
 - b. street and mailing address of the facility;
 - c. designated individual to be contacted;
 - d. number, type, and location diagram of systems present;
and
 - e. estimated flow rate to each system.
4. Annually, the facility shall furnish to the Health Department a waste characterization for each system which shall be provided by a qualified, independent laboratory. Minimum testing required includes Total Toxic Organics (TTO) and Extraction Procedure Toxic Metals (EP Tox Metals). The Health Department at any time may require an additional sample be taken with a Health Department representative present and the sample then analyzed at the facility's expense.
5. Registration required under this subsection shall be submitted within six (6) months after the effective date of this ordinance.
6. The operator of a facility shall notify the Health Department within sixty (60) days of any change at the facility except estimated flow rate changes after the initial registration which renders the information contained in the ten existing registration inaccurate.
7. The operator of any facility described in subsection (1) above which is placed in service after the effective date of this ordinance shall register with the Health Department within sixty (60) days after being placed in service and shall meet all other applicable requirements under this ordinance.

B. Hazardous substance storage areas.

1. All facilities which use, store, or generate toxic or hazardous substances in aggregate quantities greater than 100 kilograms per year (approximately equal to twenty-five (25) gallons or 220 pounds) shall register with the Health Department.
2. Registration shall be submitted by the operator of the facility on forms provided by the Health Department and shall contain at a minimum the following information:
 - a. name of the facility;
 - b. street and mailing address of the facility;
 - c. designated individual to be contacted;
 - d. type of substances stored; and
 - e. location of storage (indoor/outdoor), with a diagram.
3. Registration required under this subsection shall be submitted within twelve (12) months after the effective date of this ordinance.
4. The operator of a facility shall notify the Health Department within sixty (60) days after:
 - a. any twenty (20) percent increase in the toxic or hazardous substance storage capacity of the facility; or
 - b. any change at the facility whereby any toxic or hazardous substance which was previously stored inside is subsequently stored outside.
5. The operator of any facility described in subsection (1) above which is placed in service after the effective date of this ordinance shall register with the Health Department within sixty (60) days after being placed in service and shall meet all other applicable requirements of this ordinance.
6. A facility shall be exempt from the registration required by this section but only with respect to the following types of storage:
 - a. underground storage tanks other than:
 - (1) farm or residential tanks of eleven hundred (1100) gallons or less capacity used for storing motor fuel for noncommercial purposes; and
 - (2) tanks used for storing heating oil for consumptive use on the premises where stored.
 - b. hazardous waste storage areas that are regulated under RCRA.

7. Any laboratory that is a facility or any laboratory contained in a facility shall be exempt from the registration required by this section but only with respect to its laboratory activities.

Section 6 Aboveground Storage of Toxic or Hazardous Substances

- A. This section applies only to the storage of toxic or hazardous substances in containers, whether portable or nonportable, in which more than ninety (90) percent of the volume of the storage container, excluding all pipes connected thereto, is at or above the final ground elevation.

B. Inside storage

Toxic or hazardous substances may not be stored indoors on bare ground or within ten (10) feet of a drain that empties into the ground or that is connected to an onsite waste water disposal system that drains or empties into the ground.

C. Outside storage

1. Outside storage of toxic or hazardous substances is prohibited except in product-tight containers.
2. Secondary containment of toxic or hazardous substances stored outside shall be provided and shall be sufficient to store the substances, including an allowance for the expected accumulation of precipitation, for the maximum anticipated period of time necessary for the recovery of any discharged substance.
3. Drainage of precipitation from within any area designed to contain a discharge of a toxic or hazardous substance shall be controlled in a manner that will prevent any toxic or hazardous substance from entering into or upon the soil, surface water, or groundwater of Elkhart County.
4. All applicable State and Federal requirements for storage leak detection, recordkeeping, spill prevention, emergency response, transportation, and disposal shall be met.
5. Aboveground storage tanks existing and placed in service prior to the adoption of this ordinance shall be exempted from secondary containment provided:
 - a. registration requirements of Section 5 above are met;
 - b. adequate measures shall be provided so as to prevent incidental leaks and spills from contacting the ground at all loading and offloading areas; and
 - c. for all aboveground storage tanks greater than ten (10) years of age, an acceptable means of establishing tank integrity and product-tightness shall be utilized by the facility and

such information provided to the Health Department every two (2) years unless the facility provides documentation prepared by an independent registered professional engineer of an alternate testing frequency assuring tank integrity and product-tightness. If the facility is unable to establish tank integrity and product-tightness, secondary containment shall be required.

6. Any relocation of an existing aboveground storage tank previously exempted shall be required to comply with all applicable requirements of this section.
7. The provisions of Section 6 shall not apply to agricultural or residential facilities.

Section 7 Report of Discharges

The operator of a facility shall contact the Health Department within twenty-four (24) hours of any discharge of a toxic or hazardous substance in Elkhart County that is owned by and subject to the control of the facility, regardless of whether the discharge occurs on or off of the facility's premises, providing information relating the best available information of what was discharged, how much was discharged, when the discharge occurred, where the discharge occurred, and what corrective action was taken, which report shall be followed within ten (10) working days by a written report to the Health Department.

Section 8 Records

A copy of the records pertaining to registration under this Ordinance shall be retained for not less than three (3) years, and shall be made available for review by the Health Department upon request. All such copies of the records shall be transferred to any new owner or operator of a facility that is sold, leased, transferred to, or received by a new owner or operator. The transfer of copies of the records shall in no way operate to eliminate or obviate the necessity of the new owner or operator to register with the Health Department as required by this ordinance.

Section 9 Penalties

- A. Any person who violates any provision contained in this Ordinance or in any variance granted pursuant to Section 12 may be fined up to One Thousand Five Hundred Dollars (\$1,500.00) for each violation. Each day that a violation continues shall be deemed to constitute a separate violation. In assessing any fine under this Ordinance, the nature of the violation, the seriousness of the violation, the capability of the violator, the harm or potential harm involved by the violation, and any other relevant factor shall be considered.
- B. Whenever any violation of this ordinance is occurring, the Health Officer may order the violation stopped by written notice served on any person violating the ordinance, and such person upon receiving said notice shall immediately cease the violation.

- C. The Health Department may institute suit for injunction in the County's Circuit or Superior Courts to restrain any person from violating the provisions of this ordinance or any rules and regulations established by the Board of Health pursuant to Section 11 below.

Section 10 Enforcement

- A. The provisions of this ordinance shall be administered and enforced by the Health Department and the Health Officer.
- B. Inspections to assure compliance and to investigate alleged violations of this Ordinance will be conducted by the Health Department in accordance with the requirements of law. Whenever necessary to make an inspection or to enforce this ordinance, the Health Department may enter any facility or premises at all reasonable times upon presentation of proper credentials and demand for entry. If entry is refused, the Health Department shall have recourse to every remedy provided by law to secure entry.
- C. Upon request of the Health Department, the owner or operator of any facility at which toxic or hazardous substances are used, stored, or generated shall furnish all information then currently available to the facility deemed necessary by the Health Department to monitor compliance with this ordinance.

Section 11 Appeals

Any decision of the Health Department or the Health Officer made in enforcement of this Ordinance or any rules and regulations established by the Board of Health pursuant to Section 13 below and any decision of the Board of Health regarding a variance request may be appealed to the board by any person adversely affected by that decision, and the appeal shall be processed under all laws, rules, and regulations applicable to that board. Any appeal to the board must be taken no later than thirty (30) days following written notice of the decision. In addition, any person adversely affected by a decision of the board as a result of an appeal to the board shall have the right of appeal as in other civil actions if such person gives fifteen (15) days written notice of intent to do so to the board by certified U.S. mail. The notice shall concisely state the alleged grievance. It is specifically provided that failure to appeal to the board and exhaust other remedies shall work as a bar to the right to appeal the decision of the Health Department or the Health Officer to the Courts.

Section 12 Variances

- A. Although the provisions of this Ordinance are to be followed with strict compliance, certain individual cases may justify the issuance of a variance while still allowing for consistent protection of groundwater resources.

- B. All requests for variances must be in writing to the Health Department and must contain all specifications, studies, or evidence showing why such a variance should be granted. The Health Department shall review the variance request and submit its recommendations to the Board of Health.
- C. Variances from this ordinance may be granted by the Board of Health after a hearing in compliance with proper public notice at which the applicant establishes that the requested variance will not jeopardize or degrade the groundwater or create other hazards to human health and that requiring strict compliance with the requirements of this Ordinance would create an undue burden upon the applicant. In granting variances, the Board of Health shall take into consideration the amount and type of toxic or hazardous substances involved; the rate and direction of groundwater flow, soil condition, depth to groundwater, size and slope of site, existing and known future water supplies, and any other relevant factors. All variances shall be site specific, in writing, and include any and all conditions deemed necessary by the Board of Health to assure the protection of the groundwater and to prevent other hazards to human health.
- D. In no case shall the Board of Health grant a variance which will violate existing State or Federal law or regulation.

Section 13 Authority of Board of Health

The Board of Health is authorized to adopt such rules, regulations, and forms as it deems necessary to implement, effectuate, and assure compliance with the requirements of this ordinance.

Section 14 Compliance with Other Laws

Compliance with this ordinance does not obviate or eliminate the necessity of complying with all other applicable Federal, State, or local laws and regulations with respect to toxic or hazardous substances.

Section 15 Construction

- A. To the extent that any provision of this ordinance is ultimately determined by a court of competent jurisdiction to be preempted by any State or Federal law, this ordinance shall automatically be deemed amended by eliminating the preempted provision and incorporating in its place the applicable provision of the preempting State or Federal law.
- B. Each provision of this ordinance shall be construed as separate, to the end that if any part of it shall be held invalid for any reason, the remainder shall continue in full force and effect.

C. This ordinance shall not be construed to apply in any respect to any other political subdivision as defined by Indiana Code Section 36-1-2 et seq., other than Elkhart County, Indiana, unless such a political subdivision consents to be regulated hereby and subjected to the requirements of this ordinance.

Section 16 Effective Date

This Ordinance shall take effect on the _____ day of _____, 1988.

THE BOARD OF COMMISSIONERS
OF ELKHART COUNTY, INDIANA

By _____

By _____

By _____

ATTEST:

Auditor of Elkhart County, Indiana

SINKHOLE ORDINANCE,
LEXINGTON-FAYETTE URBAN-COUNTY GOVERNMENT,
LEXINGTON, KENTUCKY

SRA 85-2
Article 6-7(1)

SINKHOLES

For purposes of this section, the following definitions shall apply:

- A. Sinkhole--Any closed depression formed by removal (typically underground) of water, surficial soil, rock, or other material. The existence of a sinkhole shall be indicated by the closed depression contour lines on the Unified Mapping Program topographic maps or other documents as approved by the Urban County Engineer. Its actual limits may, however, be determined by field measurements with concurrence of the Urban County Engineer. Sinkholes may be either circular in plan or irregular, depending upon structural control.
- B. Immediate Sinkhole Drainage Area--Any area that contributes surface water directly to the sinkhole(s); this does not include areas which contribute surface water indirectly to a sinkhole (via streams).
- C. Sinkhole Cluster Area--Any area that contributes surface water other than by way of a stream to a sinkhole which is located in a group of two or more sinkholes clustering together.

Section 1 Plan Requirements

A sinkhole, the immediate sinkhole drainage area, a sinkhole cluster area, or portions of such items shall be shown on any development or preliminary subdivision plan for land where they exist. Sinkhole-related nonbuildable areas and restricted fill areas shall be shown on final subdivision plans and development plans.

Section 2 Sinkhole-Related Nonbuildable Areas

Based upon the topography, geology, soils, and known history of the sinkhole (such as past filling) and the developer's engineer's stormwater analysis and plan, the Planning Commission shall establish sinkhole-related, nonbuildable areas. No buildings, parking areas, or other structures shall be permitted within the sinkhole-related, nonbuildable area.

This nonbuildable area shall follow the limits of the sinkhole in most cases. However, the nonbuildable area may be expanded or contracted by action of the Planning Commission where warranted due to the nature of the specific sinkhole, the underlying geology, soils, drainage, and any related information such as depth to bedrock. In sinkhole cluster areas, the Division of Engineering may require the developer to provide recommendations from a consulting engineer and a consulting hydrogeologist

based upon substantial and state-of-the-art field studies and evaluation of the specific sinkhole system. Such studies shall be submitted to the Division of Engineering and Planning, which shall review said studies and make recommendations to the Planning Commission.

Section 3 Development in Sinkhole Drainage Areas

Development may occur in the immediate sinkhole drainage area if the developer provides alternative surface drainage away from the sinkhole, while keeping the water in the same surface drainage basin, and provided further that the water shall not go into another sinkhole drainage area off the petitioner's property, nor into another stream of known flooding problems. The immediate sinkhole drainage area (or portion thereof) which cannot be provided with an alternative drainage system can be deleted from the development area and can be used to meet the normal open space requirements. The developer may request that the Planning Commission increase the density on the remainder of the developable area, with the total resulting density no greater than if the entire area were developed to the permitted density.

For portions of the immediate sinkhole drainage area where alternative surface drainage methods cannot be provided, as determined by the Division of Engineering, the developer may choose one of the options described in Section 4 herein below.

Section 4 Sinkhole Surface Drainage Analyses

The sinkhole can be used for surface runoff drainage of a proposed development if the conditions of either of the following alternatives are met:

- A. Alternative 1: A sinkhole can be used for surface runoff of a proposed development with or without retention or detention facilities as recommended by a consulting engineer and a consulting hydrogeologist, provided that any increase in the quantity of surface runoff due to development of the entire sinkhole drainage area in question will not aggravate flooding on the proposed development, adjacent existing development, or connected/adjacent sinkhole subsurface systems. Such engineering and geological reports must be substantive and based on state-of-the-art field studies and evaluation of the specific sinkhole system. The Planning Commission shall not approve development proposals subject to Alternative 1 provisions unless the study findings meet the requirements of this subsection and the Division of Engineering concurs with those findings and recommendations.
- B. Alternative 2: A sinkhole can be used for surface drainage of a proposed development if all of the following conditions and provisions are met:
 1. That the runoff from the development area is either completely retained in a retention basin or detained in a detention basin. The flow rate out of the above basins shall be regulated so that it is no greater than the flow rate into the sinkhole of the

development area prior to development for each of the following storms: 10 year/1-hour, 25 year/24-hour storm or a 100 year/1-hour storm. The outflow rate shall not aggravate flooding on downstream properties for any of these storms.

2. As previously noted in subsection 3, the developer may elect to divert enough of the sinkhole drainage area so that the development of the remaining area does not increase the total quantity of runoff into the sinkhole. Where additional runoff is anticipated, a consulting engineer and hydrogeologist shall evaluate and show the effect of any additional quantity of runoff to the sinkhole and sinkhole system. For approval, the study must show the development will not aggravate flooding on the proposed development, adjacent lands, or connected/adjacent sinkhole systems. The Division of Engineering shall review the study findings and make recommendations to the Planning Commission for alternative 2 to be accepted.
3. Where the sinkhole outlet is offsite, either the runoff leaving the subject property must be shown to be no greater in flow or in quantity than that which existed before development or written approvals must be submitted from owners of property where any increase in flow or quantity of water must go to reach the sinkhole outlet. Easement areas shall be approved by the Division of Engineering based upon the calculations of the engineer of the developer on the proposed ponding elevation.

Section 5 Filling in Sinkholes and Sinkhole Drainage Areas

Development may involve some filling of the sinkhole drainage area or sinkhole upon approval by the Urban County Engineer. However, no principal or accessory buildings with soil-bearing foundations shall be permitted to be constructed on fill within the limits of any sinkhole.

Section 6 Required Plan Notes

For any land which includes a sinkhole-related, nonbuildable area, or restricted fill area, the developer shall place the following notes on the final subdivision plan or development plan:

- A. Based upon the evidence presented to them, the Planning Commission had identified sinkhole-related, nonbuildable areas on this plan. However, approval of this plan is not to be interpreted as any guarantee that future sinkhole problems will not occur due to either natural or human activities.
- B. Any sinkhole-related, nonbuildable area identified here has been determined to be unsuitable for any construction activity, and no buildings, parking areas, or other structures shall be permitted within this area.

- C. Any sinkhole or restricted fill area identified here has been determined to be unsuitable for soil bearing foundation, and the entire structure of any building (including the floor system) constructed therein must be founded on solid rock.
- D. No basement or first floor elevations shall be lower than elevation _____ USGS datum, said elevation being at least 1 foot above the 100 year six-hour storm assuming no outflow from the sinkhole.

Based upon the facts of each case additional notes may be required by the Planning Commission.

"AN ORDINANCE TO REGULATE THE USE, STORAGE, AND
DISPOSAL OF HAZARDOUS AND TOXIC SUBSTANCES IN BRILEY TOWNSHIP,"
(NORTHEAST MICHIGAN COUNCIL OF GOVERNMENTS, FEBRUARY 1982).

BRILEY TOWNSHIP ORDINANCE # _____

An ordinance to regulate the use, storage, and disposal of hazardous and toxic substance in Briley Township.

It is hereby enacted by the Township Board of Briley Township, Montmorency County, Michigan, pursuant to the authority granted by P.A. 246 of 1945, an ordinance as follows:

Section 1.0 Title

Briley Township Ordinance # _____ shall heretofore be known as the "Briley Township Groundwater Protection Ordinance."

Section 2.0 Purpose

It is the purpose of this ordinance to enhance and preserve the public health, safety, and welfare of the persons and property of Briley Township by protecting the groundwater of Briley Township from degradation resulting from the improper use, storage, or disposal of hazardous and toxic substances.

Section 3.0 Definitions

- A. Act 64--Act No. 64 of the Public Acts of 1979, as amended, being MCLA 299.401 et seq. and known as the "Hazardous Waste Management Act."
- B. Act 136--Act No. 136 of the Public Acts of 1969, as amended, being MCLA 232.271 et seq. and known as the "Liquid Industrial Wastes Act."
- C. Act 207--Act No. 207 of the Public Acts of 1941, as amended, being MCLA 29.1 et seq. and known as the "Fire Prevention Act."
- D. Act 245--Act No. 245 of the Public Acts of 1929, as amended, being MCLA 323.1 et seq. and known as the "Water Resources Commission Act."
- E. Act 348--Act No. 348 of the Public Acts of 1965, as amended, being MCLA 336.11 et seq. and known as the "Air Pollution Act."
- F. Act 368--Act No. 368 of the Public Acts of 1978, as amended, being MCLA 333.12703 et seq. and known as the "Public Health Code."
- G. Act 399--Act No. 399 of the Public Acts of 1976, as amended, being MCLA 325.1001 et seq. and known as the "Safe Drinking Water Act."
- H. Act 641--Act No. 641 of the Public Acts of 1978, as amended, being MCLA 299.401 et seq. and known as the "Solid Waste Management Act."

- I. Degrade--for the purposes of this ordinance, to change in quality in a manner which reduce the existing or intended use of groundwater or surface water.
- J. Discharge--the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of some product upon or into any land, groundwater, or surface water within Briley Township.
- K. Garage--any commercially operated structure where repair, construction, modification, or washing of motorized vehicles takes place.
- L. Hazardous Waste--any waste or substance described in Rule 201 of Act 64.
- M. Hazardous or Toxic Substance shall be a term used to generally describe hazardous wastes including, but not limited to, the following:

- gasoline
- kerosene
- fuel oil
- motor oil
- diesel fuel
- mineral spirits
- brake fluid
- transmission fluid
- anti-freeze
- petroleum based degreasers
- petroleum based cleansers
- radioactive wastes
- infectious wastes
- strippers
- paint
- varnish
- thinners
- solvents
- pesticides
- insecticides
- herbicides
- hazardous wastes as defined by Act 64
- compounds on the Michigan Critical Materials List

- N. Petroleum Fuel Storage Tank shall mean to include all tanks used for the storage of leaded and unleaded gasoline, kerosene, fuel oil and diesel fuel.

Section 4.0 General Prohibitions

- A. It shall be unlawful for any person to discharge hazardous or toxic substances in Briley Township unless such discharge is specifically allowed and/or permitted under provisions or permits of Act 64, Act 245, Act 348, Act 368, or Act 641, or other Michigan statutes which provide for regulation or discharges of hazardous or toxic substances.

- B. It shall be unlawful for any person to use, store, transport, or discharge hazardous or toxic substances in Briley Township in such a manner as to violate Michigan law regulating such use, storage, or transportation, or in such a manner as to degrade or seriously threaten to degrade the surface or groundwaters of Briley Township.
- C. It shall be unlawful for any person to use, store, discharge, or transport hazardous or toxic substances in Briley Township within the guidelines of Act 64, Act 245, Act 348, Act 368, or Act 641, without notifying the township board of proposed or existing activities requiring regulation under the above-mentioned Acts and providing proof of any permits required by the above-mentioned Acts for such activities to the township.
- D. Unlawful discharge shall include, but not be limited to, the following:
 - 1. Dumping of hazardous or toxic substances which may generally be described as including, but not limited to, gasoline, kerosene, fuel oil, petroleum based solvents and thinners, motor oil, petroleum based degreasing agents, cleaning fluids, paint and varnish removers, pesticides, herbicides and insecticides on private or public property;
 - 2. Leaks from petroleum fuel storage tanks, both above and below ground;
 - 3. Spills during transport or transfer of hazardous wastes including fuel oil and other petroleum fuels;
 - 4. Disposing of hazardous or toxic substances to septic systems, storm sewers, storm drains, or sanitary sewers.

Section 5.0 Fuel Storage Tanks

- A. Owners of all subsurface fuel storage tanks in excess of 500 gallons capacity in Briley Township shall provide to the township no later than 120 days from enactment of this ordinance, information regarding the location, size, construction, use, and history of such tanks on forms available from the township. Copies of evidence of date of purchase and installation should be included.
- B. Where information cannot be provided which can reasonably assure the township board, or its appointed representative, that a tank is product-tight and has no structural faults, the township may order the tank to be exposed, tested, monitored, made unusable, or removed at the owner's expense.
- C. Owners of all commercial subsurface fuel tanks in excess of 500 gallons capacity, which are considered to be in use, must maintain daily inventory records which are capable of showing the existence of fuel losses. Owners must submit quarterly reports to the township, on standardized forms provided by the township, certifying by means of their inventory records that no losses had occurred during that

quarter. If losses are recorded, the owner must report the incident to the township within 24 hours and notify other appropriate officials and agencies as provided in Act 207. Tanks which are found to be leaking must be emptied within 24 hours.

- D. All new construction or installation of subsurface fuel storage tanks larger than 500 gallons shall meet the requirements of Act 207 and shall meet the following additional criteria:
1. all tanks must be equipped with overfill protection;
 2. all tanks must have a striker plate below the dip stick tube to protect the bottom of the tank;
 3. monitoring holes adjacent to tanks must be installed to provide early warning of any subsurface leaks.
- E. All commercial tanks which are abandoned or temporarily out of use must comply with the provisions in Act 207 for abandonment.
- F. Any tank which is found to be leaking and is greater than five years old must be removed and made unusable by making a sufficient number of holes in the tank.

Section 6.0 Garages

- A. All new construction of garages must meet requirements of the Michigan Plumbing Code with regard to installation or separators on all drains. Wastes separated from the drain water must be contained in a properly ventilated holding tank of not less than 1,000 gallons in capacity. Wastes collected in the holding tank must be removed only by a licensed liquid waste hauler. Wastes must either be transported to a licensed hazardous waste disposal facility or to a local holding facility if one exists.
- B. All used motor oil must be stored in secure containers and must be removed from the premises only by a licensed liquid waste hauler.

Section 7.0 Onsite Wastewater Treatment

- A. All new onsite sewage disposal systems shall meet a minimum site criteria of six feet between natural surface grade and the seasonal high groundwater level or the maintenance of four feet of natural soil between the seasonal high groundwater level and the bottom of the drain tiles in a trench or bed system.
- B. The use or sale of cesspool or septic tank cleaners, decloggers, or degreasers of which the active ingredients are organic solvents such as 1,1,1 trichloroethane, methylene chloride, or (O,P) dichlorobenzene shall be prohibited.

Section 8.0 Variances

- A., Although the provisions of this ordinance are meant to be followed with strict compliance, there may be certain individual cases where a variance may be given which will still allow for consistent protection of groundwater resources.
- B. All requests for variances must be in writing to the township board and must contain all specifications, studies, or evidence showing why such a variance should be granted.
- C. If in the opinion of the township board, a requested variance will not jeopardize or degrade the groundwater, then a site-specific variance will be granted. The specifics of the variance will be made in writing including any and all conditions of the judgment.
- D. In no case shall the township board make judgment in favor of giving a variance which will violate existing State or Federal law.

Section 9.0 Enforcement

The provisions of this ordinance shall be enforced by the Briley Township Board of Trustees or their legally appointed representative.

Section 10.0 Penalties

Any person or other entity violating this ordinance may be imprisoned in the county jail for not more than 90 days, or assessed a fine of not more than \$500, or both.

Section 11.0 Severability

Each provision of this ordinance shall be construed as separate, to the end that if any part of it shall be held invalid for any reason, the remainder shall continue in full force and effect.

Section 12.0 Effective Date

This ordinance shall take effect on the 31st day after publication as required by law.

PUBLIC HEALTH REGULATION NO. 40

WELL WATER SUPPLY CONSTRUCTION AND WELL ABANDONMENT REGULATION
FOR OLMSTED COUNTY

A regulation providing for the proper construction of well, well water supplies, and the orderly and proper abandonment of wells.

Section 1 Purpose

- A. The Olmsted County Board accepts the premise that an abundant source of pure water is essential to the maintenance of the public's health and the continued economic and social development of the county.
- B. Olmsted County has an extensive supply of groundwater. These waters are subject to contamination from a variety of sources. Because of the karst geology, it is essential that all wells be properly constructed and that all wells not in use be properly abandoned to prevent contaminated waters from entering the abandoned wells.
- C. These provisions are adopted for the purpose of halting the travel of pollutants to the subsurface water supply through improperly abandoned water wells and to assure proper development of new well water supplies.
- D. This regulation provides for the control of construction, repair, and abandonment of wells in Olmsted County, Minnesota, and indicates the authority for penalty for violation thereof.

Section 2 Index

- Section 1. Purpose
- Section 2. Index
- Section 3. Duties and Authority of County Health Department
- Section 4. Bonding of Well Contractors
- Section 5. Permit Requirements
- Section 6. Notification for Inspection
- Section 7. Water Well Record
- Section 8. Construction Standards
- Section 9. Acceptability of a Waterbearing Formation for a Potable Water Supply
- Section 10. Abandoned Wells
- Section 11. Waterline, Pump, and Pressure Tank Sizing

Section 12. Wells and Pumps Used for Thermal Exchange

Section 13. Public Water Supplies

Section 14. Use of Existing Wells for New Construction

Section 15. Penalties

Section 16. Severability

Section 17. Effective Date

Section 3 Duties and Authority of County Health Department

- A. It shall be the duty of the Olmsted County Health Department to implement this regulation; to issue all permits, notices of violation, and notices of revocation of permit; to make reports required by this regulation; to take complaints to the county attorney of violations of the provisions of this regulation; to examine work in progress; to determine compliance with all provisions of this regulation and to keep proper records on all transactions conducted under this regulation.
- B. The Olmsted County Health Department is hereby given authority to make inspection and perform tests necessary in the performance of this duty; to order the suspension of any work being done in violation of the provisions of this regulation; and to prohibit the use of any material or operation of any machinery in violation of the provisions of this regulation.

Section 4 Bonding of Well Contractors

- A. No person, partnership, corporation, or other entity shall engage in the abandonment, construction, or repair of wells within the county of Olmsted, Minnesota, nor shall a permit be issued therefor, unless such person, partnership, corporation, or other entity shall have in effect at all times a bond in the principal sum of \$10,000 conditioned upon the observance of all laws, ordinances, regulations, and standards relative to the construction of wells and upon the performance of all work required by this regulation.
- B. Such bond shall run to the county of Olmsted as obligee and shall be for the benefit of any person, firm, or corporation who shall sustain any injury covered by the bond and shall provide that any person, firm, or corporation so injured may bring an action in his or its own name for the recovery of damage upon the bond in addition to any other remedy.
- C. Proof of the appropriate bond shall be made available at the Olmsted County Health Department whenever the bond is renewed, updated, or upon request by the department.

Section 5 Permit Requirements

A. Permits Required

No person, partnership, corporation, or other entity shall construct, reconstruct, or abandon a well within the county of Olmsted, Minnesota, without having first obtained a permit to do so from the Olmsted County Health Department. Reconstruction shall be defined as work which includes the modification of the well casing, screen, diameter, or depth below the upper termination of the well casing (the point 12 inches above grade).

B. Other Permits

The county or a town or city within the county shall not issue a building, remodeling, alteration, or demolition permit for buildings or facilities until the proposed water supply or proposed abandonment procedures for well on that property have been approved by the Olmsted County Health Department.

C. Application for a Well Construction or Abandonment Permit

An application for a permit shall be made in writing and signed by a well contractor licensed by the State of Minnesota. Such application shall be made in duplicate upon forms furnished by the Olmsted County Health Department. One copy shall remain on file in the office of the health department. This application shall be submitted and the permit issued prior to any construction or repair work.

D. Approval of Application

If after consideration of the application for permit, the Olmsted County Health Department shall be satisfied that the construction contemplated complies with the provisions of this regulation, the health department shall issue a permit. One copy of the permit shall be kept continuously available at the work site during its progress.

E. Rejection of Application

If after consideration of the application for permit, the Olmsted County Health Department shall be satisfied that the work contemplated will not comply with the provisions of this regulation, the health department shall refuse to issue a permit until such application has been revised or corrected.

F. Permits Not Issued

No well construction permit shall be issued where a public or municipal water supply is available. No well construction permit that will allow replacement of an existing well shall be issued until provisions have been made for proper abandonment of such well in accordance with applicable regulations and standards.

G. Alteration of Plans

Any construction authorized by the approved application and any accompanying plat or scale drawing shall not be altered or modified without consent of the Olmsted County Health Department.

H. Expiration of Permit

All well construction and well abandonment permits issued hereunder by the Olmsted County Health Department shall expire after one year unless the work contemplated and authorized is in actual progress.

I. Work Not Authorized

No person, partnership, or corporation shall continue work on any well after the Olmsted County Health Department shall have issued in writing, a notice to suspend work nor shall the use of material or machinery be continued whenever use of the material or machinery is contrary to the provisions of this regulation.

Section 6 Notification for Inspection

- A. It shall be the duty of the well contractor to notify the Olmsted County Health Department in person, by telephone, or in writing:
1. when construction will begin;
 2. when drilling and/or nitrate sampling is completed;
 3. when grouting a well under construction or properly abandoning a well will begin; and
 4. when disinfection has been completed and the well is ready to be sampled.
- B. Notice for inspections shall be made between the hours of 8 a.m. and 4 p.m. on the workday preceding the day inspection is desired. If adjustments of the specific inspection time are necessary, the final notice shall be given not less than four hours before a well is scheduled for grouting or sealing.
- C. If a health department sanitarian does not appear for an inspection at the designated time, excluding Saturdays, Sundays, or holidays, the contractor/permittee may proceed and shall file an affidavit with the health department that the work was installed in accordance with the standards, limitations, approved plans, and permit and that it was free from defects. Information shall be provided as to whether the owner or his authorized agent was present when the construction or tests were made. The permittee shall also include a detailed "as built" plan of the well's components and relative location to the geologic formations, water table, and surficial features, or structures.

Section 7 Water Well Record

- A., A copy of the Minnesota Department of Health water well record shall be submitted by the Minnesota licensed well contractor to the Olmsted County Health Department within thirty (30) days of water well construction or reconstruction and sealing of abandoned wells.

Section 8 Construction Standards

- A. Minnesota Rules Chapter 4725 governs, except that the only acceptable type of well construction for potable water shall be a cased and grouted well or cased well where permitted by the Minnesota Department of Health Water Well Code, Minnesota Rules, Chapter 4725, and this regulation.

Section 9 Acceptability of a Waterbearing Formation for a Potable Water Supply

- A. Organisms of the coliform group in concentrations of one or more per 100 ml shall be considered indicative of pollution. Nitrate nitrogen in excess of 1 mg/l shall also be considered indicative of pollution. The acceptability of terminating a well in any waterbearing formation encountered during construction or reconstruction shall be dependent upon the water having concentrations of nitrate nitrogen or coliform bacteria less than levels as defined above.
- B. Prior to completing construction of the well in the aquifer as permitted, the well contractor shall arrange for testing of the water for nitrate nitrogen after setting liner casing but before grouting. The Olmsted County Health Department may require the sample or a duplicate sample be submitted to its laboratory for analysis. If the nitrate nitrogen level is less than 1.0 mg/l, the well contractor may proceed with grouting after the required notice to the health department.
- C. If the nitrate nitrogen level of the sample before grouting is 1.0 mg/l or greater but less than 3.0 mg/l and other factors indicate that the nitrate nitrogen level in the finished well will be less than 1 mg/l, the well contractor may grout the well upon obtaining a signed statement of acceptance from the well owner and approval of the Olmsted County Department of Health. The statement shall state that the well owner has been apprised that the nitrate nitrogen level is greater than 1 mg/l and that he will accept the finished grouted well even if it shows nitrate nitrogen greater than 1 mg/l provided that all other known construction practices were made in accordance with the well code standards. Forms for such statement will be provided by the health department. The statement shall be attached to copies of the well construction permit application filed at the health department.
- D. If the nitrate nitrogen level is 3.0 mg/l or greater, the well shall be drilled deeper to obtain water meeting the pregrouting requirements stated above.

Section 10 Abandoned Wells

- A. Minnesota Rules Chapter 4725 governs, except as provided otherwise herein.
- B. A well is defined as an abandoned well if, based on inspection of the well and site or an analysis of water from the well, any of the following conditions exist:
1. use of the well has been replaced by another well or new well or use of the well has otherwise been abandoned;
 2. the well exists on residential property that is now served by a public community water supply;
 3. the well is not usable or is not equipped with an operable pump;
 4. the well has not been properly sealed in abandonment or is filled with unapproved materials; or
 5. the well is located, constructed, or maintained in such a manner that its continued use or existence endangers the quality of the groundwater or provides a distinct health hazard to persons consuming water from the well.
- C. Existing wells that are abandoned as defined in 10.02 subparagraph 1, 2, or 3 may request a permit from the health department renewed annually that will allow the well to be maintained provided that it is protected from the conditions outlined in 10.02 subparagraph B.4 and B.5. Similarly, wells existing for commercial purposes on property served by community water may continue to be used if the well is properly constructed to prevent interconnection of surface and groundwater or interconnection of aquifers and if an annual permit is obtained from the health department.
- D. The Olmsted County Health Department is authorized to take steps necessary to locate and identify abandoned wells within the county and specify corrective measures. The following procedures will be followed:
1. The existence of an improperly abandoned well is a threat and nuisance to the groundwater used by the public for potable water supplies. Therefore, the Olmsted County Health Department will notify the owner of land where an abandoned well exists that the well must be properly abandoned in accordance with State of Minnesota and county of Olmsted regulations and standards. The landowner will be given 30 days to comply. In cases of imminent hazard, the compliance time may be shortened accordingly.
 2. If the owner does not comply within the compliance time limit, the appropriate governing body may contract with a licensed well contractor to have the well properly abandoned.

3. Any expenses incurred by the governing body in properly abandoning the well shall be the responsibility of the property owner and if subsequently unpaid, shall be assessed against the property as provided by law.

Section 11 Waterline, Pump, and Pressure Tank Sizing

- A. The following table and rules establish the minimum pump capacity, waterline sizing, and pressures for 1 to 14 homes:

1. Pumps and Pressure Tanks

Number of Homes	Pump capacity in gpm at the well head against average pressure of 50 PSI	Pressure tank size per home	
		Precharge bladder	Plain steel
1 to 2 homes	10 gpm each home	40 gallons each	80 gallons each
3 to 5 homes	5 gpm each home+10 gpm	40 gallons each	70 gallons each
6 to 14 homes	3 gpm each home+20 gpm	40 gallons each	60 gallons each

(To calculate the pump capacity of four homes as an example, multiply four homes by 5 gpm and add 10 gpm to equal the total required capacity of 30 gpm.)

2. Water Pressure and Waterline Sizing

Waterlines shall provide at peak flow: (a) no more than 5 PSI of friction loss for each 100 ft. of pipe length; (b) a minimum pressure of 30 PSI to each service connection during the maximum momentary volume rate of waterflow; (c) a minimum pressure of 20 PSI to the plumbing fixture at the highest elevation; and (d) water service lines for one house shall be a minimum of 1 ft. When lengths are more than 350 ft. or when more than one home will be served by the waterlines, appropriately sized larger diameter lines must be provided.

Section 12 Wells and Pumps Used for Thermal Exchange

- A. If a groundwater heat pump or other thermal exchange unit is proposed to use water from the well also used for the domestic water supply, the pump capacity and pressure tank size must be increased to provide an adequate water supply for the rated capacity of the unit in addition to the minimum supply required in Section 11 for domestic use. Domestic water needs shall take priority over water demand for thermal exchange devices.
- B. Discharge of water to waste from a groundwater heat pump system shall follow applicable State of Minnesota and Olmsted County regulations and standards.

- C. No building permit or other relevant permits shall be issued until the plans for water use for a heat pump or other thermal exchange system using groundwater have been reviewed and acted on by the Olmsted County Health Department.

Section 13 Public Water Supplies

- A. Any establishment serving water to the public from a public water supply or public noncommunity water supply as defined in Minnesota Rules, Part 4720.0100, subparagraph 16, shall be supplied with water from a well in conformance with this regulation; provided however, that such establishments already in existence upon the adoption of this regulation shall be supplied with water from a well in conformance with this regulation by January 1, 1986.

Section 14 Use of Existing Wells for New Construction

- A. An existing well may be used as a source of water supply for any new building intended for permanent or transient human occupancy if the well is constructed to meet the minimum standards of this regulation.

Section 15 Penalties

- A. Misdemeanor

Any person who violates this regulation shall be guilty of a misdemeanor and upon conviction shall be punished as provided by law. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.

Section 16 Severability

- A. If any provision or application of any provision of this regulation is held invalid, that invalidity shall not affect other provisions or applications of this regulation.

Section 17 Effective Date

This regulation shall be in full force and effect upon adoption and publication pursuant to law.

Dated this _____ day of _____, 19 ____.

OLMSTED COUNTY BOARD OF COMMISSIONERS

Chairperson Harley Boettcher

ATTEST:

Richard G. Devlin, Clerk-Administrator

RESOLUTION NO. 85-17

Whereas, Olmsted County Public Health Regulation No. 40, a regulation set forth herein, and Notice of Intent to Enact same by resolution were duly published, and

Whereas, a public hearing on said resolution was held on January 29, 1985, in the County Commissioners' meeting room, second floor, Olmsted County Courthouse, Rochester, Minnesota, and

Whereas, it is deemed to be in the public interest for the preservation of public health to adopt Public Health Regulation No. 40.

NOW, THEREFORE, BE IT HEREBY RESOLVED, pursuant to Minnesota Statutes 145.53, that Public Health Regulation No. 10 is repealed and Public Health Regulation No. 40 the Well Water Supply Construction and Well Abandonment Regulation for Olmsted County as on file in the office of the Olmsted County Auditor is hereby adopted this 29th day of January, 1985, at Rochester, Minnesota.

OLMSTED COUNTY BOARD OF COMMISSIONERS

Harley Boettcher, Chairperson

ATTEST:

Richard G. Devlin
Clerk-Administrator

PUBLIC HEALTH REGULATION NO. 41

SEWAGE AND WASTEWATER TREATMENT REGULATION FOR OLMSTED COUNTY

A regulation providing for (1) the design, construction, repair, and operation of individual sewage treatment systems; (2) the utilization of privy vaults and other nonwater carried sewage disposal systems; (3) the removal, transport, treatment, and disposal of septage/sludge wastes; (4) the adoption of minimum standards for the treatment and disposal of sewage, septage/sludge, and wastewater; (5) the enforcement of this regulation; and (6) the fixing of penalties throughout the entirety of Olmsted County.

Section 1 Purpose

- A. The Olmsted County Board accepts the premise that in order to protect the public's health, eliminate, or prevent the development of public nuisance, and protect the county's groundwater from contamination by human sewage and waterborne household and commercial wastes, minimum standards be adopted for the disposal of sewage, septage/sludge, and wastewater.

Section 2 Index

- Section 1. Purpose
- Section 2. Index
- Section 3. Duties and Responsibilities of the Health Department
- Section 4. Definitions
- Section 5. Standards for Health and Environmental Protection
- Section 6. Licenses Required
- Section 7. Permits Required for Construction and Repair of Sewage Systems and Operation of Septage Treatment Systems
- Section 8. Action on Construction and Operation Permits
- Section 9. Notice to Health Department for Inspections
- Section 10. Fees
- Section 11. Enforcement
- Section 12. Severability
- Section 13. Effective Date

Section 3 Duties and Responsibilities of the Health Department

- A. The Olmsted County Health Department shall review the design and inspect the construction, installation, and operation of individual sewage treatment systems and disposal/treatment of septage/sludge wastes.
- B. The Olmsted County Health Department shall be responsible for the administration and enforcement of this regulation; issue all licenses and permits, notices of violation, and notices of revocation of licenses or permits; make reports required by this regulation; make complaints to the county attorney of violations of the provisions of this regulation; examine the work in progress as required by this regulation and determine compliance with the provisions of this regulation, including the keeping of proper records on all transactions conducted under the regulation.

Section 4 Definitions

- A. When used in this regulation, the following terms and the terms included as part of Minnesota Rules Part 7080, except where amended below, have the meanings given to them.
 - 1. Board of Health--the Olmsted County Board of Health.
 - 2. Groundwater--the water contained below the surface of the earth in a saturated zone, including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations, deeper underground.
 - 3. Health Department--the Olmsted County Health Department.
 - 4. Health Officer--the Olmsted County Director of Public Health or his designated representative.
 - 5. Incorporation--mixing of sludge with the topsoil, concurrent with application or immediately thereafter, by means such as discing, mold-board plowing, chisel plowing, roto-tilling, or injection.
 - 6. Individual sewage treatment system--any individual sewage treatment system, as defined in Minnesota Rules, Chapter 7080.
 - 7. Licensee--any person who obtains a license from the county pursuant to this regulation. A person is a licensee only for the term of the license.
 - 8. Noncomplying system--any individual sewage treatment system which does not comply with this regulation.

9. Nonwater carried sewage systems--a device for the disposal of human excreta in a structure designed to treat sewage utilizing methods that significantly reduce or eliminate the addition of water to the sewage (examples include privies, chemical toilets, recirculating toilets, combustion toilets, composting toilets, oil flush toilets, and portable toilets).
10. Owner of land or landowner--any person who holds a freehold interest, either individually or as a joint tenant or tenant in common, to any land lying within the county. Where the term "owner of land" or "landowner" is used, it includes each and all of the joint tenants and tenants in common with respect to such land.
11. Permittee--any person who obtains a permit from the county pursuant to this ordinance. A person is a permittee only for the term of the permit.
12. Person--any natural person, any State, municipality or other governmental or other political subdivision or other public agency or instrumentality, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity.
13. Sand--a soil texture composed of at least 25 percent very coarse, coarse, and medium sand varying in size from 2.0 to 0.25 mm, less than 50 percent of fine or very fine ranging in size between 0.25 and 0.05 mm, and no more than 10 percent of particles smaller than 0.05 mm.
14. Soil Conservation Service--the United States Department of Agriculture Soil Conservation Service.
15. Subsurface water--any water below the surface of the ground, including, but not limited to, water in the saturated and unsaturated zones.
16. Support area--that area or portion of a property or land parcel that is designated to be protected for the use of present or future soil treatment areas meeting all setback requirements for individual sewage treatment units.
17. Utilization of septage--land application of septage at rates where the quantity of nutrient and nonnutrient elements and soil conditioning materials are generally consistent with the biochemical assimilative capacity of the soil-plant system.
18. Residential development--an area containing a concentration of buildings used as the residence or sleeping place for ten or more persons but not including tents, trailers, or similar portable housing.

19. Minnesota Rules--the Minnesota Individual Sewage Treatment Systems Standards codified in Minnesota Rules Chapter 7080 and appendixes thereto.

Section 5 Standards for Health and Environmental Protection

A. Minnesota Rules

Those standards provided in Minnesota Rules, Chapter 7080, except with amendments authorized by this regulation, shall be the basis for permit applications and issuance of permits, the conduct of inspections of work in progress, the issuance of notices of violation and notices of revocation of permits, except as otherwise provided herein.

1. There shall be a 4-foot thickness of soil separating the bottom of a sewage treatment system from limiting factors such as bed-rock or water table. The soil shall have percolation rates ranging between 0.1 and 60 minutes per inch unless an alternative system is installed.
2. Twelve inches of soil-fill material with appropriate percolation rates shall be placed between the filter material and the original soil in the excavation when soil conditions have very fast or very slow percolation rates.
3. Where Minnesota Rules allow sewage mound systems to be located on slopes, the mound shall be designed and constructed with sufficient base area to prevent seepage out of the mound. The base area shall be designed according to a calculated absorption rate of 0.24 gallons per day per square foot of base area.

B. Support Areas

Sewage treatment systems shall be placed in a designated support area. The least dimension of the support area running with the contour lines shall be a minimum of 50 feet. Support areas shall be located and sized according to the daily sewage flow and the slope as follows:

1. For every proposed dwelling there shall be identified and preserved at least 5,000 square feet of support area for the soil treatment system if slopes do not exceed 6 percent. Where slopes exceed 6 percent, the support area size shall be determined by multiplying the percent slope by 1,000 square feet.
2. For installations other than single-family dwellings, the appropriate size of support area shall be determined by multiplying the square feet of the soil treatment area by three and adding 10 percent for every percent slope that is more than 6 percent.

C. Soils Evaluations and Construction Designs

- Soils evaluations for individual sewage treatment systems and septage land application sites may be performed by authorized staff of the health department. Olmsted County licensed sewage treatment system contractors normally prepare construction designs where soils have moderate or slight restrictive features for individual sewage treatment systems.

Soils evaluations and/or construction designs must be prepared by a Minnesota licensed professional engineer, hydrologist, geologist, or soils scientist/classifier, that is trained and experienced in soils evaluation and sewage treatment design and appropriately certified (or provisionally certified) by the Minnesota Pollution Control Agency (MPCA) for Individual Sewage Treatment Systems Site Evaluation and/or Design when:

1. the "Soil Survey of Olmsted County" published by the Soil Conservation Service, indicates that soils have severe restrictive features or when slopes exceed 20 percent;
2. the number of soils evaluations needed exceeds the capacity or capabilities of work the health department staff can provide (such as for proposed plats or metes and bounds subdivisions of three or more lots); or
3. the sewage system proposed is designed for sewage flows that are apt to exceed 5,000 gallons in any 24-hour period.

D. Multifamily-Residential, Commercial, or Industrial Development

1. Proposed multifamily-residential, commercial, or industrial developments that generate sewage wastes shall connect to a public sewage collection system properly operated in accordance with MPCA permits unless otherwise authorized by the Board of Health. Developments such as campgrounds or parks that cannot be connected to a public sewage system shall be considered for development in accordance with subparagraph 2 below.
2. Proposed expansions to existing developments or other proposed developments authorized by the Board of Health which utilize individual sewage treatment systems shall be limited as follows:
 - a. The maximum average sewage flow for the development shall be limited according to the size of the property. The development's daily average sewage flow shall not exceed an amount determined by multiplying 200 gallons by the acres of land within the development.
 - b. The land involved in the development shall be maintained as recommended by the Soil Conservation Service to limit

erosion and nitrogen application to the soils. The applied nitrogen shall not exceed the amount necessary to equal the nitrogen needs of crops removed from the land.

- c. All developments that are not single-family residential shall measure and maintain written, current records that detail sewage generation rates.

E. Wastewater from Thermal Exchange Systems and Systems Designed to Lower Water Tables

Wastewater discharge systems designed to serve groundwater heat pumps, lower water table elevations, or other discharges of clean water shall be installed only after appropriate action or permits are obtained.

- 1. Discharge to public sewers, ground surface, or surface waters shall be permitted as follows:
 - a. Discharge to public sanitary sewers, storm sewers, streams, lakes, or ponds will be permitted only when accepted by the MPCA and/or other governing body having appropriate jurisdiction.
 - b. Private ponds or lakes used for surface discharge shall be managed to discourage mosquito breeding. They shall be constructed to prevent raising the groundwater table to the extent that it will affect individual sewage treatment systems.
 - c. When water is discharged directly or indirectly to public lands, such as a road's right-of-way, the affected governing bodies shall determine the conditions under which such discharge shall be allowed.
- 2. Subsurface discharge to soils:
 - a. Permits shall be required for subsurface discharge as provided in Section 7 of this regulation.
 - b. Subsurface discharge of heat pump and other clean wastewater shall be made in conformance with the existing Olmsted County regulations for sewage systems with the exception that any clean, nonpolluting filter media that resists degradation and provides adequate pore space may be utilized.
 - c. Heat pump and other clean water drainfields must maintain minimum separation distances as required for sewage drainfields. In addition, the drainfield shall be adequately separated by elevation or distance to prevent migration of water from such drainfields to affect the operation of individual sewage treatment system drainfields.

F. Nonwater-Carried Sewage Treatment/Disposal Methods

1. Homes or other establishments requiring sewage treatment facilities may utilize nonwater-carried sewage treatment facilities. However, an adequate support area shall be located for future construction of a sewage drainfield.
2. The board of health will review all proposed construction, and issue permits for all nonwater-carried sewage disposal and/or treatment methods. The wastes from these systems shall be treated and disposed of to protect the quality of surface or groundwaters and not become offensive, odor-producing, or serve as a source or attraction for flies, vermin, or rodents. Unsanitary conditions or nuisances caused by these devices must be corrected.

G. Septage Disposal and Treatment

1. Septage removed from individual sewage treatment systems including sludge from facilities such as car washes and garages shall be treated or disposed of so as not to create a nuisance or menace to public health. Unless otherwise authorized by the board of health, septage/sludge shall be disposed into a public sewage treatment system in a manner and at a point accepted by the health department and appropriate governing body. Land treatment of septage/sludge by spreading on the surface or by subsurface injection and plowing no deeper than one foot shall be allowed during certain calendar periods and at sites as described in the section below.
2. Septage/sludge may be applied by surface spreading or subsurface injection to soils that have slight restrictive features or by subsurface injection to soils that due to slope have moderate restrictive features as identified in the septic tank column Table 9 of the Soil Survey of Olmsted County issued March 1980 by the United States Department of Agriculture Soil Conservation Service. The soil types and depth shall provide at least 6 inches of available water capacity in the soil above the water table or bedrock as shown in table 15 of the Soil Survey. Applications of septage shall be further limited as follows:
3. Septage shall not be applied to lands that are within a 10-year floodplain, on soils that are poorly or excessively drained, where there is less than four feet of suitable soil depth over bedrock or water table for treatment of the waste by methods or on soils that do not meet minimum recommendations of the Soil Conservation Service.
4. Septage applied to sites shall be managed to control ponding and runoff. Deflectors, splash plates, injectors, or other appropriate equipment shall be used to promote a uniform application to the soils. Equipment that produces sufficient sprays that can cause migration of aerosols off the application site shall not be used.

Land Application of Septage/Sludge

<u>Slope</u>	<u>Soil Texture</u>	<u>Months When Application To Soils Is Accepted</u>	<u>Minimum distance to surface water</u>	
			<u>Surface spread (ft)</u>	<u>Subsurface injection (ft)</u>
0-6%	Coarse--includes sands and loamy sand	May Through October	200	100
		April and November	400	100
		December through March*	600	100
0-6% (cont.)	Medium and fine-- includes sandy loams, loams, silt and clay loams, and clays	May through October	300	75
		April and November	600	75
		December through March*	600	75
More Than 6%	Coarse, medium and fine soils that have been treated to control runoff with terraces and berms	May through October	400	150
		April and November	600	150

*Permitted at specifically identified sites operating under special permit conditions that address monitoring and the control of frozen septage and potential runoff at the site.

5. Accumulation of liquids and septage solids on the surface shall be managed by allowing the drying of soils with soil tillage as needed. No more than 15,000 gallons of septage shall be applied per acre unless practices involving greater rates have been reviewed and approved by the board of health.
6. Soil application sites for septage/sludge waste shall be managed to prevent nuisances, runoff, erosion, and changes in the soil fertility or chemistry that will adversely affect the accepted use of ground or surface waters or soils for conventional agricultural purposes.
7. Root and leafy vegetable crops shall not be raised for human consumption on septage/sludge soil application sites until at least three calendar years have passed since the last septage application. Animal grazing and forage harvesting shall be delayed for at least three weeks after the last application of septage/sludge.
8. Soil application sites for septage and sludge shall be located to prevent nuisance and pollution problems. In no case shall septage be applied to sites where the features identified below are closer than the minimum separation distance:

<u>Feature</u>	<u>Minimum separation distance</u>
Water wells	200 ft.
Public road right-of-way	100 ft.
Property lines	25 ft.
Residential and commercial developments	1/4 mile
Occupied building	600 ft.*

*Unless the owner and occupant given written permission to decrease this distance.

9. Soil application sites to be operated under conditions of the Olmsted County permit shall have "no trespassing" signs clearly visible every 500 feet around the perimeter of the site. A sign shall also be posted at the entrance stating: "Septage/Sludge Land Application Site, Do Not Enter Without Authorization" and the permittee's name and permit number shall be included. The signs shall be furnished and installed by the permittee and the signs shall have at least 2-inch letters or numbers with a 3/8-inch stroke.

10. Any vehicle and pump tanks for septage/sludge pumping and hauling shall be equipped with signs clearly visible on the left side of the vehicle and either the right side of the vehicle or at the upper rear end of the tank. The signs shall be furnished and installed by the permittee. The signs shall state the Olmsted County permit number in letters or numbers at least 2 inches high with 3/8-inch stroke and the permittee's name and address in letters or numbers at least 1-1/2 inches high with 1/4-inch stroke.
11. Tanks used for removal of septage or sludge shall be constructed of nonporous materials and provide an access point to allow inspection and cleaning of the tank interior. The outlet shall be equipped with a durable nonleaking valve.
12. Pumpers' tanks and vehicles shall be maintained free of buildup solids and operated to control offensive odors or spilling of septage/sludge.
13. Due to the potential for transmission of pathogenic organisms, sewage, or septage being pumped from an individual sewage treatment system more often than once every three months shall be disposed only into a licensed sewage treatment plant as directed by the managing authority for the facility.
14. Persons licensed to pump and dispose of septage/sludge waste in Olmsted County shall maintain a written log and make that log available to the health department upon request. The log shall be sufficiently organized and detailed to identify the person operating the pumper, the date, property, and person receiving the service, the amount of septage/sludge pumped, and date and location of disposal.

H. Use and Maintenance of Sewage Systems

No person shall use, operate, or maintain a noncomplying sewage treatment system. No person shall permit sewage effluent to spill upon or pool on the surface of the ground or to enter a well, sink hole, or fissured rock formation.

Section 6 Licenses Required

A. Installers, Pumpers, and Operators

No person shall engage in the installation, construction, alteration, extension, repair, maintenance, or pumping of individual sewage treatment systems or operating a septage/sludge land application site under permit in Olmsted County without first obtaining a license to perform such tasks from the health department. Such licenses shall expire on March 15 of the following year and are not transferable. A property owner who is constructing a sewage treatment system for a residence to be occupied by himself or in the operation of his farm does not need to be licensed but shall obtain all required permits.

B. Applications and Bonding

Applications for licenses shall be made in writing and shall include all information bearing on the qualifications of the applicant to become a licensee. When a person applies for any combination of installer's, pumper's, or septage land application site operator's license, he may obtain his licenses at fees as set by resolution of the Olmsted County Board of Commissioners.

1. Before any license can be issued, the applicant shall pay the established fees and:

a. Demonstrate appropriate experience and training as provided below:

- (1) Installers are required to have, effective March 15, 1986, an Individual Sewage Treatment System Certificate (or Provisional Certificate) for Installation issued by the MPCA and the Individual Sewage Treatment System Advisory Committee.
- (2) Applicants applying for pumpers' licenses prior to July 1, 1985, shall be licensed without proof of prior training. Proof of prior experience shall be required. All applicants for a pumper's license after that date shall obtain either a course completion certificate for Land Application of Sludge or an Individual Sewage Treatment System Certificate (or Provisional Certificate) for Pumping issued by the MPCA which certificate shall be required effective March 15, 1986.
- (3) Anyone that operates a septage or sludge land application site under permit shall obtain a course completion certificate for Land Application of Sludge offered by the MPCA; such certificate shall be required effective March 15, 1986.
- (4) Renewal of licenses shall be contingent on maintaining satisfactory training requirements or MPCA certification as established by this regulation.

b. Provide a certificate of a license and permit bond in the principal sum of \$5,000,000 or an amount established periodically by resolution of the county board of commissioners. The bond shall be written by an insurer or bonder license to do business in the State of Minnesota. The bond shall protect and benefit the county of Olmsted and injured persons who bring action for the recovery of damage in addition to any other remedy allowed by law.

Section 7 Permits Required for Construction and Repair of
Sewage Systems and Operations of Septage Treatment Systems

A. Construction Permits

Persons who install, construct, alter, extend, or repair an individual sewage treatment system in Olmsted County shall first obtain a permit from the health department. Such permits are not transferable as to person or place. Such permits shall expire 12 months after date of issue.

B. Septage Pumpers' and Land Application Site Permits

Persons who pump septic/sludge tanks, haul septage to treatment/disposal points in Olmsted County, or apply septage to land application sites in Olmsted County shall obtain permits from the health department for pump tanks and trucks and sites used for application of the septage to the soil.

1. Land application sites do not need to be permitted unless the site receives more than 4,000 gallons per acre per year by surface spreading or 10,000 gallons per acre per year by subsurface injection or plowing. However, any site having soils that have severe restrictive soil features for Sanitary Facilities as identified by the Soil Conservation Service shall not be used as a land application site without a permit.
2. Applications for land application sites shall be considered with other information available at the health department and the Soil Conservation Service such as topographic and soil conservation service maps which report available water capacity, soil texture, permeability, slope, drainage ways, water table, and bedrock. When information from the Soil Conservation Service is adequate to assure that proposed land application has only "slight" restrictive soil features for septic tank sanitary facilities the initial application for the land application site shall be adequate for consideration by the health department. Proposed sites that show moderate or severe restrictive soil features shall be considered according to the proposed land application plan and the type of restrictive soil feature. Such sites may require more extensive soil testing and evaluation.
3. Applications for permits shall be made annually on or before March 15 on a form furnished by the health department. Permits shall expire on the next March 15 following the date of issue unless otherwise limited. Such permits are not transferable.

C. Temporary or Limited Permit

When lots are of insufficient size or uncorrectable conditions exist that require unusual or alternative design or construction, a temporary or limited operational permit may be issued by the board of

health. These alternative systems shall be constructed in accordance with the standards prescribed by this regulation. The board of health may impose limitations on construction, use, or expiration of the permit.

D. Operation Permits

No person shall use an individual sewage treatment system constructed or repaired after enactment of this regulation until an operational authorization permit has been issued by the health department.

Authorization to use the sewage system is automatically and immediately revoked when and if the system malfunctions, fails, or otherwise becomes a public health hazard or nuisance. No fee will be imposed for operation permits issued for individual sewage treatment systems.

E. Application

The permit application shall contain:

1. legal description and location of any property relative to the permits;
2. name, address, and telephone number of the permittee and landowner if applicable; and
3. any other information that may be required by the county to assure compliance with this ordinance.

F. Building Permits

No building permit or other relevant permits shall be issued until the individual sewage treatment system permit has been issued by the health department.

G. Posting of Permits

Permits shall be available for inspection and displayed as established by this regulation or upon demand.

Section 8 Action on Construction and Operation Permits

A. Approval of Application for Construction Permit

If after considering the application for permit and accompanying information, the health department is satisfied that the proposal complies with the provisions of this regulation, the health department shall issue a written permit. One copy of the approved application accompanying information and permit number shall be kept by the permittee at the work site during its progress. The other copy shall remain with the health department.

B. Rejection of Application

If after considering the construction permit application and accompanying plat or scale drawing, the health department determines that the work will not comply with the provision of this regulation, the health department shall not issue a permit until suitable revisions and corrections are proposed.

C. Alteration of Plans

The construction or operation authorized under the construction permit shall not be altered or modified in any of the essential details without the written consent of the health department.

D. Construction or Operation Violations

A sewage treatment system, pumpers' equipment, and land application sites which are constructed or operated in violation of the provisions of this regulation shall be prima facie evidence of a common nuisance without other proof thereof than the proof of its unlawful construction or operation. The health department may abate and remove it as authorized by this regulation or other applicable regulations or statutes.

E. Expiration of Permit

Operation permits for use of the sewage system shall terminate if at any time in the future the sewage system should fail, becomes a nuisance, if a public sewer is accessible to serve the building, or if the board of health should require operation permits to be renewed periodically.

Section 9 Notice to Health Department for Inspections

A. Notification for soils evaluations to be performed by health department staff shall be as described in C(1). The soil treatment area of the support area shall be tested and found satisfactory before any components of the sewage system have been installed.

B. Inspection

It shall be the duty of the permittee to notify the health department when construction of the individual sewage treatment system will start and when it is completed before any of the system is covered. The installation and construction of the system shall be in accordance with the permit limitations and application design. Proposals to alter the permitted construction shall be reviewed and the proposed change accepted by the health department prior to construction.

C. Notifications:

1. It shall be the duty of the permittee to notify the health department in person, by telephone, or in writing between the hours of 8 a.m. and 4 p.m. on the workday preceding the day the inspection is desired. If adjustments of the specific inspection time are necessary, the final notice shall be given not less than 4 hours in advance of the time the permittee desires inspection.
2. It shall be the duty of the permittee to make sure that the work meets the prescribed standards and limitations before giving the above notification.
3. The equipment and supporting labor necessary for the inspection and tests shall be finished by the permittee.
4. If the permittee provides proper notice as described above and the health department does not appear for an inspection within one hour of time set, excluding hours when the health department is closed (Saturdays, Sundays, and legal holidays), the permittee may complete the installation. He shall then file an affidavit with the health department within five working days that the work was installed in accordance with the standards and permit and that it was free from defects. Information stating whether the owner or his authorized agent was present when such inspections or tests were made shall also be submitted. The permittee shall include a detailed "as built" plan to the owner and the health department detailing location of the system components and their relative location to permanent structures or physical features of the lot.

5. Watertight Tanks

When required by the health officer, holding, septic, or dosing tanks shall be filled with liquid to the discharge invert level to demonstrate they are watertight.

6. Covering of Work

If any building drain, plumbing, or septic system component is covered before being inspected and approved, it shall be uncovered upon the direction of the health department.

7. Method of Testing

The drainage system shall be checked for materials and slopes in its entirety or in sections. Construction or components of a sewage system that are defective or in an unsanitary condition shall be repaired, replaced, or removed upon notice, and the permittee shall renotify as above unless the health officer issues an operational authorization permit subject to the corrections or work being completed according to the standards.

8. Operational Authorization Permit

Upon the satisfactory completion and final inspection of the sewer system, an operational authorization permit may be issued by the county and left at the site or mailed to the property owner.

Section 10 Fees

- A. The appropriate fee shall accompany permit applications for: septic/sludge pump trucks, septic/sludge land application sites, individual sewage treatment system construction, or repairs of a sewage treatment system, and license application for a septic/sludge pumping contractor operator of septic/sludge land application sites or sewer installation contractor. Fees for licenses and permits shall be set from time to time by resolution of the Olmsted County Board of Commissioners.
- B. The fee for other services performed by personnel of the health department such as soil investigations or processing loan applications will be as set by resolutions of the Olmsted County Board of Commissioners.

Section 11 Enforcement

A. Misdemeanor

Any person who violates any provision of this regulation shall be guilty of a misdemeanor and upon conviction shall be punished as provided by law. A separate offense shall be deemed to be committed each day that a violation occurs or continues.

- B. All premises affected by this regulation shall be subject to inspection by the health officer. The health officer may collect samples for laboratory examination as deemed necessary for enforcement of this regulation. No person shall refuse to permit the health officer to inspect any premises. No person shall molest or resist the health officer in the discharge of his duty in the protection of the public health.
- C. The existence of violations to this regulation are a threat and nuisance to the public and the groundwater. Therefore, the health department will notify the owner of the land where the violation exists that the violation must be corrected in accordance with State of Minnesota and county of Olmsted regulations and standards. The owner will be given 30 days to comply. In case of imminent hazard, the compliance time may be shortened accordingly. If the owner does not comply within the compliance time limit, the appropriate governing body may cause the violation to be corrected. Any expenses incurred therefor shall be the responsibility of the owner and if subsequently unpaid shall be assessed against the property as provided by law.

Section 12 Severability

A. The provisions of this regulation are severable. Should any action, paragraph, sentence, clause, phrase, or portion of the regulation be declared invalid for any reason, the remainder of this regulation shall not be affected.

Section 13 Effective Date

This regulation shall be in full force and effect upon adoption and publication pursuant to law.

Dated this _____ day of _____ 19 _____.

OLMSTED COUNTY BOARD OF COMMISSIONERS

Chairperson

ATTEST:

Richard G. Devlin, Clerk-Administrator

AQUIFER CONSERVATION DISTRICT ORDINANCE
OF THE TOWN OF AMHERST, NEW HAMPSHIRE

March 13 1984

Section 4-13 Aquifer Conservation District

Purpose--Pursuant to RSA 31:60 (674:16) and RSA 31:61A (674:21) and in order to help maintain the quality of living in the town of Amherst as set forth in the master plan, the town believes that an adequate water supply is indispensable to the health, welfare, and safety of its citizens. Such an adequate supply is also essential to the maintenance of the ecological balance of the natural environment of the town, an environment which the town wishes to protect. These water resources are subject to an ever increasing demand for new and competing uses. Thus, the town declares and determines that such water resources whether occurring above or below ground constitute a precious, finite, and invaluable public resource. These resources should be protected, conserved, and managed in the interest of present and future generations. The intent of this ordinance is to provide for the protection of the water resources from contamination by polluting, hazardous, or toxic materials.

Location--The Aquifer Conservation District is identified as those areas designated by blue shading or crosshatching which appear on State-wide mapping prepared by the U.S. Geological Survey (USGS) entitled "Availability of Groundwater in the Lower Merrimack River Basin, Southern New Hampshire," by John E. Cotton, 1977, and as may be amended or superseded by the USGS or by the Planning Board as provided herein from time to time. This map is on display in the Zoning Office of the town of Amherst. The district shall include mapped primary and secondary recharge areas.

A. Permitted Uses

Any of the following uses, which may require a permit, that meet the purpose of the district outlined above and which comply with all of the following requirements and conditions:

1. Industrial or commercial uses, in the industrial and commercial zones respectively, which discharge no hazardous or toxic waste on site and which uses are nonpolluting;
2. Residential uses;
3. Activities designed for conservation of soil, water, plants, and wildlife;
4. Outdoor recreation activities except those which destroy the surfaces of hillsides, or other watershed areas;
5. Operation and maintenance of existing bodies of water, wells, dams, or other conservation devices; and

6. Forestry uses provided that the land is returned to its natural state in order to prevent loss of top soil, erosion, or alteration of the normal drainage patterns and flow. Agricultural uses where the land in question is planted with a cover crop when the use is terminated.

B. Prohibited Uses

The following uses are prohibited in this district:

1. Outdoor storage of road salt or other deicing chemicals and dumping of snow containing road salt or other deicing chemicals;
2. Solid waste disposal sites;
3. Septage disposal sites and lagoons;
4. Automotive repair shops, junkyards, automotive junkyards, and automotive salvage operations, as well as any similar use which might potentially affect water quality; and
5. Onsite storage of hazardous waste, or toxic materials, except temporarily as necessary in the ordinary course of business; a permit is required for such temporary storage.

C. Special Conditions

The following conditions shall apply to all uses in this district:

1. Sanitary wastewater discharge to septic and leaching systems shall conform to the regulations set forth in the town of Amherst Water Pollution Control Regulations;
2. All liquid or solid waste other than normal septic effluent shall be temporarily stored onsite and disposed of in a manner determined by the Planning Board;
3. Monitoring wells shall be established for all industrial and commercial uses utilizing or storing hazardous or toxic materials; the number, construction, and location of these wells shall be determined by the Planning Board; these wells shall be checked for compliance with the Interim Primary Drinking Water Regulations and Secondary Drinking Water Regulations as provided for in the Safe Drinking Water Act of 1974. The checking of wells shall take place on a monthly basis and the results reported to the Board of Health;
4. Storage of petroleum and refined petroleum products shall be aboveground in a manner approved by the Fire Department unless Planning Board permission is obtained for subsurface storage. It shall be the responsibility of every applicant for such permit to demonstrate to the satisfaction of the Planning Board that

subsurface storage can be accomplished in a manner which will not adversely affect the aquifer; subsurface storage of such materials is permitted only with permission of the Planning Board and with such conditions specified to prevent the pollution of the aquifer; permits issued by the Board of Selectmen shall be for a period of not more than fifteen (15) years, renewable upon application;

5. Use of pesticides, herbicides, fertilizers, manure, and other potentially dangerous leachables shall be controlled in a manner determined by the Board of Health and in compliance with RSA 149D, 149D:7, 222, and the NH Code of Administrative Rules; storage of these materials shall not be outside;
6. When an industrial or commercial use changes on a site within this district to a use which involves the use, storage, or disposal of hazardous, or toxic materials, a nonresidential site review shall be required;
7. No more than 70 percent of a lot shall be rendered impervious; and
8. Stormwater drainage from aquifer sites shall be collected into catch or settling basins before leaving the site.

D. Incorrectly Designated Zones

When the actual boundary of the Aquifer Conservation District is disputed, the Planning Board, at the complainant's expense and authorization, may engage a professional geologist or hydrogeologist to determine the precise location of the Aquifer Conservation District boundaries in the properties affected. A report of his/her findings shall be submitted to the Planning Board and shall include, but not be limited to, the following:

1. A revised soils map of the area in question prepared by a soils scientist qualified in hydrologic studies along with a written report of his/her onsite field inspection and test boring data.
2. The Planning Board shall adjust the boundary of this district based on the evidence provided as set forth above. It shall reserve the right to withhold action on any plat pending the results of an onsite inspection by the Board or its appointed agent and shall act to approve or disapprove the plan within ninety (90) days of submission or such further time as deemed necessary, but not to exceed an additional ninety (90) days.

E. Administration

All existing industrial and commercial uses utilizing or storing hazardous or toxic materials which are located within the Aquifer Conservation District must be reviewed by the Planning Board within six (6) months of the enactment of this ordinance and must be in compliance with the conditions of this ordinance by January 1, 1986.

F. Nonconforming Uses

Nonconforming uses which exist at the time of adoption of this ordinance may continue unless that use is found by the Board of Selectmen in consultation with the Planning Board to be an imminent danger to the public health, safety, and welfare. In such cases, that use must be brought into conformance with this ordinance in a timely fashion as determined by the Board of Selectmen or the Board of Health.

AQUIFER CONSERVATION DISTRICT ORDINANCE
OF THE TOWN OF MERRIMACK, NEW HAMPSHIRE,
AND ADJACENT COMMUNITIES

TO AMEND THE AQUIFER CONSERVATION DISTRICT IN ORDER TO PROTECT
THE AQUIFER/RECHARGE AREAS AND CERTAIN WATERSHED AREAS

TO DELETE THE EXISTING SECTION 16 AS IT NOW READS:

SECTION 16--AQUIFER CONSERVATION DISTRICT

Section 16.01 Purpose

The Aquifer Conservation District is created to protect, preserve and maintain the existing and potential groundwater supply and recharge areas within the known aquifer from adverse development or land use practices.

Section 16.02 Location

The Aquifer Conservation District is identified on maps prepared by U.S. Geological Survey as referenced in New Hampshire RSA. 155-E:4,VI, as areas having potential for large volume water extraction.

Section 16.03 District Uses

The use permitted in the Aquifer Conservation District shall in all cases be subject to the zoning regulations of the town of Merrimack as defined in Sections 1 through 14 of this ordinance. In cases of conflict between permitted uses of this district and permitted uses defined elsewhere in this ordinance, the more restricted use shall apply.

Section 16.03.1 Permitted Uses

The following uses shall be permitted in this district:

- A. Industrial or commercial uses (in the appropriate industrial or commercial district) which discharge no wastes onsite. The temporary storage of hazardous waste other than for treatment is permitted only when it is used, manufactured, or generated as a waste as part of an industrial, manufacturing, or laboratory process that takes place within the town of Merrimack, and in such event the same shall be inventoried and stored inside a building with an impermeable floor and otherwise handled in strict conformance with all applicable Federal and State regulations governing the same. The records pertaining to such inventory and storage shall be open to the Board of Selectmen and/or the Merrimack Fire Department upon reasonable request.
- B. Residential Development
- C. Activities designed for conservation of soil, water, plants, and wildlife

- D. Outdoor recreation, nature study, boating, fishing, and hunting where otherwise legally permitted
- E. Normal operation and maintenance of existing water bodies, wells, and dams, splash boards, weirs, and other water control, supply, and conservation devices
- F. Foot, bicycle, and/or horse paths and bridges
- G. Maintenance and repair of any existing structure
- H. Farming, gardening, nursery, forestry, harvesting, and grazing provided that fertilizers, herbicides, pesticides, manure, and other leachables are used appropriately and not stored outdoors

Section 16.03.2 Prohibited Uses

The following uses shall not be permitted in the Aquifer Conservation District:

- A. Disposal of solid waste
- B. Subsurface storage of petroleum and other refined petroleum products except with suitable secondary barriers and automatic alarm systems
- C. Disposal of liquid or leachable wastes except one- or two-family residential subsurface disposal systems
- D. Industrial uses which discharge contact-type process waters onsite. Noncontact cooling water is permitted
- E. Use of outside unenclosed storage of road salt
- F. Dumping of snow containing deicing chemicals brought from outside the district
- G. Commercial animal feedlots
- H. Mining of land except incidental to a permitted use
- I. Excavation of sand or gravel except as such use is conducted in accordance with an approved Earth Removal Permit issued pursuant to Section 13 of this ordinance
- J. Onsite disposal or processing for recycling of hazardous or toxic materials
- K. Automotive service and repair shops, junk, and salvage yards
- L. Bulk storage of toxic material for resale or distribution
- M. Underground brush and stump dumps

Section 16.04 Administration

All subdivision proposals and other proposed new developments within the Aquifer Conservation District shall be reviewed by the Planning Board and shall conform to the provisions of this ordinance and the Subdivision Regulations of the town of Merrimack and further shall assure that:

- A. All such proposals are consistent with the need to protect the groundwater of the town of Merrimack and adjacent communities;
- B. All sanitary sewer systems are designed to minimize or eliminate leakage or discharges from the system into the groundwater;
- C. Onsite waste disposal systems are located so as to avoid or minimize groundwater contamination;
- D. Streets, roads, and parking areas are constructed so that direct application of road salt is not required for winter safety, and so that runoff from such uses is channeled to avoid or minimize groundwater contamination; and
- E. Written approval of the State of New Hampshire Water Supply and Pollution Control Commission has been obtained.

Section 16.04.1 (Number Served)

Section 16.04.2 Conservation Commission Review

The Conservation Commission shall review, within a reasonable time, each plan for development in the Aquifer Conservation District and shall make a recommendation to the Planning Board to approve, approve with conditions and/or recommendations, or disapprove the plan, with reasons for disapproval.

Section 16.04.3 Incorrectly Designated Zones

When the actual boundary of the Aquifer Conservation District is in dispute by any owner or abutter actually affected by said boundary, the Planning Board, at the owner/abutter's expense and request, may engage a professional geologist or hydrologist to determine more accurately the precise boundary of said Aquifer Conservation District, and shall submit to the Planning Board his findings, including:

- A. A detailed topographic layout of the subdivision and/or area to be developed prepared by a registered land surveyor;
- B. A revised soils map of the subdivision and/or area prepared by a soils scientist qualified in hydrologic studies including a written report of his onsite field inspection and test boring data;

- C. The aquifer boundary as shown on the U.S. Geological Survey Map shall be overlayed on the plat as outlined in Section 4.04 of the subdivision regulations and the newly proposed boundary location shall be indicated on the same plat by a broken line.

The Planning Board shall adjust the boundary or area designation based thereon.

The precise boundary of said Aquifer Conservation District shall be as determined by the Planning Board.

The Planning Board shall reserve the right to withhold action on such plat pending the results of an onsite and/or other investigation by that board or its appointed agent and shall act to approve or disapprove the final plat within 90 days of submission of such further time as deemed necessary, but not to exceed an additional 90 days.

Section 16.05 Enforcement

The Town Building Official shall be responsible for enforcement of this ordinance. He shall issue permits for construction in the Aquifer Conservation District only after specific approval for the construction has been granted by the Planning Board. The Building Official is authorized to issue cease and desist orders whenever he becomes aware of violations of this ordinance.

Section 16.06 Nonconforming Uses

Nonconforming uses may continue in this district in the form in which they exist at the time of the adoption of this ordinance and as provided in Section 10.07, unless some foreign substances (oils, salts, chemicals, etc.) are introduced into the aquifer. In the latter case, the Building Official shall issue an immediate cease and desist order to stop the offending activity or process from continuing activity in this district.

AND REPLACE IT WITH THE FOLLOWING:

SECTION 16--AQUIFER CONSERVATION DISTRICT

Section 16.01 Purpose

The Aquifer Conservation District is created to protect, preserve, and maintain the existing and potential groundwater supply and recharge areas within the known aquifer from adverse development or land use practices.

Section 16.02 Location

The Aquifer Conservation District is identified on a map prepared by Whitman and Howard, Inc., entitled "Aquifer Conservation District,"

dated February 4, 1988, as having potential for large volume of water extraction. The Aquifer Conservation District is subdivided into the following three areas:

- A. The aquifer/primary recharge area,
- B. The secondary recharge area, and
- C. The balance of the watershed.

The Aquifer Conservation District map is hereby declared to be a part of this ordinance and is incorporated by reference (16.02.1).

Definitions:

Aquifer--areas of permeable deposits of rock, or sand and gravel containing significant amounts of potentially recoverable water whereby a combination of transmissivity, saturated thickness, and specific capacity of the area can be expected to yield at least 200 gallons per minute to a large diameter well.

Hazardous Waste--shall be defined in the NH Code of Administrative Rules Chapter HE-p 1901.03 (v).

Impervious--the quality of any material or structure which substantially restricts the penetration of surface water or rainfall into the soil.

Leachable Wastes--waste materials including without limitation solids, sewage sludge and agricultural residue which may release waterborne contaminants to the surrounding environment.

Mining of Land--the removal or relocation of geological materials for the purpose of extracting topsoil, sand or gravel, metallic ores, or bedrock.

Process Waters--liquids used in cooling or in the manufacturing process which contact raw materials, products, wastes, or machinery and which because of that contact contain toxic or hazardous substances or do not meet State and Federal Drinking Water Standards.

Radioactive Material--any of the materials which have a concentration which exceeds the limits set forth in Appendix B, table II of 10 CFR Part 20 (Standards for Protection Against Radiation).

Recharge Area--areas of permeable deposits which are hydraulically connected to and upgradient from aquifer areas.

Solid Waste--useless, unwanted, or discarded material with insufficient liquid content to be free flowing, including, without limitation, rubbish, garbage, scrap materials, junk, refuse, inert fill material, and landscape refuse.

Toxic or Hazardous Materials--shall be as defined in the NH Code of Administrative Rules Chapter HE-p 1901.03 (v).

Section 16.03 District Uses

The uses permitted in the Aquifer Conservation District shall in all cases be subject to the zoning regulations of the town of Merrimack as defined in Sections 1 through 14 of this ordinance. In cases of conflict between permitted uses of this district and permitted uses defined elsewhere in this ordinance, the more restrictive use shall apply.

Section 16.03.1 Permitted Uses

The following uses shall be permitted in the aquifer/primary recharge area, the secondary recharge area, and the balance of the watershed Area:

- A. Industrial or commercial uses (in the appropriate industrial or commercial district) which discharge no wastes onsite. The temporary storage of hazardous waste other than for treatment is permitted only when it is used, manufactured, or generated as a waste as part of an industrial, manufacturing, or laboratory process that takes place within the town of Merrimack, and in such event the same shall be inventoried and stored inside a building with an impermeable floor and otherwise handled in strict conformance with all applicable Federal and State regulations governing the same. The records pertaining to such inventory and storage shall be open to the Board of Selectmen and/or the Merrimack Fire Department upon reasonable request.
- B. Residential development
- C. Activities designed for conservation of soil, water, plants, and wildlife
- D. Outdoor recreation, nature study, boating, fishing, and hunting where otherwise legally permitted
- E. Normal operation and maintenance of existing water bodies, wells, and dams, splash boards, weirs, and other water control, supply, and conservation devices
- F. Foot, bicycle, and/or horse paths, and bridges
- G. Maintenance and repair of any existing structure
- H. Farming, gardening, nursery, forestry, harvesting, and grazing provided that fertilizers, herbicides, pesticides, manure, and other leachables are used appropriately and not stored outdoors

Section 16.03.2 Prohibited Uses

The following uses shall not be permitted in the aquifer/primary recharge area:

- A. Disposal of solid waste;
- B. Subsurface storage of petroleum and other refined petroleum products within one thousand feet (1000 ft) of an existing municipal well;
 - 1. Subsurface storage of petroleum and other refined petroleum products is permitted in locations more than one thousand feet (1000 ft) of an existing municipal well provided that such storage is in containment with suitable secondary barriers and with automatic alarm systems;
- C. Disposal of liquid or leachable wastes except one- or two-family residential subsurface disposal systems;
- D. Industrial uses which discharge contact-type process waters onsite. Noncontact cooling water is permitted;
- E. Use of outside unenclosed storage of road salt;
- F. Dumping of snow containing deicing chemicals brought from outside the district;
- G. Commercial animal feedlots;
- H. Mining of land except incidental to a permitted use;
- I. Excavation of sand or gravel except as such use is conducted in accordance with an approved Earth Removal Permit issued pursuant to Section 14 (formerly 13) of this ordinance; application for an Earth Removal Permit for any site within the district shall include clear evidence to demonstrate the seasonal high groundwater level across the site; the permanent removal of the existing soil cover resulting in a finished grade at a level below (5) feet above the existing seasonal high groundwater level;
- J. Onsite disposal or processing for recycling of hazardous or toxic materials;
- K. Automotive service and repair shops, junk, and salvage yards
- L. Bulk storage of toxic material for resale or distribution;
- M. Underground brush and stump dumps;
- N. Trucking and bus terminals;
- O. Heliports and airports; and
- P. Car washes.

Section 16.03.3 Prohibited Uses

The following uses shall not be permitted in the secondary recharge area:

- A. Disposal of solid waste;
- B. Outside unenclosed storage of road salt;
- C. Onsite disposal or processing for recycling of hazardous or toxic waste; and
- D. Subsurface storage of petroleum and other refined petroleum products within one thousand feet (1000 ft) of an existing municipal well.
 - 1. Subsurface storage of petroleum and other refined petroleum products is permitted in locations more than one thousand feet (1000 ft) of an existing municipal well provided that such storage is in containment with suitable secondary barriers and automatic alarm systems.
- E. Helicopters and airports
- F. Disposal of liquid or leachable wastes except one- or two-family residential subsurface disposal systems
- G. Industrial uses which discharge contact type process waters on site. Noncontact cooling water is permitted.

Section 16.03.4 Special Exceptions

The Zoning Board of Adjustment may grant a special exception for the following uses of lands within the secondary recharge area: In cases of conflict between permitted uses of this district and permitted uses defined elsewhere in this ordinance, the more restrictive use shall apply.

- A. Dumping of snow containing deicing chemicals brought from outside the district
- B. Commercial Animal Feedlots
- C. Mining of land except incidental to a permitted use
- D. Automotive service and repair shops, junk, and salvage yards
- E. Bulk storage of toxic material for resale or distribution
- F. Underground brush and stump dumps
- G. Trucking and bus terminals
- H. Car washes

Provided that, at a minimum, the following conditions are met:

- A. The proposed use is consistent with the purpose and intent of the Aquifer Conservation District;

- B. The proposed use is appropriate to the natural topography, soils, and other characteristics of the site to be developed;
- C. The proposed use will not, during construction or thereafter, have an adverse environmental impact on the aquifer water supply;
- D. The proposed use will not adversely affect an existing or potential water supply;
- E. The specific site is an appropriate location for such use or uses in terms of overall community development;
- F. The use as developed will not adversely affect the neighborhood; and
- G. Adequate and appropriate facilities will be provided for the proper operating of the proposed use or uses.

Section 16.04 Administration

All subdivision proposals, site plan applications, or any change of use, alterations, or expansion of an existing use, new developments, or expansion of floor space of existing uses and changes in use within the Aquifer Conservation District shall be reviewed by the Planning Board and shall conform to the provisions of this ordinance and other applicable regulations of the town of Merrimack and further shall assure that:

- A. All such proposals are consistent with the need to protect the groundwater of the town of Merrimack and adjacent communities;
- B. All sanitary sewer systems are designed to minimize or eliminate leakage or discharges from the system into the groundwater;
- C. Onsite waste disposal systems are located so as to avoid or minimize groundwater contamination;
- D. Streets, roads, and parking areas are constructed so that direct application of road salt is not required for winter safety, and so that runoff from such uses is channeled to avoid or minimize groundwater contamination; and
- E. Written approval of the State of New Hampshire Water Supply and Pollution Control Commission has been obtained.

Section 16.04.1 (Number reserved)

Section 16.04.2 Conservation Commission Review

The Conservation Commission shall review, within a reasonable time, each plan for development in the Aquifer Conservation District and shall make a recommendation to the Planning Board to approve, approve with conditions and/or recommendations, or disapprove the plan, with reasons for disapproval.

Section 16.04.3 Incorrectly Designated Zones

When the actual boundary of the Aquifer Conservation District is in dispute by any owner or abutter actually affected by said boundary, the Planning Board, at the owner/abutter's expense and request, may engage a professional geologist or hydrologist to determine more accurately the precise boundary of said Aquifer Conservation District, and shall submit to the Planning Board his findings, including:

- A. A detailed topographic layout of the subdivision and/or area to be developed prepared by a registered land surveyor;
- B. A revised soils map of the subdivision and/or area prepared by a soils scientist qualified in hydrologic studies including a written report of his onsite field inspection and test boring data;
- C. Evidence derived from a pumping test(s) or a sufficient number of test borings, test pits, observation wells, and groundwater elevations to clearly demonstrate that the area in question does not meet the definition of aquifer or recharge area.

The Planning Board shall adjust the boundary or area designation based thereon;

The precise boundary of said Aquifer Conservation District shall be as determined by the Planning Board; and

The Planning Board shall reserve the right to withhold action on such plat pending the results of an onsite and/or other investigation by that board or its appointed agent and shall act to approve or disapprove the final plat within 90 days of acceptance of application for public hearing or such further time as deemed necessary, but not to exceed an additional 90 days.

Section 16.05 Enforcement

The Town Building Official shall be responsible for enforcement of this ordinance. He shall issue permits for construction in the Aquifer Conservation District only after specific approval for the construction has been granted by the Planning Board. The Building Official is authorized to issue cease and desist orders whenever he becomes aware of violations of this ordinance.

Section 16.06 Nonconforming Uses

Nonconforming uses may continue in this district in the form in which they exist at the time of the adoption of this ordinance and as provided in Section 10.07, unless they pose a direct hazard to the aquifer or are actually causing some foreign substances (oils, salts, chemicals, etc.) to be introduced into the aquifer. In the latter case, the Building Official shall issue an immediate cease and desist order to stop the offending activity or process from continuing activity in this district.

AQUIFER CONSERVATION DISTRICT ORDINANCE
OF THE TOWN OF SANBORNTON, NEW HAMPSHIRE

A. Purpose and Intent

The town of Sanbornton adopts this ordinance for the promotion of the health, safety, and general welfare of its residents by protecting the ground water resources in certain areas of the town underlain by potentially productive unconsolidated aquifers from adverse development or land use practices (such as, but not limited to, the disposal or storage of solid wastes, sludge, sub-surface waste disposal, road salting materials, gas or other petroleum products) that might reduce the quality and quantity of water that is now--and in the future will be--available for use by municipalities, individuals and industries.

B. District Boundaries

The Aquifer Conservation District is defined as those areas which are delineated as having medium and high potential to yield groundwater by the United States Geological Survey and shown on the Town Aquifer District Map (SP78001).

Where the bounds, as delineated, are in doubt or in dispute, the burden of proof shall be upon the owner(s) of the land in question to show where they should properly be located. At the request of the owner(s), the Planning Board may engage a professional geologist, hydrologist, or soil scientist to determine more accurately the location and extent of an aquifer area, and may charge the owner(s) for all or part of the cost of the investigation. The delineation can be modified by the Planning Board upon receipt of findings of the detailed onsite survey techniques.

C. Relation to Districts

Where the Aquifer Conservation District is superimposed over another zoning district, the more restrictive regulations shall apply

D. Uses Permitted (By Owners or Agents)

The following uses are permitted in the Aquifer Conservation District:

1. Recreation--Aquifer areas may be used for recreation purposes; such as, biking, hunting, cross country skiing, tennis courts, recreation fields, parks, and others which pose no threat of contamination or pollution of the groundwater. No more than 10 percent of a lot or tract in the Aquifer Conservation District shall be covered with pavement, roofing, or other material impervious to water.
2. Agriculture--Aquifer areas may be used for agricultural purposes such as cultivation and harvesting of crops, pasture and grazing, outdoor plant nurseries, orchards, or silvaculture.

Agricultural uses and/or operations which pose a possible threat to groundwater contamination such as, but not limited to, animal feedlots, manure storage, spraying, or spreading of chemical fertilizers or pesticides may be permitted subject to approval of the Board of Adjustment (see Article XII-B-9).

3. Development--Low density, single-family residential development is permitted, subject to special conditions listed in Paragraph E, after detailed onsite investigation determines that sewage disposal systems and access roads can be constructed and maintained without contamination of the groundwater nor diminishing the recharge capability of the aquifer. No more than 10 percent of a lot or tract shall be covered with pavement, roofing, or other material impervious to water.

E. Special Conditions

1. Lot Size--The minimum lot size in the Aquifer Conservation District is 6 acres
2. Site Plan--Any proposal for construction or development within the Aquifer Conservation District shall include a site plan indicating:
 - a. all proposed subsurface disposal of waste materials,
 - b. proposed excavations and/or earth moving operations which alter the slope or composition of the soil,
 - c. proposed methods of conveying water from roads, paved surfaces, and
 - d. any proposed diversion of ground or surface waters on or adjacent to the site.
3. The Planning Board may engage such professional assistance as it requires to assist in evaluation of the site plan prior to approval and may charge the owner(s) for all or part of the cost of the evaluation.

AQUIFER PROTECTION DISTRICT ORDINANCE
OF THE TOWN OF CORTLANDVILLE, NEW YORK

Section 1

Local Law Number 1 for the year 1986 is hereby amended at Section 21, by adding the following:

7. Aquifer Protection District

Section 2 Definitions

Local Law Number 1 for the year 1986 is hereby amended at Section 1.2(3) by deleting the term and definition of "Development" and by adding the following terms and their definitions in their alphabetical placement within the existing list of terms:

- A. Aquifer--a saturated, permeable geologic material capable of yielding sufficient amounts of water to wells and springs.
- B. Aquifer Protection District Map--the Aquifer Protection District Map shall be the official map adopted by the town of Cortlandville and delineated to indicate that area of the town of Cortlandville underlain by any aquifers which now serve and/or in the future may serve as the water supply for the town of Cortlandville.
- C. Bulk storage--materials stored in large quantities which are usually dispensed in smaller units for use or consumption.
- D. Contamination--the degradation of natural water quality as a result of human activities to the extent that its usefulness is impaired.
- E. Development--any manmade changes to improved or unimproved real estate including, but not limited to, the construction and re-construction of buildings, dredging, filling, mining, grading, construction of tanks or other storage facilities, pumps, pumping stations, waste treatment or disposal facilities, or commercial excavation.
- F. Discharge--the disposal, deposit, injection, dumping, spilling, leaking, or release by any other means of a substance to the surface or subsurface of the ground, surface waters or groundwater.
- G. Hazardous material--any substance found listed in either 40 CFR Part 261, 40 CFR Part 302, or 6 NYCRR Part 371, alone or in combination including, but not limited to, petroleum products, organic chemical solvents, heavy metal sludges, acids with a pH less than or equal to 2; alkalies with a pH greater than or equal to 12.5, radioactive substances, pathological or infectious wastes, or any material exhibiting the characteristics of ignitability, corrosivity, reactivity, or EP toxicity.

- H. Linear distance--the shortest horizontal distance from the nearest point of a structure or object to the boundary of any protection area, or to the margin or steep bank forming the normal high water line of a watercourse.
- I. Solid waste disposal facility--any facility used for solid waste disposal including, but not limited to, sanitary landfills and dumps but not including disposal areas for inert debris.
- J. Toxic substance--any compound or material which is, or may be, harmful to human health as defined by Section 4801, Subdivision 2 of the New York State Public Health Law.
- K. Watercourse--any river, stream, spring, wetland, pond, lake reservoir, or channel of water or any manmade culvert which flows directly into one of the aforementioned.

Section 3

Local Law Number 1 for the year 1986 is hereby amended to provide for Section 2.2 to read as follows:

2.2 Zoning Map

The boundaries of the districts are established as shown on the map entitled "Zoning Map" in this local law except that the aquifer protection district is set forth on the Aquifer Protection District Map filed with the town of Cortlandville. Reference is also made to Section 13.3(2) of the Town Zoning Law herein concerning the filed plan and maps for Flood Hazard Areas.

The Zoning Map, including any explanatory material on it, is made a part of this local law. The town clerk shall certify the Zoning Map as part of this local law and keep it on file in the clerk's office. Any changes in district boundaries or other matter shown on the Zoning Map shall be made on the certified Zoning Map. The local law making any change shall provide for its entry upon the Zoning Map.

Section 4

Local Law Number 1 for the year 1986 is hereby amended by adding, after the entire Article VIII, a new Article VIII-A to read as follows:

ARTICLE VIII-A
AQUIFER PROTECTION DISTRICT

8.A.1 Statement of Intent

The purpose and intent of the aquifer protection district is, in the interest of public health, safety, and general welfare, to preserve the quality and quantity of the town's groundwater resources in order to ensure a safe and healthy drinking water supply. This is to be accomplished by regulating land uses which might contribute to the contamination of any aquifers identified as necessary for the present and future water supply of the town of Cortlandville.

8.A.2 Scope and Authority

The aquifer protection district shall be considered as overlaying other zoning districts. Any uses permitted in the portions of the districts so overlaid shall be permitted subject to all the provisions of this district. In any cases where conflicts arise between these supplemental regulations and any other existing regulations, the more restrictive regulations shall apply.

8.A.3 Establishment and Delineation of an Aquifer Protection District

For the purposes of this district, there are hereby established within the town of Cortlandville, certain aquifer protection areas which consists of any aquifer, the land above such aquifer, and the aquifer's most significant recharge areas as follows:

A. Area I: Primary aquifer area

The primary aquifer area, as delineated, shall include:

1. Those highly permeable aquifer areas which have undergone significant development as public water supplies and which serve populations greater than 8,000 persons including municipal water systems, private water companies, water districts, and water authorities but excluding individual wells.
2. Any bodies of surface water or portions thereof, including wetlands (as defined by Article 24, Section 107 of the New York State Conservation Law) within the primary aquifer area boundaries.

B. Area II: Principal aquifer area

The principal aquifer area, as delineated, shall include:

1. Potentially productive aquifer areas not yet intensively used as sources of public water supply but which:

- a. are composed of moderately permeable material which may have the potential to be used as a source of public water supply;
 - b. serve as a significant source of water for individual wells; and
 - c. have an area extent greater than one (1) square mile;
2. Areas which provide significant recharge to primary aquifers but which are not composed of aquifer material;
 3. Any bodies of surface water or portions thereof including wetlands (as defined by Article 24, Section 107 of the New York State Conservation Law) within the principal aquifer area.
- C. Area III: Tributary watershed area

The tributary watershed area, as delineated, shall include land outside the aquifer area that may contribute runoff overland and/or through surface streams for groundwater recharge.

D. Wellhead protection areas

In addition to the aquifer protection areas described herein, boundaries for Wellhead Protection Areas (WPAs) shall be delineated by the State of New York as part of the Wellhead Protection Program required under Section 1428 of the Federal Safe Drinking Water Act Amendments of 1986. The Wellhead Protection Program, including WPA delineation, must be submitted to the United States Environmental Protection Agency (EPA) by June 10, 1989, and EPA approval or disapproval of the program shall be made within nine months of that date. Implementation of a New York State Wellhead Protection Program shall occur no later than the year 1991. Wellhead Protection Area boundaries are expected to become incorporated into Watershed Rules and Regulations under jurisdiction of the State and County Health Departments. Upon delineation of the WPA boundaries for the town of Cortlandville and subsequent EPA approval, they shall become separate WPAs under this article and shall be subject to all rules and regulations pertaining thereto.

The boundaries of the aquifer protection district and the aquifer protection areas reflect the best hydrogeologic information available as of the date of the map. Where these bounds are in doubt or in dispute, the burden of proof shall be upon the owner(s) of the land in question to show where the boundaries should be properly located. At the request of the owner(s), the town may engage a professional geologist, hydrogeologist, engineer, or other qualified expert trained and experienced in hydrogeology to determine more accurately the location and extent of an aquifer or recharge area, and may charge the owner(s) for the entire cost of the investigation.

8.A.4 Permitted Uses

The following uses are permitted within the aquifer protection district provided that all necessary permits, orders, or approvals required by local, State, or Federal law shall have been obtained:

- A. Areas I, II, and III: Primary and principal aquifer areas; tributary watershed areas

All uses currently permitted under the Cortlandville Zoning Law and Map are permitted in the aquifer protection district subject to the provisions of this article.

- B. Nonconforming Uses

Notwithstanding any other provision herein, a nonconforming use within the aquifer protection district may be continued and maintained so long as it remains otherwise lawful. No such use shall be enlarged, altered, extended, or operated in any way which increases its threat to groundwater quality or otherwise contravenes with the purpose and intent of this article.

In the event that a nonconforming use has ceased for a consecutive period of one (1) year or for eighteen (18) months during any three (3) year period, such nonconforming use may not be resumed except in conformity with the provisions of all districts within which it is located.

As with the other zoning districts, all provisions of Article XIV shall apply in the same manner to the provisions of the aquifer protection district.

8.A.5 Restrictions and Requirements

- A. Prohibitive Uses and Activities

1. The discharge, land application, or disposal of any hazardous material, toxic substance or radioactive material.
2. The production or processing of bulk quantities of any hazardous material or toxic substance is prohibited.
3. Open Storage of Pesticides, Herbicides, Fungicides
 - a. the open storage of pesticides, herbicides, fungicides and artificial fertilizers within fifty (50) feet linear distance of any watercourse in Area III is prohibited;
 - b. the open storage of pesticides, herbicides, or fungicides is prohibited in Areas I and II; all storage of such material is prohibited unless any necessary authorization has been obtained from the New York State Department of Environmental Conservation as provided in Article 33 of the New York State Environmental Conservation Law;

4. The dumping or disposing of snow or ice collected offsite from roadways or parking areas into or within fifty (50) feet linear distance of any watercourse;
5. Storage of Coal
 - a. the open storage of coal or chloride salts within fifty (50) feet linear distance of any watercourse in Area III is prohibited;
 - b. the bulk storage of coal or chloride salts is prohibited in Areas I and II except in a water-tight ventilated structure constructed on an impervious surface; any outside area used for loading, handling, or mixing shall be designed so as to prevent seepage and runoff from entering the groundwater or any watercourse;
6. Any form of underground injection or hazardous materials or toxic substances is prohibited;
7. Gas stations, solid waste disposal facilities, and junkyards are prohibited in Areas I and II;
8. Single family houses using septic tanks on lots of less than 30,000 feet are prohibited.
9.
 - a. two-family houses using septic tanks on lots of less than 45,000 square feet are prohibited.
 - b. all plans for two-family houses using septic tanks require the approval of the Cortland County Health Department.
10. Multifamily houses using septic tanks are prohibited.
11. All prohibited uses and activities associated with industrial development as per Article 12.5 of the Town Zoning Law;
12. The use of septic system cleaners which contain toxic substances or hazardous materials.
13. The disposal of toxic substances or hazardous materials by means of discharge to a septic system.

B. Other Requirements

1. Petroleum bulk storage facilities installed above and below ground require permits and are subject to compliance with those standards described in Articles XIX, XX and XXI of the Sanitary Code of the Cortland County Health District.
2. Bulk storage of toxic substances or hazardous materials is subject to compliance with Article XVIII of the Sanitary Code of the Cortland County Health District.

3. Quarries, gravel mining, and excavations are permitted in accordance with Article 16.3 of the Town Zoning Law except where onsite activities violate the provisions of Sections 8.A.5 and 8.A.6 herein.

Operations which commence on or after the effective date of these regulations shall install a minimum of one (1) groundwater monitoring well in a direction upgradient from onsite activities and one (1) groundwater monitoring well in a direction downgradient from onsite activities. The specific location of these groundwater monitoring wells shall be determined by a professional geologist, hydrogeologist, engineer, or other qualified expert trained and experienced in hydrogeology.

Frequency of required water quality sampling from monitoring wells shall be determined on a site-specific basis.

Access to monitoring wells shall be provided to employees of the Cortland County Health Department for purposes of any additional water quality sampling deemed appropriate.

4. Vehicular servicing including, but not limited to, automotive repair stations, body shops and rustproofing operations, is allowed within the aquifer protection district provided that the following requirements are met:
 - a. floor drains must be connected to holding tank or sanitary sewer equipped with an oil and grit separating tank;
 - b. wastes collected in a holding tank must be disposed of through a licensed waste hauler;
 - c. waste degreasing solvents must be stored in drums or a holding tank and disposed of through a licensed waste hauler;
 - d. waste oil must be stored in tanks or drums for disposal by a licensed waste hauler;
 - e. storage facilities for tanks and/or drums require coated concrete floors and dikes to retain accidental spills or leaks; a permanent roof to protect tanks or drums and to prevent precipitation from entering dikes; drums should be sealed, and tanks and drums must be located away from floor drains;
 - f. large drip pans should be kept beneath drums which have spigots and are stored in horizontal position on racks; and

- g. potentially contaminated scrap including, but not limited to, scrap parts, batteries and used filters shall be stored in proper containers to prevent environmental release of contaminants.
- 5. Application of Pesticides, Herbicides, Fungicides
 - a. application of pesticides, herbicides, fungicides, or chemical fertilizers shall be performed in accordance with the recommendations and label of the manufacturer.
 - b. property owners who enlist the services of a commercial pesticide, fungicide, or herbicide applicator shall ensure that the applicator is certified and licensed by the New York State Department of Conservation.
- 6. Conversion of a one-family house using a septic tank to a two-family house using a septic tank requires the approval of the Cortland County Health Department.
- 7. Site plans for all proposed industrial and commercial uses shall be accompanied by a detailed and complete description of the anticipated uses and their operation as per Article XI of the Town Zoning Law.
- 8. Dry wells connected to drains from buildings require the approval of the Cortland County Health Department.
- 9. Whenever there is a question as to the groundwater contamination potential of a proposed use, the expert opinion of the EPA, the New York State Department of Environmental Conservation (NYS DEC), and the State and County Health Departments may be requested.

8.A.6 Special Permits

Any use of property within the aquifer protection district shall be permitted only upon obtaining a special permit from the town board of the town of Cortlandville when the use:

- A. Violates or does not meet any of the provisions of Section 8.A.5 herein;
- B. Is a development, other than residential, of real property exceeding \$150,000 in development cost; or
- C. Is a use that anticipates an average daily onsite water consumption exceeding 50,000 gallons per day (gpd).

8.A.7 Application for a Special Permit

Applicants for a special permit to develop in the aquifer protection district shall submit the following:

- A. Name, address, and telephone number of the applicant;
- B. If the applicant is a corporation, the name, address, and telephone number of all the corporate officers and directors;
- C. A map and report showing the location of the premises for which the permit is sought and plans prepared by a licensed professional engineer or architect showing all features of the system necessary for the satisfactory conveyance, storage, distribution, use and disposal of sanitary wastes, stormwater wastes, process wastes, toxic substances and hazardous materials, solid wastes, and incidental wastes within the property boundaries of the business or commercial establishment.
- D. Use of Toxic Substances
 - 1. When the use of toxic substances or hazardous materials averages an amount equal to or in excess of 55 liquid gallons per month or 500 pounds dry weight per month, the applicant must provide for any design features, operating plans, and any other protection measures as the town board deems appropriate and sufficient to prevent and/or monitor groundwater contamination especially in the event of a potential leak or spill of these substances.
 - 2. When the use of toxic substances or hazardous materials averages less than 55 liquid gallons per month or 500 pounds dry weight per month, and when the project is determined to have a potential negative impact on groundwater quality, the town board may demand the applicant to provide for any and all design features, operating plan, and/or such other protection measures as per 8.A.7(D1) above.
- E. Storage of Toxic Substances
 - 1. When storage of toxic substances or hazardous materials at any one time is equal to or exceeds a total 220 liquid gallons or a total of 2000 pounds dry weight, the applicant must provide for any and all design features, operating plans, and such other additional protection measures as the town board may require to prevent and/or monitor groundwater contamination especially in the event of a potential leak or spill of these substances.
 - 2. When storage of toxic substances or hazardous materials at any one time is less than a total of 220 liquid gallons or a total of 2000 pounds dry weight, the town board may demand the applicant to provide for any and all design features, operating plans, and such other additional protection measures as per 8.A.7(E1) above.
- F. Such other nonproprietary information as the town board shall request in order to have all facts before it prior to making their decision.

- G. Copies of any permits and applications to any other government agencies.
- H. List of all toxic substances or hazardous materials known to be used or stored on the premises together with sufficient detail to appraise the town board of the method of storage and the amount of toxic substances or hazardous materials on the premises.
- I. Method of disposal of toxic substances or hazardous materials.
- J. A full report regarding the use and storage of all toxic substances and all hazardous materials.

8.A.8 Referral and Public Hearing For a Special Permit

The town board shall refer an application for such Special Permit to the Town and County Planning Boards for comments prior to the town board's decision.

Where appropriate and not inconsistent with this article, the town board shall follow the procedures, including application fees and General and Additional Specific Requirements, set forth in Article XII of the Town Zoning Law, Conditional Permit.

A public hearing shall be held in regards to granting such Special Permit and notice of the public hearing in regard to the granting of such Special Permit shall be published in the official town newspaper not more than twenty (20) days and not less than ten (10) days before the date of such public hearing. All uses specified in Sections 8.A.5 and 8.A.6 above which would be subject to a Special Permit, except for the fact that when such uses are governmental entities, they shall nevertheless be subject to the public hearing requirements of this Section, and shall file an Environmental Assessment Form which shall be reviewed by the town board of the town of Cortlandville in accordance with the provisions of the New York State Environmental Quality Review Act.

8.A Issuance of Special Permit

- A. The town board may grant the Special Permit, deny the Special Permit or grant the Special Permit with stated conditions.
- B. In the event that a Special Permit is granted or granted with stated conditions, it shall be a requirement that the applicant use the best available means to prevent the contamination of the groundwater and the aquifers of the town of Cortlandville. This shall be a continuing requirement.

8.A.10 A Change in Use

Where a Special Permit has been previously issued, a change in use requires application for a new Special Permit.

- A. In the event that a change in ownership does not result in any change in use, the Special Permit shall be automatically granted and be considered an agreement between the town board and the new owner that the provisions of this article shall be adhered to.

8.A.11 Penalties

In accordance with Section 268.(1) of the New York State Town Law, a violation of Article VIII-A is hereby declared to be an offense, punishable by a fine not exceeding three hundred fifty dollars or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars or imprisonment for a period not to exceed six months, or both; and, upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars or imprisonment for a period not to exceed six months, or both. Each week's continued violation shall constitute a separate additional violation.

Section 5

Local Law Number 1 for the year 1986 is hereby amended to provide for Section 12.1(1). to read as follows:

The uses and structures listed in each district, with the exception of the aquifer protection district, which require Conditional Permits are recognized as potentially desirable for the town. However, the uses and structures requiring Conditional Permits may, because of their nature, present some degree of hazard or danger to the town and its people. In the aquifer protection district, Special Permits shall be considered pursuant to Article VIII-A.

Section 6

Local Law Number 1 for the year 1986 is hereby amended by adding the following paragraph to Section 19.2:

Separate penalties for breaches and violations of Article VIII-A are set forth in Section 8.A.11.

Section 7

The invalidity of any section or provision of this local law shall not invalidate any other section, provision, or part of it.

Section 8

This local law shall take effect in accordance with the provisions of Section 264 of the New York Town Law and immediately upon filing in the Office of the Secretary of State.

ARTICLE 12 SUFFOLK COUNTY SANITARY CODE

Article 12--Toxic and Hazardous Materials Storage and Handling Controls

Section 1201.0 Declaration of Policy

The designated best use of all groundwaters of Suffolk County is for public and private water supply, and of most surface waters for food production, bathing, and recreation. The Federal government has officially designated the aquifer below Suffolk County as a sole-source for water supply. Therefore, it is hereby declared to be the policy of the County of Suffolk to maintain its water resources as near to their natural condition of purity as reasonably possible for the safeguarding of the public health and, to the end, to require the use of all available practical methods of preventing and controlling water pollution from toxic and hazardous materials.

Section 1202.0 Statement of Purpose

It is the intent and purpose of this article to safeguard the water resources of the County of Suffolk from toxic or hazardous materials pollution by controlling or abating pollution from such sources in existence when this article is enacted and also by preventing further pollution from new sources under a program which is consistent with the above-stated Declaration of Policy.

Section 1203.0 Definitions

Whenever used in the article, unless otherwise expressly stated, or unless the context or subject matter requires a different meaning, the following terms shall have the respective meanings set forth or indicated:

- A. Aboveground, when referring to tanks, means more than 90 percent exposed above the final ground elevation.
- B. Bulk storage means the loose or bagged storage of dry or semidry materials.
- C. Commissioner means the Commissioner of the Suffolk County Department of Health Services.
- D. Discharge means to release by any means or to relinquish control in a manner that could result in a release to the surface waters, groundwaters, surface of the ground, or below ground. Discharge includes, but is not necessarily limited to, the following, either singly or in any combination:
 - 1. Leaks from the failure of a storage facility;
 - 2. Spills during transport or transfer of toxic or hazardous materials;

3. Disposal or storage of soils, sand, or debris containing toxic or hazardous materials;
 4. Disposal to storm drains, cooling water, roof drains, sanitary systems, or any other drainage system or leaching system of toxic or hazardous materials;
 5. Burial, land-spreading, or dumping anywhere of toxic or hazardous materials, including but not limited to landfill and scavenger facilities, notwithstanding that the material so buried, spread, or dumped was containerized at the time of said burial, spreading or dumping;
 6. Passing of toxic or hazardous waste materials to any person;
 7. Abandonment of containers, tanks, pipes, vehicles, or premises containing toxic or hazardous materials or residues. For the purpose of this subdivision, abandonment shall mean:
 - a. substantially empty and unattended, or
 - b. the relinquishment or termination of possession, ownership or control without full disclosure to the new owner thereof of containers, tanks, pipes, vehicles, or premises containing toxic or hazardous materials or residues, whether by vacating or by disposition thereof, and shall not depend on a mere lapse of time.
- E. Double-walled means constructed with more than one containment layer with space between the layers sufficient to allow monitoring of any leakage into or out of the space.
- F. Impervious means a layer of natural and/or manmade material of sufficient thickness, density, and composition as to prevent the discharge into the underlying groundwater or adjacent surface waters of any toxic or hazardous substances for a period of at least as long as the maximum anticipated time during which the toxic or hazardous substances will be in contact with the material, and sufficient to allow complete recovery of the spilled product with minimum disturbance of the containment material.
- G. New York State discharge standards means standards of quality and purity and special standards, and groundwater quality standards and effluent standards, and/or limitations as found in Title 6, Parts 701-703 of the Official New York Compilation of Codes, Rules and Regulations.
- H. Pollution means the presence in the environment of conditions and/or contaminants in quantities or characteristics, which are or may be injurious to human, plant, or animal life, or to property, or which unreasonably interferes with the comfortable enjoyment of life and property throughout such areas of the county as shall be affected thereby.

- I. Product-tight means impervious to the material which is or could be contained therein so as to prevent the detectable seepage of the product through the container. To be product-tight, the container shall be made of a material that is not subject to physical or chemical deterioration by the product being contained.
- J. Properly registered industrial waste scavenger means a person in the business of collecting industrial wastes who carries a current, valid industrial waste collector registration issued by the New York State Department of Environmental Conservation.
- K. Substantial modifications shall mean the construction of any additions to an existing storage facility as defined under Section 1203 M, or restoration, refurbishment, or renovation which:
1. Increases or decreases the in-place storage capacity of the facility,
 2. Alters the physical configuration; or
 3. Impairs or affects the physical integrity of the facility or its monitoring systems.
- L. Single-walled means constructed with walls of but one thickness of material. Laminated, coated, or clad materials shall be considered as single-walled.
- M. Storage facility means tanks, pipes, vaults, buildings, yards, pavements or fixed containers used or designed to be used, either singly or in any combination thereof, for the storage and/or transmission of toxic or hazardous materials or for the storage of portable containers containing toxic or hazardous materials.
- N. Toxic or hazardous materials means any substance, solution, or mixture which, because of its quality, quantity, concentration, physical, chemical, or infectious characteristics, or any combination of the foregoing, presents or may present an actual or potential hazard to human health or to the drinking water supply if such substance, solution, mixture, or combination thereof is discharged to the land or waters of the County of Suffolk, toxic or hazardous materials shall include:
1. Each and every substance, material or waste found listed in either or both Part 116 and Part 261, Title 40 of the Code of Federal Regulations; or Title 6, Part 366, of the New York State Codes, Rules and Regulations;
 2. Acids and alkalies beyond the pH range of 4 to 10;
 3. Heavy metal sludges, mixtures, and solutions in excess of standards;
 4. Petroleum products, including fuels and waste oils;

5. Organic solvents, including petroleum solvents, halogenated, and nonhalogenated hydrocarbons;
6. Any material listed in Schedule I, Part 703.6 of the Official Compilation of New York Codes, Rules and Regulations, in excess of the concentration standards thereof, except for iron, manganese, foaming agents and pH unless otherwise provided elsewhere in this article;
7. Any substance not included within subdivisions one through six above subsequently declared to be a toxic or hazardous material by the commissioner;
8. Any solid or semi-solid material which, if left to stand, or if exposed to water, will leach out or wholly or partially dissolve forming a toxic or hazardous material as defined in subdivisions one through seven above.

All toxic or hazardous materials are hereby declared to also be offensive materials for the purposes of Article VB.

O. Toxic or Hazardous Wastes mean:

1. Toxic or hazardous materials as defined in subdivision N above, generated by, or as the result of, operations in or the existence of any manufacturing or other industrial or commercial establishment, which toxic or hazardous materials are not actually used in a final product for sale, and shall include those toxic or hazardous materials retained as by-products of the operations within such manufacturing or other industrial or commercial establishment for the purpose of recouping salvage value; or
2. Toxic or hazardous materials generated by one in possession or control of any residential premises, for which materials disposal is intended, and which waste is not domestic wastewater without the admixture of nonsewage wastewater from any industrial process.
3. All toxic and hazardous wastes are toxic and hazardous materials.

P. Underground, when referring to tanks, means 10 percent or more below the final ground elevation.

Section 1204.0 Powers of the Commissioner

- A. The commissioner may make, or cause to be made, any investigation or study which, in his opinion, is desirable for enforcing this article or controlling or reducing the potential for contamination of the waters of the county from toxic or hazardous materials.

- B. The commissioner may order the owner or any other person in possession or control of any land, structure, or equipment, or agent of such owner or other person, to take whatever action is necessary in the opinion of the commissioner to bring said land, structure, or equipment into compliance with the provisions of this article and any standards or regulations promulgated thereunder. Such action may include, but is not necessarily limited to, the following, either singly or in any combination thereof:
1. Ordering tank-testing or the testing of the physical integrity of pipes or any other part of a storage facility or ordering the physical testing of the integrity of an entire storage facility;
 2. Ordering the removal of the contents of a tank, portable container, storage facility, or any part thereof;
 3. Ordering the removal or abandonment or reconstruction of any installation, tank, storage facility, or any part thereof installed in contravention of any of the requirements of this article or any standards or regulations promulgated thereunder;
 4. Ordering that physical improvements be performed on any tank, storage facility, or part thereof before permitting it to be returned to service including such improvements as tank lining removal and replacement, bottom and structural repairs;
 5. Ordering the drafting, and/or implementation of contingency plans if there is evidence that such plans may be necessary to protect the public from toxic or hazardous materials stored at any particular facility;
 6. Ordering the posting of a performance bond or other undertaking either prior, or subsequent, to the construction or operation of a storage facility within Suffolk County on a case-by-case basis if evidence indicates such may be necessary to protect the public from the effects of operating such a facility.

Section 1205.0 Prohibited Discharges, Transporting and Disposal

- A. It shall be unlawful for any person to discharge toxic or hazardous materials in Suffolk County, unless such discharge is specifically in accordance with a State Pollutant Discharge Elimination System (SPDES) permit or other permit issued by or acceptable to the commissioner for that purpose.
- B. It shall be unlawful for any person to pick up, transport, or dispose of toxic or hazardous waste materials in Suffolk County without having a valid and appropriate New York State Industrial Waste Collector Registration.
- C. It shall be unlawful for any industrial waste collector with a registration issued by the New York State Department of Environmental Conservation to fail to maintain a copy thereof on each vehicle operated by said collector at all times.

Section 1206.0 Construction and Modification Permits

- A. It shall be unlawful for any person to construct, install or substantially modify a storage facility, or part thereof, without a valid permit therefor issued by or acceptable to the commissioner.
- B. It shall be unlawful for any person in possession of or acting pursuant to a permit issued under this section to act, allow or cause any act in contravention of any provision of the permit.
- C. Any permit issued pursuant to this section shall be effective for the specified duration of time indicated thereon, not to exceed one year from the effective date thereof.

Section 1207.0 Permits to Operate

- A. It shall be unlawful for any person to use, cause to be used, maintain, or fill or cause to be filled with toxic or hazardous materials any storage facility or part thereof without having registered all the tanks at the facility on forms provided by the commissioner, and without having obtained a valid permit to operate such storage facility or part thereof issued by or acceptable to the commissioner.
- B. It shall be unlawful for any person in possession of or acting pursuant to a permit issued pursuant to this section to act, permit, or cause any act in contravention of any provision of the permit.
- C. No permit to operate a storage facility as required pursuant to this section shall be issued by the commissioner or shall be satisfactory to the commissioner unless and until the prospective permittee has:
 - 1. Provided a listing to the commissioner of all of the toxic or hazardous materials to be stored at the storage facility; and
 - 2. Demonstrated that said storage facility complies with all of the provisions of this article and all regulations and standards promulgated pursuant to it applicable to said storage facility based upon submission of such written proof as is required by the commissioner.
- D. Any permit issued pursuant to this section shall be effective only for the specified duration of time indicated thereon, not to exceed five (5) years from the effective date thereof.

Section 1208.0 Exemptions

- A. All storage facilities which meet all of the following criteria shall be exempt from all provisions of this article except those contained in Sections 1203--Definitions; 1204--Powers of the Commissioner; 1205--Prohibited Discharges; 1208--Exemptions; 1210.A--New Storage Facilities; 1210.E--General Provisions and Requirements; 1210.G--Overfill Protection; 1211.A.4--Overfill Detection;

1211.D.1 and 2.--Leaks; Repairs; 1213 B.1 and 4--Transfer Operations; and 1220--Waivers.

1. The materials so stored are not toxic or hazardous wastes; and
 2. The volume of the storage facility is less than 1,100 gallons; and
 3. The facility is intended solely for the storage of kerosene, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil, diesel oil or lubricating oil; and
 4. The intended use of the product stored is solely for onsite heating, or intermittent stationary power production such as standby electricity generation or irrigation pump power; and
 5. The materials stored are not intended for resale.
- B. All storage facilities which meet the following criteria shall be exempt from the provisions of this article contained in Sections 1210.B, 1210.D, 1212.B, 1214, 1219, and any regulations or standards promulgated thereunder;
1. The materials so stored are not toxic or hazardous wastes; and
 2. The volume of the storage facility is greater than 1,100 gallons; and
 3. The facility is intended solely for the storage of kerosene, number 2 fuel oil, number 4 fuel oil, number 6 fuel oil or lubricating oil; and
 4. The intended use of the product stored is solely for onsite heating, or intermittent stationary power production such as standby electricity generation or irrigation pump power; and
 5. The materials stored are not intended for resale.
- C. All storage facilities no longer receiving the benefit of any exemption but which were previously exempted from any or all provisions of this article shall be required to appropriately conform to all of the provisions of this article and all regulations and standards promulgated pursuant thereto by November 1, 1983.
- D. Tanks for the storage of number 6 fuel oil, or other petroleum products of equivalent viscosity, are exempt from the internal inspection and tank lining requirements. Further, storage facilities for these products are exempted from the impervious dike and enclosure around the tank requirements if, in the opinion of the commissioner, the location of the facility is so situated that a spill could not drain into storm drains or surface waters.
- E. All storage of toxic or hazardous materials in containers of five-gallon capacity or smaller where the total capacity stored at any

time does not exceed 250 gallons or where the dry storage in bags, bulk, or small containers does not exceed 2,00 pounds is exempt from all portions of this article unless specifically ruled otherwise by the commissioner on a case-by-case basis.

Section 1209.0 Transfer of Permits Prohibited

It shall be unlawful for any person to transfer a permit issued pursuant to Sections 1206 and 1207 of this article from one location to another, from one storage facility to another, or from one person to another. Any permit transferred in violation of this section shall be deemed null and void and without any effect whatsoever as of the date of said unlawful transfer. However, upon making proper application, a new owner of a facility which was previously operating under a valid permit may continue operation under the terms of the old permit until such time as the new permit is issued or denied.

Section 1210.0 Underground Storage Facilities

A. New Storage Facilities

1. All new storage facilities used or to be used for the underground storage of toxic or hazardous materials shall be designed and constructed in a manner which will, in the opinion of the commissioner, provide the maximum reasonable protection available against leakage or spillage from the facility because of corrosion, breakage, structural failure, or other means. Double-walled or equivalent facilities are required for all toxic or hazardous materials except those with a specific gravity of less than one and which are only slightly soluble in water such as oils and gasoline. For these floatable materials, acceptable designs for tank construction include cathodically protected steel; glass fiber reinforced plastic; steel clad with glass fiber reinforced plastic; double-walled steel or plastic; or other equivalent design approved by the commissioner.
2. Approval of design by the commissioner is required before installation, and the determination of equivalency or adequacy lies with the commissioner.
3. Design, construction, fabrication, and installation of new underground storage facilities shall be in accordance with regulations and standards as they may be adopted by the commissioner under this article from time to time.
4. A new storage facility for all facilities not previously covered by this section is one for which construction actually begins on or after November 1, 1982, subject, however, to the exemptions contained in Section 1208.A.
5. It shall be unlawful for any person to sell for use in Suffolk County, install, use, put into service, or maintain the existence of any new underground storage facility or part thereof

after November 1, 1982, if said new storage facility or part thereof fails to conform to all of the provisions of subsections 1-3 above, and all regulations and standards promulgated thereunder, subject, however, to the exemptions contained in Section 1208.A.

B. Existing Storage Facilities

1. An existing underground storage facility is one for which construction actually begins prior to November 1, 1982.
2. It shall be unlawful for any person to substantially modify or cause the substantial modification of any existing underground storage facility or part thereof without complying with the provisions of subdivision A above and all regulations and standards promulgated thereunder.
3. It shall be unlawful to use, or maintain the existence of, any existing underground storage facility beyond January 1, 1995, which is intended for use with toxic or hazardous materials with a specific gravity of less than one and which are only slightly soluble in water such as oils and gasoline, without modifying said storage facility so as to comply with all of the provisions of subdivision A above and all regulations and standards promulgated thereunder.
4. It shall be unlawful to use or maintain the existence of any existing underground storage facility beyond January 1, 1987, which is intended for use with any toxic or hazardous materials other than those with a specific gravity of less than one and which are only slightly soluble in water such as oils and gasoline, without modifying said storage facility so as to comply with all of the provisions of subdivision A above and all regulations and standards promulgated thereunder.

C. Abandonment

1. It shall be unlawful for any person to use or maintain the existence of an abandoned underground storage facility or part thereof.
2. It shall be unlawful for anyone to sell or transfer to another an improperly abandoned underground storage facility or land containing an improperly abandoned underground storage facility if there exists any reasonable evidence of the existence of such a facility unless the purchasing party has been made fully aware of the presence of such facility or evidence.
3. It shall be unlawful for any person to repair, alter, or prepare for use any abandoned storage facility without first obtaining a permit to construct from the commissioner.

4. It shall be unlawful for the owner or other person in possession or control of any real property, building, place, or vehicle to fail to immediately empty all toxic or hazardous materials and completely fill with sand or concrete or permanently remove an abandoned storage facility or part thereof within ninety (90) days of the discovery thereof on or in said real property, building or place pursuant to the provisions of subdivision H below unless approval is granted by the commissioner to do otherwise.
5. For the purposes of this section, an abandoned storage facility or part thereof means one which has remained out of service for two (2) years or more, or which has been declared by the owner to be abandoned.
6. For the purposes of this section, out of service means substantially empty, meaning five (5) percent or less filled; or not in use, meaning no regular filling or drawing; or not being maintained, meaning lacking adherence to the requirements of this article; or uncontrolled, meaning not attended or secured; or any combination thereof.
7. For the purposes of this section, discovery means either actual discovery or knowledge of the existence of the abandoned storage facility or part thereof or possession of sufficient knowledge of the facts and circumstances involved so that the existence of the abandoned storage facility or part thereof should have been discovered or known of.

D. Testing and Inspection

1. All existing underground storage facilities or parts thereof which do not meet the construction standards in subdivision A. above, must be tested and inspected in accordance with the schedule set forth below. It shall be unlawful for any existing underground storage facility owner, operator or lessee to fail to test his tanks and file an acceptable certificate of test completion with the commissioner in accordance with the following schedule:

TESTING SCHEDULE
FOR EXISTING UNDERGROUND TANKS
AGE OF SYSTEM BY 1980
(in years)

	1-4	5-9	10-14	15-19	20 or more
1980					
1981					X
1982				X	
1983			X		X
1984		X			
1985	X			X	X
1986			X		

FULL COMPLIANCE FOR ALL FACILITIES
EXCEPT THOSE DESCRIBED IN 1210.B.4

	1-4	5-9	10-14	15-19	20 or more
1987				X	X
1988		X			
1989	X		X	X	X
1990					
1991		X		X	X
1992			X		
1993	X			X	X
1994		X	X		
1995		Full Compliance for All Facilities			

2. If for any reason testing satisfactory to the commissioner cannot be performed, the tank must be removed from service or brought up to the standards of subsection A by the first scheduled test date.
3. The Final Test of the National Fire Protection Association (NFPA), Recommended Practice No. 329 or other test of equivalent or superior accuracy as approved by the commissioner must be used to comply with the testing and inspection requirement of Section 1210.D.1.
4. Any test and inspection as required by this subdivision shall be performed by a person whose qualifications are acceptable to the commissioner for performing such tests. Certificates of test completion containing the results of such tests as performed shall be prepared by the tester and shall be filed with the commissioner within thirty (30) days after completion of the testing of the storage facility. No certificate of test completion shall be acceptable to the commissioner to indicate satisfactory compliance with the testing requirements of this subdivision if the qualifications of the tester have not been accepted by the commissioner prior to the test. No certificate of test completion shall be acceptable to the commissioner if the test and inspection were not performed in accordance with subsection 3 of this subdivision and in accordance with any regulations and standards which may be promulgated pursuant thereto.
5. The Certificate of Test Completion shall be filed on a form provided by the commissioner and a copy of such form, completed, shall be kept by the storage facility owner, operator or lessee, and by the tester for a period of not less than five (5) years from the date of its issuance. It shall be unlawful for the storage facility owner, operator, or lessee, and for the tester thereof to fail to keep a copy of the Certificate of Test Completion for the required five (5) year period.

6. Certificates of Test Completion shall contain a legally authorized form notice to the effect that false statements made knowingly therein are punishable pursuant to Section 210.45 of the Penal Law.
7. A Certificate of Test Completion not properly completed and/or not subscribed by the tester shall not be acceptable to the commissioner.

E. General Provisions and Requirements

1. When an underground storage facility or part thereof is found to be leaking, the portion containing the leak must be immediately emptied of all contents therein and removed from service. It shall be unlawful to cause or permit a leaking underground storage facility or part thereof to remain in service or to continue to retain its toxic or hazardous contents after the owner, operator, or lessee of said storage facility or part thereof knows or should have known of the existence of the leak therein.
2. It shall be unlawful for any person to repair or to permit the repair, in place, of any underground storage facility or part thereof which has leaked or has otherwise failed, for the purpose of reusing said storage facility unless:
 - a. such repair will result in the storage facility or part thereof complying with the requirements of subdivision A above and all regulations and standards promulgated thereunder; and
 - b. such repair occurs pursuant to plans therefor previously submitted to and approved by the commissioner.
3. It shall be unlawful for any person to replace or cause the replacement of any underground storage facility or part thereof for any reason if the replacement facility does not meet the requirements of subdivision A above and all regulations and standards promulgated thereunder.
4. It shall be unlawful for any person to use, maintain, or put into service any underground storage facility or part thereof without first complying with the testing and inspection requirements of subdivision D above and regulations and standards promulgated thereunder.

F. Monitoring and Leak Detection

1. All underground storage facilities or parts thereof must be equipped with means of calculating product delivery and consumption. Accurate records must be kept of all deliveries and consumption and the figures reconciled daily in an approved manner unless a less frequent schedule is allowed by the commissioner.

2. All underground storage facilities or parts thereof must be provided with a means of monitoring frequently and accurately for any leakage and spillage that might occur. All leak detection systems and tanks shall be monitored by the facility operator at least on a weekly basis and the results recorded and kept with the product records. Leak detection and monitoring can be provided by an electrical continuous leak detection system; visually- or float-operated alarms for tanks in pits; pressure, vacuum or fluid level detector for double-walled facilities; observation wells, collection barriers, or membranes for use in high groundwater areas; for gasoline and oil facilities, a perforated, properly designed U-tube installation is acceptable, or other equivalent design approved by the commissioner. Permanent records of all monitoring shall be kept for a period of five (5) years.
3. It shall be unlawful for the owner or other person in possession or control of a storage facility or part thereof to fail to comply with any of the requirements of this subdivision and of any regulations and standards promulgated pursuant thereto.

G. Overfill Protection

1. A means of overfill protection shall be provided for all new underground storage facilities or parts thereof and for all replacement underground storage facilities or parts thereof. Overfill protection shall consist of either an overfill prevention device or a product-tight containment capable of intercepting and preventing the release to the ground or groundwater of an overfill spill.
2. It shall be unlawful for the owner, operator, or lessee to fail to provide satisfactory overfill protection for any new underground storage facility or part thereof in accordance with the provisions of this subdivision and any regulations and standards promulgated pursuant thereto.

H. Removal of Underground Storage Facilities From Service

1. It shall be unlawful for the owner or any other person in possession or control of an underground storage facility or part thereof, to remove it from service unless:
 - a. said storage facility or part thereof is declared abandoned, emptied immediately, and removed within ninety (90) days of so declaring, and is disposed of as junk by first rendering it vapor-free and by sufficiently perforating it so as to render it unfit for further use; or
 - b. said storage facility or part thereof is declared abandoned, emptied immediately, and removed within ninety (90) days for reuse for the storage of toxic or hazardous materials after having met all of the requirements of subdivision A. and all regulations and standards promulgated pursuant thereto; or

- c. said storage facility or part thereof is declared abandoned, emptied immediately, and removed within ninety (90) days for the storage of other than toxic and hazardous materials in which case the facility shall be emptied, cleaned of all residue, and made safe and vapor-free; or
 - d. said storage facility is declared temporarily out of service and maintained in accordance with subdivision 3 of this section; or
 - e. said storage facility or part thereof is declared abandoned, emptied immediately, and made inert by completely filling with sand or concrete within ninety (90) days; or
 - f. said storage facility is declared to be suspected of leaking and maintained in accordance with Section 1210.E.
- 2. Any declaration of facility abandonment or of temporarily taking a facility out of, or returning it to, service, must be made to the commissioner in writing.
 - 3. It shall be unlawful for the owner or any other person in possession or control of any underground storage facility or part thereof to render it temporarily out of service unless said storage facility or part thereof is planned to be returned to active service within two (2) years of the placement of it temporarily out of service, and it is returned to active service within said two (2) years, it is emptied of its contents immediately, and the fill line, gauge opening and pump suction are capped and secured against tampering, and the vent line is left open. No facility in a temporarily out-of-service condition shall be returned to use prior to notification to the commissioner and the successful completion of any tightness testing due under Section 1210.D.
 - 4. It shall be unlawful for anyone to place toxic or hazardous materials in a facility which is temporarily out of service.

Section 1211.0 Outdoor Aboveground Storage Facilities

A. New Storage Facilities

- 1. For the purpose of this subdivision, a new aboveground storage facility shall be one for which construction actually begins on or after November 1, 1982.
- 2. It shall be unlawful to fabricate, construct, install, use, or maintain any new aboveground storage facility or part thereof in a manner which will allow the discharge of a toxic or hazardous material to the ground, groundwaters, or surface waters of Suffolk County.

3. It shall be unlawful to fabricate, construct, install, use, or maintain any new aboveground storage facility or part thereof without having constructed around and under it an impervious containment and dike enclosing the storage facility or part thereof, conforming to the following requirements:
 - a. the volume of the diked area shall be at least 110 percent of the volume of the largest tank contained therein excluding the volume below the dike level occupied by other tanks. Additional volume up to 10 percent of the total volume of all other tanks or vessels contained in the dike area may be required if the configuration, arrangement, and spacing of the tanks and dikes do not meet National Fire Protection Association standards.
 - b. the dikes and the entire area enclosed by the dikes including the area under the tanks shall be made permanently impervious to the types of product expected to be stored in the tanks. A tank cannot be switched from one product to another unless the barrier is impervious to the new material stored.
 - c. drainage of precipitation from within the diked area shall be controlled in a manner that will prevent any toxic or hazardous material from entering the ground, groundwaters, or surface waters of Suffolk County.
4. It shall be unlawful to construct, fabricate, install, use, or maintain any new aboveground storage facility without providing a positive means of detecting an overfilling condition therein before any spillage can occur, which detection system shall include, but shall not necessarily be limited to, both visual and audible alarms at a point on the storage facility most frequently manned. The overflow point must be clearly visible to the operator filling the facility or the operator at the receiving facility where possible. If not possible, adequate means must be provided to immediately detect an overflow.
5. It shall be unlawful to fabricate, construct, install, use, or maintain any new aboveground storage facility or part thereof without conforming to all regulations and standards promulgated pursuant to this section relating to such new storage facilities.
6. It shall be unlawful to fabricate, construct, install, use, or maintain any new aboveground storage facility sitting on the ground and making contact therewith or partially buried in the ground and making contact therewith, or part thereof, unless and until the exterior surface of the area in contact with the ground are cathodically protected in conformance with a design approved by the commissioner.

B. Existing Storage Facilities

1. An existing aboveground storage facility is one for which construction actually begins prior to November 1, 1982.
2. Commencing January 1, 1990, it shall be unlawful for any person to use, maintain, or fill with toxic or hazardous materials any existing aboveground storage facility or part thereof without conforming to all of the requirements of subdivision A above and all regulations and standards promulgated pursuant thereto, with one exception. It will not be required to place an impervious barrier directly beneath an existing tank that is sitting on or partially in the ground and is too large to be moved. In this case, the interior bottom of the tank shall be coated with a glass fiber reinforced epoxy coating or approved equivalent. In achieving the above compliance, the following schedule shall be adhered to:

by January 1, 1985, all interior coating of facilities shall be completed;

by January 1, 1985, all facilities shall be protected against overfill;

by January 1, 1987, installation of cathodic protection shall be completed on all facilities in contact with the ground which were built prior to 1967;

by January 1, 1988, installation of cathodic protection shall be completed on all facilities in contact with the ground which were built between 1967 and 1972;

by January 1, 1989, installation of cathodic protection shall be completed on all facilities in contact with the ground which were built between 1972 and 1977.

3. It shall be unlawful for any person to use, maintain, or fill with toxic or hazardous materials an existing aboveground storage facility or part thereof without complying with the following inspection schedule and all regulations and standards promulgated pursuant thereto, and without submitting to the commissioner a statement of Proof of Inspection.
 - a. any owner or other person in possession or control of an aboveground storage facility or part thereof shall file a Proof of Inspection with the commissioner by January 1, 1985. Where interior coating has not yet been applied, such inspection will be performed before coating.
 - b. for the purpose of this section, inspection means the inspection of all aboveground tanks and other vessels for the storage of toxic or hazardous materials constituting an aboveground storage facility or part thereof.

- c. any inspection of an existing aboveground storage facility or greater than 10,000 gallon capacity or part thereof as required by this subdivision shall be performed in accordance with a written protocol submitted to and approved by the commissioner by an authorized tank inspection firm or person or by a professional engineer licensed to practice professional engineering in the State of New York, and it shall be performed in compliance with any regulations and standards promulgated pursuant to this section relating to such inspections.
 - d. aboveground storage facilities or parts thereof sitting on the ground and in contact therewith or partially buried in the ground and in contact therewith, shall be emptied and cleaned to facilitate inspection of portions thereof not accessible from the outside.
 - e. proofs of Inspection must be filed with the commissioner on a form provided by the commissioner or one acceptably equivalent thereto within thirty (30) days of each inspection and before the tank is refilled, and a copy of such form shall be kept and maintained by both the owner or other person in possession or control of the aboveground storage facility or part thereof and the inspector for a period of not less than five (5) years from the date of the inspection. The Proof of Inspection form shall be subscribed by both the owner or other person in possession or control of the aboveground storage facility inspected and the inspector. This Proof of Inspection form shall contain a legally authorized form notice to the effect that false statements made knowingly therein are punishable pursuant to Section 210.45 of the Penal Law.
4. It shall be unlawful for any person to substantially modify or cause the substantial modification of any aboveground storage facility or part thereof without complying with the provisions of subdivision A above and all regulations and standards promulgated pursuant thereto.

C. General Provisions

- 1. It shall be unlawful for any person to abandon an aboveground storage facility or part thereof without first cleaning out all residue, venting it until dry and safe, and leaving all of the hatches open or with all connections severed and valves blank flanged. For the purpose of this subdivision, an abandoned aboveground storage facility or part thereof means one that has remained substantially empty and unattended for one (1) year or more without being declared temporarily out of service, or has been temporarily out of service for two (2) years or more.
- 2. It shall be unlawful for the owner or other person in possession or control of an aboveground storage facility or part thereof to remove it from service unless:

- a. said storage facility or part thereof is disposed of as junk by first rendering it vapor-free and by sufficiently perforating it so as to render it unfit for further use, and demolishing it and removing it from the site; or
 - b. said storage facility or part thereof is demolished for sale or use elsewhere in which case it must be first cleaned and made vapor-free to be safe in transit, and such reuse shall be in accordance with all pertinent portions of this article if relocation is to be within Suffolk County; or
 - c. said storage facility is declared abandoned; or
 - d. said storage facility is declared temporarily out of service; and
 - e. the commissioner has been notified of the intended status of removal from service.
3. It shall be unlawful for the owner or other person in possession or control of an aboveground storage facility or part thereof to render it temporarily out of service unless said storage facility or part thereof is planned to be returned to active service within two (2) years of its placement temporarily out of service, and it is returned to active service within said two (2) years pursuant to the provisions of subsections C.6 and 7 following, and it is drained of all liquid and the fill line, gauge opening, and discharge line are capped and blind flanged and secured against tampering, and the vent line is left open.
 4. It shall be unlawful for anyone to place toxic or hazardous materials in an abandoned or temporarily out-of-service aboveground storage facility.
 5. It shall be unlawful for any person to bring an abandoned aboveground storage facility back into service without meeting all of the requirements of subsection A above. No abandoned facility shall be brought back into service without a complete inspection acceptable to the commissioner.
 6. It shall be unlawful for any person to bring a temporarily out of service facility back into use after January 1, 1990, without first meeting all the requirements of subsection A above.
 7. An aboveground storage facility properly declared to be temporarily out of service may be returned to service prior to 1990 by written notification to the commissioner if the requirements of Section 1211.B.2 have been met.
 8. It shall be unlawful for the owner or other person in possession or control of an aboveground storage facility or part thereof to fail to empty, clean, and inspect pursuant to subsection B.3.c

above, to file Proof of Inspection pursuant to subsection B.3.e above, to leak test, and/or to recoat if necessary every seven (7) years each tank or vessel for the storage of toxic or hazardous materials within the said storage facility or part thereof.

9. It shall be unlawful for any person to replace or cause the replacement of any aboveground storage facility or part thereof for any reason without complying with the new storage requirements of subdivision A above and without complying with the inspection and Proof of Inspection requirements of subsections B.3.c and B.3.e, respectively.
10. It shall be unlawful for any person to use, maintain, construct, fabricate, modify, or install any aboveground storage facility or part thereof without conforming to all plans and specifications submitted to and approved by the commissioner prior to such use, maintenance, construction, fabrications, modification, or installation.

D. Leaks; Repairs

1. When an aboveground storage facility or part thereof is found to be leaking, it must immediately be emptied of all contents and removed from service unless approval is specifically granted by the commissioner to do otherwise.
2. It shall be unlawful for the owner or other person in possession or control of a leaking aboveground storage facility or part thereof to cause or permit it to remain in service or to continue to retain its toxic or hazardous contents after said owner or other person knows or should have known of the existence of the leak.
3. It shall be unlawful for any person to reuse and repair or cause the reuse and repair of an aboveground storage facility or part thereof which is leaking or which has leaked without;
 - a. performing or having said repairs performed in accordance with a written protocol submitted to and approved by the commissioner prior to said repairs; and
 - b. inspecting or having said leaking storage facility or part thereof inspected by a person whose qualifications are acceptable to the commissioner, with such inspection in accordance with subsection B.3.c. above and filing a Proof of Inspection in accordance with subsection B.3.e. above, with such inspection performed and Proof of Inspection filed prior to reuse of the storage facility or part thereof or filling it with a toxic or hazardous material but after repairs have been effected.

Section 1212.0 Piping, Fittings, Connections

A. New Installations

1. For the purpose of this section, new installations means piping, pipelines, fittings, and connections for use with toxic or hazardous materials for which installation or construction actually begins on or after November 1, 1982.
2. All new installations shall be:
 - a. fabricated, constructed and installed in a manner that will prevent the escape of the toxic or hazardous materials contained therein to the ground, groundwater, or surface waters of Suffolk County; and
 - b. protected against corrosion by the use of noncorrosive materials, cathodic protection with coatings approved by the commissioner of the functional equivalent of the foregoing options approved by the commissioner; and
 - c. designed, constructed, and installed with access points as required by the commissioner to permit periodic pressure testing of all underground piping without the need of extensive excavation; and
 - d. designed, constructed, and installed with a simple, effective, reliable means of monitoring the new installation for leakage including a warning device to indicate the presence of a leak, spill, or other failure or breach of integrity for piping installed underground or in areas where piping is not clearly visible; and
 - e. constructed of double-walled pipe or be constructed in product-tight trenches or galleries where the piping is buried or below grade except that single-walled piping will be allowed for facilities containing products with a specific gravity less than one and only slightly soluble in water such as gasoline and fuel oil.
3. It shall be unlawful for any person to fabricate, construct, install, use, or maintain, or to cause the fabrication, construction, installation, use, or maintenance of any new substantial installation or part thereof for use with toxic or hazardous materials without:
 - a. previously having submitted plans therefor to the commissioner, and without having received approval of said plans;
 - b. without complying with the plans submitted to and approved by the commissioner as required in subsection A.3.a above; and

- c. complying with the provisions of subsections A.1 and A.2 above and any regulations and standards promulgated thereunder.

B. Existing Installations

1. For the purpose of this section, existing installations shall mean piping, fittings, and connections for use with toxic or hazardous materials for which installation or construction actually begins prior to November 1, 1982.
2. Commencing January 1, 1995, it shall be unlawful to use or maintain any existing installation or part thereof in association with any underground storage facility or part thereof unless said existing installation complies with all of the provisions of subdivision A above and all regulations and standards promulgated pursuant thereto.
3. It shall be unlawful for the owner or other person in possession or control of any existing piping installation or part thereof associated with any underground storage facility or part thereof to fail to pressure test said existing piping or part thereof whenever the associated underground storage facility or part thereof is tested.
4. It shall be unlawful for the owner or other person in possession or control of an existing installation or part thereof when testing or contracting to test said installation or part pursuant to subsection B.3 above to:
 - a. fail to test or have said installation or part thereof tested by a person whose qualifications are acceptable to the commissioner; and
 - b. fail to test or have tested said installation in a manner acceptable to the commissioner; and
 - c. fail to test or have installation tested in accordance with a written protocol submitted to and approved by the commissioner prior to said test; and
 - d. fail to test or have tested said installation in accordance with any regulations or standards which may be promulgated under this subdivision relating to said testing; and
 - e. fail to submit to the commissioner within thirty (30) days of said test a completed Certificate of Test Completion form, pursuant to Section 1210.D.3-6 and any regulations and standards promulgated thereunder.

C. General Provisions

1. Notwithstanding the requirements of subsection B.3 above, it shall be unlawful for the owner or other person in possession or control of a new or existing installation or part thereof not to test said installation or part in accordance with the procedures set forth in subsection B.3 above and in all regulations and standards promulgated thereunder whenever the commissioner has determined that such a test is necessary, or whenever the commissioner has ordered that such a test be performed.
2. Whenever an existing or new installation or part thereof is found to be leaking, it must immediately be emptied of all contents therein contained and removed from service.
 - a. it shall be unlawful for the owner or other person in possession or control of said leaking installation or part thereof to cause or permit it to remain in service or to continue to retain its toxic or hazardous contents after said owner or other person knows or should have known of the existence of the leak.
 - b. it shall be unlawful for any person to repair or cause the repair of any new or existing installation or part thereof which has leaked or otherwise failed without performing said repairs or having said repairs performed in a manner approved by the commissioner.
 - c. it shall be unlawful for any person to reuse or cause the reuse of any new or existing installation or part thereof which has leaked or otherwise failed without repairing said installation pursuant to the provisions of subsection C.2.b above and all regulations and standards promulgated thereunder.
 - d. it shall be unlawful for any person to reuse or to cause the reuse of any new or existing installation or part thereof which has leaked or otherwise failed without repairing said installation or part so as to conform to the requirements of subdivision A above and all regulations and standards promulgated thereunder.
 - e. it shall be unlawful for any person to reuse or cause the reuse of any new or existing installation or part thereof which has leaked or otherwise failed without inspecting or having said installation or part inspected subsequent to the completion of any repairs but prior to said reuse by a person whose qualifications are acceptable to the commissioner in accordance with Section 1211.B.3.d and any regulations and standards promulgated thereunder and without filing with the commissioner a Proof of Inspection prior to said reuse in accordance with Section 1211.B.3.e and any regulations and standards promulgated thereunder.

Section 1213.0 Transfer of Toxic or Hazardous Materials

A. Transfer Facilities

1. Transfer facilities means truck fill stands and/or any other facility for the loading or unloading of toxic or hazardous materials.
2. It shall be unlawful for any person to fabricate, construct or install a transfer facility or part thereof without:
 - a. first submitting plans therefor to the commissioner and without first obtaining the commissioner's approval thereof; and
 - b. fabricating, constructing, and installing said transfer facility or part thereof in accordance with the plans submitted and approved pursuant to subsection A.2.a above; and
 - c. providing a simple, effective, reliable means of monitoring the transfer facility or part thereof for leakage or spillage, including a warning device; and
 - d. providing a level of spill protection equivalent to that provided by a fill stand area completely paved and curbed with an impervious material and drained to a holding tank of adequate size to contain any spill that could reasonably be expected to occur from the normal operation of the facility, and roofed so as to exclude precipitation which otherwise would tend to fill the holding tank.
3. It shall be unlawful for any person to operate, maintain, or use a transfer facility or part thereof so as to permit the escape therefrom of toxic or hazardous materials to the ground, groundwaters or surface waters of Suffolk County. All holding tanks associated with spill control shall be maintained in an empty condition at all times to provide maximum storage capacity at the time of a spill.
4. It shall be unlawful for any person to fabricate, construct, install, use, operate, or maintain any transfer facility or part thereof without doing so in accordance with all regulations and standards pertaining thereto which may be promulgated by the commissioner.

B. Transfer Operations

1. It shall be unlawful for any person to transfer, cause the transfer, or permit the transfer of toxic or hazardous materials to or from a storage facility, part thereof, or vehicle, where conditions at the transfer facility are inadequate at the time of said transfer to ensure a safe transfer operation without the occurrence of spills, leaks, or accidents.

2. Failure of a transfer facility to conform and comply with the provisions of subdivisions A and all regulations and standards promulgated thereunder shall constitute a rebuttable presumption that conditions at said transfer facility are inadequate for the purposes of subsection B.1 above.
3. The transfer of toxic or hazardous materials to any storage facility or part thereof which does not comply with all provisions of this article applicable thereto and any regulations and standards promulgated under this article applicable thereto, shall constitute a rebuttable presumption that conditions at said transfer facility are inadequate for the purposes of subdivision B.1 above.
4. Conditions at the transfer facility shall be deemed to be inadequate at the time of a transfer if:
 - a. the transfer facility is constructed so that all possible points of overflow are not visible from the loading and unloading locations; or
 - b. the truck, storage facility, or part thereof being delivered to does not have adequate capacity to contain the amount of toxic or hazardous material being transferred or to be transferred, or if a person performing or causing said transfer does not ensure by some reliable means that the truck, storage facility or part thereof has adequate capacity to contain the amount of toxic or hazardous material being transferred or to be transferred.

Section 1214.0 Indoor Storage Facilities

- A. An indoor storage facility is specifically intended to include within its meaning all tanks, vessels, and appurtenant plumbing which contain, are to contain, or to be used for the transmission of toxic or hazardous materials regardless of the volume of said tanks and vessels and regardless of the duration of time said tanks and vessels may contain the toxic or hazardous materials and regardless of their use.
 1. All processing baths and tanks including dip tanks, rinse tanks, and tanks associated with wastewater treatment, located indoors, shall constitute an indoor storage facility or part thereof.
 2. All portable containers and tanks with an individual volume of greater than 80 gallons, stored or located indoors, and used to contain toxic or hazardous materials, shall be deemed to be an indoor storage facility or part thereof and shall be subject to all of the provisions of this section and any regulations and standards promulgated pursuant hereto, and not the provisions of Section 1215 and the regulations and standards created thereunder.

B. New Storage Facilities

1. A new indoor storage facility or part thereof is one for which construction, fabrication, or installation actually begins on or after November 1, 1982, or one consisting of portable containers and/or tanks each with an individual volume in excess of 80 gallons, for which indoor storage of said portable containers and/or tanks containing toxic or hazardous materials actually begins on or after November 1, 1982.
2. It shall be unlawful to fabricate, construct or install a new indoor storage facility or part thereof unless:
 - a. plans and specifications for said storage facility have been first submitted to and approved by the commissioner; and unless
 - b. said fabrication, construction, or installation is accomplished in accordance with the approved plans and specifications submitted pursuant to subsection B.2.a above; and unless
 - c. said fabrication, construction, or installation is accomplished in accordance with all regulations and standards which may be promulgated under this subdivision; and unless
 - d. the fabrication, construction, or installation provides for impervious secondary containment for the new storage facility or part thereof, equal to, or greater than 110 percent of the entire volume to be contained; and unless
 - e. said storage facility or part thereof is fabricated, constructed, or installed in a manner which will prevent the release into the ground, groundwaters, or surface waters of Suffolk County of any toxic or hazardous materials; and unless
 - f. any open tanks or vessels containing or to contain toxic or hazardous materials within the storage facility or part thereof in a building equipped with a sprinkler system are provided with head deflectors or automatic covers or the equivalent thereof acceptable to the commissioner to prevent the overflow of the tanks by reason of flow from the sprinkler system; and unless
 - g. high level alarms or other adequate means of detecting an impending overfill condition have been provided for all tanks not readily visible by the operator controlling filling.
3. It shall be unlawful to operate, maintain, or use a new indoor storage facility or part thereof unless:

- a. said storage facility or part thereof has been fabricated, constructed, and installed in accordance with all of the provisions of subdivision B above and any regulations and standards promulgated thereunder; and unless
 - b. said storage facility or part thereof has been inspected prior to said operation, maintenance, or use pursuant to the provisions of Section 1211.B.3.c and any regulations and standards promulgated thereunder; and unless
 - c. Proof of Inspection is filed with the commissioner within thirty (30) days of the inspection conducted pursuant to subsection B.3.b above and such filing occurs prior to said operation, maintenance, or use, and said Proof of Inspection conforms to all of the provisions of Section 1211.B.3.e and any regulations and standards promulgated thereunder; and unless
 - d. said storage facility or part thereof is operated, used, or maintained in a manner which will prevent the discharge of toxic or hazardous materials therefrom into the ground, groundwaters, or surface waters of Suffolk County.
4. It shall be unlawful to repair and reuse a new indoor storage facility or part thereof without complying with all of the provisions of subsection B.2 above and all regulations and standards promulgated pursuant thereto.

C. Existing Storage Facilities

- 1. An existing indoor storage facility includes all indoor storage facilities or parts thereof as described in subdivision A above, not within the class of storage facilities described in subsection B.1 above as new indoor storage facilities.
- 2. Commencing November 1, 1982, it shall be unlawful to fabricate, construct, install, modify, operate, maintain, or use any indoor storage facility or part thereof which does not conform to all of the provisions of subdivision B above and all regulations and standards promulgated thereunder.
- 3. It shall be unlawful for any person to operate, maintain, or use an existing indoor storage facility or part thereof in a manner which will allow the discharge of toxic or hazardous materials therefrom into the ground, groundwaters, or surface waters of Suffolk County.

Section 1215.0 Portable Containers and Tanks

A. Storage Facilities

- 1. It shall be unlawful to fabricate, construct, install, or otherwise create a storage facility or part thereof

for portable containers and tanks in excess of 250 gallons total capacity containing toxic or hazardous materials if the facility has to be used for more than thirty (30) days without:

- a. first having submitted satisfactory plans and specifications therefor to the commissioner; and without
 - b. constructing, installing, fabricating, or otherwise creating said storage facility in accordance with the reports and plans submitted pursuant to subsection A.1.a above; and without
 - c. constructing, installing, fabricating, or otherwise creating said storage facility so as to prevent the discharge of any of the toxic or hazardous contents of the portable containers therein to the ground, groundwaters, or surface waters of Suffolk County; and without
 - d. providing a chemically resistant pad on which to place the portable containers or tanks, impervious to the toxic or hazardous materials being stored in said containers and tanks; and without
 - e. providing a complete impervious containment of the storage facility or part thereof sufficient to contain at least thirty (30) percent of the volume to be stored; and without
 - f. constructing, fabricating, installing, or otherwise creating a storage facility or part thereof in accordance with all regulations and standards promulgated under this subdivision.
2. It shall be unlawful for any person to use, maintain, or operate a storage facility containing portable containers or tanks for the storage of toxic or hazardous materials without:
- a. preventing the discharge of any of the toxic or hazardous contents of the portable containers or tanks to the ground, groundwaters, or surface waters of Suffolk County; and without
 - b. properly securing the portable containers or tanks containing toxic or hazardous materials so as to protect them from vandalism, unauthorized access and damage by traffic, machinery or falling objects; and without
 - c. storing the portable containers and tanks containing toxic or hazardous materials indoors except where such storage is prevented by fire regulations, or where sufficient evidence is presented that physical or financial constraints of the

facility make indoor storage impractical. Waiver of the indoor storage requirement shall be only by permission of the commissioner; and without

- d. protecting any outdoor storage of portable containers or tanks containing toxic or hazardous materials from damage from heat, cold, rust, and other weather-related conditions; and without
- e. complying with all regulations and standards promulgated relating to the maintenance, use, or operation of a storage facility containing portable containers containing toxic or hazardous materials; and without
- f. complying with all of the provisions of subdivision B below and any regulations and standards promulgated thereunder.

B. Handling of Portable Containers or Tanks

It shall be unlawful for the owner or other person in possession or control of a storage facility containing portable containers or tanks which contain toxic or hazardous materials to:

- a. stack said portable containers or tanks more than two (2) high without using a properly designed storage rack for that purpose, or to attempt any stacking without adequate equipment; and
- b. store said portable containers or tanks in a manner so as to prevent all sides thereof from being available for inspection; and
- c. fail to maintain current inventory records indicating deliveries, consumption, sale, and final disposal of all toxic or hazardous materials stored in portable containers or tanks and to maintain said records for five (5) years from the occurrence recorded; and
- d. fail to handle the said portable containers or tanks in accordance with any regulations and standards promulgated pursuant to this subdivisions; and
- e. store said portable containers in numbers in excess of the maximum allowed by the approved design of the storage facility.

C. Inspections

- 1. It shall be unlawful for the owner or other person in possession or control of a storage facility containing portable containers or tanks for the storage of toxic or hazardous materials to fail to have said facility or part thereof containing said portable containers or tanks inspected:

- a. prior to application for the renewal of a permit to operate a storage facility issued pursuant to Section 1207; and
 - b. subsequent to any substantial modification of the storage facility or part thereof containing said portable containers or tanks, and prior to the using or putting into service a storage facility or part thereof; and
 - c. prior to the using or putting into service said storage facility or part thereof after repairs have been performed on it.
- 2. It shall be unlawful to fail to have the inspections required by subsection C.1 above performed in accordance with the provisions of Section 1211.B.3.c and all regulations and standards promulgated pursuant thereto and those promulgated under this subdivision.
 - 3. It shall be unlawful to fail to file a Proof of Inspection with the commissioner within thirty (30) days of the performance of an inspection required by subsection C.1 above complying with the provisions of Section 1211.B.3.e and any regulations and standards promulgated pursuant thereto.
- D. It shall be unlawful for any person to repair or modify or to cause or permit said repairs or modifications of a storage facility or part thereof containing portable containers or tanks for the storage of toxic or hazardous materials without performing said repairs or modifications or having them performed pursuant to a written protocol previously submitted to and approved by the commissioner.
 - E. At the discretion of the commissioner, Sections 1215.A.1.d-f, and 1215.C, may be waived for temporary facilities such as spill cleanup operations.

Section 1216.0 Bulk Storage of Toxic or Hazardous Materials

- A. It shall be unlawful for any person to fabricate, construct, install, repair, or modify any bulk storage facility or part thereof without doing so in accordance with a written protocol previously submitted to and approved by the commissioner.
- B. It shall be unlawful for any person to fabricate, construct, install, modify, repair, use, maintain, or operate any bulk storage facility or part thereof without:
 - 1. Doing so in a manner that will prevent the toxic or hazardous materials contained therein from coming into contact with precipitation or other sources of moisture unless there is provision made for collecting and treating the leachate and runoff generated so as to prevent a discharge of toxic or hazardous materials to the ground, groundwaters, or surface

waters of Suffolk County and so as to prevent the development of an explosive, incendiary or other hazardous or dangerous condition; and without

2. Providing for the segregation of, and without segregating potentially reactive chemicals which are toxic or hazardous materials or which may react so as to form toxic or hazardous materials, may react to present or cause a hazardous or dangerous condition; and without
 3. Providing for and storing bagged toxic or hazardous materials on pallets, and within a roofed structure which prevents precipitation from reaching the bags; and
 4. In the case of an indoor bulk storage facility, without providing an impervious floor without floor drains with a surrounding impervious dike so as to provide containment for hazardous or toxic materials generated from firefighting within the building; and without
 5. Providing for and providing adequate security so as to protect the storage facility and toxic or hazardous contents therein from vandalism and accident; and without
 6. Complying with any regulations and standards which may be promulgated pursuant to this section.
- C. Road deicing salt and other deicing materials are toxic or hazardous materials. In addition to the foregoing provisions of this section, road deicing salt may be stored near the shore or other areas where no adverse environmental impact will occur without brine control so long as the commissioner's approval for such a storage facility has been applied for and received in advance.

Section 1217.0 Reporting, Records, Cleanup

- A. It shall be unlawful for the owner or other person in possession or control of any storage facility or part thereof to fail to report any unauthorized discharge, spill, leak, or recognizable loss of toxic or hazardous materials therefrom or the failure of said storage facility to the commissioner within two (2) hours of the time such owner or other person has sufficient evidence that he knew or should have known of said unauthorized discharge, spill, leak, loss, or failure.
1. A report to the commissioner shall not be deemed compliance with any reporting requirement of any other Federal, State, or local law.
- B. It shall be unlawful for the owner or other person in possession or control of any storage facility or part thereof to fail to keep records in writing reflecting the types and amounts of toxic or hazardous materials stored in the said storage facility or part thereof at any given time.

1. It shall be unlawful for the owner or other person in possession or control of any storage facility or part thereof to fail to keep records of the disposal or other transfer in or out of the said storage facility or part thereof, such records reflecting the types and amounts of toxic or hazardous materials involved in the transfer. The name and vehicle license and registration numbers of the transporter, and the intended destination must also be included if the material is waste.
 2. It shall be unlawful for any person required to keep records by any provision of this article to fail to maintain said records available for inspection by the commissioner for at least five (5) years from the date of the event, occurrence, or transaction recorded. Copies shall be provided by the owner or operator for the commissioner if requested.
 3. It shall be unlawful for any person required to keep records by any provision of this article to fail to keep, record, and maintain said records in accordance with any regulations and standards promulgated pursuant to this section.
- C. It shall be the responsibility and obligation of any person who discharges, or causes or permits the discharge of any toxic or hazardous material to the ground, groundwaters, or surface waters of Suffolk County to cease said discharge, to reclaim, recover, and/or properly dispose of the discharged toxic or hazardous material and any other substance contaminated therefrom, to restore the environment to a condition and quality acceptable to the commissioner, and to repair any damages caused thereby, all to the satisfaction of the commissioner.
1. It shall be unlawful for the owner or any other person in possession or control of any source discharging toxic or hazardous materials to the ground, groundwaters, or surface waters of Suffolk County to fail to cease said discharge immediately upon obtaining knowledge or notice of its existence.
 2. It shall be unlawful for the owner or any other person in possession or control of any source discharging or which has discharged toxic or hazardous materials to the ground, groundwaters, or surface waters of Suffolk County to fail to reclaim, recover, and/or dispose of the discharged toxic or hazardous materials. Where time permits, cleanup shall be in accordance with a written protocol previously submitted to and approved by the commissioner.
 3. It shall be unlawful for the owner or other person in possession or control of any premises or place to fail to reclaim, recover, and/or otherwise dispose of any toxic or hazardous materials discharged thereto, in accordance with a written protocol previously submitted to and approved by the commissioner, in the event the persons described in subsection C.2 above are not ascertainable or otherwise fail to comply with the provisions of subsection C.2. This provision shall not abridge any existing

right of action in any person, nor shall it create any new right of action in any person.

4. It shall be unlawful for the owner or any person in possession or control of any source which has discharged toxic or hazardous materials to the ground, groundwaters, or surface waters of Suffolk County to fail to restore the environment contaminated or damaged by the said discharge to its condition prior to the discharge, repairing any damages caused thereby in accordance with a written protocol previously submitted to and approved by the commissioner.
5. It shall be unlawful for any person required by this article or by any order of the commissioner to reclaim, recover, or otherwise dispose of discharge toxic or hazardous materials and other substances contaminated therefrom and/or to restore the environment to the condition that existed prior to the discharge of toxic or hazardous materials thereto, to fail to perform said required acts pursuant to any regulations and standards promulgated pursuant to this subdivision.

Section 1218.0 Confidentiality of Records

- A. Any information relating to secret processes, or methods of manufacture or production, obtained in the course of an inspection or investigation, or submitted to the department, shall be kept confidential except for the use and purpose of the department in the enforcement of this article and the rules and regulations promulgated thereunder.
- B. In the event that a person claims to be unable to file complete reports and/or plans and specifications on the grounds that it relates and is part of a secret process or method of manufacture or production, an affidavit signed by an authorized person must be filed with the commissioner, stipulating:
 1. The location of the process or the equipment, specifying the building and the section or part of the building in which it is located;
 2. In general terms, the name of the process equipment;
 3. The means to be employed for control of water contaminants;
 4. The nature and estimated rate of discharge of contaminants to ground or surface waters;
 5. The authority of the person signing the affidavit; and
 6. A statement that the installation is related to a secret process or method of manufacture or production.

In the event any such affidavit is filed, the commissioner shall determine the extent to which an exemption should be granted. Any information relating to secret processes, methods of manufacture or production which may be required, ascertained, or discovered by the commissioner shall not be disclosed and shall be kept confidential.

Section 1219.0 Posting and Labeling

- A. It shall be unlawful for the owner or other person in possession or control of any place, building, land, vehicle, or thing to store toxic or hazardous materials therein without conspicuously posting a notice threat or thereon warning of the presence of such materials and providing any safety information necessary to protect the public and assist emergency response personnel in carrying out their responsibilities.
- B. It shall be unlawful for any person to use, maintain, or operate any storage facility or part thereof without:
 - 1. Clearly labeling the specific contents of each portable container conspicuously on said container; and
 - 2. Clearly labeling the specific contents of each indoor and aboveground tank or vessel conspicuously thereon; and
 - 3. Clearly labeling the specific actual, intended and possible contents of piping associated with any storage facility or part thereof at or near the points of filling or drawing; and
 - 4. Conspicuously posting a permit issued pursuant to this article.
- C. It shall be unlawful for any person to falsely post or label any container or storage facility or to post an invalid permit.
- D. It shall be unlawful for any person to use, maintain, or operate any storage facility or part thereof without complying with all regulations and standards promulgated pursuant to this section.

Section 1220.0 Waivers

Any requirement, mandate, prohibition, or time limitation imposed by this article or any regulation, standard or order generated hereunder, may be waived or modified by order of the commissioner.

ORDINANCE NO. 810319-M

AN ORDINANCE ADDING CHAPTER 29A, ARTICLE 1 TO THE CODE OF THE CITY OF AUSTIN; DECLARING CERTAIN FINDINGS OF FACT; PROVIDING STANDARDS FOR THE DEVELOPMENT OF LAND LOCATED WITHIN THE AQUIFER-RELATED WATERSHED OF WILLIAMSON CREEK; SUSPENDING THE RULE REQUIRING THAT ORDINANCES BE READ ON THREE SEPARATE DAYS; DECLARING AN EMERGENCY AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. The Code of the City of Austin of 1967 is amended by adding a Chapter 29A, Article I, to read as follows:

CHAPTER 29A
SPECIAL REQUIREMENTS FOR SITE DEVELOPMENT IN WATER QUALITY
RELATED ENVIRONMENTALLY SENSITIVE AREAS

ARTICLE I. AQUIFER-RELATED WILLIAMSON CREEK WATERSHED

Division 101. General Provisions

Section 101.1 Findings and Objectives

- A. The City Council of the city of Austin, Texas, hereby makes the following findings:

The Edwards Aquifer contributes to the domestic water supply of the city of Austin; and,

The City Council of the city of Austin, Texas, is the trustee of the natural environment of Barton Springs, the Edwards Aquifer, and the Williamson Creek watershed for future generations of citizens of Austin and its environs; and

Barton Springs, fed by the Edwards Aquifer, provides significant and irreplaceable recreational opportunities to the citizens of Austin and its environs; and,

Development activities in the Aquifer-Related Williamson Creek watershed can result in damage to the natural environment of, the recreational qualities of, and the quality of the water in, the Edwards Aquifer, and Barton Springs; and,

The Williamson Creek watershed is facing rapid development; and,

The continued economic growth of Austin is dependent on a pleasing natural environment, adequate quantity and quality supplies of water, affordable housing, and recreational opportunities in close proximity to Austin; and,

The Edwards Aquifer, Barton Springs, and the Aquifer-Related Williamson Creek watershed must be protected in order to preserve the health, safety and welfare of the citizens of Austin and its environment; and,

It appears to the City Council of the city of Austin that development in those portions of the watersheds of Williamson Creek, which are within the Edwards Aquifer Recharge Zone or the Edwards Aquifer Contributing Recharge Zone, may adversely affect the Edwards Aquifer; and,

The City Council of the city of Austin is desirous of adopting appropriate development rules and regulations for the purpose of protecting the Edwards Aquifer.

Section 101.2 Application of Article

- A. This article sets out special requirements for the development of land located in the Aquifer-Related Williamson Creek watershed, as defined herein. A person wishing to develop land in this area must comply with both these special requirements and with the applicable requirements, insofar as they do not conflict with this article, in Chapter 20 of this code.
- B. No development shall be undertaken on any land, tract, parcel, or lot within the Aquifer-Related Williamson Creek watershed until a site development permit for said development has been obtained from the Director of Public Works. This requirement shall not apply to any single-family or duplex residential structures or appurtenance thereto where only one such structure is built per legal lot, or to a development within a recorded subdivision which was finally approved or disapproved by the Planning Commission prior to December 18, 1980.
- C. In case of conflict between the requirements of this article and those of Chapter 29 or some other ordinance, the requirements of this article govern.
- D. The Director of Public Works, in cooperation with the directors of Environmental Resource Management and Planning, shall design and administer a system, including necessary forms, that coordinates the requirements of this article and Chapters 29, 41 and 41A, minimizes duplication of requirements and conflict between them, and facilitates the expeditious processing of site development applications.
- E. Any project that includes only development that is permitted under Chapter 41A shall be exempt from the requirements of this article. However, any additional development that is not specifically included in a Chapter 41A permit shall comply with the provisions of this article.

Section 101.3 Burden of Proof

An applicant for a site development permit under this article must establish that his/her plan complies with the requirements of this article and with the applicable requirements of Chapter 29 of this code.

Section 101.4 Definitions

- A. The definitions in Chapter 29 of this code also apply to this article, insofar as they do not conflict with the definitions contained herein.
- B. In this article the following special terms have the following meanings:

Aquifer-Related Williamson Creek Watershed--All land area in the Williamson Creek watershed that is within the Edwards Aquifer Recharge Zone or that naturally drains to, or is otherwise located upstream from, the Recharge Zone. The approximate boundaries of the Aquifer-Related Williamson Creek watershed are depicted on a map attached to this ordinance as Exhibit A. Copies of the map are available for inspection at the offices of the City Clerk, Planning Department, Public Works, Environmental Resource Management, and the City/County Health Department. All questions concerning the exact boundary shall be determined by the Director of Public Works.

Centerline of a Waterway--The centerline of the waterway refers to existing topographically defined channels. If not readily discernible, the centerline shall be determined by (first) the low flowline, or (second) the centerline of the two-year floodplain.

Commercial Lot--Any lot not to be used as single- or two-family residential, recreational, or open space.

Critical Water Quality Zone--Lands and waters as defined in Sections 103.3.A and 103.3.B.

Edwards Aquifer--The waterbearing substrata also known as the Edwards and Associated Limestones Aquifer includes the following geological formations: Comanche Peak, Edwards, Kiamichi, and Georgetown.

Edwards Aquifer Recharge Zone--The interim boundaries of the recharge zones shall encompass all land over the Edwards Aquifer recharging the same, as determined by the outcrop of the geologic units comprising the Edwards Aquifer, including such areas overlain with quaternary terrace deposits (this zone is shown in Exhibit A). Permanent boundaries may be determined at a later date as part of a more comprehensive delineation of the entire recharge zone.

Impervious Cover--Roads, parking areas, buildings, and other impermeable construction covering the natural land surface; this shall include, but not be limited to, all streets and pavement within the project boundaries.

Intermediate Waterway--Any natural channel for surface water drainage that drains an area greater than 320 acres but less than 640 acres under predeveloped conditions.

Major Waterway--Any natural channel for surface water drainage that drains 640 acres or more under predeveloped conditions.

Minor Waterway--Any natural channel for surface water drainage that drains an area greater than 64 acres but less than 320 acres under predeveloped conditions.

Overland Flow--Stormwater runoff that is not confined by any natural or manmade channel such as a creek, drainage ditch, storm sewer, or the like.

Residence Time--The average residence time of a basin is equal to the volume of the basin divided by the average rate of outflow.

Division 102. Site Development Plan

Section 102.1 Site Development Permit Required

No development shall be undertaken on any land, tract, parcel, or lot which is within the Aquifer-Related Williamson Creek watershed until a site development permit is issued by the Director of Public Works to the owner of such property; provided, that the requirements of this article shall not apply to the construction of single-family or duplex residential structures or appurtenances thereto where only one such structure is built per legal lot; and provided further, that no waterway development permit is required where a site development permit has been issued for an area within the city limits where all requirements of Sections 29-1 through 29-3.7 are met.

Section 102.2 Application for Site Development Permits; Contents

Application for a site development permit required under Section 29A-102.1 shall be submitted to the Director of Public Works and shall be accompanied by a site development plan. The application and site development plan shall contain the following information unless the Director of Public Works determines that because of the scope and nature of the proposed development some of the information is unnecessary:

- A. The date, scale, north point, and key plan showing the location of the tract on which the development is to take place;
- B. The existing boundary lines and acreage of the tract on which the development is to take place, and the common boundary lines and names of the owners of adjacent properties;
- C. The identification of all critical water quality zones and all such areas with restrictions required by this article;
- D. A detailed erosion-sedimentation control plan and construction sequencing plan required by Section 103.2; and
- E. A detailed drainage plan and street layout that comply with the requirements of this article.

- F. A showing of compliance with the applicable requirements of this article for control strategies.
- G. A slope map, drawn to a scale of one hundred feet to one inch, or in an appropriate scale as determined by the Director of Public Works. The slope map should display, according to the best information available, topographic information and features (including, but not limited to, faults and fractures along waterways and sink holes) the 100-year and 25-year floodplains, the slope classes, and the boundaries of the proposed development. The slope map shall separate the proposed development into three slope classes of (1) slopes greater than 20 percent, (2) slopes of 10 percent to 20 percent, (3) slopes less than 10 percent gradient; and shall represent each class with a distinct color or coding.
- H. The location, type of use, and total percentage of proposed and existing impervious cover on the site for each slope category, in conformance with Section 104.2.
- I. Location of all temporary and permanent runoff detention basins, constructed and altered waterways and other physical facilities to be installed to comply with the terms of this article.
- J. Final plans for wastewater line installation shall be submitted with the site development plan and shall include the use of minimum construction corridor widths, minimum use of blasting that might disturb subsurface faults and fractures, and the use of environmental protection measures and vegetative restoration as quickly and thoroughly as possible.
- K. Special notes or attachments as may be required by other sections of this article.

Section 102.3 Certification by a Registered Professional Engineer

No plans and specifications called for in this article shall be accepted, reviewed, or approved by the Director of Public Works unless accompanied by the certification of a Registered Texas Professional Engineer that (1) the development plan is complete, (2) the technical data is accurate, and (3) the requirements of this article are met.

Division 103. Control Strategies--Minimum Level of Performance

Section 103.1 Special Controls Required

In addition to satisfying the requirements of Chapter 29 of this code, all developments of land within the Aquifer-Related Williamson Creek watershed, as specified in Section 101.2 of this section, shall comply with the provisions of this division.

Section 103.2 Construction Sequencing and Erosion Controls

- A. A comprehensive and detailed erosion and sedimentation control plan and report shall be submitted with the application. The report shall

specify maintenance of controls. All items noted in the erosion control and construction sequencing plans shall also be included in the final construction plans. A copy of the report and plan shall be made available for the Austin City Department of Public Works and 48 hours notice shall be given to same before actual construction begins.

1. The report shall include the following items:
 - a. construction sequencing as it relates to placement, maintenance, removal, or temporary erosion controls, and restoration measures. The sequencing plan schedules these items in the overall scheme of development.
 - b. a list of such erosion controls and maintenance thereof.
 - c. slope stabilization techniques to be employed.
 - d. restoration plans including vegetative types and acceptability note for the city.
2. The erosion control and construction sequencing plan shall include the following items:
 - a. Location of temporary erosion controls with maintenance note. The plan shall show the physical details of the controls.
 - b. A construction sequencing list, including the timing of the use of various controls in relation to steps in the construction.
 - c. Restoration techniques and acceptability note.
- B. The development shall comply with the erosion control and restoration measures in the Austin City Erosion and Sedimentation Control Manual, as approved by City Council. Until the time that such controls are adopted by City Council the interim guidelines shall be the Soil Conservation Service manual "Erosion and Sediment Control Guidelines for Developing Areas in Texas." In both cases, the final judgment on the erosion controls and construction sequencing shall be made jointly by the Director of Public Works and the Director of the Office of Environmental Resource Management, and shall be made within ten days of the filing of the plan. The provisions of Section 105.1 shall apply.
- C. After two days written notice to the person holding the site development permit, modifications from the approved erosion control and construction sequencing plans may be made in the field if the City Inspector deems the controls or sequencing inappropriate or inadequate and has confirmed his/her findings with the Director of Public Works and the Director of the Office of Environmental Resource Management, and has their written approval.

D. The clearing of land shall conform to the following criteria:

1. No clearing or rough cutting shall be permitted prior to the issuance of a site development permit by the Director of Public Works. Limited clearing and rough cutting for soil testing and surveying may be allowed.
2. No clearing or rough cutting for purposes other than paragraph (1) above and construction of temporary erosion and sedimentation controls as per approved plans shall be permitted until these controls are in place.
3. Clearing for the temporary storage of spoil or construction equipment, or for the permanent disposal of fill material or spoils, shall be so designated on the site plan unless he provides erosion and sedimentation controls and the continuing maintenance thereof acceptable to the Director of Public Works.
4. Vegetation within the Critical Water Quality Zone shall not be disturbed except for purposes consistent with development activity permitted by Section 103.3.
5. If an applicant does not comply fully with his approved construction sequencing and erosion control plan, the Director of Public Works shall notify him in writing that the city may correct and revegetate the disturbed area at his expense unless he provides erosion and sedimentation controls and the continuing maintenance thereof acceptable to the Department of Public Works.

Section 103.3 Critical Water Quality Zone

- A. Critical Water Quality Zones shall be established along all creeks and tributaries with drainage basins greater than 64 acres in size. The zone line shall be delineated parallel to each such creek or tributary according to the size of the drainage basin:
1. For minor waterways, the zone line shall be defined by the limits of the 100-year floodplain, provided that it shall never extend beyond 100 feet on each side from the centerline of the waterway.
 2. For intermediate waterways, the zone line shall be defined by the 100-year floodplain, provided that it shall never be located greater than 200 feet nor less than 100 feet on each side from the centerline of the waterway.
 3. For major waterways, the zone line shall be defined by the 100-year floodplain, provided that it shall never be located greater than 400 feet nor less than 200 feet on each side from the centerline of the waterway.

- B. The floodplain delineation shall be based on a channel in its unaltered state, and shall assume developed watershed conditions.
- C. The Critical Water Quality Zone shall remain free of all construction activity, development, and alterations except that the following may be permitted:
 - 1. Arterial, collector, and residential street crossings only as provided below:
 - a. major waterways may be crossed by arterial streets that are identified in the Austin City Roadway Plan, as approved by City Council.
 - b. intermediate waterways may be crossed by arterial and collector streets, provided, however, that no collector street crossing shall be within one mile of any other crossing of a collector street or arterial street on the same waterway.
 - d. minor waterways may be crossed by a residential street only with a variance approved by the Planning Commission.
 - e. the Planning Commission may vary these requirements prior to site plan approval after receiving reports from the Directors of Public Works, Urban Transportation and Environmental Resource Management.
 - 2. Utilities as provided by Sections D and E below.
 - 3. Fences that do not obstruct floodflows.
 - 4. Public and private parks and open space, with development in the parks and open space limited to trails and facilities (other than stables and corrals for animals) for hiking, jogging, nonmotorized biking, and nature walks.
 - 5. Water quality detention basins as per Section 104.1.D.
- D. All utilities other than wastewater shall be located outside the Critical Water Quality Zone, except for crossings, and shall comply with the provisions of the Utility Assignment Policy.
- E. Wastewater trunk lines and lateral lines shall be located out of the Critical Water Quality Zone whenever possible, except for crossings. At the time of site development plan review, the Director of Environmental Resource Management shall make a report to the Director of Public Works on any significant environmental impact and possible alternatives related to wastewater line locations in the Critical Water Quality Zone. In no case shall any wastewater line be located less than 100 feet from the centerline of a major waterway or 50 feet from the centerline of an intermediate waterway or 25 feet from the

centerline of a minor waterway unless approved by the Director of Public Works upon consideration of reports by the Directors of Environmental Resource Management and Water and Wastewater, and the applicant has shown the installation outside of this zone is physically prohibitive. Connections to wastewater lines that have already been approved by the city do not require additional city approval under this section.

Section 103.4 Overland Flow and Natural Drainage

- A. Purpose. Natural drainage patterns must be preserved whenever possible and the amount of impervious cover limited to prevent erosion and attenuate the harm of contaminants collected and transported by stormwater. Open surface drainage through grass-lined swales shall be preferred. Drainage objectives can best be accomplished by avoiding the use of streets and street rights-of-way as the central drainage network whenever practical. Drainage swales conveying stormwater runoff from developed areas shall be located to avoid sink holes, faults, and fractures to the greatest extent practicable.
- B. Construction of enclosed storm sewers and impervious channel linings shall be permitted only when the Director of Public Works, on the basis of competent engineering evidence, concludes that such storm sewers or impervious linings are the only justifiable option available. In the event that stormwater drainage systems and/or culverts are necessary, such systems shall be designed to mitigate their impact on water quality through the use of approved control strategies to control sediment and dissipate energy and through the use of multiple smaller outlets whenever practical and by locating discharges to maximize overland flow.

Section 103.5 Velocity Attenuation and Surface Drainage Channels

- A. All drainage channels that are to be constructed, or that are to be altered for drainage purposes or for purposes other than street and utility crossings, shall conform to the criteria of this section.
- B. Requirements for design:
 - 1. Surface drainage channels shall be designed to minimize potential erosion and to maximize the bottom width to flow depth ratio:
 - a. channel cross-sections shall be trapezoidal in configuration.
 - b. side slopes of channels shall be no steeper than 4 horizontal to 1 vertical.
 - c. for a six-month design storm assuming wet antecedent conditions, channel bottom flow depth shall not exceed four inches and design flow velocity shall be 2.5 feet per second.

- D. All constructed and altered drainage channels shall be stabilized and vegetated immediately after final grading.
- E. The Director of Public Works may allow exceptions to the design flow velocities or depths in the following situations in conformance with the purpose of Section 103.4:
 - 1. On lands with greater than 15 percent slope or less than 2 percent slope, provided that the design flow velocity shall never be greater than three feet per second.
 - 2. In limited transitional channel sections (such as culverts, culvert entries and exits, drop sections, sharp bends, and water quality basin entries).

Section 103.6 Wastewater Collection and Disposal

- A. Organized Sewer Systems. All construction of sewer systems within the Edwards Aquifer Recharge Zone shall comply with the special standards of Section VII-B of the Austin City manual, "Standard Specifications for Water and Wastewater Utility Construction."
- B. Individual Disposal Systems. The minimum size of all lots not served by organized wastewater collection and disposal systems shall be at least one-acre exclusive of all land within a 25-year floodplain or of a slope greater than 17 percent gradient. Unsewered lots overlying the Aquifer Recharge Zone shall use alternative sewage disposal systems that must be lined to prevent any infiltration to the aquifer and shall be installed in accordance with Ordinance 720928-A, as amended.

Section 103.7 Street Standards

- A. Low density alternative urban street standards, as provided by Ordinance No. 800207-J establishing Sections 41-38.1 through 41-38.5 in the Code of the city of Austin, may be used in the Aquifer-Related Williamson Creek watershed. Drainage from the streets shall comply with Sections 103.4 and 103.5 of this article. Curb cuts for the purpose of overland flow and velocity attenuation and surface drainage channels shall be encouraged.
- B. All driveways shall be designed so that drainage flow from a 25-year storm shall never exceed a depth of 12 inches on any portion of the driveway.

Division 104 Additional Control Strategies

Section 104.1 Detention, Sedimentation and Filtration for Water Quality Control

- A. All developments of land within the Aquifer-Related Williamson Creek watershed with projected impervious cover exceeding 18 percent shall comply with the provisions of this division in addition to all the

control strategies of Division 103 and in addition to satisfying the requirements of Chapter 29 of this code.

B. Water quality detention-sedimentation basins shall be situated and constructed to capture and hold the first 0.5 inch of drainage from streets, parking areas, and other areas developed under this article.

1. The basins shall be designed to contain the first 0.5 inch of runoff from all areas that drain into them from the site.
2. The basins and drainage into the basins shall be designed to capture and isolate the first flush runoff from the project. All subsequent runoff in excess of the design capacity of the basins shall bypass the basins and remain segregated from the contained runoff waters in a peak shaving basin up to the capacity specified in the Drainage Criteria Manual.
3. The design of all water quality basins shall allow an average residence time of 24 hours for the first half inch of runoff.
4. All basins located in the aquifer recharge zone shall have impervious liners to prevent seepage to groundwater.
5. Input to and release from detention basins shall utilize grass-lined swales and/or overland flow dispersion measures in conformance with Sections 103.4 and 103.5 above.

C. Water Quality Filtration

1. Sedimentation basins detaining runoff drainage from commercial areas and areas where the projected impervious cover exceeds 25-percent shall, in addition to the other requirements of this section, release all water through a filter media.
2. A filtration-sedimentation basin shall be required to serve each commercial lot provided that adjacent commercial lots may jointly use such basin and that they shall be situated and constructed to capture the first 0.5 inch of runoff.

D. No portion of a water quality detention basin shall be located within 200 feet from the centerline of an existing channel of a major waterway nor within 50 feet from the centerline of an intermediate waterway.

E. Limited blasting shall be permitted for the excavation and construction of detention basins located within Critical Water Quality Zones in the aquifer recharge zone.

F. After receiving reports from the Directors of Public Works and Environmental Resource Management, the Planning Commission may grant variances from the terms of Section 104.1.D above for special circumstances where topography dictates a lesser setback.

- G. No basins in the recharge zone shall allow direct infiltration to groundwater.

Section 104.2 Maximum Development Intensity

- A. The projected impervious cover on any single commercial lot shall not exceed 40 percent for those portions within the following areas:
1. Within 200 feet of the Critical Water Quality Zone of a major waterway.
 2. Within 100 feet of the Critical Water Quality Zone of an intermediate waterway.
- B. No commercial development shall occur within 100 feet of the centerline of a minor waterway.
- C. Unless the provisions of (a), above, are more restrictive, no commercial development shall exceed 65 percent cover on slopes of 10 to 20 percent gradient, nor 25 percent on slopes greater than 20 percent gradient provided, however, that no multifamily residential development shall exceed 65 percent impervious cover on slopes of 0 to 20 percent gradient, nor 25 percent on slopes greater than 20 percent gradient.
- D. Detention basins, swales and other conveyances for drainage shall not be calculated as impervious cover.

Section 104.3 Street Improvement Projects/Maintenance

- A. Any street project that is to be constructed entirely on public rights-of-way, is designed to provide adequate service to approved development, has been identified for exemption, discussed at public hearings, and approved by the City Council may be exempt from the requirements of this division and Section 29-55.3.C of this code.
- B. Street maintenance projects that do not increase the impervious cover to beyond that of the original street shall be exempt from the provisions of this article.

Section 104.4 Limitations on Pollutants

- A. No permanent waste disposal sites for spoils or organic, chemical or toxic materials shall be allowed in the Edwards Aquifer-Related area of the Williamson Creek watershed.
- B. Facilities used for the underground storage of hydrocarbon products, and other toxic chemicals and hazardous materials (as designated by the Water Quality Review Board) shall be of double-wall construction. In addition, methods for detecting leaks in the wall of the storage facility shall be included in the facility's design and construction.

- C. Facilities used for the aboveground storage of hydrocarbon products, and other toxic chemicals and hazardous materials (as designated by the Water Quality Review Board) shall be constructed only within controlled drainage areas sized to capture any and all spillage that may result from ruptures or leakage from the facilities or appurtenances thereto. The controlled drainage area shall be constructed of material that is impervious to the product being stored, leaked, or spilled. Any and all spillage from such storage facilities and associated uses at the site shall be disposed of outside of the Edwards Aquifer-Related area of the Williamson Creek watershed.
- D. All commercial parking lots or other parking lots containing impervious cover of at least 5,000 square feet shall be vacuum swept at least three times a week on three separate nonconsecutive days. Failure to do so will result in a fine of at least fifty dollars per day. The chief corporate officer of any corporate entity or the owner of any noncorporate entity shall be subject to this fine.

Division 105 Technical Review

Section 105.1 Water Quality Review Board

- A. An applicant may be permitted to use alternative control strategies in lieu of those required by this article only with the approval of the Water Quality Review Board as established by Section 41-105.1 of this code. The Water Quality Review Board shall meet, hear the applicant, and rule on the appropriateness of the alternative control strategies within 30 days after the applicant has requested Board approval and submitted all necessary supporting data. The applicant shall have the burden of proof of the validity of all supporting data. The Board shall disapprove all alternative control strategies that are not proven to be equal to, or to exceed, the abilities of the control strategies required by this article to mitigate the pollution impacts of rainfall runoff. The applicant may resubmit strategies if the Board disapproves because of inadequate support data. Board approval of a new control strategy shall not constitute an addition to this article. Subsequent applicants desiring to use similar control strategies must prove the adequacy of such strategies for each particular site. The validity of the proposed alternative strategies must be certified by a registered Texas Professional Engineer with expertise in the area of concern, and must be capable of being enforced.

Division 106. Inspection, Enforcement and Maintenance

Section 106.1 Inspection and Enforcement

- A. Inspection--Any person who has filed a site development plan for approval pursuant to this article shall agree to allow entry on the land or premises which is the subject of such application for the purpose of inspection of conditions on the premises by duly authorized agents and employees of the city of Austin.

- B. Construction phase inspections--The city of Austin shall cause such inspections to be made of the land or premises during development and construction so as to assure full compliance with all terms, conditions, requirements, and agreements to which the person obtaining approval of a plan under this article is found, whether such terms and conditions are required by this article, State law, or other ordinances and requirements of the city of Austin, including notes and covenants made a part of the plans, subdivision plat, or deeds.
- C. Notice--The applicant shall designate one person or legal entity, with a current address, to which notice shall be given pursuant to this division.
- D. Enforcement
1. Administrative--When an appropriate Department Director of the city of Austin determines that there has been non-compliance with any material term, condition, requirement or agreement under this division, the person obtaining such approved Site Development Permit shall be ordered in writing to the alleged noncompliance until corrected by compliance. Said person may appeal an order to cease and desist to the appropriate Department Director by giving written notice. Said Director shall hear the appeal within three working days of receiving such notice. Said person may appeal in writing, a negative ruling by the Director to the Planning Commission which shall hear the appeal at the next regular meeting following receipt of the notice.
 2. Court--The city of Austin shall bring suit in a court of competent jurisdiction to restrain and enjoin any person who attempts to carry out any plan for development and construction without first obtaining approval of said plan as required by the law and the ordinances of the city of Austin or any person who fails to cease and desist from further development or construction under 1 above.
 3. Any right, privilege, or remedy granted by this section to the person obtaining or holding plan or plan approval shall also run in favor of such person's successors in interest and assigns. Any duty or obligation of, or remedy against, such person arising from this section shall also ensure as to such person's successors in interest, assigns, agents, employees, representatives, or any person acting pursuant to the directions of any of the foregoing, or under color of the same.

Section 106.2 Maintenance Stage

All developments of land in the Aquifer-Related Williamson Creek watershed shall comply with the provisions of this section.

- A. All drainage facilities located in the street rights-of-way shall be maintained by the appropriate jurisdiction.

- B. All drainage facilities located on private property shall be maintained by the property owner.
- C. All sedimentation and sedimentation/filtration facilities and their appurtenances required for commercial property shall be maintained by the property owner.
- D. The maintenance required above shall be to the standards and specifications contained in this article and other ordinances and resolutions of the city and shall retain the effectiveness of each design feature or part of a plat or plan governed by the provisions of this article.
- E. Duly authorized inspectors of the city shall have the right of entry on the land or premises where property owners are required to maintain drainage facilities or detention/filtration facilities, at reasonable times, for the purpose of inspection of the maintenance required. The Austin City Public Works Department shall inspect the premises of each such facility approved pursuant to this division at least once per year. Where noncompliance is found, the city shall request in writing that the property owner comply. This notice shall describe the measures required to be taken. If, within three months of the notice the maintenance required is not accomplished, the city shall either:
 - 1. Cause the necessary restoration to be accomplished and assess the property owner for the city's actual cost, or
 - 2. Bring an action for mandatory injunction to require the property owner to accomplish the necessary maintenance.
- F. All drainage easements across private property shall contain the necessary language to permit the required water flow, require the maintenance set out herein, and permit the necessary access by the city of Austin for inspection and maintenance. All these shall be properly noted in the deed to the land.
- G. The required maintenance by private landowners and the power of the city in E. above shall be noted on the plan filed in the Deed Records of Travis County as a Deed Restriction.

Division 107 Variances

Section 107.1 Variances

- A. The Planning Commission may grant a variance from the terms of this article only if an applicant requests in writing and the Commission finds that, because of special circumstances applicable to the property involved, a strict application deprives such property of the privileges or safety enjoyed by other similarly situated property with similarly timed development. Where such conditions are found, the variance permitted shall be the minimum departure from the terms of this article necessary to avoid such deprivation of privileges enjoyed by such other property to facilitate a reasonable use, and

which will not create significant probabilities of harmful environmental consequences. The Planning Commission may not grant a variance if it would provide the applicant with any special privileges not enjoyed by other similarly situated property with similarly timed development, or if based on a special or unique condition which was created as a result of the method by which a person voluntarily subdivides land after the effective date of this ordinance.

- B. The Planning Commission may grant a variance from the terms of Section 103.3 when the development free zone constitutes a proportion of the land in the proposed plan making the requirement an unreasonable and unwarranted taking or an undue hardship. However, no such variance may be granted if the condition was created as a result of the method by which a person voluntarily subdivides land after the effective date of this ordinance. The granting or denial of this variance may be appealed to the City Council by any citizen.
- C. The granting or denial of any variance may be appealed to the City Council by any citizen provided that the Council shall consider the appeal no later than the second regular Council meeting following the Planning Commission action.
- D. The Planning Commission shall prepare written findings of fact justifying its grant or denial of a variance under subsection A.

Division 109. Signs for Notification

Section 109.1 Signs Required for Proposed Permits

Within two days of the filing of any application for a site development permit, the city shall place signs on property under application for the purposes of advertising said permit. The signs shall meet the following requirements: each sign shall be no smaller than eighteen inches by thirty inches and shall include the words "Proposed Site Development Permit," plus such other information as may be determined necessary by the Director of Public Works. Signs placed on the property involved must be within ten feet of any property line paralleling any established or proposed street and must be visible from that street. All required signs shall remain on the property until final disposition of the permit request is determined.

Division 110. Issuance of Site Development Permit

Section 110.1 Automatic Issuance of Permit if not Denied; Reasons for Denial Required

A site development permit not denied or disapproved by the Director of Public Works within 20 working days following the date of application therefor shall issue automatically to the applicant. If the Director of Public Works denies the permit or disapproves it pending receipt of additional information, he shall notify the applicant in writing by certified mail. His letter to the applicant shall be accompanied by a detailed statement of the reasons for such action, which reasons must be based on

standards contained herein. The permit shall be effective 10 days after issuance unless within that period an appeal is filed under Section 110.3.

Section 110.2 Aggrieved Property Owner May
Appeal Denial of Permit to the City Council

If the site development permit is denied, the aggrieved property owner may appeal to the City Council by filing a written notice with the City Clerk. Said notice shall point out with specificity why, in the opinion of the aggrieved property owner, the denial was improper. The City Council shall set a date for a hearing upon such appeal within thirty days of the date of notice filing, and shall notify the property owner in writing of such hearing date. Upon a public hearing, the City Council may issue the permit if by a preponderance of competent technical evidence it finds that the Director of Public Works exceeded his discretion in denying same.

Section 110.3 Appeal of Issuance of Permit

Any owner of property in the city of Austin or in the Aquifer-Related Williamson Creek watershed may appeal the issuance of a site development permit by the Director of Public Works on the basis that said permit will impair the water quality of the Edwards Aquifer, Williamson Creek or tributaries thereof. Such appeal must be made in writing to the City Clerk within ten days after the date of issuance. The City Council shall have fifteen working days from the date of filing in which to hold a public hearing to consider said appeal and must act to revoke said permit within that period. The appeal shall be denied unless the City Council finds by a preponderance of competent technical evidence that the permit in question would violate one or more provisions of this ordinance. Unless the appeal is allowed within fifteen days, the appeal shall be denied and the permit shall be effective on the fifteenth day.

Section 110.4 Permit Fees

Applications for permits required by the provisions of this chapter shall be accepted only upon payment of the appropriate fee as established by the City Council.

Division 111. Penalty for Violations

Section 111.1 Penalty for Violations

Any person violating any of the provisions of this article and any person who does any act requiring a permit under the provisions hereof without a valid permit, and any person who fails or refuses to comply with any of the provisions hereof, shall be guilty of a misdemeanor and upon conviction shall be fined not less than 25 dollars nor more than 200 dollars. Each day that such violation continues shall constitute a separate offense and be punishable as such.

PART 2. The need to protect the Edwards Aquifer, Barton Springs and Williamson Creek and its watershed from harm that can result from development activities creates an emergency; therefore, an emergency is hereby declared to exist; the rule requiring that ordinances be read on three (3) separate days is hereby suspended and this ordinance shall be effective immediately upon its passage and adoption as provided for in the Charter of the city of Austin.

PART 3. If any part of this article is found to be unconstitutional, unenforceable, or in violation of the law, the remaining portions shall remain in effect and shall be construed so as to give effect to those portions held not to be in violation of the law.

PASSED AND APPROVED

X
X
X
X

March 19, 1981

Mayor

APPROVED: _____
City Attorney

ATTEST: _____
City Clerk

ORDINANCE NO. 810507-K

AN ORDINANCE ADDING DIVISION 108 AND SECTION 108.1 TO CHAPTER 29A, ARTICLE I OF THE AUSTIN CITY CODE OF 1967; PROVIDING FOR CONTRACTORS' PERMITS AS A CONDITION OF PERFORMING WORK ON SITE DEVELOPMENT RELATED FACILITIES IN THE AQUIFER-RELATED WILLIAMSON CREEK WATERSHED; PROVIDING FOR SEVERABILITY; SUSPENDING THE RULE REQUIRING THE READING OF ORDINANCES ON THREE SEPARATE DAYS; DECLARING AN EMERGENCY AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. That a new Division 108 and Section 108.1 be and are hereby added to Article I of Chapter 29A of the Austin City Code of 1967 and shall read as follows:

Division 108. Contractor's Permits

No person shall construct, reconstruct, alter, repair, remove, place, replace, pave, repave, surface, or resurface site development related facilities in a development approved pursuant to this article without first obtaining a valid contractors' permit approved and issued by the Director of Public Works.

- A. Such permit shall list the city permits and other related approvals required before a contractor may begin work. The permit shall also include the name and signature of the contractor's representative responsible for the project.
- B. No new permit shall be issued to any contractor who holds a suspended permit or has had a permit revoked within the preceding twelve (12) months; however, a contractor who has had a permit suspended or revoked may complete the work authorized by other previously issued construction permits so long as the work performed thereunder is in compliance.
- C. In the event that any contractor fails to comply with the terms of the permit, the approved construction plans on which the permit is based, or applicable ordinance requirements, said permit may be suspended and/or revoked by the Director of Public Works after the contractor has been notified in writing of the specific act(s) and/or omission(s) constituting noncompliance and has been given a reasonable opportunity to correct the act(s) and/or omission(s) constituting noncompliance.
- D. Enforcement of this provision shall be in conformance with the procedure of subsection 106.1.D.

PART 2. If any part of this article is found to be unconstitutional, unenforceable, or in violation of the law, the remaining portions shall remain in effect and shall be construed so as to give effect to those portions held not to be in violation of the law.

PART 3. The need to protect the Edwards Aquifer, Barton Springs, and Williamson Creek and its watershed from harm that can result from development activities creates an emergency; therefore, an emergency is hereby declared to exist; the rule requiring that ordinances be read on three separate days is hereby suspended and this ordinance shall be effective immediately upon its passage and adoption as provided for in the Charter of the city of Austin.

PASSED AND APPROVED

X
X
X
X

May 7, 1981

Mayor

APPROVED: _____
City Attorney

ATTEST: _____
City Clerk

ORDINANCE NO. 82 1118-N

AN ORDINANCE AMENDING CHAPTER 9-10 (RIVERS, LAKES, AND WATERCOURSES) OF THE AUSTIN CITY CODE OF 1981; ADDING A NEW DIVISION 4 TO ARTICLE V OF SAID CHAPTER; DECLARING CERTAIN FINDINGS OF FACT; PROVIDING FOR SITE DEVELOPMENT STANDARDS FOR LAND LOCATED WITHIN THE WATERSHED OF BARTON CREEK; PROVIDING FOR SEVERABILITY; SUSPENDING THE RULE REQUIRING THE READING OF ORDINANCES ON THREE SEPARATE DAYS; DECLARING AN EMERGENCY; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. That Chapter 9-10 of the Austin City Code of 1981 be and is hereby amended to add a new Division 4 to Article V of said Chapter, which new Division 4 shall read as follows:

DIVISION 4. BARTON CREEK WATERSHED

PART A. GENERAL PROVISIONS

Section 9-10-301 Findings and Objectives

- A. The city council of the city of Austin, Texas, hereby makes the following findings:
1. The city council of the city of Austin, Texas, is the trustee of the natural environment of Barton Creek, Barton Springs, and much of the Barton Creek watershed for existing and future generations of citizens of Austin and its environs; and,
 2. Barton Creek is a significant source of Austin's water supply; and,
 3. Barton Springs and portions of Barton Creek provide significant and irreplaceable recreational opportunities to the citizens of Austin and its environs; and,
 4. The Barton Creek watershed, compared to other watersheds within Austin's jurisdiction, is mostly undeveloped; and,
 5. Development activities in the Barton Creek Watershed can result in irreparable damage to the natural environment of, the recreational qualities of, and the quality of the water in, Barton Creek, Barton Springs and the Barton Creek Watershed; and
 6. The Barton Creek Watershed, due to abrupt topography, thin and easily disturbed soil, natural springs, and seeps, including Barton Springs, rare biotic communities, and sparse but significant vegetation, is different from other watersheds within

Austin's jurisdiction and is highly susceptible to irreparable damage resulting from development activities; and

7. The Barton Creek watershed is facing rapid development; and
 8. The continued economic growth of Austin is dependent on a pleasing natural environment, quality supplies of water and recreational opportunities in close proximity to Austin; and
 9. Barton Creek, Barton Springs, and the Barton Creek watershed must be protected in order to preserve the health, safety, and welfare of the citizens of Austin and its environs; and,
 10. If the Barton Creek watershed is not developed in a sensitive and innovative manner in accordance with regulations designed to protect the watershed, natural environment, water resources, and recreational characteristics of Barton Creek and Barton Springs will be irreparably damaged; and,
 11. The city council has commissioned and received an extensive study of characteristics of the Barton Creek watershed, the adverse impact of development activities thereon and the means by which adverse development impacts can be mitigated; and
- B. Based on the findings set out in subsection (a), the study cited in subsection (a)(11), and the study and recommendations of the Barton Creek Task Force the city council enacts this ordinance to achieve the following specific objectives:
1. Prevent indiscriminate and unnecessary stripping of vegetation and the unnecessary loss of soils;
 2. Prevent, or compensate for, increases in soil erosion and sedimentation during and after development construction activities;
 3. Prevent, or compensate for, increases in stormwater runoff rates;
 4. Prevent or reduce increases in pollutant concentrations and total pollutant loadings of stormwater runoff;
 5. Prevent loss of recharge to localized aquifers supplying local seeps and springs essential to the maintenance of the ecosystem and the base flow and water quality of Barton Creek; and
 6. Prevent loss of recharge to the Edwards Aquifer and protect the quality of the recharge to the Edwards Aquifer.

Section 9-10-302 Application of Division
and Coordination with Other Ordinances

- A. This division sets out special requirements for the development of land located in the Barton Creek watershed, as defined herein, when situated either within the corporate limits of the city of Austin or within the five (5) mile extraterritorial jurisdiction of the city of Austin. A person wishing to develop land in this area must comply both with these special requirements and the other applicable requirements of this chapter.
- B. In case of conflict between the requirements of this division and other provisions of this chapter or some other ordinance, the requirements of this division govern.
- C. The Director of Public Works, in cooperation with the Directors of Planning and Environmental Resource Management, shall design and administer a system, including necessary forms, that coordinates the requirements of this article and division and the rest of this chapter and Chapter 13-3, minimizes duplication of requirements and conflict between them, and facilitates the expeditious processing of site development permit applications.

Section 9-10-303 Exemption from Division

- A. The requirements of this division shall not apply to the construction of one- or two-family residential housing structures or appurtenances thereto where only one such structure is built per legal lot, tract, or parcel.
- B. The requirements of this division shall not apply to subdivisions which were lawfully subdivided prior to April 17, 1980, or to subdivisions which were specifically exempted from Austin City Ordinance No. 800417-I.

Section 9-10-304 Exemption from Waterway Development Permit

No waterway development permit is required where a site development permit has been issued for a site within the city limits, such site development permit has become effective, and where all requirements of Article IV, Division 2, of this chapter are met.

Section 9-10-305 Definitions

- A. The definitions in Section 9-10-1 of this chapter also apply to this division insofar as they do not conflict with the definitions contained herein.
- B. In this division the terms set forth in this section shall have the following meanings:

Alternative sewage disposal systems--wastewater treatment and disposal systems other than a standard septic tank and absorption-type drainfield. Such systems include, but are not limited to,

aerobic systems, evapotranspiration drainfields and pressure-dosing trench fields.

Applicant--a person applying for a site development permit under this division.

Barton Creek watershed--the Director of Public works shall determine the boundaries of the Barton Creek watershed and Edwards Aquifer Zone from topographic and hydrologic data. For purposes of illustration, the Watershed and Aquifer Zone boundaries are identified on a map attached to this ordinance as Exhibit A. Copies of the map are available for inspection at the offices of the City Clerk, Planning Department, Public Works Department, Environmental Resource Management and City/County Health Department.

Bluff--an abrupt vertical change in topography in land located in the Critical Water Quality Zone or the Lowland Water Quality Zone of more than 40 feet with an average slope steeper than 4 feet of rise for 1 foot of travel.

Commercial--includes all development other than one- and two-family residential housing structures.

Crest of Bluff--a line on the ground parallel to and at the top of a bluff, beyond which the average slope is no steeper than 1 foot of rise in 2 feet of travel, for a horizontal distance of not less than 40 feet.

Critical Water Quality Zone--all land except that located beyond the crest of a bluff (1) within 400 feet, measured horizontally, on either side of the centerline of Barton Creek and (2) with 200 feet, measured horizontally, on either side of the centerline of a major tributary of Barton Creek.

Development--includes buildings and other structures; construction; and excavation, dredging, grading, filling, and clearing or removing vegetation.

Edwards Aquifer Zone--includes all land, not included in the Critical or Lowland Water Quality Zones, over the Edwards Aquifer recharging Barton Springs.

Family--one person or two or more persons related by blood, marriage, or legal adoption, or a group of not more than six unrelated persons occupying a housing unit.

Lowland Water Quality Zone--all land except that located in the Critical Water Quality Zone which is (1) within 700 feet, measured horizontally, on either side of the centerline of Barton Creek and (2) with 500 feet, measured horizontally, on either side of the centerline of a major tributary.

Major tributary--any watercourse within the Barton Creek watershed having a drainage area of 320 acres or more. A major tributary is measured from its confluence with Barton Creek or another tributary upstream to a point at which the contributing drainage area is less than 320 acres.

Minor tributary--any watercourse within the Barton Creek watershed which drains directly into Barton Creek and drains an area of 64 acres or more. A minor tributary is measured from its confluence with Barton Creek upstream to point at which the contributing drainage area is less than 64 acres.

Minor Tributary Protection Zone--all land within 150 feet on either side of the centerline of a minor tributary for the first 1,500 feet of its length from the centerline of Barton Creek and all land within 100 feet for the next 1000 feet. The lengths of minor tributaries and the widths of the minor tributary protection zone are measured horizontally.

Natural drainage--a stormwater runoff conveyance system not significantly affected by development.

Natural state--substantially the same conditions of the land which existed prior to its development including, but not limited to, the same type, quality, quantity, and distribution of soil, ground cover, vegetation, and topographic features.

One-family residential housing structure--a detached building occupied or suitable for occupancy by only one family as a residence, and having kitchen, bath, and sanitary facilities, and appropriate appurtenances for such occupancy.

Overland drainage--stormwater runoff which is not confined by any natural or manmade channel such as a creek, drainage ditch, storm sewer, or the like.

Two-family residential housing structure--a single detached building having two separate components, each of which components is occupied or suitable for occupancy by only one family as a residence, and each of which has kitchen, bath, and sanitary facilities, and appropriate appurtenances for such occupancy.

Upland Water Quality Zone--all land not within the Critical Water Quality Zone, the Lowland Water Quality Zone, or the Edwards Aquifer Zone.

Section 9-10-306 Certification of Plans and Specifications

No plans and specifications called for in this division shall be accepted, reviewed, or approved by the Director of Public Works unless accompanied by the certification of a registered Texas professional engineer that (1) the development plan is complete, (2) the technical data is accurate, and (3) the requirements of this division are met.

Section 9-10-307 Inspections

Any person who has filed a site development plan for approval pursuant to this division shall agree to allow entry on the land or premises which is the subject of such application for the purpose of inspection of conditions on the premises by duly authorized agents and employees of the city, as may be necessary to assure compliance with this division.

Section 9-10-308 Certificate of Compliance or Occupancy

No city utilities may be connected to a site unless a certificate of compliance is issued by the Department of Public Works when the development is completed pursuant to requirements of this division for areas outside the city limits or until the Building Inspection Department issues a certificate of occupancy with the written concurrence of the Director of Public Works for areas within the city limits. Requests by the developer/owner for a certificate of compliance or occupancy for development other than one- or two-family residential housing construction shall be accompanied by a certificate prepared and signed by a registered professional engineer attesting to the completion of the project in substantial conformance with the site development permit.

Section 9-10-309 Penalty for Violations

Any person violating any of the provisions of this division, upon conviction, shall be fined not less than twenty-five (25.00) dollars nor more than two hundred (200.00) dollars. Each day that the violation continues shall constitute a separate offense.

PART B. SITE DEVELOPMENT PERMIT

Section 9-10-316 Required

Unless exempt under Section 9-10-303, above, no development shall be undertaken on any land, tract, parcel, or lot within the Barton Creek watershed until the effective date of a site development permit for said development issued by the Director of Public Works.

Section 9-10-317 Application

A. Application for a site development permit shall be submitted to the Director of Public Works and shall be accompanied by a site development plan. The application and site development plan shall contain the following information unless the Director of Public Works determines that due to the scope and nature of the proposed development some of the information is unnecessary:

1. The date, scale, north point, and key plan showing the location of the tract on which the development is to take place. The minimum scale of site plans shall be one inch equals forty feet (1" = 40').

2. The existing boundary lines and acreage of the tract on which the development is to take place, and the common boundary lines and names of the owners of adjacent properties.
3. A topographic map with two (2) foot contours meeting national mapping accuracy standards, showing:
 - a. each water quality zone in which the site is located;
 - b. each major tributary and minor tributary protection zone on the site;
 - c. the 100-year floodplains on the site;
 - d. the location, type, and total percentage of proposed and existing impervious cover on the site; and
 - e. the proposed grades.
4. A slope map, with a scale comparable to the site plan showing:
 - a. all bluffs;
 - b. all slopes greater than 35 percent gradient; and
 - c. all slopes of 15 to 35 percent gradient for proposed development in the Edwards Aquifer Zone.
5. A drainage study to address the purposes and design criteria set forth in Part D of this division and certifying compliance with requirements thereof.
6. The plan for erosion-sedimentation control required by Section 9-10-346.
7. The archaeological site investigation required by Section 9-10-355, if applicable.
8. A description of the structure types or uses proposed, and total percentage of proposed and existing impervious cover on the site.
9. Final site construction plans.
10. Variance requests.

Section 9-10-318 Fee

Applications for permits required by the provisions of this division shall be accepted only upon payment of the appropriate fee as established by ordinance.

Section 9-10-319 Burden of Proof

An applicant for a site development permit under this division must establish that his/her plans comply with the requirements of this division and with other applicable requirements of this chapter.

Section 9-10-320 Advertising Application

- A. Within two (2) days of the filing of any application for a site development permit, the city shall place signs on property under application for the purposes of advertising said permit. The signs shall meet the following requirements:
 - 1. Each sign shall be no smaller than eighteen (18) inches by thirty (30) inches; and
 - 2. Each sign shall include the words "Proposed Site Development Permit," plus such other information as may be determined necessary by the Director of Public Works.
- B. Signs placed on the property involved must be within ten (10) feet of any property line paralleling any established or proposed street and must be visible from that street.
- C. All required signs shall remain on the property until final disposition of the permit request is determined.

Section 9-10-321 Review of Application

- A. On receipt of an application for a site development permit, accompanied by the correct filing fee, the Director of Public Works shall file the application and send a copy to the Director of Environmental Resource Management for review and recommendations. The Director of Public Works may not act on an application (except to request more information) until he or she receives a report on the application from the Director of Environmental Resource Management.
- B. The Director of Environmental Resource Management shall review the application and send a written report thereon to the Director of Public Works within fifteen (15) working days after the date on which the application was filed. Included in such report shall be the recommendation of the Director of Environmental Resource Management to:
 - 1. Grant the permit,
 - 2. Deny the permit, or
 - 3. Disapprove the permit pending the receipt of additional information.

Section 9-10-322 Action on Application

- A. The Director of Public Works must grant the permit, deny the permit, or disapprove the permit with the request for additional information within twenty (20) working days after the date on which the application was filed.
- B. If the director denies the permit or disapproves the permit with the request for additional information, he or she must within the twenty (20) working day period notify the applicant by certified mail of the denial or disapproval and explain each ground of denial or describe the additional information requested, in either case identifying the requirements of this chapter that justify the denial or necessitate additional information.
- C. If the Director of Public Works does not deny or disapprove the permit, within the time period and in the manner specified in subsections (A) and (B), the permit is automatically granted on the twentieth (20th) working day after the date on which the application was filed.
- D. A site development permit is effective on the tenth (10th) working day after the date on which it is granted unless an appeal is timely delivered under Section 9-10-324.

Section 9-10-323 Variances

- A. The planning commission may grant a variance from the terms of this division if the applicant requests it in the application and the commission finds that, because of special circumstances applicable to the property involved, a strict application deprives the property of privileges or safety enjoyed by other similarly situated property with similarly timed development. Where these conditions are found, the variance permitted shall be the minimum departure from the terms of this division necessary to avoid the deprivation of privileges enjoyed by the other property and to facilitate a reasonable use and which will not create significant probabilities of harmful environmental consequences. The commission may not grant a variance if it would provide the applicant with any special privileges not enjoyed by other similarly situated properties with similarly timed development, or if based on a special or unique condition created as a result of the method by which the applicant voluntarily subdivided the land on which the site proposed for development is located, if such voluntary subdivision of the land occurred after the effective date of Austin City Ordinance No. 800417-I (April 17, 1980) and if such voluntary subdivision was not exempt from said ordinance. The planning commission may consider written reports from appropriate city departments and may request such further information from city departments which is relevant and necessary to its decision.
- B. The planning commission shall justify the grant or denial of a variance in writing for the application file.

Section 9-10-324 Appeal to City Council

- A. Any person may appeal in writing to the city council the grant or denial (but not disapproval) of a site development permit under Section 9-10-322 or the grant or denial of a variance under Section 9-10-323. The appeal must be delivered to the Director of Public Works on or before the ninth (9th) working day after the date on which the permit or variance was granted or denied.
- B. On receipt the Director of Public Works shall deliver the appeal, together with the permit application file to the city clerk for placing on the council agenda. The city clerk shall notify the appellant, the applicant (if different), and the Directors of Public Works and Environmental Resource Management of the hearing date by mail at least ten (10) days before the hearing.
- C. The city council must decide the appeal at a public hearing on or before the forty-fifth (45th) day after the date on which the appeal was delivered to the city clerk. If both the grant or denial of a permit, or the grant or denial of a variance from the same site are appealed, or if there are multiple appeals of the same grant or denial, the Council shall decide them at the same hearing.
- D. The appellant has the burden of proof on appeal and the council must decide the appeal solely on the basis of the permit application file; the written appeal; the written response to the appeal, if any; from the applicant; oral argument at the council hearing; written reports from appropriate city departments; and such further information which is relevant and necessary to the council's decision as may be requested from appropriate city departments by the council.
- E. After considering the appeal the council may affirm the grant or denial, reverse it, or modify it to comply with the requirements of this division.

PART C. WATER QUALITY ZONES

Section 9-10-331 Purpose

- A. The Barton Creek watershed is divided into four water quality zones, the Critical Water Quality Zone, the Lowland Water Quality Zone, the Edwards Aquifer Zone, and the Upland Water Quality Zone.
- B. The widths and location of the zones are calculated to protect the water quality of Barton Creek and Barton Springs by attenuating the contaminants and sediments transported by runoff, reducing the rate and volume of runoff, maximizing infiltration and recharge of the seeps and springs in the watershed, and preserving the delicate vegetation of the mesic woodlands.

Section 9-10-332 Critical Zone

A. Within the Critical Water Quality Zone, development activities shall be limited to:

1. Collector street crossings, maintenance of existing roadways, and reconstruction and widening of existing roadways;
2. Utilities which cannot reasonably be located in other zones;
3. Fences, other than in the 25-year floodplain;
4. Public and private parks and open space, with development in the parks and open space limited to trails and facilities (other than stables and corrals for animals) for hiking, jogging, biking, horseback riding, and nature walks; and
5. Flood control projects approved by the city council.

B. This section does not prohibit development of the southern extension of Mo-Pac Boulevard or of the Barton Skyway Bridge.

Section 9-10-333 Lowland Zone.

A. Development in the Lowland Water Quality Zone is limited to:

1. Development authorized in the Critical Water Quality Zone;
2. One- and two-family residential housing structures;
3. Streets and driveways;
4. Drainage facilities other than storm drainage facilities for commercial development or structural controls for commercial development; and
5. Public and private parks and open spaces, exclusive of parking lots.

Section 9-10-334 Edwards Aquifer Zone

A. Development in the Edwards Aquifer Zone is limited to:

1. Development authorized in the Lowland Water Quality Zone;
2. Commercial, if:
 - a. on completion of development the applicant leaves, or restores if necessary, at least forty (40) percent (all in the Edwards Aquifer Zone) of his proposed commercial site in or to its natural state and leaves it in that state to serve as a buffer located contiguous to the development to receive runoff from the development for purposes of overland drainage.

- b. the proposed impervious cover on the proposed commercial site does not exceed thirty-five (35) percent of the commercial site area.
 - c. no impervious cover is created on slopes which, prior to any development, exceed twenty-five (25) percent gradient.
- B. Development or related activity necessitating restoration to the natural state is authorized in the forty (40) percent buffer zone only for the installation and maintenance of drainage systems, including storm drainage facilities and structural controls for commercial development, occupying no more than one-half of the area of the forty (40) percent buffer zone, fences, utility and irrigation lines, access for these purposes, and to the building site and clearing necessary for these purposes.

Section 9-10-335 Upland Zone

- A. Development in the Upland Water Quality Zone is limited to:
 - 1. Development authorized in the Lowland Water Quality Zone;
 - 2. Commercial, if:
 - a. upon completion of development the applicant leaves, or restores if necessary, at least forty (40) percent (all in the Upland Water Quality Zone) of his proposed commercial site in or to its natural state and leaves it in that state to serve as a buffer located contiguously to the development to receive runoff from the development for the purpose of overland drainage.
 - b. the proposed impervious cover on the proposed commercial site does not exceed thirty-five (35) percent of the commercial site area. Provided, however, that impervious cover on the commercial site may exceed such thirty-five (35) percent limitation to the extent that development rights were transferred to the site during the planning of the land under Chapter 13-3, Article VII, Division 2 of this code, but in no case shall exceed forty-five (45) percent of the commercial site.
- B. Development or related activity necessitating restoration to the natural state is authorized in the forty (40) percent buffer zones under subsection (a) above, only for the installation and maintenance of drainage systems, including storm drainage facilities, and structural controls for commercial development, occupying no more than one-half of the area of the forty (40) percent buffer zone, fences, utility and irrigation lines, access for these purposes and to the building site and clearing necessary for these purposes.

Section 9-10-336 Protection of Minor Tributaries

Land within the minor tributary protection zone is subject to the same development limitations as land located in the Critical Water Quality Zone. However, for purposes of computing the impervious cover limitations imposed by this division, land within the minor tributary protection zone is part of the water quality zone in which it is located.

PART D. DRAINAGE

Section 9-10-341 Purpose

- A. Natural drainage patterns must be preserved and the amount of impervious cover limited to prevent erosion, maintain infiltration and recharge of local seeps and springs, and attenuate the harm of contaminants collected and transported by stormwater.
- B. These objectives can best be accomplished by avoiding the use of streets and street rights-of-way as the central drainage network wherever practicable.

Section 9-10-342 Drainage Design

- A. To the greatest extent practicable, an applicant shall maintain natural drainage patterns consistent with the purpose of the preceding section.
- B. If storm sewers are necessary, an applicant shall design his drainage system to mitigate their harmful impact on water quality by using structural devices or other methods to control sediment and dissipate energy, by using multiple smaller discharge outlets wherever practicable, and by locating discharges to maximize overland flow.
- C. An applicant shall provide at least three-hundred (300) feet of natural drainage between each storm sewer outlet and Barton Creek or one of its major tributaries.
- D. The post-development stormwater runoff rates from a site may not exceed the predevelopment rates from the site for 1-year, 5-year, and 25-year storms.
- E. An applicant may not clear off vegetation or alter the land within the 100-year floodplain of Barton Creek or its major tributaries except for authorized development.

PART E. EROSION AND SEDIMENTATION CONTROL

Section 9-10-345 Purpose

The volume, rate, and quality of stormwater runoff originating from development must be controlled to prevent soil erosion and water

quality degradation in the Barton Creek watershed. Stormwater transported sediment is of primary concern because it provides a transport medium for contaminants and because excessive sedimentation can reduce infiltration and recharge of the local seeps and springs in the watersheds.

Section 9-10-346 Plan

- A. An applicant must submit with the application a two-phase erosion-sedimentation control plan, as described in subsections (B) and (C), that complies with the city of Austin "Erosion and Sedimentation Control Manual," as approved by the city council. Until the manual is approved, the plan must comply with the Soil Conservation Service manual titled "Erosion and Sediment Control Guidelines for Developing Areas in Texas."
- B. The preliminary plan must locate on the topographic map and describe:
 - 1. The features and soil characteristics of the site that bear on the land's erosion potential;
 - 2. The proposed temporary erosion controls, including slope stabilization techniques and maintenance of the controls; and
 - 3. Proposed locations for temporary storage of fill and spoil, for permanent disposal of fill and spoil, and for temporary storage of construction equipment.
- C. The final plan must:
 - 1. Locate on the final construction site plans and describe any required structural controls;
 - 2. Describe all maintenance necessary for proper operation of any required structural controls and agree to perform the maintenance;
 - 3. Describe how the undeveloped portion of the site will be restored to blend with undeveloped portions of the surrounding land; and
 - 4. Include a construction timetable that meshes the major steps of construction with the installation and removal of the temporary erosion controls, installation of any structural controls required, and restoration of the site.

Section 9-10-347 Enforcement of Plan

- A. After two days written notice to the person holding the site development permit, modifications from the approved erosion-sedimentation control plan may be made in the field if the city inspector deems the controls or sequencing inappropriate or

inadequate in achieving their purpose and has confirmed his/her findings with the Director of Public Works and the Director of the Office of Environmental Resource Management, and has their written approval. In evaluating the appropriateness or adequacy of the approved erosion controls or construction sequencing for the purpose of determining whether field modifications may be made under this subsection, the city inspector and said department directors shall take into consideration the following:

1. Deviations between the locations where water was expected to drain and the actual patterns of drainage;
 2. Deviations between the expected effectiveness of the approved erosion controls and their demonstrated effectiveness; and
 3. Such other factors which clearly demonstrate the inappropriateness or inadequacy of the approved erosion control or construction sequencing plans.
- B. If an applicant does not comply fully with his approved erosion-sedimentation plan, the Director of Public Works shall notify him in writing that the city may correct and revegetate the disturbed area at his expense unless he does so within sixty (60) days after the date on the notice, or unless he provides erosion and sedimentation controls and the continuing maintenance thereof acceptable to the Department of Public Works.

PART F. OTHER REQUIREMENTS

Section 9-10-351 Land Clearing

- A. Not more than eighty-five (85) percent of the land area included within the site to be developed located in the Upland Water Quality Zone shall be cleared of existing vegetation.
- B. No clearing or rough cutting shall be permitted prior to the effective date of a site development permit issued by the Director of Public Works. Limited clearing and rough cutting for soil testing and surveying and construction of temporary erosion and sedimentation controls as per approved plans may be allowed with a permit from the Public Works Department for such limited purposes.
- C. Vegetation within the Critical Water Quality Zone shall not be disturbed except for purposes consistent with development activity permitted by Section 9-10-332.

Section 9-10-352 Bluff Setback and Bluff Clearing Limitation

No clearing, alteration or development of any kind shall be undertaken within fifty (50) feet of a crest of a bluff.

Section 9-10-353 alternative Sewage Disposal

An alternative sewage disposal system is required:

- A. for all development in the Edwards Aquifer Zone not served by an organized wastewater collection and disposal system; and
- B. for each lot, parcel, or tract smaller than 1 acre.

Section 9-10-354 Construction on Certain Slopes

There shall be no development, except development which is authorized within the Critical Water Quality Zone, on slopes over thirty-five (35) percent gradient.

Section 9-10-355 Archaeological Site Investigation

- A. An applicant must furnish an archaeological site investigation report with his site development permit application. The report should be limited in nature and must be signed by a qualified archaeologist and either:
 - 1. Locate, briefly describe, and evaluate the significance of all archaeological and historical sites found in the proposed development site that warrant further investigation; or,
 - 2. Certify that there is no significant archaeological or historical site on the surface of the proposed development site that warrants further investigation.
- B. If the report recommends further investigation, the Director of Parks and Recreation may do so at city expense.
- C. No archaeological site investigation report shall be required, however, if such report was previously submitted pursuant to the subdivision of the land under Chapter 13-3, Article VII, Division 2 of this code. Nor shall such report be required if the site being developed is smaller than five (5) acres.

PART 2. If any part of this ordinance is found to be unconstitutional, unenforceable, or in violation of law, the remaining portions shall remain in effect and shall be construed so as to give effect to those portions held not to be in violation of law.

PART 3. The grave need to protect Barton Creek, Barton Springs, and the Barton Creek watershed from irreparable harm that can result from development activities creates an emergency; therefore, an emergency is hereby declared to exist; the rule requiring that ordinances be read on three (3) separate days is hereby suspended and this ordinance shall be effective immediately upon its passage and adoption as provided for in the Charter of the City of Austin.

PASSED AND APPROVED

X
X
X

November 18, 1982

Carol Keeton McClellan
Mayor

APPROVED: _____, ATTEST: _____

Albert DeLaRosa
City Attorney

Grace Monroe
City Clerk

PRIVATE SEWAGE REGULATIONS, DEL RIO, TX

ORDINANCE No. 0:87-47

AN ORDINANCE IN ACCORDANCE WITH THE CITY CHARTER AND STATE LAW PROVIDING FOR THE AMENDMENT OF CHAPTER 23 OF THE DEL RIO CODE OF ORDINANCES; PROVIDING FOR THE ADOPTION OF RULES AND REGULATIONS GOVERNING PRIVATE SEWAGE FACILITIES WITHIN THE JURISDICTION OF THE CITY OF DEL RIO; PROVIDING FOR AN EFFECTIVE DATE, AND PROVIDING FOR A PENALTY NOT TO EXCEED \$2,000.00.

Whereas, Article 1175, Subdivision 19, of the Texas Revised Civil Statutes states in pertinent part that a city has the power to prohibit the pollution of any stream, drain, or tributaries thereof, which may constitute the source of water supply of any city and to provide for policing of same as well as provide for the protection of any watershed; and

Whereas, the Utilities Commission has reviewed and examined the proposed regulations and has recommended the adoption of the same to the City Council; and

Whereas, the City Council has reviewed and examined the proposed private sewage facilities regulations as set forth herein and has found and determined that the same are in the best interest of the city of Del Rio and its citizens; and

Whereas, the City Council has further found and determined that the private sewage facility regulations as set out herein do promote the health, safety, and general welfare of the community and the safe, orderly, and healthful development of the City of Del Rio, Texas; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DEL RIO, TEXAS THAT:

Section 1

Chapter 23 of the Del Rio Code of Ordinances, SEWERS, is hereby amended to add ARTICLE III entitled "Rules For Private Sewage Facilities" and provides as follows:

Article III Rules for Private Sewage Facilities

Section 23-66 Definitions

The following words and terms, when used in these rules, shall have the following meanings, unless the context clearly indicates otherwise:

Aerobic digester--any self-contained unit used to treat raw domestic sewage that uses a process depending on mechanical aeration and the action of aerobic bacteria and that has been given prior approval by the National Sanitation Foundation.

Absorption unit--any subsurface system that primarily relies on soil absorption in an absorption trench or absorption bed to dispose of the effluent from a wastewater treatment unit.

Evapotranspiration unit--any subsurface system that primarily relies on evaporation and plant transpiration to dispose of effluent from a wastewater treatment unit.

Existing private sewage facilities--Any private sewage facility that was in use on the effective date of these rules. Such a facility shall be an existing private sewage facility as long as that facility is not causing pollution, a threat to the public, or nuisance conditions; or is not substantially modified after the effective date of these rules. Any private sewage facility that has been actually used at any time during the twelve (12) month period immediately preceding the effective date of these rules shall be conclusively presumed to have been in use on the effective date of the rules.

Institution--any establishment other than a single family residence.

License--a license to operate as required by Section 23-72 of these rules.

Licensing authority--the unit of the city government that has been designated by the City Council in Section 23-69 of these rules to have the duties and powers to administer and enforce these rules.

Mobile home--a factory built structure, or components of a structure, brought to a site on wheels and intended for use as a single-family dwelling.

Mobile home park--any facility or area developed for the lease or rental of two or more mobile homes, mobile home spaces, or spaces for the parking of recreational vehicles, or any commercial campground that does not qualify as having an existing private sewage facility.

Nuisance--any activity or condition that is or tends to be injurious to or adversely affects human health or welfare, animal life, vegetation, or property; or interferes with the normal use and enjoyment of animal life, vegetation, or property.

Organized disposal system--any publicly or privately owned system for the collection, treatment, and disposal of sewage that is operated in accordance with the terms and conditions of a valid waste discharge permit issued by the Texas Water Commission.

Permit--a Permit to Construct as required by Section 23-72 of these rules.

Person--any individual, corporation, organization, government or governmental subdivision or agency, business, trust, estate, partnership and any other legal entity or association including, but not limited to, owners, developers, installers, operators, or any other person responsible for the construction, installation, or operation of a private sewage facility.

Pollution--the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of any water in the State that renders the water harmful, detrimental, or injurious to humans, animal life, or vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

Private sewage facility--all systems and methods used for the disposal of sewage, other than organized disposal systems. Private sewage facilities are usually composed of three units: the generating unit (the residence; the institution, etc.); the treatment unit (septic tank, etc.); and the disposal unit (the drainfield that may be an absorption trench or bed, or an evapotranspiration bed).

Proposed individual or public water supply wells or systems, proposed organized disposal systems--any such well or system for which the owner or operator has entered into contractual obligations and which cannot be cancelled or modified without substantial loss, for the construction of such well or system that will be completed within a reasonable time.

Sewage--waterborne wastes that are primarily organic and biodegradable or decomposable and that generally originate as human, animal, or plant waste from domestic activities such as washing, bathing, food preparation, and certain retail or commercial activities.

Single-family residence--a single-family dwelling or mobile home or manufactured home.

Standards--the standards set forth in the pamphlet entitled "Construction Standards for Private Sewage Facilities" and all future amendments thereto, which were adopted by the Texas Board of Health, pursuant to Article 4477-1 (Section 23[b]), of the Texas Revised Civil Statutes Annotated, as Texas Department of Health Rules 301.79.03 001-.003 and which were originally published in 2 Tex. Reg. 4978.

State--the State of Texas.

Substantial modification--an increase in the size or use of a private sewage facility's generating unit (residence or institution) that, based on the considerations in the standards, could be expected to result in an increase of 25 percent or more in the average daily volume of sewage generated by that unit; or an action that, based on the considerations in the standards, could be expected to result in an increase or decrease in the capacity of a private sewage facility's treatment unit (septic tank) or disposal unit (drainfield) by 25 percent or more.

Water or water in the State--groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the State, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and 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.

Section 23-67 Establishment and General Provisions

A. Authority

These rules are adopted by the City Council of Del Rio, Val Verde County, Texas, acting in its capacity as the governing body of the city of Del Rio. The city of Del Rio adopts these rules under the authority of Article 1175, Subdivision 19 of the Texas Revised Civil Statutes.

B. Purpose

The purpose of these rules is to abate or prevent pollution or injury to the public health in the city limits.

C. Area of Jurisdiction

These rules shall apply to all of the area within the city limits of Del Rio and within the city's extraterritorial jurisdiction as provided for in pertinent statute, except for the areas regulated under an existing Texas Water Development Board of Texas Water Commission Rule.

D. Effective Date

These rules shall become effective upon approval by the City Council of the city of Del Rio.

E. Incorporation by Reference

The standards and all future amendments thereto are incorporated by reference and are thus made a part of these rules. A copy of the standards is attached to these rules as an appendix.

F. Construction, Precedence, and Interpretation

1. These rules shall be construed liberally to accomplish their purpose. In construing the standards, precatory words contained therein shall be deemed mandatory.
2. In the event of any conflict between these rules and an order, resolution, or rule adopted by the Texas Water Development Board, the order, resolution, or rule adopted by that board shall take precedence. In the event of any conflict between these rules and the standards, these rules shall take precedence.
3. The licensing authority shall, within the purpose of these rules, resolve any question regarding any interpretation of these rules or the standards and any such interpretation of said rules, shall be final.

G. Severability

If any provision of these rules or the application thereof to any person or circumstances is held invalid, the validity of the remainder of these rules and the application thereof to other persons and circumstances shall not be affected.

Section 23-68 Administrative Provisions

A. Exceptions

1. A person desiring an exception to any requirement of these rules shall file a written request with the licensing authority stating:
 - a. the nature of the exception requested;
 - b. justification for the granting of the exception; and
 - c. any information that the licensing authority reasonably requests.
2. Within thirty (30) days after the receipt of said request, the licensing authority shall review the request and reply to the applicant in writing either granting or denying the request. If the request is denied, the licensing authority shall include the reasons for denial in the reply.

B. Appeal

1. Any person aggrieved by an action or decision made hereunder by the licensing authority may, within thirty (30) days of the date of the document giving notice of the action or decision, or within thirty (30) days of the action, if no document is given, appeal to the City Council of the city of Del Rio.

2. The appeal shall be initiated by filing a written objection with the City Attorney. The written objection shall state what the complainant believes the action or decision of the licensing authority should have been and the reasons therefore. A copy of the document containing the notice of the complained of action or decision, or a written statement of the complained of action or decision, if no document was given, shall be attached to said written objection.
3. When an objection is filed, the City Attorney shall notify the City Secretary who shall place the matter on the agenda of the City Council for review at the next meeting of the council that is at least ten (10) days after the date of the filing of the objection. The City Attorney shall notify the licensing authority and the complainant that the matter is on the agenda.
4. The City Council shall review the matter and consider such information and evidence that they may deem relevant and that may be offered by the licensing authority or the complainant. The council shall affirm, reverse, or modify the action or decision of the licensing authority.
5. These provisions for appeal are not exclusive, but are cumulative of any other remedies at law or in equity.

C. Notice

Any notice required to be given pursuant to these rules shall be considered given by depositing the same in the United States mail, postage prepaid, and addressed in accordance with the information given by an applicant or complainant.

D. Fees

To defray the reasonable cost of administering these rules, the licensing authority shall require fees to be paid in accordance with the schedule established from time to time by the Del Rio City Council. Such fees shall be paid with the filing of an application for a permit, license, or authorization; a written request for an inspection, reinspection, or exception; or an appeal.

Section 23-69 Duties and Powers

A. Inspection Division

The Chief of the Inspection Division of the city of Del Rio is designated by the City Council of the city of Del Rio to be the licensing authority for these rules and thus have the duty, and necessary powers to administer and enforce them. The Chief Inspector, as the licensing authority, shall have the following duties and necessary concomitant powers:

1. To enforce these rules and to make appropriate recommendations to the proper city authorities when instances of noncompliance with these rules have been identified.
2. To make inspections of any existing private sewage facilities when requested or required and all new private sewage facilities. Additionally, he will make periodic unannounced inspections of private septic facilities within the city's jurisdiction to ensure proper operation and compliance with this ordinance.
3. Keep track of the location of all septic systems within the planning area and within the city's jurisdiction, on a current wall map (see the 1987 Hogan and Razor, Inc. report, "San Felipe Springs Area Protection Study and Comprehensive Plan").
4. To make periodic reports to the City Council on all actions, including legal actions, taken concerning these rules.
5. Maintain a current list of approved (qualified) or licensed designers, constructors/fabricators, installers, engineers, sanitarians, soil scientists, and sewage pumping and hauling services authorized to participate in various phases of design, installation, construction, or service of septic systems or components, within the city's jurisdiction (see also Section 23-71).
6. To perform all other duties necessary to meet the requirements of these rules including the assignment of specified tasks to his assistant(s).

B. City Secretary

The City Secretary shall collect all fees as set by the City Council as necessary to recover the reasonable costs incurred in meeting the requirements of these rules.

Section 23-70 Lawful Discharges and General Requirements

A. Lawful Discharges

After the effective date of these rules only the following types of sewage discharges shall be lawful:

1. sewage discharged into an organized disposal system operating under a valid permit issued by Texas Water Commission;
2. sewage discharged into a private sewage facility designed, installed, licensed, operated, and maintained in accordance with these rules; and

3. sewage discharged into an existing private sewage facility that is in use on the effective date of these rules, that has not been substantially modified since the effective date of these rules, and that is operated and maintained in such a manner as not to cause pollution, a threat to the public health, or nuisance conditions.

Section 23-71 General Requirements

- A. No person, except the person owning or having the right of possession and use of the parcel of land upon which a proposed private sewage facility is to be located, may apply for a private sewage facility permit or license.
- B. Specific professional credentials are required by the standards in order to design septic systems with exceptional public health implications. Specifically:
 1. Mobile home parks and other multiuse developments
 2. Systems for lots of less than the prescribed minimum size
 3. Commercial/institutional systems that produce more sewage than a single family residence
 4. When a site has an impervious strata or groundwater less than four (4) feet below the bottom of a soil absorption system
 5. When the use of a lined evapotranspiration bed is indicated
 6. For pressure doping systems

In instances where other, unusual design circumstances are present, the licensing authority may require the applicant to employ registered, certified, or licensed professionals to participate in the permitting process.

- C. Regardless of current registration, certification, or licensing, the licensing authority shall evaluate the qualifications of septic system designers and installers for each permit application. Verifiable experience and work history in onsite sewerage, familiarity with the "standards," training in related fields, current standing in related professional or trade organizations, prior client satisfaction, and prior system performance are some of the acceptable evaluation criteria to be applied to participating professionals and tradesmen before a permit is issued.
- D. The design construction, and installation of any new private sewage facility and the maintenance of any private sewage facility shall, at a minimum, meet the requirements set forth in the standards.
- E. The Chief of the Inspection Division shall approve all construction only after a thorough inspection, and if a facility fails an inspection, corrections shall be made by the constructor and the facility

reinspected. Each reinspection necessary shall require an additional fee of twenty-five dollars (\$25.00) to be paid by the owner or constructor to the city.

- F. No person may cause, suffer, allow, or permit the construction or installation of, or a substantial modification to, a private sewage facility unless a permit therefor has been issued.
- G. The construction, installation, or substantial modification of a private sewage facility shall be made in accordance with the approved design and requirements of the permit issued therefor.
- H. No component of a private sewage facility shall be covered until an inspection by the licensing authority has been made. Provided, however, absorption trenches or beds, or evapotranspiration beds may be partially backfilled, but all ends and other critical areas shall not be covered until the licensing authority has determined, as evidenced by the issuance of a license, that the installation, construction, or substantial modification complies with these rules, the standards, or other special conditions specified in the permit.
- I. No person may cause, suffer, allow, or permit the operation or use of a new private sewage facility unless a license, or necessary license amendment therefor, has first been issued.
- J. No person may cause, suffer, allow, or permit the construction or installation of a private sewage facility on a lot or tract that is smaller than that required to meet the requirements set forth in the standards, as such may be from time-to-time amended; provided, however, on any lot that was platted and conveyed from the original subdivision of which it was a part, prior to the effective date of this ordinance, and is now held in ownership who or which does not now own any adjoining or contiguous property thereby making possible the combining of such properties so as to aggregate an area as large as necessary to comply with said State regulations, a private sewage facility may be permitted to be constructed and licensed to operate on such a smaller than required lot; provided, however, that in no event shall a private sewage facility and a private water well both be located on a lot of less area than 15,000 square feet, or in the event that the lot is served by an organized or public water distribution and supply system, be of less area than 8,000 square feet, and further provided that it has been proven as a result of a thorough and adequate investigation and analysis that a private sewage facility can be operated without causing a threat or harm to an existing or proposed water supply system or the the public health, or the threat of pollution or nuisance conditions.

In calculating lot or tract sizes, easements or rights-of-way adjacent or through such lots or tracts shall be included, but no such areas shall be counted twice to add to the area of two or more lots.

- K. The effluent from a private sewage facility, whether using an aerobic or anaerobic treatment unit, must be discharged into a properly designed and constructed absorption or evapotranspiration unit and shall not be discharged to the ground surface or onto or across any property under other ownership or into any water of the State, except that effluent from an aerobic digester may be stored in an onsite reservoir device and used periodically for onsite lawn sprinkling and/or irrigation.
- L. Injection wells, pit privies, and cesspools used to dispose of sewage, and any system utilizing naturally or artificially produced holes, cavities, or drilled wells to ease the disposal of sewage are specifically prohibited from being installed and licensed.
- M. No person may cause, suffer, allow, or permit the maintenance of a private sewage facility in such a manner as to cause, or as may tend to cause, pollution, injury to public health, or nuisance conditions.
- N. Within all areas under the city's jurisdiction with respect to controlling private sewage facilities, absorption trenches and/or beds may be used for effluent disposal only if the soil is suitable therefore as set forth by the Soil Conservation Service of the United States Department of Agriculture in their report "Soil Survey of Val Verde County, Texas." The soils defined in the report upon which absorption trenches or beds may be permitted and used are specifically: (Soil Name and Map Symbol) Acuna--AcB; Coahuila--CoB; Hodgins--HdB; Lagloria--LaB; Laredo--Ls; Reynosa--Ra; Sanderson--SsC; and Val Verde--VaB.

Because there may be small and isolated areas of soil suitable for effluent disposal by absorption within an area otherwise mapped and classified as shown on the soils maps in the above stated report, an applicant for a permit may submit the results of a percolation test or tests along with a map or survey showing the specific location claimed to be suitable for use of an absorption system. If such location is determined to be acceptable for absorption methods by the licensing authority, a permit may be issued accordingly, and if the facility is properly designed and constructed, a license may be issued.

- O. Because a dwelling may be constructed and initially occupied by a lesser number of persons than may later occupy the structure as renters or subsequent purchasers, no private sewage facility shall be permitted or licensed under Section 23-72 unless that facility will be adequate to serve a dwelling having not less than four bedrooms.
- P. Aerobic digestors may be used in lieu of a septic tank if such facility has been manufactured and approved by the National Sanitation Foundation and if it is installed under an agreement that it will be serviced and maintained by a qualified distributor or vendor (who shall be prequalified by the licensing authority) and if its use and location are entered into a special register as maintained by

the licensing authority and if all data relevant thereto has been filed with the State health department as required by the regulations of such agency.

- Q. No person may cause or allow the installation of a private sewage facility when any part of the facility is to be within 1,000 feet in horizontal distance (measured on the closest practicable access route) of an existing organized disposal system.

Section 23-72 Requirements for New Private Sewage Facilities

- A. A Permit to Construct may be obtained from the licensing authority prior to commencing the construction or installation of, or substantial modification to, a private sewage facility and one will be issued upon a finding that construction can commence.
- B. A License to Operate must be obtained from the licensing authority prior to operating a new private sewage facility and one will be issued after satisfactory completion and approval of construction.
- C. To make an application for a Permit to Construct, the applicant shall submit to the Licensing Authority the following:
1. a properly completed application form;
 2. the required fee;
 3. an accurate map showing the precise location of the proposed facility so as to permit the location thereof in reference to the Soils Maps as published by the United States Soil Conservation Service, and if desired, the results of percolation tests performed by a registered professional engineer, registered professional sanitarian, or similarly qualified person approved by the licensing authority;
 4. a drawing of the proposed facility and the topography of the site upon which the facility is to be located which will satisfactorily demonstrate that the proposed system will comply with these rules and that the lot or tract is large enough;
 5. a statement or other evidence that demonstrates that the proposed facility is not within 1,000 feet of an organized disposal system;
 6. the completed application and all additional information submitted shall not contain any false information or conceal any material facts and shall be sworn to and notarized;
 7. within thirty (30) days after a proper and complete application has been made, the licensing authority shall make a finding on the issuance of a permit, based upon the information contained in the completed application and any other information available to the licensing authority;

- a. upon a finding that construction can commence, a Permit to Construct shall be issued to the applicant;
 - b. upon a finding that Permit to Construct cannot be issued, the licensing authority shall so notify the applicant in writing within ten (10) days of that finding and shall include the reasons for denying the issuance of a permit;
8. a permit shall expire one year from the date of issuance unless construction has commenced on the private sewage facility for which the permit was issued. An expired permit may be reissued provided the conditions under which the permit was originally issued have not changed; a fee will be charged to defray the cost of reissuance; when a permit has expired and the original conditions have changed, a new application must be submitted with a new application fee.

D. License to Operate

Each new private sewage facility shall be inspected and approved by the licensing authority prior to the final covering of the facility.

1. The applicant or installer shall notify the licensing authority, at least forty-eight (48) hours in advance, excluding weekends and legal holidays, of the need for an inspection.
2. The applicant or installer shall provide whatever reasonable assistance the licensing authority requests in order to make the inspection. Within five (5) days after an inspection, the licensing authority shall make a finding on the issuance of a license, based upon the information obtained from the inspection and any other information available.
3. Upon a finding that the use of the new private sewage facility will not cause pollution, injury to the public health, or nuisance conditions and is not in conflict with these rules and upon payment of appropriate fees, a License to Operate the facility shall be issued to the applicant.
4. Upon a finding that a License to Operate cannot be issued, the licensing authority shall so notify the applicant in writing within five (5) days of that finding and shall include the reasons for denying the issuance of a license.
5. The License to Operate issued under the authority of these rules for a facility that is intended to or does serve a single-family dwelling (including mobile home) of any size, or a nonresidential use that has no more wastewater discharge than 325 gallons any two successive days, shall be for an indefinite period and shall be transferred to the succeeding owner. Upon the request of a new owner of a licensed private sewage facility, the licensing authority shall transfer the license to that new owner, provided the private sewage facility has not been

substantially altered, has been properly maintained, and is functioning properly.

6. If the facility (structure) to be served (1) contains two or more dwelling units, including townhouse and condominium projects, or, (2) is a mobile home park as herein defined, or (3) any nonresidential use that does or may have a potential flow of wastewater for two successive days of greater than 325 gallons, the license to operate issued under the authority of these rules shall be for a term of three (3) years. At the end of every three (3) years, the private sewage facility shall be reinspected by the licensing authority for compliance with these rules. The license may be transferred to a succeeding owner. Such transfer shall be upon the request of the owner, provided the private sewage facility has not been substantially modified, has been properly maintained, and is functioning properly.

E. Existing Private Sewage Facilities

All such facilities existing as of the effective date of this ordinance shall be inspected within thirty (30) months of the effective date hereof. If, upon inspection, such an existing facility is found to be in compliance with the city's regulations, a license to operate for a three (3) year term shall be issued. If such facility is found to be in noncompliance with the regulations, no license to operate shall be issued and the owner/operator of such facility shall be given written notice of the defects or conditions required to be corrected, and depending on the severity and urgency of the conditions or defects, the owner/operator shall be required to make the needed corrections within not less than one, nor more than twelve, weeks from the date of the notice setting forth the required correction. As such time as the required corrections have been satisfactorily completed, the license to operate shall be issued for a term of three (3) years, as set forth in the preceding paragraph.

F. Special Requirements for Institutions

A registered professional engineer, registered professional sanitarian, or similarly qualified person approved by the licensing authority shall design all private sewage facilities serving institutions. Said designs shall be made in accordance with these rules, including the standards. Single compartment treatment units shall not be utilized, but instead, treatment units with two or more compartments or two or more treatment units connected in series shall be utilized.

Section 23-73 Enforcement and Penalty

- A. The license authority may routinely inspect private sewage facilities to assure continued compliance with these rules.

- B. The licensing authority shall inspect any private sewage facility that is reasonably believe to be causing pollution, a threat to the public health, or nuisance conditions, or to have been substantially modified without complying with these rules based on a creditable complaint or other information available to the licensing authority and may inspect any new private sewage facility should the conditions existing at the time of licensing be found to have changed. If upon such inspection it is found that pollution, a threat to public health, or a nuisance condition is occurring, or an unpermitted substantial modification was performed, the licensing authority shall so notify the owner of the private sewage facility in writing and include what problems must be remedied in order to achieve compliance, and set a reasonable amount of time to achieve compliance. The private sewage facility shall be reinspected at the expiration of the allotted time.
1. if the facility is found to be compliant, a license therefor may be issued or the existing license may be modified;
 2. if the facility is found to be noncompliant, appropriate enforcement action shall be taken.
- C. A person who violates any of these rules is guilty of a misdemeanor and on conviction is punishable by a fine of not less than \$10.00 nor more than \$2,000.00. Each day that a violation occurs constitutes a separate offense.
- D. Jurisdiction for prosecution of a suit under this section is in the Municipal Court of the city of Del Rio, Texas.
- E. Venue for prosecution of a suit under this section is in the Municipal court of the city of Del Rio, Texas.
- F. Whenever it appears that a violation or the threat of a violation of any of the terms and conditions of these rules has occurred or is occurring, the licensing authority may have a suit instituted in a district court through its own attorney for injunctive relief or civil penalties or both against the person who committed, is committing, or is threatening to commit the violation.
- G. Such suits may not be instituted by the licensing authority unless the City Council had adopted a resolution authorizing the institution of the suit.
- H. In suits brought under this section, the Texas Water Commission is a necessary and indispensable party.

Section 237-74 Notice and Effective Date

Notice of the passage of this ordinance shall be given once a week for two (2) consecutive weeks in the official newspaper of the city of Del Rio, Texas by publishing the caption and the penalty or fine for a violation of its provisions. This ordinance shall become effective after its passage and publication as prescribed by law.

HUGH WILLIAMS, Mayor

JEFFREY A POMERANZ
City Manager

JAMES J. BAYNE, City Attorney

CONSTRUCTION STANDARDS
FOR PRIVATE SEWAGE FACILITIES
DEL RIO, TEXAS

An Appendix to the City of Del Rio
Private Sewage Facilities Ordinance
(Ordinance No. 0:87-47)

Note that these standards include all of the technical requirements contained in the "Construction Standards for Onsite Sewerage Facilities" published by the Texas Department of Health and effective on January 1, 1988, and in addition these standards have been supplemented and edited to recognize local requirements and the recommendations of consultants.

Section 1 General Procedures and Information

A. Purpose

It is the policy of the city of Del Rio that individual onsite sewerage facilities shall be designed, constructed, and operated so as to provide adequate sewage treatment and disposal that will not contaminate potable water supplies or threaten the health and welfare of the public. Therefore, the primary purpose of this document is to establish minimally acceptable standards for constructing onsite sewerage facilities. These construction standards will cover the aspects of onsite sewerage systems for use by individual homes, small business establishments, recreational areas, institutions, and other activities that do not have access to a central collection system. The various types of treatment processes covered by these standards do not have any open discharges to the surface of the ground. Any process which proposes open discharge should be designed in accordance with 31 Texas Administrative Code, Chapter 317 (relating to Design Criteria for Sewerage Systems) and must be operated under a waste discharge permit issued by the Texas Water Commission. For daily flows over 5,000 gallons per day that are proposed for subsurface disposal, the determination of the necessity for a waste discharge permit must be obtained from the Texas Water Commission.

B. Definitions

The following words and terms, when used in these sections, shall have the following meanings, unless the context clearly indicates otherwise.

1. Aerobic digestion--the bacterial decomposition and stabilization of sewage in the presence of free oxygen.
2. Anaerobic digestion--the bacterial decomposition and stabilization of sewage in the absence of free oxygen.
3. Bedrock--a continuous horizontal layer of hardened mineral deposits that does not support growth of common plant life.

4. Blackwater--all sewage other than greywater that contains sufficient human or animal wastes to require the water to be treated prior to disposal to the earth's subsurface.
5. Bore hole--a drilled hole four feet or greater in depth and one to three feet in diameter.
6. Caliche--a white or pale yellow deposit of calcium carbonate and/or sulfate of varying hardness that exists in the soil profile.
7. Cesspool--a nonwatertight covered receptacle intended for the receipt and partial treatment of domestic sewage. This device is constructed such that its sidewalls and bottom are open jointed to allow the gradual discharge of liquids while retaining the solids for anaerobic decomposition (see section on Unsatisfactory Onsite Disposal Systems).
8. Chemical--a liquid or powdered waste that in sufficient quantity could have a biotoxic effect on onsite sewerage facilities.
9. Chemical toilet--a portable toilet using chemicals to mask odors, discourage insect breeding, and provide partial disinfection.
10. Collective system--an onsite sewage collection, treatment, and disposal system designed to serve two or more sewage-generating units where the total combined flow from all units does not exceed 5,000 gallons per day.
11. Composting toilet--a disposal facility designed to decompose nonwater-borne human wastes through bacterial action facilitated by aeration.
12. Evapotranspiration system--a subsurface sewage disposal system which relies on soil capillarity and plant uptake to dispose of treated effluent through surface evaporation and plant transpiration.
13. Gravel less drainfield pipe--a generically labeled large diameter (usually eight or 10 inches) geotextile fabric-wrapped piping product which is intended for use without gravel in a subsurface sewage disposal system.
14. Greywater--wastewater from clothes washing machines, showers, bathtubs, handwashing lavatories, and sinks that are not used for food preparation or disposal of chemical and biological ingredients.
15. Holding tank--a watertight container used to receive and store sewage in an anaerobic environment pending its delivery to, and treatment at, an approved treatment facility. This type of facility is generally intended for interim use, if and when approved by the permitting authority.

16. Individual--a person, group of persons, corporation, or entity permitted to own or use real estate.
17. Injection well--a hole drilled into permeable soil which is intended to receive either raw sewage or the effluent from some form of treatment process (see discussion relating to Unsatisfactory Onsite Disposal System).
18. Innovative design--detailed drawings and specifications describing the construction of onsite sewerage facilities that utilize materials and concepts not included in these standards.
19. Mobile home park--any facility or area developed for lease or rental of space for the placement of two or more mobile homes.
20. Mound system--a soil absorption system which is installed in or below an artificially created mound of earth.
21. Natural soil--earthen materials deposited by natural processes and not disturbed by artificial processes.
22. Onsite aerobic treatment unit--a watertight covered receptacle designed to receive, store, and provide treatment to domestic sewage received through a building sewer. Its function is to separate solids from the liquid, promote the aerobic digestion of organic matter through the use of a forced air supply, store and aerobically digest settleable solids, and allow the clarified liquid to be disposed of in a subsurface disposal system.
23. Onsite sewerage facilities--septic tanks, pit privies, cess-pools, sewage holding tanks, injection wells used to dispose of sewage, chemical toilets, treatment tanks, and all other facilities, systems, and methods used for the disposal of sewage other than the disposal systems operated under a permit issued by the Texas Water Commission.
24. Pit privy--a vented waterproof vault intended to store human wastes and allow its decomposition through natural processes. In this type of treatment, no external water source is provided and there is no direct discharge to the surface. It is recommended for use only in primitive and remote areas.
25. Platted--recorded with the county in an official plat record.
26. Portable toilet--a small portable enclosure with a built-in toilet seat and a raw sewage holding tank. It is primarily intended for use at construction sites and other areas where temporary restroom facilities are required. Domestic sewage collected in these facilities is generally retained in an anaerobic state pending delivery to, and treatment at, an approved treatment facility.

27. Pressure dosing--the use of some form of pumping device and a network of small diameter piping to distribute treated effluent within a subsurface sewage disposal area.
28. Sanitary control easement--an easement securing all land within 200 feet of a public or private potable water well from pollution hazards that include, but are not limited to, solid and liquid waste disposal sites, animal pens, improperly sealed or abandoned wells, major sewage pumping and treatment plants, and drainage ditches which contain industrial waste discharges. (The 200 feet criteria has its origin in the 1987 Hogan and Razor, Inc. recommendation to the City Council entitled "San Felipe Springs Area Protection Study and Comprehensive Plan," Section VI, pg 22.)
29. Scum--a mass of organic and/or inorganic matter which floats on the surface of sewage.
30. Seepage pit--an unlined covered excavation in the ground which is designed to be operated in essentially the same manner as a cesspool.
31. Septic tank--a watertight covered receptacle designed to receive, store, and provide treatment to domestic sewage received from a building sewer. Its function is to separate solids from the liquid, digest organic matter under anaerobic conditions, store the digested solids through a period of detention, and allow the clarified liquid to be disposed of in a subsurface disposal system.
32. Sewage--water which contains, or which has been in contact with, organic and inorganic contaminants such as human or animal wastes, vegetable matter, cooking fats and greases, laundry and dishwashing detergents, and other chemicals compounds and waste products.
33. Single-family dwelling--a habitable structure constructed on, or brought to its site, and occupied by one or more persons.
34. Sludge--a semiliquid mass of partially decomposed organic and inorganic matter which settles at or near the bottom of a receptacle containing sewage.
35. Soil--the unconsolidated mineral material on the surface of the earth that serves as a natural medium for the growth of plants.
36. Soil absorption system--a subsurface sewage disposal system which relies on the soil's ability to absorb moisture and allow its dispersal by lateral and vertical movement through and between individual soil particles.
37. Split system--a wastewater disposal system that treats and disposes of blackwater and greywater separately.

38. Subsurface sewage disposal system--a network of perforated piping installed below ground level which is used to distribute pretreated sewage effluent over a given disposal area.
39. Ultra low-flow toilets--toilets that use 1-1/2 gallons or less per flush.

C. General Environmental Requirements

1. Background

These construction standards are being adopted under authority of the Texas Sanitation and Health Protection law, Texas Civil Statutes, Article 4477-1 and the "Construction Standards for Private Sewage Facilities" promulgated by the Texas Department of Health. The onsite sewage disposal system was originally developed to serve rural residences. For this purpose, the properly installed septic tank performed well and permitted the remote rural resident to utilize the convenience of indoor plumbing. During the past 30 years, the population distribution in the United States has shifted from rural to urban, thus creating rapid development in and on the fringes of urban areas. Many residential subdivisions have been located beyond the limits of organized water and sewerage facilities causing the residents to rely on individual resources available within the boundaries of small lots or tracts of land. Onsite sewerage systems have been used frequently as the means of liquid waste disposal. Unfortunately, in many cases, subdivisions were located in areas with soil conditions unsuitable for conventional systems. Quite often, lot sizes are no larger than those found in subdivisions serviced by central water and sewerage systems. Residential areas with small lots served by individual systems, on many occasions, are subject to undesirable conditions such as widespread saturation of the soil, malfunction of the treatment unit, sewage on the surface of the ground and in roadside ditches, and strained relationships between neighbors. The standards presented herein are based on the cumulative observations, and experiences of the past and are intended to provide the citizens of the Del Rio area with adequate public health protection and minimum of environmental pollution.

2. Facility owner's responsibilities

A properly designed onsite sewerage facility, properly constructed in a suitable soil, can malfunction if the amount of water it is required to dispose of is not controlled. It will be the responsibility of the owner to maintain and operate the facility in a satisfactory manner. The proper performance of an onsite sewerage facility cannot be guaranteed even though all provisions of these standards have been met. Inspection and licensing of an onsite sewerage facility by the licensing authority shall indicate only that the facility meets minimum requirements and does not relieve the owner of the property from

complying with city, State, and Federal regulations. Onsite sewerage facilities, although approved as meeting minimum standards, must be upgraded by the owner, at the owner's expense, if the owner's operation of the facility results in objectionable odors, if unsanitary conditions are created, if pollution or nuisance conditions are threatened or occur, or if the facility when used does not comply with governmental regulations.

3. Locational and environmental standards

The developers of subdivisions of mobile home parks that are remote from organized sewage collection systems shall consider the method of sewage disposal in the determination of lot size and arrangement. The provision of a collection system and central treatment plant is generally the preferred method of sewage disposal. However, if soil conditions permit, and other factors are favorable to the use of onsite sewerage systems, the standards in table 1 shall be used with regard to the location of the systems' components. A sewage disposal plan shall be submitted to the city licensing authority a minimum of 45 days prior to the anticipated date of construction.

4. Authority of the city to regulate onsite sewerage facilities

The Texas Sanitation and Health Protection law, Texas Civil statutes, Article 4477-1, requires local health officials to abate nuisances, and to aid the State Board of Health in the enforcement of its rules, regulations, requirements and ordinances, and in the enforcement of all sanitary laws within the jurisdiction of the local health officials. The city of Del Rio may require, by ordinance or waste control order, regulations which exceed the requirements of the State standards, but the city must not permit their standards to fall below those recommended by the Texas Department of Health.

5. Design approvals of onsite sewage systems

a. Approval of conventional designs

The construction standards contained herein are promulgated under the authority of the Texas Sanitation and Health Protection Law, Texas Civil statutes, Article 4477-1. In Addition, Article 4477-1 states that disposal of human excreta in populous areas must be by methods approved by the Department of Health. It further states that the effluent from septic tanks (or aerobic treatment units) shall be disposed of through subsurface drainfields designed in accordance with good public health engineering practice. The design standards in this ordinance constitute the minimum criteria established and approved by the department of health and it includes supplementary criteria that has evolved from land use or engineering studies relating to methods of onsite sewage disposal appropriate to this area.

b. Approval of innovative designs

The city may consider feasible innovative designs which are not specifically covered in these construction standards. New systems may be conceived in the future to meet requirements demanded by unusual or new circumstances. To assist the city in determining the reliability of new system and protect the public from improperly designed systems, the department of health will review and evaluate new proposals on an individual basis. A system found to be designed in accordance with good engineering practice will be approved by the department for the one installation for which the design was intended. Subsequent similar designs for other installations will then be reviewed by the city. All new and innovative designs must be submitted through the city to the department as a clearing house procedure. At the department's discretion, the city, if it possesses qualified technical expertise will be assigned authority to review each design and administer a program to evaluate the design's in place performance. A 12-month trial operational period shall be required prior to any final approval by the department of any innovative design.

6. Residential lot sizing

a. General considerations

The failure of an onsite sewerage system may be caused by a large number of circumstances, including inadequate soil percolation, improper construction, design, installation, and misuse. The single most important factor concerning public health problems resulting from these failures is the residential dwelling density which is primarily a function of lot size. The failure of a system in a highly populated area is the fundamental cause of public health hazards resulting from onsite sewage disposal. Surfacing sewage provides a medium for the transmission of disease and the fact that many people are in the vicinity causes concern over the spreading of disease. Sewerage systems using soil absorption for effluent disposal are more likely to malfunction in high population density situations because the soil available to absorb or evaporate the effluent is limited. The failure of an absorption system on the small lot can be financially disastrous to the owner because the lot may not contain sufficient room to construct a new absorption field in a new location.

b. Platted subdivisions served by a public water supply

Subdivisions of single-family residences platted after the effective date of this ordinance, and served by a public water supply but utilizing individual subsurface methods for sewage disposal, shall provide for individual lots having surface areas of at least one acre, or shall have a

site-specific design by a registered professional engineer or registered professional sanitarian and approved by the city. In no instance, shall the the area available for such a system be less than two times the design area. The surface area must be free of restrictions indicated in table 1 and those referred to throughout this ordinance.

c. Platted subdivisions served by individual water systems

In subdivisions platted after the effective date of this ordinance, for single family residences where each lot maintains an individual water supply well and sewerage system with a subsurface soil system, the plat shall show the approved well location and a sanitary control easement around the well within a 200-foot radius in which no subsurface sewerage system may be constructed. A watertight sewerage unit or lined evapotranspiration bed with leak detection capability may be placed closer to the water well than 200 feet, provided the minimum separation stated in table 1 is not violated (for an explanation of the origin of the 200 feet criterial, see the definition of "sanitary control easement"). To minimize the possibility of the transmission of waterborne diseases due to the pollution of the water supplied for domestic use, each lot in a platted subdivision shall contain not less area than two acres, or shall have a site-specific design by a registered professional engineer or a registered professional sanitarian and approved by the department or its designee. In no instance shall the area available for such system be less than two times the design area. The surface area must be free of the restrictions indicated in table 1 and those referred to throughout this publication.

d. Smaller Lots or Tracts

The construction or installation of an onsite sewage facility on a lot or tract that is smaller than the size required in paragraphs (6)(b) and (c) above shall not be allowed. However, on smaller lots or tracts recorded with the county prior to the effective date of this ordinance, and onsite sewerage facility may be permitted to be constructed and licensed to operate if it meets the following criteria. It must be demonstrated by a thorough investigation or registered professional engineer or registered professional sanitarian (either having demonstrated expertise in onsite sewerage system design) that an onsite sewerage facility on one of these lots can be operated without causing a threat or harm to an existing or proposed water supply system or to the public health, or creating the threat of pollution or nuisance conditions.

7. Mobile home parks and multiuse residential developments

Mobile home parks and multiuse residential developments which are owned or controlled by an individual and which rents or leases space, or mobile home parks and multiuse residential developments which are sold but ownership and control of a central water system and/or a central sewerage system is vested in a responsible entity, may utilize smaller lots than stated in paragraph (6)(b) of this subsection, provided an overall sewerage plan is submitted to the city and approved and water is supplied by a central water system. Parks and developments of this type may connect no more than 20 units to a single sewerage system, provided the system is designed by a registered professional engineer or registered professional sanitarian. The total anticipated sewerage discharge shall not exceed 5,000 gallons per day from the connected homes and the sewerage facilities in subsection (b) (23) of this section. Individual home sites must meet the requirements in paragraph (6) of this subsection unless applicable under this section.

8. Exemptions and variances

Requests for exemptions or variances of any part or parts of these standards for the design, installation, or operation of any onsite sewerage system shall be considered on an individual basis. The burden of proof is the responsibility of the registered professional engineer, registered professional sanitarian, or other qualified individual responsible for the design or installation of the system under consideration. This individual must demonstrate to the satisfaction of the Department of Health or licensing authority, that the exemption or variance has been requested because conditions are such that equivalent protection of the public health and environment can be provided by alternate means or construction features. Any such request must be accompanied by sufficient engineering or applicable data to meet the department's or licensing authority's satisfaction. The department shall, at the request of the city, provide evaluation and comment services.

Section 2 Design Standards for Sewerage Systems

A. Septic tank design--residential

1. House sewer

The sewer from the house plumbing system to the septic tank shall be constructed of structurally sound pipe such as cast iron, ductile iron, or SDR 35 (or equivalent), plastic pipe with metallic location tape, bedded in sand. Cast iron, ductile iron, Schedule 40 PVC, or high-strength pipe should always be used under driveways. The pipe from the house to the septic tank shall have a minimum inside diameter of not less than three inches and be compatible with the house stub outpipe. The slope of the house sewer shall be no less than 1/4-inch fall per foot

of pipe. The stubout location shall be at the highest possible elevation with respect to the house foundation to avoid deep treatment systems. The line must be of watertight construction. A cleanout plug must be provided within three feet of the building and at 90 degree turns in alignment, both horizontal and vertical, and at every 50 feet of straight horizontal piping. Prospective installers and users of low flush commodes should consult with the manufacturers of these devices regarding their grade requirements. Too steep or too shallow slopes on pipes connecting the toilet and the treatment tank may require excessive maintenance. Piping from the treatment tankage to the disposal area must have at least two inches inside diameter, have at least a minimum fall of 1/8-inch per foot, and be as sturdy as SDR 35 PVC piping. Metallic locating tape shall be used with the installation of all piping to and within the disposal area. This tape shall be readily detectable with a metal detector.

2. Septic tank capacity based on sewage loading

A properly designed septic tank shall be watertight. The settleable and suspended solids will undergo partial decomposition under anaerobic conditions. As a result of use, the septic tank will accumulate partially decomposed solids which must be removed periodically. As additional sewage is introduced into the tank, partially clarified effluent is discharged into the subsurface disposal field. No permit shall be issued and no facility licensed unless it shall be designed and constructed to serve a dwelling, as set forth in the State regulations, having not less than four bedrooms.

3. Inlet and outlet devices

To assure rapid drainage of house plumbing, the flow line of the inlet pipe shall be at least three inches higher than the operating tank liquid level which is determined by the flow line of the outlet pipe. Liquid penetration of the inlet device shall be at least six inches, but never greater than that of the outlet device. Liquid penetration of the outlet device shall be approximately one-fourth to one-half of the tanks liquid depth. T-branches are required for inlet and outlet devices because they provide a means for venting the gases produced by the decomposition process from the tank and absorptions system through the house plumbing. Otherwise, gases may escape from around the lid of the tank and cause an odor nuisance in the vicinity of the septic tank. T-branches also offer ready access for required maintenance. To prevent the escape of floating solids from the tank to the subsurface disposal field and the possibility of inlet stoppages, the open spaces between the tops of the inlet and outlet devices and the underside of the tank cover shall not be greater than four inches, nor less than two inches (see figure 1). In order to provide a good watertight septic tank, the inlet and outlet T-branches shall be installed in a permanent manner at the time the septic tank is

constructed. Factory built tanks shall have the T-branches grouted in place before delivery so that the only connection to the tank at the point of installation will be influent and effluent lines. Manufacturers of prefabricated tanks shall be allowed to install watertight flanges into the tank walls, into which inlet and outlet stubs can be easily fitted by field installers, causing watertight connections.

4. Details of septic tank design

- a. Two single compartment tanks in a series, or a two compartment tank, with approximately one-half to two-thirds of the total volume in the first compartment will be required for acceptable solids removal. Tanks may be round, rectangular, or any shape that allows the city's standards to be met. The second tank or compartment shall have inlet and outlet devices designed the same as for a single-compartment tank, except that the elevation, or flow-line, of the inlet device in the second unit shall be the same as the outlet device in the first unit (see figure 2). A 10-inch minimum diameter or square port shall be provided to each flow line device for inspection, cleaning, and maintenance. Both the inlet and outlet devices shall be accessible for inspection and maintenance without having to enter the septic tank. For tanks not having more than 12 inches of earthen cover, the use of sectional slab covers will conveniently and safely provide the needed access. For tanks buried more than 12 inches, manholes with risers are required. The septic tank shall be of sturdy, watertight construction. Materials used may be steel-reinforced, poured-inplace concrete, steel-reinforced precast concrete, reinforced fiberglass, polyethylene, or other materials approved by the city. Metal septic tanks are prohibited because they are subject to corrosion. The septic tank shall be structurally designed to resist buckling from external hydraulic loading and exterior loading caused by earth fill, garden tractors, riding lawn mowers, or any expected maximum wheel weights. At the option of the city the tanks shall be tested by filling with fresh or construction grade water following installation and checked 24 hours later for leaks and structural integrity. Tanks exhibiting obvious deflections, leaks, or defects that will impair treatment must not be used. Where concrete tanks are installed, sweating, or condensation at construction joints is acceptable.
- b. In the case of poured-inplace concrete tanks, septic tank bottoms shall be at least six inches thick with 6x6x6 gauge welded steel mesh or number three reinforcing bars on six inch centers, with such reinforcing materials being extended up into the wall area of the tank so that it will mesh with the reinforcing materials in the walls of the tank. The floor and walls must be constructed monolithically. Walls are to be minimum of six inches thick.

TABLE I
MINIMUM REQUIRED DISTANCES IN FEET FOR CONVENTIONAL SYSTEMS

From	To:	Sewage Treatment Tanks	Lined Evapo. Deds	Soil Absorption Systems or Unlined Evapo. Deds	Sewer Pipe With Watertight Joints
Private Water Wells, Underground Cisterns and Pump Suction Pipes		50 +	150* +	150 +	20 +
Public Water Wells		50	150*	150	20
Water Supply Lines		10	10	10	9
Streams, Ponds and Lakes		50	75*	75	20
Sharp Slopes, Breaks		5	var.	50**	5
Foundations, Structures and Surface Improvements		5	5	15	—
Property Lines		10	10	10	—
Easement Lines		1	1	5***	—
Soil Absorption Systems		5	5	20	—
Swimming Pools		15	15	15	—

* When a leak detection system, as described in Sec. 301.13.(c)(3)(A)(ii)(IV)(a-) is used, the minimum required distance is 50 feet to existing private water wells, cisterns and pump suction pipes.

Var. These minimum required distances may be varied if an innovative lined system is required by the permitting authority to be designed by a Registered Professional Engineer or Registered Professional Sanitarian.

** The absorption system's bottom must be a minimum of 50 feet from any break or outcropping ledges, unless it is designed by a Registered Professional Engineer or a Registered Professional Sanitarian having hydrogeological data of the strata below the system's site. Greywater disposal areas may be installed to within 25 ft. of the slope face.

*** A drainage Easement having sloped sides greater than 30% or grade breaks will require adherence to the 50 foot criteria indicated by **.

+ This distance may be reduced to a minimum of 30 feet, for existing private water wells only, if the space between the existing private water well casing and the surrounding ground is filled with cement slurry that is pumped through a tube that extends to the required depth of sealing. This depth shall be at least two times the horizontal encroachment measurement but not more than the depth to the water producing strata. A three foot square by six inch thick concrete slab shall be poured around the casing.

TABLE II

SEPTIC TANK MINIMUM LIQUID CAPACITIES

NUMBER OF BEDROOMS	SEPTIC TANK CAPACITY (Gallons)
Two or less	750
Three	1,000
Four	1,250
For Each Additional:	250

NOTE. The Inside Liquid Depth Of The Tank Shall Not Be Less Than 30 Inches.

See Table VI For Calculating The Number Of Bedrooms Based On Dwelling Living Area.

Consideration shall be given to increasing total tank capacity if extensive use of kitchen sink waste grinders or disposals is anticipated.

TABLE III
INDIVIDUAL USAGE RATES
IN
BUSINESSES/INSTITUTIONS

This table may be used for estimating gallons of daily sewage flow per person to determine minimum tank capacity requirements, unless actual water usage data is available and has been carefully checked by the designer of the proposed system.

TYPE OF ESTABLISHMENT	GALLONS/PERSON/DAY
Airports (per passenger)	5
Apartment Houses	50
Boarding Schools	50
Churches (per member)	5
Country Clubs (per resident member)	100
Country Clubs (per non-resident member present)	25
Day Care Centers (without kitchen)	15
Day Care Centers (with kitchen)	25
Drive-In Theaters (per car space)	5
Factories (gallons per person per shift, exclusive of industrial wastes)	20
Hospitals	200
Hotels	80
Institutions other than Hospitals	100
Laundries Self-service (gallons per wash, i.e., per customer)	50
Lounges (bar & tables)	10
Mobile Homes	75
Motels	50
Movie Theaters (per auditorium seat)	5
Office Buildings *.	15
Parks (without bathhouse)	5
Parks (with bathhouse)	15
Restaurants (24-hour full service)	70/seat/day
Restaurants (breakfast/lunch or lunch/dinner)	35/seat/day
Restaurants (fast food — paper plate service)	15/seat/day
Schools without cafeterias, gymnasiums or showers	15
Schools with cafeterias, but no gymnasiums or showers	20
Schools with cafeterias, gymnasiums and showers	25
Service stations (per vehicle served)	10
Stores (total per day per washroom)	400
Swimming Pools and Bathhouses	10
Townhouses (with clothes washer)	50
Travel Trailer/RV Parks	50
Vet Clinics (per animal)	10
Work or Construction Camps (semi-permanent)	50
Youth camps (no showers or meals served)	15
*Note: Offices without Food Service or Bathing Facilities, with Restrooms Equipped with Toilets Requiring 1.5 Gallon per Flush or Less, and Automatic Cutoff Faucets	6

TABLE IV

FLOW SHEET FOR SELECTING PROPER SUBSURFACE DISPOSAL METHODS

TABLE V
CRITERIA FOR SOIL ADSORPTION OF SEWAGE EFFLUENT DEVELOPED FOR
SITE SPECIFIC EVALUATIONS

Site Characteristic	Classification		
	Suitable	Provisionally Suitable (1)	Not Suitable
Topography	Slopes 0-15%	Slopes 15-30%	Slopes greater than 30% Complex slopes.
Subsoil Texture	Sandy soils Loamy soils	Clayey soils with low shrink-swell potential.	Clayey soils with high shrink-swell potential.
Subsoil Structure		Angular or subangular blocky.	Platy structure. Weathered rock. Massive clayey soils.
Soil Depth	Weathered rock or consolidated bedrock greater than 48 inches below ground surface.	Weathered bedrock or consolidated rock from 36 to 48 inches below ground surface.	Weathered rock or consolidated bedrock less than 36 inches below ground surface.
Restrictive Layer	None within 36 inches of the ground surface.		Restrictive horizon within 36 inches of the ground surface or below the trench bottom.
Soil Drainage	No drainage mottles within 36 inches of the ground surface.		Drainage mottles (chroma 2 or less) within 36 inches of the ground surface.
Flooding			Areas subject to a possible flood. Depressional areas without adequate drainage.
Soil Permeability	Greater than or 5 min/inch but less than or equal to 60 min/inch.		Less than or equal to 5 min/inch or greater than 60 min/inch. Unselective fill materials groundwater.

Soil may be reclassified from unsuitable to provisionally suitable under certain conditions using acceptable site or system modifications.

TABLE VI
ABSORPTION TRENCH AND BED SIZING FOR SINGLE FAMILY RESIDENTIAL DWELLINGS

Average Percolation Rate (Minutes/Inch)	Sewage Application Rate, R_a	Soil Texture (See Table VIII USDA Soil Textural Classifications)	Minimum Bottom Area (Sq. Ft.) For a One or Two Bedroom House	Minimum Bottom Area For Each Additional Bedroom* (Sq. Ft./Bedroom)
Minutes Per Inch	Inches Per Hour	Gallons per Sq. Ft. Per Day	Trench	Bed
Less Than 5	More Than 12	Too Great For Consideration	Sections on Alternative Systems	
5-15	4-12	0.6	380	200
15-30	2-4	0.5	500	250
30-45	1.3 - 2	0.4	625	300
45 - 60	1.0 - 1.3	0.3	800	400
More Than 60	Less Than 1.0	Less Than 0.3	1500	500
		Clay	See Sections on Alternative Systems	

Minimum trench bottom area is calculated to include capacity for washing machine wastewater, organic material from garbage grinders, and infiltration from rainfall.

Required minimum spacing between parallel conventional absorption trenches is 3 trench widths.

*When dwellings consist of a large living area relative to the number of designated bedrooms, the following guidelines should be used to approximate the trench area:

Less than 1,500 sq. ft. — Use trench area for two bedroom house. 1,500 sq. ft. to 1,900 sq. ft. — Use trench area for three bedroom house. For each additional 800 sq. ft. — Add trench area equal to one bedroom.

This criteria is valid for normal water consumption by an average household occupancy and is not applicable to collective sewage system design.

TABLE VII
MEAN PAN EVAPORATION AND RAINFALL

Station	EA Mean Evaporation Rate (Inches/Year)	RFA Mean Rainfall (Inches/Year)
Abilene	75.0*	23.8**
Amarillo	87.9	20.28
Austin	70.0	32.49
Beaumont	47.8	55.07
Brownsville	56.0	25.13
Canyon Lake	80.8	33.19
Corpus Christi	67.0*	32.0**
Daingerfield	74.2	46.12
Dallas	85.0	35.94
El Paso	106.5	7.77
Fort Stockton	105.6	11.85
Houston	48.7	48.19
Lake Somerville	71.7	37.45
Laredo	87.0*	21.0**
Lubbock	88.7	18.41
Lufkin	51.0*	43.0**
Midland-Odessa	85.0*	13.0**
San Antonio	70.0*	30.0**
San Angelo	84.0*	19.0**
Temple	68.2	34.00
Tyler	55.0*	42.0**
Uvalde	72.0*	25.0**
Wichita Falls	73.0*	27.0**

* Interpolated From Map, P. 66 "Climatic Atlas of Texas"

** Interpolated From Map, P. 18 "Climatic Atlas of Texas"

TABLE VIII
USDA SOIL TEXTURAL
CLASSIFICATIONS

Clay — Smaller than 0.002 millimeters in diameter
Silt — 0.05 to 0.002 millimeters in diameter
Sand — 2.0 to 0.05 millimeters in diameter

FIGURE 1

Not intended to serve as an engineered design for construction purposes

FIGURE 2
TWO SEPTIC TANKS
IN SERIES

FIGURE 3
SOIL ADSORPTION TRENCH

Not intended to serve as an engineered design for construction purposes.

FIGURE 4
SEPTIC TANK SYSTEM FOR
SLOPING GROUND
(without sharp slopes or grade breaks)

The septic tank and perforated piping shall be installed level while compacted earthen plugs shall separate the solid wall piping from the perforated piping and gravel.

FIGURE 5
SOIL ABSORPTION BED
DETAILS

Plan View Of Dual Bed System

Section A-A

Not intended to serve as an engineered design for construction purposes.

FIGURE 6
LEAK MONITOR SYSTEM

-321-

Not Intended to serve as an engineered design for construction purposes.

FIGURE 7
EVAPOTRANSPIRATION BED
(Cross Section)

- NOTES: 1. Where a liner is used over rock or other material that may damage liner, the liner shall be laid on a 4" protective sand cushion, and covered by a similar cushion.
2. The crushed stone or gravel bed shall be made of $\frac{3}{4}$ " to 2" size hard stone.
3. Sand columns, formed by a permeable material, shall extend completely through the crushed stone or gravel bed. Total column area shall be 10 to 15% of the bed area.
4. The surface shall be mounded or sloped to drain storm water.
5. The above drawing is for illustrative purposes; final construction design shall be site specific.

Not intended to serve as an engineered design for construction purposes.

WATER WELL REGULATIONS, DEL RIO, TEXAS

Ordinance No. 0:88-44

AN ORDINANCE IN ACCORDANCE WITH THE CITY CHARTER AND STATE LAW PROVIDING FOR THE AMENDMENT OF CHAPTER 29 OF THE DEL RIO CODE OR ORDINANCES: PROVIDING FOR THE ADOPTION OF RULES AND REGULATIONS GOVERNING THE DRILLING OF WATER WELLS WITHIN THE JURISDICTION OF THE CITY OF DEL RIO; AND PROVIDING FOR AN EFFECTIVE DATE.

Whereas, Article 1175, Subdivision 19, of the Texas Revised Civil Statutes states in pertinent part that a city has the power to prohibit the pollution of any stream, drain, or tributaries thereof, which may constitute the source of water supply of any city and to provide for policing of same as well as to provide for the protection of any water sheds; and

Whereas, the City Council has expressed its desire for the city to regulate the drilling of water wells within the city's jurisdiction; and

Whereas, the City Council has reviewed and examined the proposed water well drilling regulations as set out herein to promote the health, safety, morals, and general welfare of the community and the safe, orderly, and healthful development of the city of Del Rio, Texas; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DEL RIO, TEXAS THAT:

Section 1 Adoption of Water Well Drilling Regulations

Chapter 29 of the Del Rio Code of Ordinance is hereby amended, so that, as amended, Article 11 of Chapter 29 shall be entitled and shall read as follows:

Section 29-23 Through 29-50 Reserved

ARTICLE II

WELLS

Section 29-51 Powers and Duties of City Council

The City Council of the city of Del Rio or its designated agent or representative shall have the following powers:

- A. To make or have made examinations of all wells within the city and all wells outside the city limits which by law are under the jurisdiction of the city, privately owned or otherwise;
- B. To make or have made at any time the necessary analyses for tests of water therefrom;

- C. To go upon the land and property of the owner of a well for that purpose;
- D. 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;
- E. To supervise the construction, repair, abandonment, and plugging of wells and the operation of such wells. The Council shall keep a register of all wells within the area defined in subparagraph (a) above, which shall show the name of the owner, the location, and the date of construction of each well, its depth, and diameter, the purpose for which the well was constructed, and if abandoned, the date of such abandonment.

All acts authorized to be done by the City Council may be performed by such persons as may be authorized by such Council to act for it.

Section 29-52 Compliance with Article

It shall be deemed a violation of this article for any person to fail or refuse to comply with any order of the City Council made in conformity with and under the authority of this article.

Section 29-53 Scope of Article

The provisions of this article shall not apply to wells or other openings less than fifty feet in depth; provided, however, the owner of any proposed well less than fifty feet in depth shall be required to apply for and receive from the City Council a permit to construct such well, the application for which shall supply all the information required under Section 29-55, and for such permit the Council shall charge and receive the fee hereinafter provided for.

Section 29-54 Permit--Required for Work on Wells

It shall be unlawful for any person to drill or otherwise construct, repair, correct, abandon, or plug a well, or to engage upon such work, within the limits of the area defined in Section 29-51(a), or to employ anyone else to engage in such work, without first applying for and securing a permit from the City Council or a duly authorized agent thereof. Such permit may be granted with the approval of the City Council to any person who files with such Council the application hereinafter provided for and pays the fee hereinafter required, and complies with all other provisions of this article applicable to him.

Section 29-55 Same--Application

Every application for a permit for the drilling, construction, repair and correction, abandonment or plugging of a well, shall state the name and address of the owner thereof, the purpose for which the permit is desired, which shall be one or more of the acts above-mentioned; the definite location of the well or proposed well; its approximate depth;

and if for a permit for the drilling or construction or repair and correction of a water well, the estimated amount of water to be, or which is, pumped daily, monthly or annually, and the use or uses for which the water will be or is required; if for a permit for the drilling or construction or for the repair and correction of a well, the proposed method of drilling or construction, or the proposed method of repair and correction, and the kind of equipment to be used, and in all cases, the name of the contractor, and the license number issued by the Texas Water Drillers Board, if done through a contractor, whom the owner desires to drill or construct, repair and correct, or do the work pursuant to an abandonment of a well in compliance with this article.

Section 29-56 Same--Inspection Before Issuance

It shall be the duty of the City Council or its designated agent or representative to inspect the property where any well is to be drilled, sunk, dug, or bored, and to refuse the issuance of a permit to drill, sink, dig, or bore a well in a place which does not meet with its approval as to drainage and other sanitary conditions.

Section 29-57 Same--Execution

All permits shall be executed in triplicate, one copy to be delivered to the applicant and two copies to be retained in the office of the City Council.

Section 29-57 Same--Additional Permits

It shall be unlawful for any applicant who obtains a permit to construct a well of a certain depth, to extend such well to a depth exceeding the depth provided for in such permit without first obtaining an additional permit therefor.

Section 29-58 Same--Fees--Amounts

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

- A. Permit for the drilling or construction of a new well up to fifty feet depth, ten dollars.
- B. Permit for the drilling or construction of a new well fifty feet deep to one hundred and fifty feet deep, twenty dollars.
- C. Permit for the drilling of construction of a new well one hundred and fifty feet deep to four hundred feet deep, thirty dollars.
- D. For the drilling or construction of a new well over four hundred feet deep, the fee last named and in addition thereto, for each one hundred feet or fraction thereof in excess of four hundred feet, ten dollars.

E. Permit to repair or correct a defective well, twenty dollars.

F. Permit to abandon or plug a well, five dollars.

Section 29-59 Same--Same--Disposition

All fees and other money collected by the City Council by virtue of this article shall be expended by such council to cover the expense of making examinations of wells within the city, to make or have made the necessary analysis and test of water therefrom, to supervise the construction, repair, abandonment, and plugging of wells and their operation, and such other expenses as may be necessary to the enforcement of this article.

Section 29-60 Casing of Wells Required

Every well constructed, whether drilled, dug, or excavated, which encounters salt water or water containing mineral or other substance injurious to health or vegetation, shall be securely plugged and sealed or cased in such a manner that the waters be confined to the stratum can by reason of the construction of the well come in contact with waters from another stratum. The casing shall be set in the top of the stratum from which water is to be taken and shall be cemented in place by suitable method to be approved by the City Council to the end that cement be forced up around the outside of the casing from the bottom of the casing to the surface of the ground so that all waters found in the strata, except that from which water is to be used, shall be sealed off one from the other by the cement, or, if a better method than cementing shall be scientifically developed to accomplish the purpose mentioned, such better method may be prescribed by the Council in lieu of cementing. The casing used shall be of weight per foot, not less than the following:

<u>Size of Casing</u>	<u>Minimum Weight Per Foot</u>
4 inch	10 pounds
5 inch	14 pounds
6 inch	18 pounds
8 inch	28 pounds
10 inch	40 pounds
12 inch	49 pounds
15 inch O.D.	60 pounds
18 inch O.D.	80 pounds
20 inch O.D.	89 pounds

The casing shall be mechanically continuous from the point of setting in the bottom of the well to a point not less than twelve inches above ground level and shall be so installed as to make impossible any leakage as against any pressures which may be encountered.

If casing is of two or more diameter sizes, the different sizes shall be connected with threaded nipples or be sealed with rubber, cement, or lead, or by some other manner satisfactory to the City Council.

Section 29-61 Wells Contaminating Other Water Sources

Any well or other opening located inside the area defined in Section 29-51(a) which penetrates the underground water supply and which pollutes or contaminates any other well or the city's water supply, is declared a nuisance, and on notice to the owner of such well, or to the operator thereof, or to his agent in charge of the well or of the property on which it is situated, issued by the City Council such nuisance shall be abated by the owner within ten days from the date of such notice by filling and plugging the well or opening in the manner provided in this article for abandoned wells; and if he shall fail to abate such nuisance within such time, or if after exercising reasonable diligence, the Council is unable to locate the owner or his agency, such Council shall have the right to go on the land or 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 Council for the cost of such work and shall pay such cost upon demand.

Section 29-62 Defective Wells

Every well whether dug or drilled, which for any reason does not completely prevent the mixing of water or other liquid from above and below the source of the city's water supply, of which for any reason would tend to pollute or contaminate any other well or the water in the source of the city's water supply, shall be considered a defective well and the City Council on its own initiative or upon information or complaint from any source may make an examination of any well suspected of being defective and if such examination indicates in the opinion of the Council that the well is a probable source of contamination of the city water supply or any other well, or that the water from such well is unsafe for human consumption, shall issue written instructions to the owner or his agent in charge of such well or the property upon which it is situated, for correcting the defects to comply with the provisions of this article, and prescribe a time which, in its judgment, under all the circumstances, is reasonable within which such instructions shall be complied with. It shall be unlawful for the owner or operator of such defective well to fail to comply with such instructions within the time prescribed by the City Council.

Section 29-63 Abandoned Wells

An abandoned well is: (a) a defective well which, in the judgment of the City Council, cannot be corrected to comply with the requirements of this article, or (b) any well which has been continuously out of use for a period of six (6) months, or longer. Whenever any well has not been in active use for more than two years, the owner or operator of such well shall report the fact to the Council. Every abandoned well shall be filled and plugged with such materials and in such manner, as, in the judgment of the Council, will prevent the pollution and contamination of the city's water supply or the contamination of any other well within the limits of the city, and such filling and plugging shall be done under the supervision of the Council and at the expense of the owner of such well.

Whenever the City Council 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 article, it shall notify the owner or agent in charge of such well or of the property upon which it is situated that such well is abandoned and shall instruct him to fill and plug such well in accordance with this article; and the owner or operator of such well shall comply with such order within sixty days after its date. Should he fail to so comply within such period or if, after using reasonable diligence, should the Council fail to locate the owner or agent in charge of such well or of the property upon which the well is situated, the Council may go on the land or property upon which the well is situated and fill and plug such well in the manner required by this article. Whenever it becomes necessary for the Council to fill and plug any abandoned well, the owner thereof shall be liable to the City Council for the cost of doing such work and shall pay such cost upon demand.

Section 29-64 Wells Outside City; Abating Nuisance, Drilling

The owner or lessee of property on which any well heretofore drilled or that may be hereafter drilled outside the city which is found to be contaminating or polluting influence to the underground waterbearing strata from which the municipal water supply of the city is taken or drawn or may thereafter be taken or drawn, as well as the owner or lessee of all wells drilled inside the area defined in Section 29-51(a) shall be subject to all the provisions of Sections 29-61 and 29-62 and all other provisions of this article relating to the protection of the water supply of the city and any such contaminating well may be abated as provided therein. Any person desiring to drill a well outside of the city at any location within the radius of two miles outside the city, prior to drilling such well shall fully comply with all provisions of this article relating to the protection of the water supply of the city, and upon failure to do so shall be punished as provided herein.

Section 29-65 Wells Imposing Immediate Threat; Abating Nuisance

Any well or other opening located inside the area defined in Section 29-51(a) which, in the sole opinion of the City Council or its agents, presents an immediate threat and menace to the health, morals, safety, or general welfare of the public is declared a nuisance. The City Council or its agents shall have the right to go on property upon which such well is situated and abate the nuisance in a temporary manner. Such well shall thereafter be filled and plugged by the owner after the giving of required notice and in such manner set out in Section 29.63 hereof. The owner thereof shall be liable to the City Council for the cost of doing such temporary work under this Section and shall pay such cost upon demand.

Section 29-66 Violation and Penalties

A person who violates any of the provisions of this article is guilty of a misdemeanor and on conviction is punishable by a fine of not less than \$10.00 nor more than \$2,000.00. Each day that a violation occurs constitutes a separate offense.

Section 2 Effective Date

This ordinance shall become effective upon the expiration of ten (10) days after its passage.

PASSED AND APPROVED ON THIS 10TH DAY OF NOVEMBER 1987.

HUGH WILLIAMS, Mayor

JEFFREY A POMERANZ
City Manager

JAMES J. BAYNE, City Attorney

Section 1 Title

This ordinance shall be hereinafter known as the "Aquifer Protection Ordinance," may be cited as such, will be hereinafter referred to as "this ordinance," and same shall be and constitute Chapter _____, Title of Ordinance No. _____ known as _____.

Section 2 Purpose and Intent

A. Purpose

The purpose of this ordinance is to establish aquifer protection areas for potable water supply wells and springs owned and operated by the city of Renton. This ordinance establishes procedures for prohibiting specific land uses within aquifer protection areas; establishes permitting, regulated substance management planning, and groundwater monitoring requirements for facilities that store, handle, use, or produce substances that pose a hazard to groundwater quality; establishes requirements for the construction, inspection, and maintenance of containment devices; specifies release reporting requirements and actions to be taken in the event of a violation; establishes requirements for testing of pressure pipelines, gravity, and gravity-pressure storm and sanitary sewers and appurtenances; and specifies requirements for filling.

Secondary containment and monitoring requirements for regulated substances stored in underground storage facilities are established in Ordinance No. _____.

B. Intent

It is the intent of this ordinance to provide a method to:

1. Protect the groundwater resources of the city of Renton;
2. Establish aquifer protection areas for wells and springs owned and operated by the city of Renton;
3. Provide a means of prohibiting specific land uses within aquifer protection areas;
4. Protect the city of Renton's drinking water supply from impacts by facilities that store, handle, use, or produce substances that pose a hazard to groundwater quality;
5. Protect public health and the environment by implementing SEPA (WAC 197-11); and
6. Extend the provisions of this ordinance beyond the boundaries of the city of Renton in accordance with Chapter 35.88 RCW.

Section 3 Definitions

The following definitions apply within this ordinance.

- A. Aquifer--a groundwater bearing geologic formation or formations that contain enough saturated permeable material to yield significant quantities of water to wells.
- B. Aquifer Protection Area (APA) the portion of an aquifer within the zone of capture and recharge area for a well or wellfield owned or operated by the city of Renton or the recharge-discharge area of a spring used for water supply by the city of Renton.
- C. Aquifer Protection Zones--zones of an APA designated to provide graduated levels of aquifer protection.
- D. Containment device--a device that is designed to contain an unauthorized release, retain it for cleanup, and prevent released materials from penetrating into the ground.
- E. Continuous transit--the nonstop movement of a motor vehicle.
- F. Department--the Renton City Public Works Department.
- G. EPA--the United States Environmental Protection Agency.
- H. Facility--all contiguous land, structures (except for underground storage facilities as defined in Ordinance No. _____), other appurtenances, and improvements on the land wherein regulated substances are stored, handled, used, or produced. A private residence or dwelling is not a facility.
- I. Groundwater--water below the land surface in the zone of saturation.
- J. Groundwater monitoring well--a small diameter well installed for purposes of sampling groundwater.
- K. Operator--any person in control of, or having responsibility for, the daily operation of a facility.
- L. Owner--includes the owner's duly authorized agent or attorney, a purchase, devisee, fiduciary, and a person having vested or contingent interest in the property in question.
- M. Person--any natural person, individual, public or private cooperation, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, owner, lessee, tenant or any other entity whatsoever or any combination of such, jointly or severally.
- N. Potable water--water that is satisfactory for drinking, culinary and domestic purposes, meeting current county, State, and Federal drinking water standards.

- O. Regulated substances--any hazardous material, flammable liquid, combustible liquid, or toxic substance which are more particularly defined as:
1. Flammable liquid--any liquid having a flash point below 100°F and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100°F.
 2. Combustible liquid--a liquid having a flash point at or above 100°F.
 3. Hazardous materials--such materials as flammable solids, corrosive liquids, radioactive materials, oxidizing materials, highly toxic materials, poisonous gases, reactive materials, unstable materials, hypergolic materials, and pyrophoric materials as defined in Article 9 of the Uniform Fire Code and any substance or mixture of substances which is an irritant, a strong sensitizer, or which generates pressure through exposure to heat, decomposition, or other means.
 4. Other substances:
 - a. a hazardous substance as defined by Section 101(14) of (CERCLA), or (1) any substance designated pursuant to Section 311(b)(2)(A) of the Clean Water Act (CWA); (2) any element, compound, mixture, solution, or substance designated pursuant to Section 102 of CERCLA; (3) any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (but not including any waste, the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress); (4) any toxic pollutant listed under Section 307(a) of the CWA; and (5) any imminently hazardous chemical substance or mixture with respect to which EPA has taken action pursuant to Section 7 of the Toxic Substances Control Act.
 - b. hazardous substances that include any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090, 173-303-101, 173-303-102, or 173-303-103.
 - c. hazardous waste as designated in WAC 173-303 as dangerous or extremely hazardous waste.
 - d. any material that may degrade groundwater quality when improperly used, stored, transported, or disposed of, or otherwise mismanaged.

- P. Regulated Substances Management Plan--a plan containing procedures to be followed to prevent, control, and dispose of any unauthorized release of a regulated substance.
- Q. Well--a pit or hole sunk into the earth to reach an aquifer.
- R. Wellfield--an area which contains one or more wells for obtaining a potable water supply.
- S. Wellfield Protection Operating Permit--an authorization by the Renton City Public Works Department for a person to store, handle, use, or produce regulated substances within an APA.

Section 4 Maps of Aquifer Protection Areas and Zones

- A. APA maps developed as described in subsection 4B are incorporated and made a part of this ordinance. These maps shall be filed with the Renton City Clerk's Office and maintained by the Renton City Public Works Department. Any amendments, additions, or deletions to said maps shall be effective after approval by the Renton City Council and filing with city clerk for record.
- B. APA maps delineate each APA within the city of Renton. Each APA may be subdivided into two aquifer protection zones:
 - 1. Zone 1: The land area situated between a well or wellfield owned by the city of Renton and the 180-day groundwater travel time contour, or the local recharge-discharge area of a spring used for water supply by the city of Renton.
 - 2. Zone 2: The land area situated between the 180-day groundwater travel time contour and the boundary of the zone of capture and recharge area for a well or wellfield owned or operated by the city of Renton or the boundary of the recharge area of a spring used for water supply by the city of Renton.

If the aquifer supplying water to the well, wellfield, or spring is naturally protected by overlying geologic strata, the city of Renton may choose not to subdivide an APA into two zones. In such a case, the entire APA will be designated as Zone 2. The limits of each APA and aquifer protection zone are based on current hydrogeologic information, wellfield monitoring results, wellfield pumping rates, and recharge area estimates.

- C. APA maps will be updated as necessary. The basis for such an update may include, but is not limited to, the following:
 - 1. Changes in technical knowledge or available hydrogeologic information;
 - 2. Changes in pumping rate of a well or wellfield;

3. Wellfield reconfiguration; and
4. Designation of a new APA.

Section 5 Prohibitions, Restrictions, and Permitting within APAs

A. Zone 1 of an APA

1. Within Zone 1 of an APA, changes in land use or construction of new facilities that could lead to degradation of groundwater quality shall be prohibited. Specific land uses and types of facilities to be prohibited include surface impoundments, waste piles, hazardous waste treatment and storage facilities, hazardous waste landfills, solid waste landfills and transfer stations, septic systems, petroleum-product pipelines, chemical manufacturing facilities, computer parts manufacturing facilities, lumber mills, asphalt plants, wood-treating facilities, and service stations. Other changes in land use or construction of new facilities will be reviewed on a case-by-case basis at the time that a building permit or land use permit application is filed with the city of Renton or a hearing for zoning change is held. The focus of the review will be on the activities to be conducted; regulated substances that will be stored, handled, used, or produced; and the potential for these activities or regulated substances to degrade groundwater quality.
2. Five (5) years after the effective date of this ordinance, the storage, handling, usage, or production of any regulated substance at existing facilities shall not be allowed within Zone 1 of an APA. In the interim, the storage, handling, usage, or production of any regulated substance shall be allowed only as provided herein.
3. Owners of existing facilities shall apply to the department for a Wellfield Protection Operating Permit within one hundred eighty (180) days from the effective date of this ordinance. A permit is required for each facility. All Wellfield Protection Operating Permits shall be renewed annually thereafter. The permit application shall contain:
 - a. a list of all regulated substances, including their quantities, which are stored, handled, used, or produced at the facility being permitted;
 - b. a list of the chemicals to be monitored through the analysis of groundwater samples;
 - c. a detailed description of the activities conducted at the facility that involve the storage, handling, use, or production of regulated substances;

- d. a description of the containment devices used to comply with the requirements of 5A(4); the permit application should contain a copy of the regulated substances management plan for the facility;
 - e. a description of the procedures for inspection and maintenance of containment devices;
 - f. a description of how regulated substances will be disposed; and
 - g. a site map showing the location of the facility and its property boundaries and the locations where regulated substances are stored, handled, used, and produced; the location of each containment device also should be identified on the site plan.
4. Each owner of an existing facility shall, at its own expense, install one or more groundwater monitoring wells as determined by and in a manner approved by the department. Every owner shall, at its own expense, sample groundwater in each monitoring well semiannually and obtain independent analytical results of the presence and concentration of those chemicals (including degradation and interaction products) found in each regulated substance listed in the owner's Wellfield Protection Operating Permit. The analytical results shall be obtained through the use of the EPA-approved methods for water. The results shall be filed immediately with the department.
5. Every owner of existing facilities shall:
- a. provide containment devices adequate in size to contain onsite any unauthorized release of a regulated substance and prevent such substances from penetrating into the ground. This provision also applies to releases that may mix with storm runoff. Design requirements for containment devices are as follows:
 - (1) the containment device shall be large enough to contain 110 percent of the volume of the container, in cases where a single container is used to store, handle, use, or produce a regulated substance. In cases where multiple containers are used, the containment device shall be large enough to contain 150 percent of the volume of the largest container or 10 percent of the aggregate volume of all containers, whichever is greater.
 - (2) all containment devices shall be constructed of materials of sufficient thickness, density, and composition to prevent structural weakening of the containment device as a result of contact with any regulated substance and shall be capable of containing any unauthorized release for at least the maximum

anticipated period sufficient to allow detection and removal of the release.

- (3) if the containment device is open to rainfall, then it shall be able to accommodate the volume of precipitation that could enter the secondary container during a 24-hour, 100-year storm in addition to the volume of the regulated substance storage required in subsection 5A(5)(a)(1).
 - (4) containment devices shall be constructed so that a collection system can be installed to accumulate, temporarily store, and permit removal of any storm runoff or regulated substance from the device.
- b. prepare a regulated substances management plan indicating procedures to be followed to prevent, control, collect, and dispose of any unauthorized release of a regulated substance. If a spill prevention control and countermeasure plan (SPCC) has been prepared in accordance with 40 CFR 112, or a contingency plan has been prepared in accordance with 40 CFR 264 or 265, a regulated substances management plan is not required as long as the regulated substances are included in the SPCC or contingency plan.
 - c. prepare procedures for the daily inhouse inspection and maintenance of containment devices and areas where regulated substances are stored, handled, used, and produced. Such procedures shall be in writing, and a log shall be kept of all inspection and maintenance activities. Such logs shall be submitted to the department annually and shall be available for inspection. Inspection and maintenance logs shall be maintained onsite by the owner or operator for a period of at least 3 years from the date the monitoring was performed.
 - d. all unauthorized releases shall be reported to the Public Works Department and Fire Department according to the provisions of this subsection. All unauthorized releases shall be recorded in the owner's inspection and maintenance log. Such an unauthorized release shall be determined to be an "unauthorized release requiring recording" if the release is completely captured by the containment device. If the containment device fails to contain the entire release, the release shall be determined to be an unauthorized release requiring reporting.
 - (1) unauthorized release requiring recording shall be reported to the Public Works Department and Fire Department within 5 days of the occurrence. The incident report shall be accompanied by a written record including the following information:

- (a) list of type, quantities, and concentration of regulated substances released;
- (b) method of cleanup;
- (c) method and location of disposal of the released regulated substances (indicate whether a hazardous waste manifest(s) is used);
- (d) method of future release prevention or repair; if this involves a change in operation, monitoring, or management, the owner must apply for a new Wellfield Operating Permit.
- (e) facility operator's name and telephone number; and
- (f) the approximate costs for cleanup (to be submitted voluntarily).

The Public Works Department shall review the information submitted pursuant to the report of an unauthorized release requiring recording, shall review the Wellfield Operating Permit and may inspect the facility. The Public Works Department shall find that the containment standards of this ordinance can continue to be achieved or the Public Works Department shall revoke the permit until appropriate modifications are made to allow compliance with the standards.

- (2) unauthorized release requiring reporting shall be reported to the Public Works Department and Fire Department within 5 days of the occurrence. The report shall contain the following information that is known at the time of filing the report:
 - (a) list of type, quantity, and concentration of regulated substances released;
 - (b) the results of all investigations completed at that time to determine the extent of soil or groundwater or surface water contamination because of the release;
 - (c) method of cleanup implemented to date, proposed cleanup actions, and approximate cost of actions taken to date;
 - (d) method and location of disposal of the released regulated substance and any contaminated soils or groundwater or surface water;

(e) proposed method of repair or replacement of the containment device; and

(f) facility owner's name and telephone number.

Until cleanup is complete, the owner shall submit reports to the department every month or at a more frequent interval specified by the department. The reports shall include the information requested in this ordinance.

(3) reporting a release to the Renton City Public Works Department or Fire Department does not exempt or preempt any other reporting requirements under Federal, State, or local laws.

6. Semiannually, the Renton City Public Works Department shall review all analytical results submitted by owners in an APA to determine whether a violation has occurred. Either one of the following occurrences shall constitute a violation:

- a. a chemical concentration in an owner's monitoring well(s) that exceeds applicable Federal, State, or county drinking water quality standards; or
- b. an upward trend in the concentration of a chemical.

In the event of a violation, the owner shall cease to store, handle, use, or produce the regulated substance(s) containing the chemical(s) causing the violation within 24 hours of receiving written notification from the city of Renton. Upon receiving written notification, the owner shall be responsible for immediately accomplishing the following:

- a. locate and determine the source of the unauthorized release of the regulated substance(s);
- b. stop and prevent any further unauthorized release(s); and
- c. comply with the requirements in subsection 5A(5)(d)(2) for an unauthorized release requiring reporting.

The owner shall not be subject to this mandatory action if the owner can present acceptable technical data that substantiates it is not responsible for the violation. In complying with this subsection, no new regulated substance(s) may be introduced in the place of the regulated substance that caused the violation.

7. Testing (test pressures, durations, and leakage allowed) of new pressure pipelines, gravity, and gravity-pressure storm and sanitary sewers and appurtenances constructed in Zone 1 of an APA shall conform to the 1984 Standard Specifications for Road, Bridge, the Municipal Construction by the Washington State Department of Transportation, the Washington State Chapter

of the American Public Works Association (APWA), and the APWA amendments thereto, or as modified by the city of Renton. If the department has reason to believe that operation or proposed operation of an existing piping system in Zone 1 of an APA may degrade groundwater quality, the department may require leakage testing of the existing piping system in accordance with the above.

8. Pipe for all sanitary and storm sewers within 500 feet of a city of Renton well used for potable water supply shall be constructed of ductile iron with joints and gaskets conforming to American Water Works Association Standard Specifications C151 and C111.

B. Zone 2 of an APA

1. Within Zone 2 of an APA, changes in land use or construction of new facilities that could lead to degradation of groundwater quality may be prohibited. Changes in land use or construction of new facilities will be reviewed on a case-by-case basis at the time that a building permit or land use permit application is filed with the city of Renton or a hearing for zoning change is held. Those land uses of concern include surface impoundments, waste piles, hazardous waste landfills, solid waste landfills and transfer stations, surface impoundments, waste piles, septic systems, petroleum product pipelines, chemical manufacturing facilities, computer parts manufacturing facilities, lumber mills, asphalt plants, wood-treating facilities, and service stations.
2. The storage, handling, use, or production of regulated substances at existing facilities shall be allowed within Zone 2 of an APA upon compliance with the provisions in this subsection and those in subsection 5A(5) of this ordinance.
3. Within one (1) year of the effective date of this ordinance all owners of existing facilities who store, handle, use, or produce regulated substances shall obtain a Wellfield Protection Operating Permit from the department. Owners of new facilities shall apply for a Wellfield Protection Operating Permit after their building permit is approved. A permit is required for each facility. All Wellfield Protection Operating Permits shall be renewed annually thereafter. The permit shall contain all items required by subsection 5A(3), except for item b, a list of chemicals to be monitored.

C. Conditions for Residential Development

1. Within Zone 1 and Zone 2 of an APA, new residential development shall, as a condition of approval, be required to connect to a central sewer system prior to occupancy.

2. Within Zone 1 of an APA, the use of heating oil is prohibited in any new residential development.

D. Conditions for Fill Sites

1. All filling activities within Zone 1 or Zone 2 of an APA shall comply with the provisions the Washington State Minimum Functional Standards for Solid Waste Handling (173-303 WAC) and the King County Board of Health Rules and Regulations No. 8, Minimum Functional Standards for Solid Waste Handling. Prior to initiating any filling activity, the property owner must submit a report to the Renton City Public Works Department describing how fill materials will be tested to demonstrate that leaching of these materials will not degrade groundwater quality. During the filling activity, the property owner must keep a log identifying the source(s) of all fill materials and where they are placed in the fill. A copy of the log must be submitted to the department every 6 months until the filling activity is completed. Within 5 days of completing the filling activity a copy of the entire log must be submitted to the department.

Section 6 Exemptions

A. Exemption for Continuous Transit

The transportation of any regulated substance through Zone 1 of an APA shall be allowed provided the transporting vehicle is in continuous transit.

B. Exemption for Use of Certain Regulated Substances

The use of certain regulated substances, such as pesticides, herbicides, and fungicides, in recreational, agricultural, pest control, and aquatic weed control activities shall be allowed provided that in all APAs:

1. The use is in strict conformity with the use requirements as set forth by the EPA and as indicated on the containers in which the substances are sold; and
2. The user applies for a Wellfield Operating Permit.

C. Exemption for the Use of Nitrates Contained in Fertilizers

The use of fertilizers containing nitrates shall be allowed in Zone 1 and Zone 2 of an APA provided that:

1. No single application of nitrate containing materials shall exceed one-half (0.5) pound of nitrogen per thousand square feet nor five (5) pounds of nitrogen per thousand square feet per year; and
2. The user applies for a Wellfield Operating Permit.

D. Exemption for Retail Sales Activities

Retail sales establishments in both zones of an APA that store and handle regulated substances for resale in their original unopened containers of two (2) gallons or sixteen (16) pounds, or less, shall be permitted, provided that those establishments shall apply for a Wellfield Protection Operating Permit. In order to obtain a Wellfield Protection Operating Permit said establishments need only provide an inventory of regulated substances and an annual update.

E. Petition Process for Special Exemption

An affected owner in Zone 1 or Zone 2 of an APA may petition the department for a special exemption from the prohibitions set out in Sections 5A and 5B. In granting the special exemption, the department may prescribe any additional appropriate conditions and safeguards which are necessary to protect a well, wellfield, or spring within an APA.

Section 7 Determination of Location within an Aquifer Protection Zone

In determining the location of facilities within the zones depicted on the APA maps, the following rules shall apply:

- A. Facilities located wholly within an aquifer protection zone shall be governed by the restrictions applicable to that zone.
- B. Facilities having parts lying within an APA or within more than one zone of an APA shall be governed by the restrictions applicable to the zone in which the largest portion of the facility is located.
- C. Prior to the issuance of a Wellfield Protection Operating Permit, the applicant shall file a statement with the appropriate county recording department to run with the property stating that development of the property is subject to land use limitations because it is located in an APA. This statement shall identify whether the property is in Zone 1 or Zone 2 of the APA.

Section 8 Wellfield Protection Enforcement

The Renton City Public Works Department shall be administering agency and shall have the power and authority to administer and enforce the provisions of this ordinance.

Section 9 Transfer or Assignment of Wellfield Protection Operating Permits

In the event there is a change of ownership, a new lease, or an assignment of a lease, a sublease, or any other change in regard to the person owning the facility, the department shall be notified. Upon payment of the appropriate fee and completion of processing of an application by the department, the Wellfield Protection Operating Permit shall be transferred.

Section 10 Wellfield Protection Permit Fees

Prior to the issuance of a new permit or an application for a special exemption, the owner shall pay a fee of _____. Such fee shall be used to defray this cost of engineering review and issuance of the permit or exemption. Thereafter, all permit holders shall pay an annual renewal fee of _____. Such fee shall be used to defray the cost of monitoring compliance with this ordinance. The fee for the transfer of a permit shall be _____.

Section 11 Notice of Violation

A. Whenever it is determined when there is a violation of this ordinance, the notice of violation issued shall:

1. Be in writing;
2. Be dated and signed by the authorized city of Renton agent making the inspection;
3. Specify the violation or violations; and
4. Specify the length of time available to correct the violation after receiving the notice of violation.

Section 12 Injunctive Relief

If any owner who stores, handles, uses, or produces regulated substances, without having obtained a Wellfield Protection Operating Permit as provided for herein or continues to operate in violation of the provisions of this ordinance, then the city of Renton may file an action for injunctive relief in the Superior Court of the State of Washington for King County. All costs incurred for abatement by the city of Renton, including reasonable attorney's fees, shall be paid by an owner operating without a Wellfield Operating Permit or operating in violation of the provisions of the ordinance or permit.

Section 13 Other Laws, Rules, and Regulations

All owners within an APA must also comply with county, State, and Federal laws, rules, and regulations related to the intent of this ordinance.

Section 14 Penalties

Section 15 Effective Date

The effective date of this ordinance shall be 30 days after its enactment.

Section 16 Severability

If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of the ordinance or the

application of the provision to other persons or circumstances shall not be affected.

PASSED BY THE CITY COUNCIL this _____ day of _____, 1986.

Maxine E. Motor, City Clerk

APPROVED BY THE MAYOR this _____ day of _____, 1986.

Barbara Y. Shinpoch, Mayor

Approved as to form:

Lawrence J. Warren,
City Attorney

Date of Publication:

AQUIFER SENSITIVE AREA OVERLAY ZONE

Section 4.16A.00

Common Name: ASA Overlay Zone

AS RECOMMENDED TO THE BOARD OF COUNTY COMMISSIONERS
BY THE COUNTY PLANNING COMMISSION
ON SEPTEMBER 15, 1983

ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS
NOVEMBER 1, 1983
EFFECTIVE DATE DECEMBER 1, 1983

The "Spokane Aquifer Water Quality Management Plan," or "208" Study, specified an array of actions to protect the resource. Among them is development of land use regulations specifically for aquifer protection. This overlay zone fulfills that plan provision as well as fulfills an implementation tool need of Section 10, Water Quality, of the Generalized Comprehensive Plan for Spokane County, Washington.

Chapter 4.16A

AQUIFER SENSITIVE AREA OVERLAY ZONE (ASA)

Sections

- 4.16A.010 Intent
- 4.16A.020 Objectives
- 4.16A.030 Administrative Guides for Implementation of the ASA Overlay Zone
- 4.16A.040 Application of Aquifer Sensitive Area Overlay Zone Standards
- 4.16A.050 Standards for Business, Commercial and Industrial Uses Within the Aquifer Sensitive Area
- 4.16A.060 Standards and Conditions for Residential Development Within the Aquifer Sensitive Area
- 4.16A.070 Mining Operations Within the Aquifer Sensitive Area
- 4.16A.080 Solid Waste and Septic Tank Sludge Disposal Within the Aquifer Sensitive Area
- 4.16A.090 Penalty
- 4.16A.100 Critical Materials List
- 4.16A.200 Critical Materials Activity List

Section 4.16A.010 Intent

The intent of the ASA Overlay Zone is to provide supplemental development regulations in the area so designated to permanently protect the source of metropolitan Spokane's water supply from additional long-term contamination originating from man's activities on the earth's surface. Due to the extraordinary vulnerability and sensitivity of the aquifer resource to contamination, these regulations contain extraordinary protective measures. This chapter applies to any person, firm or corporation within the ASA which establishes or proposes to establish a new or different land use or activity.

Section 4.16A.020 Objectives

The objectives of this overlay zone are to:

- A. Implement the purpose and intent of the Water Quality Management Plan and Generalized Comprehensive Plan, Section 10, which is to protect the aquifer from further long-term water quality degradation due to land use changes;
- B. Define the responsibilities of several County departments in implementing and enforcing land use controls for the protection of aquifer water quality;
- C. Allow use, handling, or storage of critical materials where adequate protection of the aquifer resource can be, or is, assured;
- D. Establish strict performance standards for use, handling, or storage facilities associated with critical materials so as to preclude their introduction into the aquifer;
- E. Establish land use intensity limitations, particularly residential, in accordance with the availability of sanitary sewers;
- F. Prohibit disposal of critical materials within the ASA; and
- G. Alert landowners, potential buyers, appraisers, assessors, and lessee of the legal restrictions inherent in certain land use activities in this overlay zone.

Section 4.16A.030 Administrative Guides for Implementation of the ASA Overlay Zone

- A. The geographic extent of the Aquifer Sensitive Area (ASA) the General Sewer Service Area (GSSA), and the Priority Sewer Service Area (PSSA) are delineated on maps, as now or hereafter updated and supplemented, which are on file at the offices of the County Planning Department and the County Utilities Department. These maps are adopted by reference and provide the basis for determining liquid waste disposal practices required for development as further defined in this section.
- B. The Critical Materials Handbook is an administrative tool for implementation of this overlay zone.
 - 1. The Critical Materials Handbook describes suggested management and design solutions to achieve the performance standards contained within this chapter.
 - 2. The Critical Materials Handbook may be updated as new means of handling Critical Materials are developed.
 - 3. A fee may be charged for the Handbook sufficient to cover its costs.

C. The Critical Materials Activity List, Section 4.16A.200, shall be used in the initial screening of applications for anticipating the type and quantities of chemicals associated with various activities.

1. The list shall include:

- a. the type of commercial or industrial activity by name and Standard Industrial Classification code;
- b. the names of chemicals generally associated with the activity, including waste chemicals;
- c. the amounts of each such chemical commonly used;
- d. the method of storage; and
- e. any other pertinent information.

2. Insofar as possible, the list will be based on statistics for Spokane area business and industries.

3. Data generated during project reviews, conducted while administering this ordinance, may be used to update and modify the list.

Section 4.16A.040 Application of Aquifer
Sensitive Area Overlay Zone Standards

A. The standards for approval of Critical Materials Use Activities contained in this overlay zone shall be as defined in subsequent subsections of this ordinance.

B. The assurance that these standards are applied to Critical Materials Use Activities is the responsibility of the Board of Spokane County Commissioners and/or other official cooperating review agents of the County.

1. Appropriate standards for approval as applied to new zone reclassification requests, conditional uses, special permits, variances, binding site plans, etc. shall be the responsibility of the Planning Department, Planning Commission, Hearing Examiner Committees, Zoning Adjustor, Board of Adjustment, and/or the Board of County Commissioners as otherwise described in agency rules.
2. Appropriate safeguards to be included in the design of buildings newly constructed or remodeled shall be the responsibility of the County Building and Safety Department.
3. Site planning and other considerations for areas outside of buildings shall be the responsibility of the appropriate office or agency as may be elsewhere described in agency rules.

4. Appropriate sanitary, industrial, and solid waste disposal practices shall be the responsibility of the County Utilities Department, the Spokane County Health District, or other appropriate agency, e.g., DSHS, DOE.
 5. When the occupancy of a building changes, any new commercial or industrial occupants shall not operate without a Certificate of Occupancy as issued by the County Department of Buildings and Safety; such Certificate of Occupancy is subject to review pursuant to Section 4.16A.040(3) of this ordinance.
 6. Prior to issuing a Certificate of Occupancy, the Department of Building and Safety shall determine that all Critical Materials associated with the activity are stored or used in such a manner that the performance criteria of Section 4.16A.040(4) are satisfied.
- C. The following process shall be used to determine whether or not critical materials are involved.
1. An initial screening will be performed by the director of the designated department by comparing the proposed use and upon request by said director, other pertinent information as provided by the proponent at his/her expense with the Critical Materials Activity List. The director shall exercise any discretion in judgment in favor of aquifer protection.
 - a. if the proposed use is judged to be on the Critical Materials Activity List, the director shall notify the applicant, in writing, that the proposed activity has been tentatively designated a Critical Materials Use Activity and shall require the applicant to provide the department with a list of materials, including quantities, to be used, handled, stored, or transported as associated with the proposed activity. Additional information shall also be provided by the proponent at his or her expense if requested by the director.
 - b. after review of the information supplied by the applicant, the director may confirm the designation as a Critical Materials Use Activity or nullify the tentative designation.
 - c. the applicant may respond by accepting the designation as a Critical Materials Use Activity or may appeal, in writing, within twenty (20) calendar days, the designation to the Spokane County Board of Adjustment, pursuant to the authority of subsection 4.25.030(c) of this ordinance.
 - (1) the DOE, the DSHS, and the SCHD shall be notified of all hearing proceedings, and legal advertising consistent with 4.21.040(a) and 4.25.070 shall be accomplished.

- (2) the Board of Adjustment shall have the authority to request additional information from either the appellant or the applicant, as appropriate, and at their expense.
 - (3) in appeal proceedings, substantial weight shall be given to the director's decision.
 - d. if the proposed use is not on the list, the director may designate the activity as not involving critical materials or may exercise (e) below.
 - e. if the director has reason to believe that, even though the proposed use is unlisted, critical materials may be involved, the director shall act to designate the proposed use as a Critical Materials Use Activity and proceed as in (C)(1)(a) above. The director may consult with such persons as may be appropriate to assist in the determination. The director may eventually designate the activity as a Critical Materials Use Activity. The process would then proceed as in (C)(1)(b) above and the applicant may respond as in (C)(1)(c) above.
 - f. if the applicant does not have a specific proposal, the director shall recommend that the action be conditioned, or shall so condition a license/permit, with the performance criteria of Section 4.16A.050 for all future uses. If conditioned approval is granted, the director shall review and approve the project prior to occupancy.
 - g. any member of the public or department/State, Federal, or local agency chief administrative officer may appeal, within twenty (20) calendar days, a decision of the director if a decision is not otherwise appealed by an aggrieved party. Such appeal shall proceed in the manner as set forth in (C)(1)(c) above.
- D. ASA Overlay Zone standards for residential development activities as defined in Section 4.16A.060 shall apply as appropriate to all residential development activity within the Aquifer Sensitive Area.
- E. The designated department may perform review and inspection to assure compliance with the provisions of this ordinance. Reasonable costs for review and inspection shall be payable to the county by the applicant upon itemized billing to the applicant by the designated department.

Section 4.16A.050 Standards for Business, Commercial,
and Industrial Uses Within the Aquifer Sensitive Area

A. Outside the Priority Sewer Service Area and regardless of Critical Materials usage:

1. Approval of all projects or developments listed below shall be required to be conditioned as listed in (2):
 - a. local or neighborhood business or office developments whose wastewater disposal needs exceed that amount equivalent to a single dwelling unit per five (5) acres;
 - b. community business or commercial developments; or
 - c. light industrial or manufacturing developments.
2. Approvals of all projects or developments listed in (a) above shall be served by wastewater disposal systems that provide aquifer protection equal to or greater than those listed below:
 - a. collection and treatment utilizing sealed lagoon(s); or
 - b. collection and treatment utilizing holding tanks and transport/disposal at a site licensed for disposal of the particular effluent; or
 - c. collection and treatment utilizing a proper and valid surface water discharge permit; or
 - d. approved connection to an existing public or private collection/treatment facility either inside or outside of the PSSA.
3. Approvals of projects or developments listed in (1) above, if not immediately connected to an approved, existing public or private collection/treatment facility as in (2)(a)-(d) shall be conditioned to include a legally binding agreement in which the owners, successors, and assigns of the property upon which the project or development is to be placed agree to authorize the County of Spokane to place their names on a petition for the formation of a ULID by petition method pursuant to RCW 36.94, which petition includes the subject property, and further agree not to object by the signing of a protest against the formation of a ULID by resolution method pursuant to RCW 36.94, which includes the subject property; such agreement shall not affect any right of any person having an interest in the property nor prohibit said persons, their successors, and assigns from objecting to any ULID assessment as provided for in RCW 36.94 and such agreement shall be recorded in the Spokane County Auditor's Office and run with the property.

B. Inside the Priority Sewer Service Area:

1. Approvals of all projects or developments not designated as a Critical Materials Use Activity shall be conditioned to:
 - a. be connected, prior to occupancy, to a central sewer system as described in the Comprehensive Wastewater Management Plan; or
 - b. be connected to a wastewater disposal system which includes double plumbing stubbed to the property line adjacent to the future collector line and includes a legally binding agreement in which the owners, successors, and assigns of the property upon which the project or development is to be placed agree to authorize the County of Spokane to place their names on a petition for the formation of a ULID by petition method pursuant to RCW 36.94, which petition includes the subject property, and further agree not to object by the signing of a protest against the formation of a ULID by resolution method pursuant to RCW 36.94, which includes the subject property; such agreement shall not affect any right of any person having an interest in the property nor prohibit said persons, their successors, and assigns from objecting to any ULID assessment as provided for in RCW 36.94 and such assignment shall be recorded in the Spokane County Auditor's office and run with the property.

2. Approvals for all projects or developments designated as a Critical Materials Use Activity shall be conditioned to be:
 - a. connected, prior to occupancy, to a central sewer system as described in the Comprehensive Wastewater Management Plan; or
 - b. connected to a sewage disposal system that provides aquifer protection equal to or greater than those listed below:
 - (1) collection and treatment using sealed lagoon(s); or
 - (2) collection and treatment using holding tank and transport/disposal of the waste at a site licensed for the disposal of the particular effluent; or
 - (3) collection, treatment, and disposal using a proper and valid surface water discharge permit.

C. Changes in occupancy of an existing site and expansions of existing activities are subject to complete evaluation under provisions of this chapter.

D. All activities designated as Critical Materials Use Activities shall only be approved as conditioned so that:

1. Facilities will be designed so that any spilled or leaked materials are contained onsite; and
 2. Facilities will be designed so that any spilled or leaked materials cannot infiltrate into the ground; and
 3. No permanent disposal of any waste containing critical materials shall be allowed onsite.
- E. Commercial or industrial activities designated as Critical Material Use Activities shall have specially designed stormwater runoff draining facilities in areas where spills might occur. Such facilities shall be designed to: (1) prevent the co-mingling of stormwater runoff and critical material spills, (2) enhance spill cleanup procedures, and (3) be consistent with the performance standards in 4.16A.050(B)(2).
- F. Even though an activity is permitted in the underlying zone classification in this section, any activity which, following review in accordance with Section 4.16A.040, is designated as a Critical Materials Use Activity, shall be required to conform to the conditions set forth in Section 4.16A.050.

Section 4.16A.060 Standards and Conditions for Residential Development Within the Aquifer Sensitive Area

- A. Within the PSSA, new residential development shall, as a condition of approval, be required to connect to a central sewer system prior to occupancy, or, if such a sewer is not available, development shall be conditioned to include:
1. A legally binding agreement in which the owners, successors, and assigns of the property upon which the project or development is to be placed agree to authorize the County of Spokane to place their names on a petition for the formation of a ULID by petition method pursuant to RCW 36.94, which petition includes the subject property, and further agree not to object by the signing of a protest against the formation of a ULID by resolution method pursuant to RCW 36.94, which includes the subject property; such agreement shall not affect any right of any person having an interest in the property nor prohibit said persons, their successors and assigns from objecting to any ULID assessment as provided for in RCW 36.94 and such agreement shall be recorded in the Spokane County Auditor's Office and run with the property.
 2. Double plumbing stubbed to the property line adjacent to the future collector line, except that for developments of greater than fifty (50) dwelling units, an operating collection system with interim treatment or a dry line collection and a legally binding obligation for installation of, and structural connection to, the central sewer system when available.

- B. Within the GSSA and outside the PSSA, new residential development:
1. Shall be five (5) or more acres per dwelling unit; or
 2. One (1) dwelling unit may be allowed on less than five (5) acres only if:
 - a. connected to a central sewer system as described in the Comprehensive Wastewater Management Plan prior to occupancy or both (b) and (c) below;
 - b. served by a sewage disposal system that provide aquifer protection equal to or greater than those listed below:
 - (1) collection and treatment utilizing sealed lagoon(s); or
 - (2) collection and treatment utilizing holding tanks and transport/disposal at a licensed disposal site; or
 - (3) collection and treatment utilizing a proper and valid surface water discharge permit; or
 - (4) approved connection to an existing public or private collection/treatment facility either inside or outside of the PSSA.
 - c. A legally binding agreement in which the owners, successors, and assigns of the property upon which the project or development is to be placed agree to authorize the County of Spokane to place their names on a petition for the formation of a ULID by petition method pursuant to RCW 36.94, which petition includes the subject property, and further agree not to object by the signing of a protest against the formation of a ULID by resolution method pursuant to RCW 36.94, which includes the subject property; such agreement shall not affect any right of any person having an interest in the property nor prohibit said persons, their successors and assigns from objecting to any ULID assessment as provided for in RCW 36.94 and such agreement shall be recorded in the Spokane County Auditor's Office and run with the property.
- C. Outside the GSSA, new residential development shall be greater than two (2) acres per dwelling unit and may use onsite sewage disposal systems with a special onsite design and management program as approved by the Utilities Department.
- D. Within the Liberty Lake Sewer District the sewer and stormwater management policies of the District shall apply.
- E. Residential development shall provide for the treatment of stormwater runoff from impervious surfaces in a manner consistent with the Spokane County Code as outlined in "Guidelines for Stormwater Management," as administered by the County Engineer.

- F. Time extension for renewal of preliminary plats approved prior to the effective date of this chapter shall be conditioned consistent with 4.16A.060(A), (B), (C), (D), and (E) as appropriate, if progress toward finalizing the plat cannot be shown.

Section 4.16A.70 Mining Operations Within the Aquifer Sensitive Area

Prior to granting approval of any mining operation within the Aquifer Sensitive Area, the standards included in the Mining Zone (Chapter 4.14) shall apply.

Section 4.16A.80 Solid Waste and Septic Tank Sludge Disposal Within the Aquifer Sensitive Area

No new sanitary landfill or septic tank sludge disposal sites shall be allowed within the Aquifer Sensitive Area. Surface or subsurface disposal of critical materials is specifically prohibited in the ASA Overlay Zone.

Section 4.16A.090 Penalty

Any person, firm, or corporation who violates, disobeys, omits, neglects, or refuses to comply with or who resists the enforcement of any of the provisions of this title, zone change conditions of approval imposed by actions, of the Board of County Commissioners, Planning Commission, Hearing Examiner Committee, or conditions of approval imposed by the Board of Adjustment, and Zoning Adjustor, shall be guilty of a misdemeanor and shall be fined in any sum not to exceed one thousand dollars (\$1000) or imprisoned in the County Jail for a term not exceeding ninety (90) days, for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

Section 4.16A.100 Critical Materials List

For the purpose of equitably administering this ordinance the following Critical Materials list has been prepared. Any activity which involves the use, handling or storage of the critical quantity of any material on this list shall be subject to the provisions of this ordinance. Should the director of a responsible department become aware of any new chemical which may adversely affect aquifer water quality, an amendment to include the new chemical in this section shall be proposed.

In order to relate chemicals on this list to chemicals regulated under State and Federal hazardous waste regulations, the following reference information has been provided: an Identification Number, the EPA hazard class, the DOE hazard designation and a Chemical Class designation. The symbols used in these designations are explained below. The references cited provide the sources for the criteria concentrations used to calculate critical quantities.

Section 4.16A.200 Critical Materials Activity List

The following types of business activity have been found to use, handle, or store critical materials. For the purposes of administering this ordinance, proposed activities fitting one of the general business descriptions provided or having one of the specified Standard Industrial Classification codes should be assumed to have critical materials onsite unless the proponent provides assurance otherwise. Chemicals in addition to those listed may be found on some sites. In some cases SIC Codes other than those listed may be associated with a general category.

LAND CONSERVATION ZONING

Section 1.1 LC-Land Conservation District

A. Purpose

The LC-Land Conservation District is intended to protect public health, welfare, and safety by limiting intensive development of those lands or areas of the municipality characterized by:

1. Natural features which should be conserved because of their public benefit in terms of groundwater recharge, water quality, unique wildlife habitat, scenic or historic qualities, or productive agriculture soils, and/or;
2. Natural limitations due to floodplains, drainage, wetlands, steep slopes, potential for erosion, or other natural features representing a hazard to buildings or structures.

B. Permitted Uses

The following areas are permitted as of right in the LC-District:

1. Single-family dwellings
2. Nature preserves, wildlife refuges, hiking trails, historic sites, scenic areas, and similar unimproved recreational sites

C. Special Uses

The following uses may be permitted in the LC-District subject to the issuance of a special permit as provided in Article X of this ordinance.

1. Commercial agriculture including farming, dairying, pasturage, agriculture, horticulture, floriculture, orchards, and normal uses accessory thereto. Every such use, in addition to any safeguards, conditions, or requirements specified under special permit authorization, shall comply with the requirements of Section 1.1.F of this ordinance.
2. Substantial improved outdoor recreational uses including, golf courses, golf driving ranges, playing fields, archery and shooting ranges, and boat launch sites.

D. Accessory Uses and Structures

Accessory uses and structures in the LC-District shall comply with the provisions governing such uses and structures found in Section X of this ordinance.

E. Bulk, Lot, and Yard Requirements:

The following bulk, lot, and yard requirements shall apply in the LC-District:

1. Minimum lot area: five (5) acres
2. Maximum lot coverage:
 - a. principal structure: two (2) percent
 - b. detached accessory structure: two (2) percent
3. Minimum required yards: forty (40) feet each

F. Additional Requirements

The following limitations and conditions shall apply to all uses permitted and permissible in the LC-District:

1. Storage Tanks

The maximum aggregate storage capacity of tanks used or intended for the storage of fuel oil, petroleum distillates, or other hazardous material shall not exceed 660 gallons on any one lot or parcel. No such tank shall be installed underground. Every storage tank shall be used in a manner and for a purpose which serves a permitted principal building or use only.

2. Use of fertilizers, pesticides, and herbicides. The storage, use, and disposal of fertilizers, pesticides, and herbicides shall be performed in a manner which minimizes their transmittal and accumulation in groundwater. The storage, use, and disposal of such material shall be performed in a manner consistent with management practices and standards adopted by the municipality.

LOW-DENSITY RESIDENTIAL ZONING

Section 1.2 RA-Residential and Agricultural District

A. Purpose

The RA-Residential and Agricultural District is intended to maintain the residential and natural qualities of those parts of the community most suitable for low-density, single-family residential and agricultural uses. This district is also intended to preserve and enhance lands with features of topography, drainage wetlands, flood-plains, or groundwater recharge that preclude their intensive use.

B. Permitted Uses

The following uses are permitted as of right in the RA-District:

1. Single-family dwellings
2. Public parks and playgrounds

C. Special Permit Uses

The following uses may be permitted in the RA-District subject to the issuance of a special permit as provided in Article X of this ordinance:

1. Commercial agriculture including farming, dairying, pasturage, agriculture, horticulture, floriculture, orchards, and normal uses accessory thereto. Every such use, in addition to any safeguards, conditions, or requirements specified under special permit authorization, shall comply with the requirements of Section 1.2.F of this ordinance.
2. Public utility substations, facilities, and structures.
3. Public and private schools offering kindergarten, primary or secondary school curriculum only.
4. Nonprofit institutions of a religious or educational nature.
5. Nursery school and day care centers.

D. Accessory Structures and Uses

Accessory structures and uses in the RA-District shall comply with the provisions governing such uses and structures found in Section X of this ordinance.

E. Bulk, Lot, and Yard Requirements

The following bulk lot and yard requirements shall apply in the RA-District:

1. Minimum lot area
 - a. residential uses: one (1) acre
 - b. nonresidential uses: two (2) acres
2. Maximum lot coverage
 - a. principal structures: five (5) percent
 - b. detached accessory structures: five (5) percent
3. Minimum required yards
 - a. front yards: thirty-five (35) feet
 - b. side yards: fifteen (15) feet each
 - c. rear yards: thirty five (35) feet

F. Additional Requirements

The following limitations and conditions shall apply to all uses permitted and permissible in the LC-District:

1. Storage Tanks

The maximum aggregate storage capacity of tanks used or intended for the storage of fuel oil, petroleum distillates, or other hazardous materials shall not exceed 660 gallons on any one lot or parcel. No such tank shall be installed underground. Every storage tank shall be used in a manner and for a purpose which serves a permitted principal building or use only.

2. Use of fertilizers, pesticides, and herbicides. The storage, use, and disposal of fertilizers, pesticides, and herbicides shall be performed in a manner which minimizes their transmittal and accumulation in groundwater. The storage, use, and disposal of such materials shall be performed in a manner consistent with management practices and standards adopted by the town.

MODEL GROUNDWATER PROTECTION DISTRICT
BYLAW/ORDINANCE

(Modified from 1982 MAPC Model Aquifer Protection District Bylaw)

Section 1 Authority

This bylaw/ordinance is adopted by the town/city of _____ under its home rule powers, its police powers to protect the public health, safety, and welfare, and under powers authorized by Mass. Gen. Laws Chapter 40A, as amended.¹

Section 2 Purposes

The purposes of this bylaw/ordinance are to protect public health from the contamination of existing and potential public and private water supplies and to protect the general welfare by preserving limited water supplies for present and future use.

Section 3 Definitions

- A. Animal feedlot--a plot of land on which twenty-five or more livestock per acre are kept for the purposes of feeding.
- B. Aquifer--a geologic formation, group of formations or part of a formation which contains sufficient saturated permeable material to yield significant² quantities of potable groundwater to public or private wells.
- C. Disposal--the deposit, injection, dumping, spilling, leaking, incineration, or placing of any hazardous material into or on any land or water so that such hazardous material or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater.
- D. Groundwater--all the water beneath the surface of the ground.
- E. Hazardous materials--any substance or combination of substances, not including any liquid petroleum product, that, because of quantity, concentration or physical, chemical or infectious characteristics, poses a significant present or potential hazard to water supplies or to human health if disposed of into or on any land or water in this town/city. Any substance deemed a "hazardous waste" in Mass. Gen. Laws Chapter 21C shall also be deemed a hazardous material for purposes of this bylaw/ordinance.

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- 1. A community may wish to broaden this definition to include bedrock aquifers.
 - 2. In lieu of this general term, a minimum numerical yield, in terms of gallons per minute, could be specified. For a municipal well, a minimum yield of approximately 100 gpm would be required.

- F. Impervious--impenetrable by water.
- G. Leachable wastes--waste materials, including solid wastes, sewage, sludge, and agricultural wastes, that are capable of releasing waterborne contaminants to the surrounding environment.
- H. Mining of land--the removal or relocation of geologic materials such as topsoil, sand and gravel, metallic ores, and bedrock.
- I. Recharge area--any area of porous, permeable geologic deposits, especially, but not exclusively, deposits of stratified sand and gravel, through which water from any source drains into an aquifer, and includes any wetland or body of surface water surrounded by or adjacent to such area, together with the watershed of any wetland or body of surface water adjacent to such area.¹
- J. Solid wastes--useless, unwanted, or discarded solid materials with insufficient liquid content to be free flowing, including, for example, rubbish, garbage, scrap materials, junk, refuse, inert fill material, and landscape refuse.

Section 4 Delineation of Groundwater Protection District

- A. For the purposes of this bylaw/ordinance, there is hereby established within the town/city of _____ an overlay district consisting of certain groundwater protection areas, including aquifers and recharge areas,² which are delineated on a map dated _____, entitled "Groundwater Protection District, Town/City of _____" and which shall be considered as superimposed over other districts established by the zoning bylaws/ordinances of this town/city. This map, as it may be amended from time to time, is on file with the office of the town/city clerk, and, with any explanatory material thereon, is hereby made a part of this bylaw/ordinance.
 - B. Uses otherwise not permitted in the portions of a zoning district superimposed by this district shall not be permitted in this district.
 - C. Where the bounds of the Groundwater Protection District, as delineated on the Groundwater Protection District map, are in doubt or in dispute, the burden of proof shall be upon the owner(s)
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- 1. It is important to protect such a watershed from contamination because of the risk of induced recharge into the aquifer from the adjacent body of surface water. It is also vital to maintain wetlands for their natural pollution abatement capacity.
 - 2. In municipalities that have little remaining open space or that overlie a single large aquifer, an alternative approach, of more limited scope, is to include in the Groundwater Protection District only the "zones of contribution" or "areas of influence" of existing municipal wells and of the sites of planned future wells.

of the land in question to show where they should properly be located. At the request of the owner(s), the town/city may engage a professional hydrogeologist or soil scientist to determine more accurately the location and extent of an aquifer or recharge area and may charge the owner(s) for all or part of the cost of the investigation.

Section 5 Permitted Uses

A. Within the Groundwater Protection District, the following uses are permitted, subject to the provisions of Section 6, provided that all necessary permits, orders and approvals required by local, State, and Federal law are also obtained:

1. Conservation of soil, water, plants, and wildlife;
2. Outdoor recreation, not involving the use of motor vehicles or motor boats including boating, fishing, nature study, and hunting where otherwise legally permitted;
3. Foot, bicycle and horse paths, and bridges;
4. Maintenance and repair of any existing structure, provided there is no increase in impervious pavement;
5. Normal operation and maintenance of existing water bodies and dams, splash boards, and other water control, supply, and conservation devices;
6. Residential development, permitted in the underlying district, provided that no more than 10 percent of a building lot (including the portion of any new street abutting the lot) is rendered impervious¹;
7. Farming, gardening, nursery, conservation, forestry, harvesting and grazing uses, provided that fertilizers, herbicides, pesticides, manure, and other leachable materials are not stored outdoors.²

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1. Communities should consider seriously adding a provision restricting the density of future residential development in the Groundwater Protection District to no more than one dwelling unit with onsite septic system per acre.
 2. Prohibition or regulation of the application of pesticides and herbicides should be considered. Local authority to regulate pesticide use is currently under review by the Massachusetts Supreme Judicial Court.

Section 6 Prohibited Uses

A. Within the Groundwater Protection District, the following uses are prohibited:¹

1. Storage of liquid petroleum products of any kind except for storage in a free-standing container within a building of fuel for the heating of that building²;
2. Disposal of hazardous materials;
3. Storage of hazardous wastes, as defined in Mass. Gen. Laws Chapter 21C, as amended;
4. Disposal of solid wastes other than brush or stumps;
5. Disposal of leachable wastes except for subsurface waste disposal from one-family or two-family residential units;
6. Storage of road salt or other deicing chemicals;
7. Disposal of snow that contains deicing chemicals and that has been brought in from outside the district;
8. Industrial uses that discharge process wastewater onsite;
9. Outdoor storage of fertilizers, herbicides, and pesticides, and outdoor uncovered storage of manure;
10. Animal feedlots;
11. Dry cleaning establishments;
12. Boat and motor vehicle service, washing, and repair establishments;
13. Junk and salvage yards;

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1. Generally speaking, zoning bylaws cannot be applied retroactively to existing uses. See Mass. Gen. Laws Chapter 40A, Section 6, as amended.
 2. If the storage of petroleum products, especially underground storage, is to be permitted at all in the Groundwater Protection District, it should be allowed only by special permit and subject to special conditions recommended by the board of health or other local department exercising general regulatory authority over the underground storage of petroleum. See Section 4.5 of the Model Bylaw for Regulating Underground Petroleum Storage Tanks (Appendix A) for a list of special conditions that may be required.

14. The rendering impervious of more than 10 percent of any lot; and
15. Mining of land except as incidental to a permitted use.

Section 7 Special Permit Uses

- A. The following uses, unless prohibited by a specific provision of Section 6, may be permitted by a special permit from the Special Permit Authority (SPA),¹ under such conditions as the may require:
 1. Commercial and industrial activities permitted in the underlying district and involving the manufacture, storage, transportation or use of any hazardous material other than hazardous wastes as defined in Mass. Gen. Laws Chapter 21C²;
 2. The application of pesticides for uses that are nondomestic and nonagricultural, provided that all necessary precautions shall be taken to prevent hazardous concentrations of pesticides in the water and on the land within the Groundwater Protection District as a result of such application, such precautions to include, but not be limited to, erosion control techniques, the control of runoff water (or the use of pesticides having low solubility in water), the prevention of volatilization and redistribution of pesticides and the lateral displacement (i.e. winddrift) of pesticides; and
 3. The application of fertilizers for uses that are nondomestic and nonagricultural provided that such application shall be made in such a manner as to minimize adverse impacts on surface water and groundwater due to nutrient transport and deposition or sedimentation.
- B. Any application for a special permit shall be made, reviewed and acted upon in accordance with the following procedures:
 1. Each application for a special permit shall be filed in writing with the SPA and shall contain a complete description of the proposed use, together with any supporting information and plans² which the SPA may require.

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1. The Special Permit Authority designated in this bylaw/ordinance may be the Board of Selectmen, City Council, Board of Appeals, Planning Board or Zoning Administrator, as designated by the local zoning ordinance or bylaw. See Mass. Gen. Laws Chapter 40A, Section 1.A, as amended.
 2. The bylaw/ordinance could also either prohibit any future commercial and industrial uses or require site plan review of any such use to prevent various forms of negative impact on the Groundwater Protection District, including not only contamination from hazardous materials but also compaction, siltation, and loss of recharge.

2. The SPA shall refer copies of the application to the Board of Health, Planning Board, Conservation Commission, and Town/City Engineer or Department of Public Works, which shall review, either jointly or separately, the application and shall submit their recommendations to the SPA. Failure to make recommendations within thirty-five days of the referral of the application shall be deemed lack of opposition.
 3. The SPA shall hold a public hearing on the application, in conformity with the provisions of Mass. Gen. Laws Chapter 40A, within sixty-five days after the filing of the application with the SPA.
 4. After notice and public hearing, and after due consideration of the reports and recommendations of the local boards/departments, the SPA may grant such a special permit provided that it finds that the proposed use:
 - a. is in harmony with the purpose and intent of this bylaw/ordinance and will promote the purposes of the Groundwater Protection District;
 - b. is appropriate to the natural topography, soils, and other characteristics of the site to be developed;
 - c. will not, during construction or thereafter, have an adverse environmental impact on the aquifer or recharge area; and
 - d. will not adversely affect an existing or potential water supply.
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1. If site plan review is required, the plan would be submitted, along with appropriate engineering data, to provide a basis for reviewing the impact of the proposed activity on the Groundwater Protection District.

MODEL BYLAW/ORDINANCE FOR REGULATING
UNDERGROUND PETROLEUM STORAGE TANKS

Section 1.0 Authority

This bylaw/ordinance is adopted by the town/city of _____ under its home rule powers, its police powers to protect the public health, safety, and welfare, and under powers authorized by Mass. Gen. Laws Chapter 40, Section 21 and Chapter 148, Section 9.

Section 2.0 Purposes

The purposes of this bylaw/ordinance are, through regulation of the design, construction, installation, testing and maintenance of underground petroleum storage facilities, to protect public health from the contamination of public and private water supplies due to leakage from such facilities, to protect the public safety from the dangers of fire and explosion associated with such leakage, and to protect the general welfare by preserving limited water supplies for present and future use.

Section 3.0 Definitions

- A. Abandoned--being out of service for a continuous period in excess of six months, in the case of a storage facility for which a license from the local licensing authority is required under the provisions of Mass. Gen. Laws Chapter 148, Section 13, as amended, and for a period in excess of twenty-four months, in the case of any other storage facility.
- B. Cathodic protection--a system that inhibits the corrosion of a tank or components through either the sacrificial anode or the impressed current method of creating a corrosion-inhibiting electrical current.
- C. Components--piping, pumps, and other related storage, conveyancing, and dispensing elements that, together with one or more tanks and any cathodic protection or monitoring system, constitute a storage facility.
- D. Effective date--the date on which the bylaw is approved by a town meeting, provided the bylaw thereafter becomes effective under the provisions of Mass. Gen. Laws Chapter 40, Section 32, as amended; or the date on which the ordinance receives final city council approval in accordance with Mass. Gen. Laws Chapter 43, Section 23.
- E. Leakage or leak--any uncontrolled movement, measurable by a final or precision test¹ that can accurately detect a leak of 0.05 gallons per hour or less, after adjustment for relevant variables such as

1. The criteria for a final or precision test are described in NFPA 329, published by the National Fire Protection Association.

temperature change and tank end deflection, or petroleum product out of a tank or its components; or any uncontrolled movement of water into a tank or its components.

- F. Monitoring system--a system installed between the walls of double-walled tanks or inside a tank or in the vicinity of a tank for the purpose of early detection of leaks.
- G. Out of service--not in use, in that no filling or withdrawal is occurring.
- H. Operator--the lessee of a storage facility or the person or persons responsible for the daily operation of a storage facility.
- I. Owner--the person or persons or government entity having legal ownership of a storage facility.
- J. Storage facility--one or more tanks, at a particular site, together with its or their components, used, or designed to be used, for the underground storage of liquid petroleum products, and shall include any cathodic protection or monitoring system used, or designed to be used, for inhibiting or detecting leaks of petroleum product from any element of the facility.
- K. Tank--any structure any part of which is used, or designed to be used, for the underground storage of any liquid petroleum product of any kind.
- L. UL-listed--included in a current list or report of approved equipment, materials, or methods published by Underwriters Laboratories, Inc.
- M. Underground storage--storage below ground level but shall not include storage in a free-standing container within a building.
- N. Water supply--any existing or potential source of potable water, including both groundwater and surface water.

Section 4.0 Permits

NEW STORAGE FACILITIES

- A. Subsequent to the effective date of this bylaw/ordinance, no storage facility shall be installed unless the owner shall have first obtained a permit from the board of health. This permit shall be in addition to any license or permit required by Mass. Gen. Laws Chapter 148, as amended, or by any regulations issued thereunder. The fee for this permit, payable to the town/city of _____ shall be _____ dollars.

- B. The application for a permit shall be on a form¹ obtained from the board of health and shall include the following information and any other information that the board may require:
1. Name, address, and telephone numbers (day and night) of the owner;
 2. Name, address, and telephone numbers (day and night) of the operator;
 3. The number of tanks in the proposed facility and the capacity and contents of each proposed tank;
 4. The proposed type of construction for each tank and its piping, together with the tank's UL serial number, if any, and a description of any provisions made for cathodic protection, electrical isolation, and early detection of leaks through a monitoring system; and
 5. The depth below ground level of the lowest and highest points of each proposed tank.
- C. In a storage facility with more than one proposed tank, the applicant shall furnish a certificate, signed by a qualified engineer, that the proposed facility meets all the design and construction requirements of this bylaw/ordinance.
- D. The applicant shall also furnish a plot plan of the site and the area surrounding it, showing the location of each proposed tank and its components and of any building on the site, and showing the approximate location of any public or private well and of any body of surface water within 500 feet of the proposed storage facility.
- E. If the board of health determines that the proposed storage facility constitutes a danger to a public or private water supply, whether by reason of its proximity to a public or private well, aquifer, recharge area, or body of surface water, or for any other reason, the board may deny the permit or may grant it subject to conditions which the board determines are necessary to protect such water supply.² The conditions may include, but are not limited to, such requirements as, for example, a double-walled tank or other secondary containment system, a monitoring system, testing at more frequent intervals than
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1. See Appendix C for a model permit application form.
 2. A community may wish to include in the bylaw/ordinance a provision specifically prohibiting installation of any new tank for the underground storage of heating oil or imposing special restrictions on such tanks, such as requiring double-walled tank construction or other secondary containment system. The public safety arguments for storing heating oil underground are significantly weaker than for the underground storage of gasoline.

would otherwise be required under Section 8, or continuing independent leak detection statistical analysis of daily inventory records.¹

EXISTING STORAGE FACILITIES

- F. The owner of every storage facility that has been installed prior to the effective date of this bylaw/ordinance shall apply to the board of health, within six months of the effective date of this bylaw/ordinance, for a permit to maintain the storage facility.² Application shall be made on a form obtained from the board of health and shall include, to the extent available to the owner, the following information:
1. Name, address, and telephone numbers (day and night) of the owner;
 2. Name, address, and telephone numbers (day and night) of the operator;
 3. The number of tanks in the facility and the capacity and contents of each tank;
 4. The type of construction for each tank and its piping, together with a description of any provisions made for cathodic protection, electrical isolation, and early detection of leaks through a monitoring system;
 5. The depth below ground level of the lowest and highest points of each tank;
 6. The date of installation of each tank; and
 7. A description of any previous leaks, including approximate dates, causes, estimated amounts, any cleanup measures taken, and any measures taken to prevent future leaks.
- G. The owner shall also furnish evidence of the date of installation. Such evidence may include, but is not limited to, a copy of any
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1. A community may wish to provide for a right of appeal to the Board of Selectmen or City Council from a decision of the Board of Health under this subsection.
 2. A community may wish to include in the bylaw/ordinance a provision authorizing the Board of Health to impose conditions on a permit for an existing storage facility upon determining that the storage facility constitutes a danger to a public or private water supply. Appropriate conditions for existing storage facilities might include cathodic protection, a monitoring system, more frequent testing than would otherwise be required, or continuing analysis of inventory records. The provision could include a right of appeal to the Board of Selectmen or City Council from the Board of Health's decision.

license issued by the local licensing authority or of any permit issued by the head of the local fire department (hereinafter, the fire chief). If no substantial evidence of the date of installation is supplied, the tank shall be presumed to have been installed twenty years prior to the effective date of this bylaw.

- H. The applicant shall also furnish a plot plan of the site and of the area surrounding it, showing the approximate location of each tank and its components and of any building on the site, and showing the location of any public or private well and of any body of surface water within 500 feet of the storage facility.¹

REPLACEMENT AND SUBSTANTIAL MODIFICATION

- I. The term "substantial modification" shall mean the installation of any addition to, or change in, a storage facility that alters its onsite storage capacity, significantly alters its physical configuration, or its capacity to inhibit or detect leaks through the use of cathodic protection or a monitoring system or any similar device.
- J. There shall be no replacement of a tank or of its components or substantial modification of any storage facility unless the owner has first applied for and obtained approval in writing from the board of health. The board shall keep a copy of its approval with the records for that storage facility.
- K. Any application for approval under subsection J shall be in writing and shall clearly describe the type of construction of any replacement tank or component or the modification that is proposed.
- L. Any application to add cathodic protection to an existing storage facility using one or more steel tanks shall be accompanied by a design plan prepared by an engineer licensed by the National Association of Corrosion Engineers, the plan to include provisions for a test box to allow measurement of electrical potential and current flow.
- M. If the board of health determines that the proposed replacement² or modification constitutes a danger to a public or private water

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1. In order to achieve full compliance with the permit requirements for existing tanks, a community may wish to add a provision prohibiting supply of product to any tank for which a permit has not been obtained. A metal identification tag affixed to the fill opening of each tank could provide evidence that a permit had been obtained.
 2. There may be instances in which replacement of one tank or its piping in a multitank facility may increase the danger of leakage at the facility.

supply, whether by reason of its proximity to any public or private well, aquifer, recharge area, or body of surface water, or for any other reason, the board of health may deny the application or approve it subject to conditions that the board determines are necessary to protect such public or private water supply.¹

- N. No replacement or substantial modification shall be made except by a contractor who has either been licensed by State authorities for work on underground storage facilities or has been certified by the manufacturer or a petroleum equipment association as qualified for that purpose.²

RENEWAL OF PERMITS AND CHANGES OF OWNERSHIP

- O. The owner of any new or existing storage facility for which a permit has been issued under this section must apply to the board of health for a renewal of the permit at five year intervals from the date on which the original permit was granted. The fee for renewal of such permit, payable to the town/city of _____ shall be _____ dollars. The application for renewal must include any changes in the information required under subsections 4.2 and 4.6. No application for renewal may be denied except for violations of this bylaw/ordinance and in accordance with the procedural requirements of subsection 11.2.
- P. The owner of any storage facility shall within two working days notify the board of health of any change in the name, address, or telephone numbers of the owner or of the operator. In the case of any transfer of ownership, the new owner shall be responsible for notification.

Section 5.0 Design and Construction

- A. All new and replacement tanks shall be designed and constructed to minimize the risk of corrosion and leakage. Only the following tank construction systems shall be approved:
1. UL-listed fiberglass reinforce plastic (FRP) tanks, using materials compatible with the product to be stored therein;
 2. UL-listed steel tanks provided with cathodic protection, a coal-tar epoxy or urethane coating, and electrical isolation, and equipped with a test box to allow measurement of electrical potential and current flow;
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1. A community may wish to provide for a right of appeal to the Board of Selectmen or City Council from a decision of the Board of Health under this subsection.
 2. State licensing, although preferable to certification by the manufacturer, is currently not provided for under State law.

3. UL-listed steel tanks with bonded fiberglass coating, compatible inner corrosion-resistant lining, and electrical isolation, the integrity of the outer coating to be verified by the manufacturer by electrostatic testing and guaranteed by the manufacturer;
 4. UL-listed double-walled steel tanks with cathodic protection or bonded fiberglass coating, and with electrical isolation, a vacuum or air pressure in the interstitial space, and provision for continuous monitoring of the vacuum or air pressure; and
 5. Any other "state-of-the-art" type of tank construction providing equal or better protection against leakage than the above-mentioned tanks and approved by the State fire marshall.
- B. All new and replacement tanks must be equipped with a metallic or nonmetallic striker plate, at least 12" x 12" in area, at least 1/4 inch thick, and attached to the bottom of the tank, under each opening.
- C. All new and replacement piping of a storage facility shall be:
1. Protected against corrosion by use of noncorrodible materials or by use of cathodic protection and electrical isolation and be compatible with the product to be stored in the facility; and
 2. Designed, constructed, and installed so as to allow testing for tightness or replacement without the need for disturbing elements of the storage facility other than the elements that are to be tested or replaced.
- D. The operator of a storage facility shall record, at least monthly, the negative voltage of every cathodic protection system, equipped with a test box, that is part of that facility. In addition, the owner shall have every cathodic protection system inspected and tested, by a qualified person, at least annually. If any such system does not have adequate negative voltage, or is otherwise defective, the owner shall have the system repaired promptly by a qualified person. For purposes of this subsection, the term "adequate negative voltage" shall mean negative voltage of at least 0.85 volts if a copper-copper sulfate reference electrode is used; and of at least 1.95 volts if a zinc reference electrode is used. Reference electrodes shall be installed in accordance with the manufacturer's directions.
- E. All submersible pumping systems for new tanks used to store automotive fuel shall be equipped with emergency shutoff valves under each dispenser and with delivery line leak detectors. The shutoff valves and leak detectors shall be tested by a qualified person upon installation and at least annually thereafter. No suction pumping

system shall be equipped with any check valve in the piping except at the tank end, and any such check valve shall be so installed that it may be tested or replaced without disturbing other elements of the storage facility.

- F. Every new tank shall be equipped with an overflow prevention system. If a tank is filled by gravity flow, it must be equipped with a float vent valve or other device that provides equal, or better, protection from overflowing. If the tank is filled under pressure, it must be equipped with a combined audible and visual high level alarm. Any such system shall be tested by a qualified person upon installation and at least annually thereafter.

Every monitoring system shall be installed by a qualified person. Those equipped with an automatic audible or visual alarm shall be tested by a qualified person upon installation and at least annually thereafter. Those without such an automatic alarm system shall be checked by the operator for evidence of leak at least monthly and shall be inspected by a qualified person at least annually.

Section 6.0 Installation

- A. No new or replacement tank or component shall be installed, whether it is part of a new or existing storage facility, unless the owner has given at least one week's notice of its installation to the fire chief; and no new or replacement tank or component shall be buried or concealed until it has been inspected for damage and external defects, tested for tightness under subsection 6.5 and approved by the fire chief or the chief's designee.
- B. No new or replacement tank or component shall be installed except by a contractor who has been either licensed by State authorities for that purpose or certified in writing by the manufacturer or a petroleum equipment association as qualified for the purpose.¹ The contractor shall, prior to any installation, submit to the fire chief a copy of such license or certificate.
- C. The installation of a new or replacement tank or component, including anchoring of the tank whenever water-saturation of any part of the excavation can reasonably be anticipated, shall be carried out in accordance with the manufacturer's recommendations, accepted engineering practices and the provisions of 527 CMR 9.06 (17)(b-d), as amended; provided that the backfill material for FRP tanks shall be pea gravel or crushed stone, and that the backfill material under all other tanks shall be either pea gravel or clean, noncorrosive sand, free of cinders, stones and any other foreign material, the material under the tank to be compacted and contoured to the shape of the tank before the tank is installed, the balance to be thoroughly compacted.

1. State licensing, although preferable to certification by the manufacturer, is currently not provided for by the State law.

- D. Any damage to the exterior of a tank or its coating shall be repaired before the tank is covered. The fire chief shall notify the board of health of such repaired damage, and the board shall make note of it in its records for that tank.
- E. Every new or replacement tank and its piping shall be tested, separately, at the owner's expense, prior to being buried. The tank shall be tested by air pressure at not less than 3, and not more than 5, pounds per square inch. The piping shall be tested hydrostatically to 150 percent of the maximum anticipated pressure of the system or tested pneumatically, after all joints and connections have been coated with a soap solution, to 100 percent of the maximum anticipated pressure of the system, but not less than 50 pounds per square inch at the highest point of the system. After the tank and piping have been fully buried, any paving installed and the tank filled with produce, the tank and its piping shall be again tested, separately, at the owner's expense. The tank shall be tested by any final or precision test, not involving air pressure, that can accurately detect a leak of 0.05 gallons per hour or less, after adjustment for relevant variables such as temperature change and tank end deflection, and that is approved by the State fire marshal. The piping shall be tested hydrostatically to 150 percent of the maximum anticipated pressure of the system. The owner shall furnish the board of health with a certified copy of the results of all testing required by this subsection, which the board of health shall keep with the records for the storage facility.

Section 7.0 Inventory Control

- A. The provisions of this section shall not apply to a tank with a capacity of less than 1,500 gallons except for tanks used to store a liquid petroleum product for retail sale or used to store waste oil or other waste petroleum products.
- B. Except as provided in subsection A, the operator of every new and existing storage facility shall prepare, reconcile, and maintain daily inventory control records for each tank and for each combination of interconnected tanks with a common level of product (hereinafter, a combination), for the purposes of prevention and early detection of leaks. The preparation, reconciliation, and maintenance of such records shall be done in accordance with the provisions of 527 CMR 5.05(3), as amended, with the following additions and modifications:
 - 1. At the close of each calendar month, the operator shall determine, for that month and for each tank or combination, the number of days in which any amount of product was dispensed and the number of days in which a loss of product was recorded.

2. An "abnormal loss of product" shall mean a loss recorded on 70 percent or more of the days, during any calendar month, in which any amount of product was dispensed from a tank or combination.¹
 3. In the event of any abnormal loss of product, the following steps shall be taken:
 - a. the operator shall, within twenty-four hours, notify the owner, the fire chief and the board of health;
 - b. the owner shall, within three working days, have the steps taken, for that tank or combination and its components, that are outlined in Section 8.A; or
 - c. the owner shall, within three working days, submit the daily inventory records of that tank or combination, for that month, for a leak detection statistical analysis by any professionally qualified person who has been approved by the board of health; and the person performing such analysis shall promptly submit certified copies of the results to the board of health and to the owner; and if the board of health, on the basis of such results, determines that there is a probability of a leak in that tank or combination, or in its components, the board shall so notify the owner and the owner shall, within three working days, have the steps taken that are outlined in Section 8.A with respect to that tank or combination and its components.
 4. An "abnormal gain of water" shall mean a gain in the water level inside any tank of more than one (1) inch in a twenty-four hour period during which no product has been added.
 5. In the event of any abnormal gain of water, the owner shall, at the owner's expense, have the water removed from the tank and disposed of in a manner approved by the Department of Environmental Quality Engineering (DEQE) and have the water level checked twenty-four hours later, during which time no product shall be added. If there is again an abnormal gain of water, the owner shall promptly have the steps taken that are outlined in Section 8.A.
 6. Apart from abnormal gains of water, the owner of any tank in which water has accumulated to a depth of three (3) inches or more, shall, at the owner's expense, have the water removed and disposed of in a manner approved by DEQE.
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1. For identifying a pattern of product loss, this measure is more useful than the traditional measure of 0.5 percent of the volume of product dispensed over a designated period of time.

7. For every storage facility covered by the inventory control requirements of this section, the owner shall, at least annually and at the owner's expense, submit the daily inventory records of the most recent calendar month for a leak detection statistical analysis by any professionally qualified person who has been approved by the board of health for that purpose. The person performing such an analysis shall promptly submit certified copies of the results of that analysis to the owner and to the board of health. The board shall keep its copy with the records of that facility. If the board determines, on the basis of that analysis, that there is a probability of a leak from any tank or its components in that facility, the owner shall, within three working days, take the steps outlined in Section 8.A with respect to that tank and its components; or, in the case of a combination, with respect to each tank and its components.
8. The board of health, in addition to the fire chief and State public safety officials, shall have access to all inventory records required by this section.

Section 8.0 Testing for Tightness

- A. If the probability of a leak is indicated by inventory control procedures under Section 7 or by a monitoring system or by a line leak detector or by the malfunctioning of a suction pump or by the presence of product or product fumes in the surrounding area, or otherwise, the owner shall, within three working days, have the following steps taken, at the owner's expense:
 1. Have the readily accessible physical facilities on the premises carefully inspected for evidence of leakage;
 2. If the inspection does not confirm a leak, and if the piping can be tested without the need for excavation, have the piping tested in accordance with the provisions of Section 8.J and K;
 3. If the testing fails to confirm a leak or if the piping cannot be tested without excavation, have the tank tested in accordance with the provisions of Section 8.J and K;
 4. If that testing fails to confirm a leak, excavate and have the piping tested, in accordance with the provisions of Section 8.J and K.

If the inspections and testing outlined above fail to confirm a leak and if there is continuing evidence of a probable leak, the board of health may order the owner and operator to take the steps outlined in Section 9.

In the case of a combination of interconnected tanks, each tank and its components shall be tested separately.

- B. If any of the testing specified in Section 8.A discloses a leak, the operator and owner shall comply immediately with the requirements of Section 9, and the board of health may direct the owner, at the owner's expense, to have all other tanks on the premises and their components tested in the same manner.
- C. The provisions of Sections 8.D-G shall not be applicable to any storage facility to which the inventory control provisions of Section 7 are applicable and shall not be applicable to any other storage facility consisting exclusively of one or more double-walled tanks, each equipped with a monitoring system, together with an automatic audible or visual alarm, between the two walls.
- D. The owner of every existing storage facility that does not satisfy the design requirements of Section 5 shall have each tank and its piping tested, at the owner's expense, during the tenth, fifteenth, eighteenth, and twentieth years after installation and annually thereafter.
- E. If the owner of any existing storage facility, pursuant to the provisions of Section 4.I-N, provides cathodic protection and electrical isolation for each tank in the facility, subsequent testing requirements shall be in accordance with the provisions of Section 8.F.
- F. The owner of every kind of new tank permitted under Section 5.A and the owner of every existing tank that satisfies all of the design requirements of Section 5 shall have the tank and its piping tested, at the owner's expense, during the fifteenth and twentieth years following the date of installation and at two-year intervals thereafter.
- G. The board of health may postpone the required testing of a tank and its piping, as required under Section 8.D and F, until the fifth year prior to the mean age to leak as established to the board's satisfaction by a method of predictability analysis that is based upon, at a minimum, the following factors: soil resistivity; soil pH; soil moisture; tank size; type of backfill; height of water table; tank depth; and the presence or absence of sulfides in the soil. After the initial testing the tank and its piping shall be tested at two-year intervals, at the owner's expense.
- H. With respect to any tank to which the inventory control requirements of Section 7 are applicable, the board of health shall require the owner to have it and its piping tested promptly, at the owner's expense, whenever the operator fails to maintain the daily inventory records properly or fails to perform the required monthly calculations of abnormal loss, or whenever the owner fails to comply with the annual leak detection statistical analysis requirement under paragraph 7 of Section 7.B.

- I. The board of health may require the owner of any existing tank to have it and its piping tested, at the owner's expense, in any case in which the owner has failed to make timely application for a permit as required under Section 4.
- J. Except for testing performed on a tank and its piping prior to their being covered, a tank shall be tested by any final or precision test, not involving air pressure, that can accurately detect a leak of 0.05 gallons per hour or less, after adjustment for relevant variables such as temperature change and tank end deflection, and that is approved by the State fire marshal. Piping shall be tested hydrostatically to 150 percent of the maximum anticipated pressure of the system.
- K. All tests shall be administered by qualified persons approved by the board of health, and any such person shall notify the board of health prior to administering a test.
- L. The person performing any test under this section shall promptly supply the owner, the board of health and the fire chief with certified copies of all test results for a tank and its piping. The board shall keep its copy with the records of that storage facility.

Section 9.0 Response to Leaks

- A. In the event of a leak, whether determined by testing or otherwise, the following steps shall be taken:
 - 1. The operator shall immediately notify the owner, the fire chief and the Office of Incident Response of the Department of Environmental Quality Engineering (OIR-DEQE);
 - 2. The owner shall promptly verify that the fire chief and OIR-DEQE have been notified and shall notify the board of health;
 - 3. If testing has confirmed that the source of the leak is the piping for a particular tank the operator shall take that tank out of service immediately;
 - 4. If testing has confirmed that the source of the leak is a particular tank, the operator shall within twenty-four hours cause that tank to be emptied of all its petroleum product; and
 - 5. If testing has failed to determine the source of the leak within a storage facility, the operator shall within twenty-four hours cause the entire storage facility to be emptied of its petroleum product.
- B. Until the arrival of a representative of OIR-DEQE, the fire chief shall take charge of all emergency containment procedures and shall verify that all steps required under Section 9.A have been taken.

- C. The owner, the fire chief and the board of health shall cooperate with OIR-DEQE in all efforts to identify the source of the leak, to contain it, and to restore the environment, including any groundwater or surface water that may have been contaminated by the leak, to a condition and quality acceptable to DEQE.
- D. The board of health shall determine whether any tank or its components that have been identified as the source of a leak shall be removed and replaced or may be repaired, and shall notify the owner and the fire chief of its decision. In making its decision the board shall be governed by the following conditions on the repair, by relining, of any steel tank:
1. It must have a minimum design shell thickness of 0.18 inch (7 gauge);
 2. It must have no open seams or splits;
 3. It must have less than 10 holes with none larger than one-half inch in diameter and no more than 2 within a 1-foot radius; and
 4. It must meet all the standards of the lining manufacturer for structural soundness.

Adherence to the above conditions shall be determined af'er the interior surface of the tank has been peened by a hammer.

- E. If the board permits the repair of any leaking tank, the board shall require that the tank and its piping be tested, at the owner's expense and in accordance with the provisions of Sections 8.J-K, prior to being restored to service, at two-year intervals for ten years and annually thereafter.
- F. Any repair of a tank or replacement or repair of components shall be performed by qualified technicians, following the manufacturer's directions and, in the case of relining of a steel tank, following the recommendations of American Petroleum Institute Publication #1631 First Edition, 1983 or any subsequent edition as it may appear.
- G. If the board of health determines that a tank and its components shall be removed, the owner shall first obtain a permit from the fire chief, pursuant to Mass. Gen. Laws, Chapter 148, Section 38A, as amended. Any removal shall be completed within ninety days after the board of health has notified the owner of its decision.
- H. The owner shall be responsible for all costs of reclaiming, recovering and properly disposing of any product that has leaked and for all costs or restoring the environment, including any groundwater or surface water that has been contaminated, to a condition and quality acceptable to DEQE.

Section 10.0 Tanks Abandoned or Temporarily Out of Service

- A. If the owner of a tank, which either is located under a building and cannot be removed from the ground without first removing the building or is so located that it cannot be removed from the ground without endangering the structural integrity of another tank, decides to abandon it, the owner shall promptly notify the fire chief and the board of health of this decision and, subject to the directions of the fire chief, have all the petroleum product removed from the tank, by hand pump if necessary, and the tank filled with sand or other inert material prescribed by the fire chief.
- B. Except as provided in Section 10.A, no tank may be abandoned in place. Any owner of a tank who has decided to abandon it or any owner of a tank that has, in fact, been out of service for a period of time constituting abandonment, as defined in Section 3.A, shall immediately obtain a permit from the fire chief pursuant to Mass. Gen. Laws Chapter 148, Section 38A, as amended, and, subject to the directions of the fire chief, have any petroleum product removed from the tank, all tank openings properly secured and the tank removed from the ground. The product and tank shall be disposed of, at the owner's expense, as directed by the fire chief.
- C. The owner of a tank, which is licensed under Mass. Gen. Laws Chapter 148, as amended, and which the owner has decided to take out of service for a period of less than six months, shall promptly notify the fire chief and the board of health of the decision and, subject to the directions of the fire chief, have all the petroleum product removed from the tank and disposed of as directed by the fire chief, all tank openings properly secured, and the tank filled with water. Before any such tank may be restored to service, the owner shall notify the fire chief and the board of health, and have the water removed and disposed of in a manner approved by DEQE. The board of health may require that the owner have the tank and its piping tested, at the owner's expense, in accordance with the provisions of Sections 8.J-K.

Section 11 Enforcement

- A. Any owner or operator who violates any provision of this bylaw/ordinance shall be subject to a fine of three hundred dollars for each offense. Each day during which such violation continues shall constitute a separate offense. This bylaw/ordinance may be enforced pursuant to Mass. Gen. Laws Chapter 40, Section 21D, as amended, by a local police officer or any other officer having police powers. Upon request of the board of health, the Board of Selectmen/City Council and Town/City Counsel shall take such legal action as may be necessary to enforce this bylaw/ordinance.
- B. In the event of any violation of this bylaw/ordinance by the owner or operator of a storage facility, the board of health, instead of or in addition to requesting enforcement under Section 11.A, may revoke or suspend the owner's permit or may require more frequent testing than

would otherwise be required under Section 8; and if a permit is revoked or if a storage facility has been installed or maintained without a permit, the board may order that the storage facility be removed from the ground. Before revoking or suspending an owner's permit, or requiring removal of a storage facility from the ground, the board shall hold a public hearing on the proposed action; shall give the owner at least ten (10) days notice of the hearing by certified mail; and shall make its decision in writing with a brief statement of the reasons for its decision.

Section 12 Variances

- A. The board of health may, after a public hearing, vary the application of any provision of this bylaw/ordinance, unless otherwise required by law, when, in its opinion, the applicant has demonstrated that an equivalent degree of protection will still be provided to public and private water supplies. Notice of the hearing shall be given by the board, at the applicant's expense, at least ten (10) days prior thereto, by certified mail to all abutters to the property at which the owner's storage facility is located and by publication in a newspaper of general circulation in the town or city. The notice shall include a statement of the variance sought and the reasons therefor. Any grant or denial of a variance shall be in writing and shall contain a brief statement of the reasons for the grant or denial.

Section 13 Severability

- A. The invalidity of any provision of this bylaw/ordinance shall not affect the validity of the remainder.

MODEL GROUNDWATER RECHARGE
AREA PRESERVATION ORDINANCE (DRAFT)
(TRICOUNTY REGIONAL PLANNING COMMISSION,
LANSING, MICHIGAN, 1983).

Section 1.0 Purpose

- A. The Township Board of _____ Township finds that growth, the spread of development, and increasing demands upon natural resources have had the effect of encroaching upon, despoiling, or eliminating many of its groundwater recharge areas and processes associated therewith, which, if preserved and maintained in a properly managed condition, constitute important, physically aesthetic, recreational, and economic assets to existing and future residents of the community.

Specifically, the township finds that:

1. A major portion of public and private water supplies is derived from wells which extend into underground bodies of water known as aquifers;
2. As water is used, the aquifer is replenished, or recharged, primarily by rainfall within areas which due to soil type, geologic formation, and geographic proximity to surface waters, have the greatest ability to transmit water to the aquifer(s); and
3. Unrestricted development of these areas will decrease the recharge capability of such areas by reducing natural area available for absorbing rainfall, and by increasing the volume and speed of surface runoff. Further, natural vegetation within the recharge area, as well as interaction between surface water and aquifers, provides for filtration of water, reducing the amount of natural and manmade pollutants reacting the aquifers.

- A. Therefore, the purposes of this article (ordinance) are to:

1. Manage groundwater recharge areas to maintain the present or natural rate of recharge, when possible, to enhance the rate of recharge to ensure dependable future water supply;
2. Provide for the nondegradation of groundwater quality in usable aquifers and protect the township's fresh water supply from the damages of drought, overdraft, pollution, or mismanagement;
3. Provide for the paramount public concern for these natural resources in the interest of health, safety, and general residents of this township.

Section 2.0 Definitions

- A. Act 64--Act No. 64 of the Public Acts of 1979, as amended, being MCLA 299.401 et seq. and known as the "Hazardous Waste Management Act."
- B. Act 207--Act No. 207 of the Public Acts of 1941, as amended, being MCLA 29.1 et seq. and known as the "Fire Prevention Act."
- C. Act 245--Act No. 245 of the Public Acts of 1929, as amended, being MCLA 323.1 et seq. and known as the "Water Resources Commission Act."
- D. Act 348--Act No. 345 of the Public Acts of 1965, as amended, being MCLA 336.11 et seq. and known as the "Air Pollution Act."
- E. Act 368--Act No. 368 of the Public Acts of 1978, as amended, being MCLA 333.12703 et seq. and known as the "Public Health Code."
- F. Act 641--Act No. 641 of the Public Acts of 1978, as amended, being MCLA 299.401 et seq. and known as the "Solid Waste Management Act."
- G. Aquifer--A geologic unit where porous and permeable conditions exist and thus are capable of yielding usable amounts of water.
- H. Contaminant--A physical, chemical, biological, or radiological substance or matter which is detrimental to human health in water.
- I. Degradation--A change in groundwater quality from local background groundwater quality, within any portion of a usable aquifer system.
- J. Diffuse Source--Any facility or operation which transmits material by seepage or percolation through the soil to the groundwaters.
- K. Discharge--The addition of materials to groundwaters from any facility or operation which acts as a discrete or diffuse source.
- L. Discrete Source--Any facility or operation which transmits materials to the groundwaters by a discernible confined conveyance.
- M. Groundwater--Underground water in the zone of saturation in which all of the pore spaces of the subsurface material are filled with water.
- N. Good Groundwater Recharge Area--An area which has predominantly sand and gravel soil overlying sandstone bedrock.
- O. Groundwater Recharge Area--An area which has soils and geological features which are conducive to allowing significant amounts of surface water to percolate into the groundwater.

- P. Hazardous Material--Those substances that, singly or in combination, pose an unacceptable, existing, or potential risk to human health or to the environment because they may be flammable, explosive, reactive, corrosive, toxic, radioactive, infectious, carcinogenic, bioconcentrative, persistent, or irritating when present in sufficient concentrations.
- Q. Hydrogeological Determination--The collection, interpretation, and presentation of hydrologic and geologic data to provide an adequate understanding of existing conditions and to determine the potential impact on the groundwaters of a discharge from an operation or activity.
- R. Health Department--County or district health departments.
- S. Impervious Surface--A surface which is incapable of being penetrated by rain water.
- T. Monitoring Well--A well that is specifically designed to measure the impact of a discharge on the groundwaters.
- U. Primary Recharge Area--That area immediately overlying the designated aquifer and adjacent areas of stratified drift that may not have a sufficient saturated thickness to be part of the aquifer and from which groundwater flows directly into the designated aquifer. The boundary of the primary recharge area is the contact between the stratified drift and adjacent till or bedrock.
- V. Secondary Recharge Area--Those areas adjacent to the primary recharge area from which groundwater moves down gradient into the aquifer, or those groundwater recharge areas which have more clay composition within the drift or more shale at the bedrock surface.
- W. Site Plan--Includes the documents and maps required by the zoning ordinance to insure that a proposed land use or activity is in compliance with local ordinances and State and Federal statutes.
- X. Solid Waste--Refuse, garbage, rubbish, ashes, or other material in solid form.
- Y. Tertiary Recharge Area--The upstream drainage area of streams that traverse the primary recharge area. Rain that falls in this area moves first into a surface-water body and then, by induced infiltration, moves from the surface water to an aquifer.

Section 3.0 District Boundaries

- A. The Planning Commission of _____ shall develop and adopt an official Groundwater Recharge Area Map, based on criteria and testing performed as part of the Regionwide Groundwater Management Plan, by the _____ County Department of Health, by the Michigan Department of Natural Resources, as

determined by the Township Engineer, or by special hydrogeological study performed for any purpose within the township. The official groundwater recharge area map shall distinguish between primary and secondary recharge areas as defined herein.

A copy of said map will be available for inspection in the township municipal offices and shall be updated as new information relevant to the criteria listed below warrants such changes.

- B. The determinants of groundwater recharge areas as designated on the map shall be as follows:
1. Primary Recharge Area--That area immediately overlying the designated aquifer and adjacent areas of stratified drift that may not have a sufficient saturated thickness to be part of the aquifer and from which groundwater flows directly into the designated aquifer. The boundary of the primary recharge area is the contact between the stratified drift and adjacent till or bedrock.
 2. Secondary Recharge Area--Those areas adjacent to the primary recharge area from which groundwater moves down gradient into the aquifer or those groundwater recharge areas which have more clay composition within the drift or more shale at the bedrock surface.

Section 4.0 Uses Permitted by Site Plan Review
in Primary Recharge Areas Pursuant to Section 7.0

- A. Conservation of soil, vegetation, water, fish, and wildlife.
- B. Outdoor recreation including parks, playgrounds and sporting areas, and field and bridle trails.
- C. Municipal uses such as waterworks, pumping stations, wells, groundwater recharge basins, or surface water impoundments intended for municipal water supply.
- D. Agricultural or horticultural activities including:
1. Raising of grain, grass, or seed crops;
 2. Apiculture (beekeeping);
 3. Floriculture;
 4. Raising of ornamental trees, shrubs, and nursery stock; and
 5. Vegetable raising.
- E. Accessory building ancillary to agricultural or recreational activities not to exceed five hundred (500) square feet in gross floor area.

Section 5.0 Uses Permitted by Site Plan Review in Secondary Recharge Areas: Pursuant to Section 8.0

- A. Uses permitted in Section 4.0 above.
- B. Detached single-family dwelling units on tracts of one (1) acre or more.

Section 6.0 Uses Permitted by Special Use Permit in Secondary Recharge of Areas, Pursuant to Section 8.0

- A. Multifamily dwellings
- B. Grouped housing

Section 7.0 Site Plan Requirements

(All proposed land uses within primary, or secondary recharge areas will be subject to site plan review. Within these designated areas, the site plan information requirements will be more stringent. The following is a comprehensive site plan review section, the items in italics are only required when a land use is proposed within a Groundwater Recharge Protection District.)

- A. Purpose--It is the purpose of this section to specify standards and data requirements which shall be followed in the preparation of site plans, plot plans, or development plans as specified in Article XI.
- B. Approval or Required--Site plan approval is required as follows:
 - 1. For those uses requiring Special Use Permits as specified
 - 2. For land uses proposed in Groundwater Recharge Protection Districts
- C. Data Required--A map scaled 1"=100' indicating:
 - 1. Property dimensions and legal description, including angles, lot area, and an arrow pointing north;
 - 2. The intended use, size, shape, location, height, and floor area of proposed buildings and finished ground and basement grades;
 - 3. Natural features such as woodlots, wetlands, streams, county drains, lakes or ponds, and manmade features such as existing roads and structures, with indication as to which are to be retained and which removed or altered;
 - 4. Existing public rights-of-way and private easements of record;
 - 5. Proposed streets, driveways, parking spaces, and sidewalks, with indication of direction of travel, the inside radii of all curves including driveway curb returns, the width of

streets, driveways and sidewalks, and the total number of parking spaces, and dimensions of a typical individual parking space and associated aisles;

6. A vicinity sketch showing the location of the site in relation to the surrounding street system and other land uses within three hundred (300) feet in every direction of the proposed use including land uses on the opposite side of any public thoroughfare(s);
7. Location of water supply and the location and design of wastewater systems;
8. Proposed location of accessory buildings and use, including free standing signs;
9. A landscaping plan indicating the locations of planting and screening, fencing, and lighting and proposed locations of common open spaces, if applicable;
10. Such other information as is necessary to enable the Planning Commission to determine whether the proposed site plan will conform to the provisions of this ordinance;

(The following as required only when project under consideration affects a Groundwater Recharge Protection District.)

11. All proposed diffuse and discrete discharges shall be located and the composition and quantity (in gallons per day) of discharges shall be defined; such discharges include:
 - a. discrete discharge--any sanitary, storm drain or other facility discharge which emanates through a discernible confined conveyance.
 - b. diffuse discharge--a discharge which involves the transmission of material by seepage or percolation through the soil to the groundwaters; this discharge includes fuel storage (above and below ground), wastewater lagoon systems, stormwater retention basins, private sanitary systems, solid waste disposal facilities, storage of road salt, storage of any hazardous materials, fuel or sanitary transmission facilities, animal waste storage, and fertilizer and pesticide application.
12. The site shall be located on a topographic map, 7.5 minute series if available.

Section 8.0 Performance Standards

A. Subsurface Disposal of Domestic Wastes:

1. Primary groundwater recharge areas--prohibited;

2. Secondary groundwater recharge areas--subsurface disposal of domestic sewage shall not exceed an average of 350 gallons per acre per day.

(For normal development of single-family homes in areas without sewers, the above requirement would correspond to an average of one dwelling unit per acre. This requirement would allow for cluster development as long as an average discharge of 350 gallons per acre per day is maintained. However, for cluster development, wastewater discharge may be concentrated on a small part of the recharge area.)

B. Storage of Road Salt

1. Primary Groundwater Recharge Areas--prohibited.
2. Secondary Groundwater Recharge Areas--storage areas must have a roof which would prevent precipitation from coming in contact with salt, must have a liquid-tight floor, be located so that surface runoff drains away from the storage area.

C. Manure Storage and Other Agricultural Activities

1. Primary Groundwater Recharge Areas--(Some agricultural practices may contribute to contamination. Contamination may result from distribution, storage, accidental spillage, or application of fertilizers, pesticides, or herbicides. Best Management Practices for these activities are available through the USDA Soil Conservation Service and Agricultural Stabilization and Conservation Service. These Best Management Practices should be implemented in all recharge areas of designated aquifers. For manure storage in direct recharge areas of designated aquifers, it is recommended that:

New and enlarged manure storage sites in the direct recharge area must:

- a. have a roof which would prevent precipitation from coming into contact with the manure,
- b. have a liquid-tight floor, and
- c. be located so that surface water runoff drains away from the storage area.

Manure spreading application should be consistent with nitrogen uptake by a cover crop. The cover crop should be harvested to maintain a nitrogen balance. The Soil Conservation Service or the Agricultural Stabilization and Conservation Service should be consulted for appropriate application rates.)

2. Secondary Groundwater Recharge Areas--Same as 1 above.

D. Underground Storage of Fuels:

1. Primary Groundwater Recharge Areas--prohibited.
2. Secondary Groundwater Recharge Areas--
 - a. underground tanks less than 500 gallons are prohibited.
 - b. underground storage tanks over 500 gallons must meet the requirements of Act 207.
 - c. all tanks must be equipped with overfill protection.
 - d. all tanks must have a striker plate below the dipstick tube to protect the bottom of the tank.
 - e. monitoring wells must be installed adjacent to tanks to monitor for subsurface leaks.
 - f. tanks must be fiberglass or other noncorrosive material and installed as per manufacturer's instruction.

E. Management of Hazardous Waste

1. Primary Groundwater Recharge Areas--The storage, use, transport, or discharge of hazardous or toxic wastes (as defined in Act 245, Act 64, Act 641) other than fuel and agricultural chemicals intended for use onsite, is prohibited.
2. Secondary Groundwater Recharge Areas--Same as 1 above.

F. Disposal of Solid Waste:

1. Primary Groundwater Recharge Areas--prohibited.
2. Secondary Groundwater Recharge Areas--prohibited.

G. Grouped Housing Developments:

Definition--Residential housing customarily known as garden apartments, terrace apartments, townhouses, row housing units, condominiums and other housing structures of similar character where two (2) or more buildings of similar character are built on one (1) parcel or lot.

1. Primary Groundwater Recharge Areas--prohibited.
2. Secondary Groundwater Recharge Areas--

Site Development Requirements:

- a. minimum site area--no group housing development shall be authorized with a gross site area of less than three (3) acres.
- b. minimum lot area--no group housing development shall be established on a lot or parcel having a width less than three hundred (300) feet. The lot area per family or dwelling unit shall not be less than twenty-one thousand seven hundred and eighty (21,780) feet.
- c. maximum lot coverage--not more than ten (10) percent of the net area within the property lines within a group housing project, including accessory buildings, shall be covered by buildings.
- d. yards--the minimum horizontal distance between buildings (front to front, rear to rear, or front to rear) shall be fifty (50) feet. The minimum horizontal distance between sides of buildings shall be not less than twenty (20) feet.
- e. yard dimensions--no building shall be closer than forty (40) feet to any street, fifty (50) feet to any rear property line, twenty (20) feet to an interior side property line. No building shall be closer than twenty-five (25) feet to any street right-of-way line.

H. Multifamily Dwellings, Duplexes

Definition--Residential housing customarily known as duplexes, triplexes, quadraplexes, apartment houses, row houses, and other structures of similar character where two (2) or more dwelling units are contained in one (1) building and built on one (1) parcel or lot.

1. Primary Groundwater Recharge Areas--prohibited.
2. Secondary Groundwater Recharge Areas--Site Development Requirements
 - a. minimum site area--no multifamily dwelling unit shall be authorized with a gross site area of less than one (1) acre.
 - b. minimum lot area--no multifamily dwelling shall be established on a lot or parcel having a width of less than two hundred (200) feet. The lot area per family or dwelling unit shall not be less than twenty-one thousand seven hundred and eighty (21,780) feet.

- c. maximum lot coverage--not more than ten (10) percent of the net area within the project lines, including accessory buildings, shall be covered by buildings.
- d. yard dimension--no building shall be closer than forty (40) feet to any street, fifty (50) feet to any rear property line, twenty (20) feet to an interior side property line. No building shall be closer than twenty-five (25) feet to any street right-of-way line.
- e. all signs and off-street parking shall be in compliance with this ordinance.
- f. maximum height shall be thirty-five (35) feet.

MINNESOTA PROJECT MODEL GROUNDWATER ORDINANCE
EROSION CONTROL

(AMENDMENT TO ARTICLE XI AND XII OF THE FILLMORE COUNTY [MINNESOTA]
ZONING ORDINANCE FOR THE CONTROL OF ACCELERATED EROSION AND
SEDIMENT DAMAGE AND PRESERVATION OF NATURAL RESOURCES.
ADOPTED APRIL 20, 1982.)

Section 1.0 Policy

It is the policy of Fillmore County to provide for the conservation of the soil and water resources of the county and for the prevention and control of accelerated soil erosion and sediment damage to our land, water, and other natural resources.

Section 2.0 Purpose

It is the purpose of this amendment to the zoning ordinance to encourage and enforce the use of land in accordance with its capabilities; to treat it according to its needs; to prevent degradation of lands, streams, and rivers; and to protect and promote the health, safety, and general welfare of the people.

Section 3.0 Definitions

For the purpose of this ordinance, the following definitions shall apply:

- A. Erosion--The process by which the surface of the land is worn away by the action of water, wind, gravity, or any combination thereof.
 - 1. Accelerated Erosion--More rapid than normal erosion or geologic erosion influenced primarily as a result of the activities of man.
 - 2. Geologic Erosion--The wearing away of the earth's surface by water, ice, or other natural agents under natural conditions of climate, vegetation, etc., undisturbed by man.
 - 3. Normal Erosion--The gradual erosion of land used by man which does not greatly exceed geologic erosion and where all reasonable soil and water conservation practices have been applied.
- B. Construction/Subdivision Activity--Any physical disturbance by man of the land associated with construction or subdivision activities which may result in accelerated erosion from water, wind, or other natural processes and the movement of sediment into water or onto land within the district. These activities include, but are not limited to, clearing, grading, excavating, transporting, and the filling of lands.

- C. Land Occupier--Any person, firm, corporation, municipality, or other legal entity who holds title to, or is in possession of, any lands lying within the district, whether as owner, lessee, renter, tenant, or otherwise. Where the term land occupier is used in this ordinance, the term shall include both the owner and the occupier of the land when they are not the same.
- D. Sediment--Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice, and has come to rest on the earth's surface.
- E. Sediment Damage--The economic or physical damage caused to any person or natural resource resulting from accelerated erosion.
- F. Sedimentation--The process or action of depositing sediment.
- G. Timber Harvesting--Any activity related to the cutting of forest trees for wood products.
- H. Soil Conservation Practices--The best management practices shall include the management, techniques, and methods for control of accelerated erosion and sediment damage resulting from the activities of man.

Section 4.0 Compliance with Ordinance

No land occupier or person may cause or conduct, contract for, or authorize any activity which causes accelerated erosion or sediment damage within the county.

Section 5.0 Agriculture

Any land occupier of agricultural land shall be considered in compliance with this ordinance if: (1) if he is using approved soil conservation practices approved by the Fillmore Soil and Water Conservation District Board to prevent erosion; (2) he does not have rills, gullies, or sediment deposits in his fields; and (3) his farming methods do not create erosion or sediment problems on adjoining properties.

Section 6.0 Woodland Activities

Land occupiers who use wooded land for pasture must ensure that proper management is used to prevent accelerated erosion or sedimentation due to overgrazing or cattle paths.

Clearing woodland to convert the land to another use is prohibited without a permit and approval by the zoning administrator and the County Board of Adjustment.

Section 7.0 Construction/Subdivision Activities

Any construction/subdivision plan that will disturb over 10,000 square feet shall include a proposed erosion control plan as part of the overall plan.

Section 8.0 Complaints

Fillmore County land occupiers or township, county, State, or Federal officials may submit a complaint verbal or written against any land occupier alleging that accelerated erosion or sediment damage has occurred or is occurring.

The complaint shall include the approximate dates and location of the alleged violation and describe the source, nature, and extent of the accelerated erosion or sediment damage alleged to have occurred or which is occurring.

Section 9.0 Action Initiated by Complaint

- A. The zoning administrator, upon the receipt of a complaint conforming with Section 8, shall request the Fillmore Soil and Water Conservation District Board to have an investigation made. A representative of the township board will arrange for a meeting with the land occupier to determine whether an actual violation exists. The complainant will be notified of the time of the investigation and will be given the opportunity to be present when the investigation is conducted.
- B. Within five days of the investigation, the above committee will notify the zoning administrator whether an actual violation exists. Then the zoning administrator will notify the violator by letter.
- C. If a violation exists, the land occupier will be given thirty (30) days from the date of the letter to work up a suitable plan to correct the violation with the Soil and Water Conservation Board representative on a voluntary basis.

The plan will include:

1. Specific conservation management and/or structural practices to be implemented to stop the accelerated erosion or sedimentation.
 2. The deadline date when the practices will be completed.
- D. If the land occupier is unwilling or unable to develop a plan within thirty (30) days, the Soil and Water Conservation District representative will notify the zoning administrator of the situation, and an evaluation of what practices will be required to bring the land into compliance with the ordinance.

Section 10.0 Violation and Penalty

Refusal to comply with request for compliance with this amendment to the Fillmore County Zoning Ordinance shall be subject to penalty under Article XXII, Section 220, of the Fillmore County Zoning Ordinance.

MINNESOTA PROJECT MODEL GROUNDWATER ORDINANCE
INDIVIDUAL SEWAGE DISPOSAL SYSTEM

Section 1.0 Findings and Declaration of Policy

The _____ County Board finds that _____ County relies on a clean supply of subsurface water to foster and promote human health and welfare and the economic and social development of the county. The soils, topography, and geology of the county are such as to lead to potential pollution of the subsurface water supply from improper design, location, installation, and use of individual sewage disposal systems.

Therefore, it is declared to be the policy of _____ County to promote, preserve, and enhance the quality of the subsurface water in the county to protect human health and welfare.

The provisions are adopted for the purpose of halting the travel of pollutants to the subsurface water supply through individual sewage disposal systems.

Purpose--The purpose of Section 1 is to establish the basic rationale and legal basis for adopting this ordinance by setting forth the findings, policy, and purpose for adopting this ordinance.

Section 2.0 Definitions

When used in this ordinance the following terms have the meanings given to them.

- A. Individual Sewage Treatment System--Any individual sewage treatment system, as defined in 6 MCAR Section 4.8040(B) (20) (1982).
- B. Licensee or Installer--Any person who obtains a license from the county to install and construct individual sewage treatment systems pursuant to Section 5 of this ordinance. A person is a licensee only for the term of the license.
- C. Noncomplying System--Any individual sewage treatment system which does not comply with Section 3 of this ordinance.
- D. Owner of the Land or Landowner--Any person who holds title to, or is in possession of, any land lying within the county, whether as owner, lessee, renter, tenant, or otherwise.
- E. Permittee--Any person who obtains a permit from the county pursuant to Section 4 of this ordinance. A person is a permittee only for the term of the permit.

- F. Person--Any natural person, any State, municipality, or other governmental or other political subdivision or other public agency or instrumentality, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity.
- G. Subsurface Water--Any water below the surface of the ground including, but not limited to, water in the saturated and unsaturated zones.
- H. WPC-40--The Minnesota Individual Sewage Treatment Systems Standards codified in 6 MCAR Section 4.8040 (1982).

Purpose--Section 2, Definitions, is necessary to define and clarify some of the terms used in this ordinance and related to individual sewage disposal systems. Several references are made to State legislation controlling sewage disposal systems.

Section 3.0 Standards for Health, Safety, and Environmental Protection

The provisions of WPC-40 and appendixes A-E are hereby adopted by reference and made a part of this ordinance.

Purpose--This section incorporates by reference the State standards and procedures for individual sewage treatment systems. Those counties that wish to include the total section dealing with individual sewage treatment systems should refer to 6 MCAR 4.8040.

Section 4.0 Permits and Permit Fees

- A. No person shall install, construct, alter, extend, or repair an individual sewage treatment system in _____ County without first obtaining a permit from the county. Such permits shall be valid for a period of twelve (12) months from the date of issuance and shall be nontransferable.
- B. Each permit application shall be accompanied by a permit fee, the amount which shall be established by the _____ County Board.
- C. The permit application shall contain:
1. Legal description and location of the land where the individual sewage treatment system is or will be located;
 2. Name, address, and telephone number of the landowner and installer;
 3. Number of bedrooms on the land;
 4. Estimated water usage if the building is not a dwelling unit;

5. List of water-using appliances; and
6. Estimated depth of wells on the land.

D. Each application shall be accompanied by:

1. A copy of a plot plan of the land drawn to scale showing boundary lines, proposed and existing buildings, location of wells and water pipes, location of any water bodies located within 200 feet of any septic tank or drainfield, roads and driveways, and land elevations;
2. A copy of a complete individual sewage treatment system plan showing location, constructed, altered, extended, or repaired; and
3. Any other information that may be required by the county to assure compliance with this ordinance.

E. No building permit shall be issued until the individual sewage treatment system permit is approved and issued by the county.

F. Where the county determines that conditions prevent the installation, construction, replacement, alteration, or repair of an individual sewage treatment system on an existing developed parcel of land, the county may reduce property line and building setbacks provided the result of such reduction will not have an effect on adjacent lands or public health. When any owner of land abandons an individual sewage treatment system located on such land, the landowner shall notify the county of the abandonment and carry out any measures prescribed by the county.

G. The county may deny any permit application or renewal or suspend or revoke any permit for any violation of this ordinance by the applicant or permittee. If an application for a permit or permit renewal is denied, suspended, or revoked, the applicant or permittee shall be notified either in person or by mail. The notice shall state the reasons for denial, suspension, or revocation; the steps to be taken by the applicant in order to secure approval or reinstatement; and inform the applicant of the applicant's or permittee's right to appeal pursuant to Section 6.

H. The permittee shall provide the county with free access to the permittee's land at reasonable times to inspect individual sewage treatment systems.

Purpose--This section requires the landowner or installer to obtain a permit from the county in order to install, alter, or repair any private sewage treatment system. It also sets forth the required information in order to obtain a permit. In addition, the individual sewage treatment system permit is required before the building permit is issued, to ensure that proper sewage disposal is available before the building is erected.

Section 5.0 Licensing

- A. No person shall design, install, construct, alter, extend, repair, maintain, or pump individual sewage treatment systems within the county without first obtaining a license to perform such tasks from the county. Such licenses shall be valid for a period of _____ (months/years) from the date of issuance and are nontransferable.
- B. Applications for licenses shall be made in writing and shall include all information bearing on the qualifications of the applicant to become a licensee.
- C. Before any license can be issued pursuant to this ordinance the applicant shall:
 - 1. Demonstrate adequate experience and training as determined by the county. As evidence of such experience and training, the county shall require the installer to provide within _____ years of the effective date of this ordinance an Individual Sewage Treatment System Certificate issued by the Minnesota Pollution Control Agency and the Individual Sewage Treatment System Advisory Committee and satisfactorily maintain certification as required.
 - 2. Provide certificate of an insurance and/or performance bond as established by the county. The insurance and/or bond shall be written by an insurer or bonder licensed to do business in the State of Minnesota.
- D. The county may deny any license application or renewal or suspend or revoke any license for any violation of this ordinance by the applicant or licensee. If an application for a license or license renewal is denied, or if a license is suspended or revoked, notice of such shall be sent by mail to the applicant or licensee. The notice shall state the reasons for denial, suspension, or revocation; the steps to be taken by the applicant in order to secure approval or reinstatement; and inform the applicant of the applicant's or licensee's right to appeal pursuant to Section 6. If a licensee appeals a revocation or suspension, the revocation or suspension shall be stayed pending the outcome of the appeal.
- E. Pumpers shall have equipment capable of agitating septage sludge and scum and thoroughly removing it from septic tanks and holding tanks. Pumpers shall remove all pumped septage from the site in sealed containers approved by the county and shall dispose of such septage in a location in a manner approved by the county. Pumpers shall make (monthly/annual) reports to the county regarding the number of systems pumped, approximate volume pumped, and the location of septage disposal.
- F. Repair of individual sewage treatment systems shall be made only by licensed installers or pumpers; provided, however, repairs requiring a permit shall be made only by licensed installers.

- G. Requirements for licensing under this ordinance shall become effective on (month) (day), 19 ____.

Purpose--Section 5 requires that installers and pumpers obtain a license from the county demonstrating adequate experience and knowledge of proper installation and pumping techniques and standards. As evidence of such knowledge, the county shall also require that the installer obtain an Individual Sewage Treatment System Certificate issued by the Minnesota Pollution Control Agency. This procedure ensures that the installers and/or pumpers have sufficient knowledge of the proper techniques to use which enhances the probability that the individual sewage treatment systems are properly installed and maintained. The county board adopting this ordinance may wish to adopt different effective dates for installers, pumpers, and designers.

Section 6.0 Administrative Hearing

- A. Any person wishing to appeal any action taken by the county pursuant to Section 4.F or 5.D may request a hearing. The appeal must be received by the county within thirty (30) calendar days, exclusive of the day of receipt of notice, after the person receives notice of the action taken by the county. The request shall be in writing stating the grounds of the appeal. If a person fails to appeal within the specified time period, the person shall forfeit any opportunity for a hearing. The county shall schedule a hearing on a date within thirty (30) calendar days of receipt of the notice of appeal and shall send to the appellant mail notice of the hearing date, time, and location.
- B. The county board shall conduct the hearing pursuant to this section. If the appellant or his or her representative fails to attend the hearing, the appellant shall forfeit any right to a hearing. The county board shall send to the appellant by return receipt mail notice of its decision within ninety (90) days after the close of the hearing.

Purpose--This section provides the opportunity for the applicant of either a permit or license to appeal a denial for a license or permit to the county board. The major purpose of this procedure is to give redress to the applicant in those cases where the staff makes an error in judgment or interpretation of the ordinance.

Section 7.0 Use and Maintenance of Systems

No person shall use, operate, or maintain a noncomplying sewage disposal system.

Purpose--This section prohibits anyone from using or operating an individual sewage disposal system which does not conform to the State standards or this ordinance.

Section 8.0 Implementation

- A. The county shall take the steps necessary to locate and identify noncomplying sewage disposal systems located in the county and prescribe corrective and protective measures to bring these systems into compliance with the State standards and this ordinance. Before prescribing corrective and protective measures with respect to a particular noncomplying system, the county shall meet with the landowners involved and discuss with them the reasons why noncomplying sewage disposal systems present a significant subsurface water pollution hazard and the need for corrective and protective measures. In prescribing corrective and protective measures, the county shall consider all relevant factors, including but not limited to the expense of implementing such measures and the effect which implementing will have upon the use by the landowners of their land. However, economic hardship alone shall not prevent prescription of corrective and protective measures. The protective measures prescribed, together with the date by which such measures must be completed, shall be set forth in writing and sent to the landowner.
- B. The owner of land upon which a noncomplying system is located shall take the corrective and protective measures prescribed by the county within the time period specified.

Purpose--This section sets forth the procedures for locating noncomplying sewage disposal systems as well as authorizes the county to set prescribed appropriate measures to bring the system into compliance with this ordinance in order to minimize pollution entering the well. It should be noted that economic hardship alone is not sufficient to evade the prescriptive measures. As a practical matter the county may want to consider subsidizing all or part of the cost of taking the protective measures or correcting the noncomplying systems in order to encourage property owners to correct existing noncomplying systems to protect the public health and safety of the citizens of the county.

Section 9.0 Enforcement

A. Civil Enforcement

1. Any person may submit to the county a verbal or written complaint alleging a violation of this ordinance or the existence of a noncomplying system with respect to which corrective and protective measures have not been prescribed.
2. Upon receipt of a complaint, the county shall conduct an investigation of the substance of the complaint. The investigation shall include a meeting with the landowner involved and an inspection of the noncomplying system and the area surrounding the system to which the complaint pertains. Upon receipt of a complaint alleging the existence of a noncomplying system with respect to which corrective and protective measures have not been prescribed, the county shall proceed pursuant to Section 8.

3. Based upon a determination that there is a violation of this ordinance, the county shall conduct an informal reconciliation with the violator. As part of such informal reconciliation, the county shall:

a. notify the violator, by mail, of the violation of this ordinance and a desire of the county to correct the violation and resolve any disputes with the violator through informal reconciliation. The statement shall also indicate that should the violator refuse to follow the recommended corrective actions within the time limit set forth by the county, the county may take action to correct the violation and bill the violator for the cost of taking the corrective action.

b. make a good-faith effort to meet with the violator and resolve the correction of the violation.

4. If after taking the steps above and after a period of ninety (90) days following the mailing of the notice of the violation, the county in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the county shall notify the violator, by mail, of the termination of the informal reconciliation.

5. The county may take the corrective action prescribed above following thirty (30) days after notifying violator, by mail, of the notice of termination of the informal reconciliation and bill the violator for the reasonable cost of such action.

6. The exclusive means of obtaining judicial review of any action of the county pursuant to this ordinance shall be by defending an action brought by the county to enforce the obligation created by Section 9.a.5. The intent of this subsection is to prevent the entry of a temporary restraining order, preliminary injunction, or permanent injunction which would prevent or delay the county from proceeding to correct the violation.

B. Criminal Enforcement

In lieu of proceeding under Section 9.A, a person who is alleged to have violated Sections 3 and 7 may be prosecuted for the commission of a crime. Violation of Sections 3 and 7 is a misdemeanor and may be punished by imprisonment of not more than ninety (90) days or imposition of a fine of not more than \$700, or both.

C. Injunctive Relief

The county may institute appropriate actions or proceedings including requesting injunctive relief to prevent, restrain, correct, or abate violations of this ordinance.

Purpose--Section 9 sets forth the procedures for enforcing the ordinance and ensuring that violations of the ordinance are corrected. The ordinance provides for a process of informal reconciliation to work out a procedure to get the violator to correct any violations. However, if that process does not work and the violator refuses to take the corrective action specified by the county, the county can then, after a period of time has elapsed, take the corrective action and bill the violator for the costs of taking the corrective action. In addition to any civil actions, the county also has the option of taking criminal actions for some of the violations under the ordinance. The county may also seek an injunction to correct any violations.

Section 10.0 Duties of the County

In order to carry out the provisions of this ordinance, the county shall take the following actions upon passing the ordinance:

- A. Employ on a full-time or part-time basis at least one person who is deemed by the Director of the Minnesota Pollution Control Agency to be qualified to inspect individual sewage treatment systems and prescribe corrective and protective measures authorized by this ordinance;
- B. Disseminate information to landowners and occupiers on techniques to install and maintain individual sewage treatment systems properly;
- C. Randomly monitor compliance with this ordinance by visits to lands in the county for the purpose of observing the condition of individual sewage treatment systems; and
- D. Prepare an annual report to the _____ County Board which includes information on the general status of individual sewage treatment systems, compliance with this ordinance, and recommendations for future county actions with respect to the systems.

Purpose--This section specifies certain administrative actions which the county must take in order to ensure that the ordinance is properly enforced.

MINNESOTA PROJECT MODEL GROUNDWATER ORDINANCE
LIVESTOCK WASTE

Section 1.0 Findings and Declarations of Policy

The _____ County Board finds that _____ County relies on a clean supply of subsurface water to foster and promote human health and welfare and the economic and social development of the county. The soils, topography, and geology of the county are such as to lead to potential pollution of the subsurface water supply from pollution from livestock feedlots and/or manure storage facilities.

Therefore, it is declared to be the policy of _____ County to promote, preserve, and enhance the quality of the subsurface water in the county to protect human health and welfare.

These provisions are adopted for the purpose of halting the travel of pollutants to the subsurface water supply through livestock feedlots and/or manure storage facilities.

Purpose--The purpose of Section 1 is to establish the basic rationale and legal basis for adopting this ordinance by setting forth the findings, policy, and purpose for adopting this ordinance.

Section 2.0 Definitions

When used in this ordinance the following terms have the meanings given to them.

- A. Animal Feedlot--A lot or building or combination of lots and buildings intended for the confined feeding, breeding, raising, or holding of animals and specifically designed as a confinement area in which manure may accumulate, or where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. For purposes of these rules, open lots used for the feeding and rearing of poultry (poultry ranges) shall be considered to be animal feedlots. Pastures shall not be considered animal feedlots under these rules.
- B. Animal Unit--A unit of measure used to compare differences in the production of animal wastes which has as a standard the amount of animal waste produced on a regular basis by a slaughter steer or heifer. For purposes of these regulations, the following equivalents apply:
- C. Aquifer--A geologic unit capable of yielding usable amounts of water.
- D. County--_____ County Board of Commissioners.

Animal Units

1	Horse	1.0
2	Slaughter steer or heifer	1.0
3	Mature dairy cow	1.4
4	Swine over 55 pounds	0.4
1	Swine under 55 pounds	0.1
1	Sheep	0.1
1	Turkey	0.018
1	Chicken	0.01
1	Duck	0.02
1	Other animals	as may be determined by the county board

- E. County Feedlot Control Officer--A county employee or officer who is knowledgeable in agriculture and who is designated by the county board to receive and process animal feedlot permit applications.
- F. Owner of Land or Landowner--Any person who holds title to, or is in possession of, any land lying within the county, whether as owner, lessee, renter, tenant, or otherwise.
- G. Manure Storage Area--An area associated with an animal feedlot where animal manure or runoff containing animal manure is stored until it can be utilized as domestic fertilizer or removed to a permitted animal manure disposal site. Animal manure packs or mounding within the animal feedlot shall not be considered to be manure storage for these regulations.
- H. Pastures--Areas where grass or other growing plants are used for grazing and where the concentration of animals is such that a vegetative cover is maintained during the growing season except in the immediate vicinity of temporary supplemental feeding or watering devices.
- I. Person--Any natural person, any State, municipality, or other governmental or political subdivision, or other public agency or instrumentality, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity.
- J. Pollutants--Anything which when introduced into water alters the chemical, physical, biological, or radiological properties of water.
- K. Sinkhole--A surface depression which is connected to a cavernous bedrock by a channel or collapse of the overlying formation.
- L. Subsurface Water--Any water below the surface of the ground including, but not limited to, water in the saturated and unsaturated zones.

- M. Violator--Any person who is determined by the county to be in violation of this ordinance.

Purpose--Section 2, Definitions, is necessary to define and clarify some of the terms used in this ordinance and related to confined feedlots. Several references are made to State legislation regulating animal feedlots.

Section 3.0 Permit and Permit Fees

- A. Any person who owns, maintains, or operates an animal feedlot of more than _____ animal units shall obtain a permit from the county. A permit shall also be required to operate a manure storage area. If the manure storage area is part of the animal feedlot area, only one permit shall be required. However, both Sections 4 and 5 shall be applicable to the facility. The term of the permit shall be for five (5) years and is nontransferable.
- B. Each permit application shall be accompanied by a permit fee, the amount which shall be established by the _____ County Board.
- C. The permit application shall contain the following data:
1. A map indicating the location of the animal feedlot or manure storage area and the surrounding area within one-half (1/2) mile of the site showing:
 - a. general topography,
 - b. survey boundaries and dimensions of the manure storage area or facility,
 - c. natural streams, springs, sinkholes, swamps, mines, quarries, pits, and other natural and manmade features relevant to groundwater quality,
 - d. roads, pipelines, and power lines, and
 - e. existing wells, test wells, excavations, monitoring wells, and other monitoring and test sites.
 2. A generalized geologic and hydrologic description of the site.
 3. A description of methods of construction and maintenance of the animal feedlot or manure storage facility.
 4. A description of the types and quantities of waste and the methods of handling the waste.

- D. Samples of groundwater in a number prescribed by the County Feedlot Control Officer shall be collected for background information at the proposed livestock waste facility site and chemically analyzed by the laboratory certified by the County Feedlot Control Officer. The analysis shall include, but not be limited to, identification of specific elements, chemicals, and compounds that are present or presumed to be present in the material to be stored in this livestock waste facility.
- E. The county may deny any permit application or renewal or suspend or revoke any permit for violation of this ordinance by the applicant or permittee. If an application for a permit or permit renewal is denied, or if a permit is suspended or revoked, notice of such shall be sent by mail to the applicant or permittee. The notice shall state the reasons for denial, suspension, or revocation, state the steps to be taken by the applicant in order to secure approval or reinstatement, and inform the applicant of the applicant's or permittee's right to appeal pursuant to Section 5.

Purpose--This section sets forth the permit application requirements for animal feedlots and manure storage areas. The critical factor for this ordinance will be deciding what size of feedlot operation will be required to obtain the permit. The county board will determine this by a threshold number of animal units (animal units are defined by the Minnesota Pollution Control Agency). Setting the threshold size will not be easy, because it is not just the large commercial feedlots that cause pollution problems. Even small feedlots can pollute groundwater with livestock waste if improperly sited, designed, and managed. The application must contain information about the site, the animal facility, and waste management. Groundwater samples may be required, normally to be taken from existing water wells nearby. The process for permit denial or revocation is outlined.

Section 4.0 Animal Feedlot and Manure Storage Area Standards

- A. The following general standards shall be applicable to animal feedlot areas:
 - 1. No animal feedlot area shall be located within a floodplain or shoreland, or within one hundred (100) feet of a sinkhole, a naturally occurring body of water, or a well used for domestic or municipal purposes.
 - 2. All animal feedlot areas shall be designed to restrict infiltration or other movement of livestock wastes to the aquifer.
 - 3. Where practical the landowner shall maintain a relatively impermeable surface for the floor of an animal feedlot area to minimize infiltration. The landowner, in consultation with the County Feedlot Control Officer, shall determine the type of surface that is appropriate.

4. Animal feedlot areas shall have adequate surface drainage to prevent the accumulation of surface water in the area. The landowner shall construct embankments to prevent or significantly retard surface runoff into or out of the animal feedlot area. The inner side and upper surface of the embankment shall be lined with an impermeable substance. The animal feedlot shall not drain directly to a sinkhole or naturally occurring body of water.
 5. Waste materials removed from animal feedlot areas shall be disposed of or stockpiled pursuant to Section 5 of this ordinance.
- B. The following standards shall be applicable to manure storage areas. No manure storage permit shall be issued where:
1. Operation of the manure storage facility will increase naturally existing chemical levels in subsurface water;
 2. The county board determines the information supplied in the permit application indicates any hazard to the public safety;
 3. A holding pond or sewage lagoon is proposed for the permanent or unreasonably long storage of liquid, semi-liquid, or water-soluble solid material;
 4. The proposed manure storage facility will be used for the storage of water-soluble materials, unless the livestock waste facility is properly lined with a leak-proof material, or the leachate is collected and treated in a manner to meet the conditions of the permit;
 5. The proposed manure storage facility is within a floodplain.
- C. Following abandonment of the manure storage facility:
1. If the manure storage facility consists of a waste-holding pond, collection swamp, or lagoon, the permit holder shall remove the facility and fill the excavation with compacted fill material approved by the County Feedlot Control Officer. The permit holder shall construct a drainage system, such as ditches or drainage tiles, surrounding the abandoned manure storage facility. The drainage system shall be constructed in such a manner that surface runoff will not flow through the site nor flow to adjacent drainage systems.
 2. If the manure storage facility consists of a waste pile or stockpile, the permit holder shall cover the site with compacted clay and topsoil, and seed and properly drain the site.

Purpose--This section sets forth the standards and requirements for animal feedlots and manure storage areas. If the feedlot and manure storage facility are part of the same area or facility, only one permit is required but the standards of both Section A and B are applicable. Also note that the standards in Section C also include procedures for dealing with abandoned manure storage areas.

Section 5.0 Land Application of Animal Manure

- A. Any permitted animal feedlot or manure storage area must have a manure management plan developed by either the Soil Conservation Service or Agriculture Extension Service. No person shall apply animal manure to land at rates greater than the uptake rates for plant phosphorus, potassium, or nitrogen, unless approved by the county board after consultation with the Soil and Water Conservation District. The nutrient need for the crop to be grown shall be determined by soil testing, with credit given for contributions from preceding legumes and past animal manure applications. The amount of animal manure to meet this nutrient need shall be calculated based on the available nutrient content of the manure after it has undergone collection, storage, and treatment.
- B. The landowner should incorporate animal manure as soon as practicable after application. When irrigating manure, the land occupier should apply light applications which do not exceed the soil's capability to retain liquid.
- C. No person shall apply animal manure:
 - 1. Within two hundred (200) feet of wells, disappearing streams, and sinkholes; or on slopes greater than or equal to 6 percent within three hundred (300) feet of wells, disappearing streams, and sinkholes. However, he shall not apply if the animal manure is incorporated at the time of application;
 - 2. In ponds, creeks, rivers, or floodplains;
 - 3. On saturated soils, actively melting snow, or thawing ground on fields upslope from sinkholes, streams, and drainage ways;
 - 4. On alfalfa fields or pasture land draining into sinkholes or disappearing streams;
 - 5. On coarse sands and gravel which do not have fine clays or impermeable rocks underlying and separating the sands from limestone or local water tables;
 - 6. On coarse to fine sands and loamy sands when the depth to the bedrock is less than ten (10) feet and on sandy loams when less than five (5) feet; and
 - 7. On fields or portions of fields where the underlying limestone is less than two (2) feet deep.

Purpose--This section deals with the procedures and standards for land application of the animal manure. The guiding policy is that manure is to be considered as a plant fertilizer, not a waste to be disposed of. In order to determine the uptake rates for the plants, the county will have to consult with soil scientists or district conservationists from the Soil and Water Conservation District.

Section 6.0 Administrative Hearing

- A. Any person wishing to appeal any action taken by the county pursuant to Section 3.F may request a hearing. The appeal must be received by the county within thirty (30) calendar days, exclusive of the day of receipt of notice, after the person receives notice of the action taken by the county. The request shall be in writing stating the grounds of the appeal. If a person fails to submit an appeal within the required time period, the person shall forfeit any opportunity for a hearing. The county shall schedule a hearing within thirty (30) calendar days of receipt of the notice of appeal and shall send to the appellant, by mail, notice of the hearing date, time, and location.
- B. The county board shall have the power to conduct hearings pursuant to this section. If the appellant or his or her authorized representative fails to attend the hearing, the appellant shall forfeit any right to a hearing. The county board shall send to the appellant, by mail, notice of the decision of the county board within ninety (90) days after the closing of the hearing.

Purpose--Section 6 sets forth the procedures for appealing the decision by the county to deny or revoke an animal feedlot or manure storage permit.

Section 7.0 Enforcement

A. Civil Enforcement

1. Any person may submit to the county a verbal or written complaint alleging a violation of this ordinance.
2. Upon receipt of a complaint, the county shall conduct an investigation of the substances of the complaint. The investigation shall include a meeting with the landowner involved and an inspection of the animal feedlot and/or manure storage area to which the complaint pertains.
3. Based upon a determination that there is a violation of this ordinance, the county shall conduct an informal reconciliation with the violator. As part of such informal reconciliation, the county shall:

- a. notify the violator, by mail, of the violation of this ordinance and a desire of the county to correct the violation through informal reconciliation. The statement shall also indicate that should the violator refuse to follow the recommended corrective actions within the time set forth by the county, the county may take action to correct the violation and bill the violator for the cost of taking the corrective action.
 - b. make a good-faith effort to meet with the violator and resolve the correction of the violation.
4. If after taking the steps above and after a period of ninety (90) days following the mailing of the notice of the violation, the county in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the county shall notify the violator, by mail, of the termination of the informal reconciliation.
 5. The county may take the corrective action prescribed above thirty (30) days after notifying violator, by mail, of the notice of termination of the informal reconciliation, and bill the violator for the reasonable cost of such action.

B. Criminal Enforcement

In lieu of proceeding under Section 7.A., a person who is alleged to have violated Sections 3 and 5 may be prosecuted for the commission of a crime. Violation of Sections 3 and 5 is misdemeanor and may be punished by imprisonment of not more than ninety (90) days or imposition of a fine of not more than \$700, or both.

C. Injunctive Relief

The county may institute appropriate actions or proceedings, including requesting injunctive relief to prevent, restrain, correct, or abate violations of this ordinance.

Purpose--Section 7 sets forth the procedures for enforcing the ordinance and ensuring that violations of the ordinance are corrected. The ordinance provides for a process of informal reconciliation to work out a procedure to get the violator to correct any violations. However, if that process does not work and the violator refuses to take the corrective action specified by the county, the county can then, after a period of time has elapsed, take the corrective action and bill the violator for the costs of taking the corrective action.

Section 8.0 Duties of the County

In order to carry out the provisions of this ordinance, the county shall take the following actions upon passing the ordinance:

- A. Apply to the Minnesota Pollution Control Agency for authorization to act as an inspection agent of the Commissioner to enforce the State Animal Feedlot provisions;
- B. Employ on a full-time or part-time basis at least one person who is deemed by the Commissioner to be qualified to inspect animal feedlots and prescribe corrective and protective measures authorized by this ordinance;
- C. Disseminate information to landowners and occupiers on techniques to minimize the amount of pollutants which enter the subsurface water through animal feedlots and manure storage facilities;
- D. Randomly monitor compliance with this ordinance by visits to lands in the county for the purpose of observing the condition of animal feedlots and manure storage areas; and
- E. Prepare an annual report to the _____ County Board which includes information on the general status of animal feedlots, compliance with this ordinance, and recommendations for future county actions with respect to animal feedlots.

Purpose--This section specifies certain administrative actions which the county must take in order to ensure that the ordinance is properly enforced.

MINNESOTA PROJECT MODEL GROUNDWATER ORDINANCE
SINKHOLES

Section 1.0 Findings and Declaration of Policy

The _____ County Board finds that _____ County relies on a clean supply of subsurface water to foster and promote human health and welfare and the economic and social development of the county. The soils, topography, and geology of the county are such as to lead to potential pollution of the subsurface water supply from pollution in or around sinkholes.

Therefore, it is declared to be the policy of _____ County to promote, preserve, and enhance the quality of the subsurface water in the county to protect human health and welfare.

These provisions are adopted for the purpose of halting the travel of pollutants to the subsurface water supply through sinkholes.

Purpose--The purpose of Section 1 is to establish the basic rationale and legal basis for adopting this ordinance by setting forth the findings, policy, and purpose for adopting this ordinance. The problem of sinkhole-related groundwater pollution is explicitly recognized, and groundwater quality is related to the general welfare of the county. The statutory authority for counties enacting this type of ordinance is Minnesota Statutes, Section 294.25.2 which provides, among other things, that counties may adopt "official controls" for the purpose of "protection of groundwater." Chapter 394 of the Minnesota Statutes sets forth various requirements for county land-use controls, with which this ordinance is in compliance. It should be noted that, although the amount of pollution entering the groundwater via most individual sinkholes is minor, in the aggregate sinkhole-related pollution presents a substantial threat to groundwater quality. Consequently, this ordinance refers to the need to view the problem in an aggregate manner. While we recognize that it is impossible to absolutely "halt the travel of pollutants to the subsurface water supply through sinkholes," this purpose is stated as an aspiration, with a view toward striving to attain the goal.

Section 2.0 Definitions

When used in this ordinance the following terms have the meanings given to them.

- A. Owner of Land or Landowner--Any person who holds title to, or is in possession of, any land lying within the county, whether as owner, lessee, or otherwise.
- B. Person--Any natural person, any State, municipality, or other political subdivision or other public agency or instrumentality, and public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity.

- C. Pollutants--Anything which when introduced into water alters the chemical, physical, biological, or radiological properties of water.
- D. Sinkhole--Any depression in the surface of the ground with or without collapse of adjacent rock which provides a means through which surface water can come in contact with subsurface water. Sinkholes are divided into Class 1 and Class 2:
 - 1. Class 1--Any sinkhole which presents a significant subsurface water pollution hazard if, due to the drainage pattern of the land surrounding the sinkhole or the nature of the substances or objects in the sinkhole, the sinkhole may permit the entry of pollutants into subsurface water.
 - 2. Class 2--Any sinkhole which is not a Class 1 sinkhole.
- E. Substances and Objects--All substances and objects, whether or not manmade and whether in liquid, solid, or gaseous form, excluding, however, rain, snow, and other forms of natural precipitation.
- F. Subsurface Water--Any water below the surface of the ground including, but not limited to, water in the saturated and unsaturated zones.

Purpose--Section 2 is necessary to define and clarify some of the terms used in this ordinance related to sinkholes. Of particular interest is the definition. This ordinance intentionally refrains from defining sinkholes in geologic terms to avoid controversy over whether a particular geologic feature is or is not a sinkhole. Because the basic problem the ordinance addresses is the existence of openings in the surface of the earth which permit surface water to intermingle with subsurface water, the definition of "sinkhole" is in functional terms. Thus the only legal issue is whether the particular geologic feature provides a conduit from the earth's surface to subsurface water--an issue about which there should be little controversy. Under this definition, blind valleys, lost streams, and disappearing streams may be treated as sinkholes.

The reason for distinguishing between Class 1 and Class 2 sinkholes is because some counties have thousands of sinkholes of varying impact on groundwater. As a practical matter it would be impossible to enforce an ordinance regulating all sinkholes. The distinction permits the county to identify those sinkholes which present the greatest threat to groundwater quality. The determination of whether a particular sinkhole is a Class 1 sinkhole involves the exercise of considerable discretion by the county. However, the determination will be guided by the need to examine the drainage system of the land surrounding the sinkhole, the nature of the substances and objects in the sinkhole, and the toxicity of such pollutants. Class 1 sinkholes are subject to the corrective and protective measures in Section 4, but all sinkholes are subject to the prohibition in Section 3 of placing substances and objects in sinkholes.

Section 3.0 Placing Substances and Objects in Sinkholes

No person shall place, or cause to be placed, any substances or objects other than those approved by the county, in any sinkhole.

Purpose--Because sinkholes are natural depressions in the surface of the earth, they have often been used as dumping sites. However, it is difficult to conceive of a more inappropriate dumping site due to impact on groundwater. Because the use of sinkholes as dumping sites must be halted, Section 3 prohibits all persons from placing any substance or object in any sinkhole, whether Class 1 or Class 2. For the occasional situation when it is appropriate to place a substance or object in a sinkhole, such as the use of dye to trace the flow of groundwater, permission of the county must be obtained.

Section 4.0 Class 1 Sinkholes

- A. The county shall take the steps necessary to identify Class 1 sinkholes located in the county and prescribe corrective and protective measures deemed reasonable and necessary to minimize, and if possible eliminate, the entry of pollutants into subsurface water through such sinkholes. Such corrective and protective measures include but are not limited to:
1. Buffer zones covered with grass or other appropriate vegetation,
 2. Installation of diversion methods or structures,
 3. Installation of concrete or plastic liners,
 4. Termination of the activity which creates the pollution hazard, and
 5. Removal of substances and objects from the sinkhole.

Before prescribing corrective and protective measures with respect to a particular Class 1 sinkhole, the county shall meet with the landowner(s) involved and discuss with them the reasons the sinkhole presents a significant subsurface water pollution hazard and the need for corrective and protective measures to minimize, and if possible eliminate, the entry of pollutants into subsurface water through the sinkhole. In prescribing corrective and protective measures, the county shall consider all relevant factors including, but not limited to, the expense of implementing such measures and the effect which implementing will have upon the use by the landowner(s) of their land; provided, however, economic hardship alone shall not prevent the prescription of corrective and protective measures. The corrective and protective measures prescribed together with the date by which such measures must be completed shall be set forth in writing and sent to the landowner(s) involved by return receipt mail.

- B. The owner of land upon which a Class 1 sinkhole is located shall take the corrective and protective measures prescribed by the county.
- C. The owner of land over, through, or under which pollutants travel to a Class 1 sinkhole which is located on another landowner's land shall take the corrective and protective measures prescribed by the county.

Purpose--The ordinance assumes the county will establish a program whereby it will actively seek out potential Class 1 sinkholes. The basic implementation approach is for the county, acting through its zoning, land-use, or environmental officer, to prescribe reasonable and necessary measures through an informal procedure which includes notice to, and a meeting with, the landowners involved. Note that measures may also be prescribed for land in the vicinity of the Class 1 sinkhole which is owned by others and which drains into the sinkhole. In prescribing corrective and protective measures, the county shall consider all relevant factors. However, the ordinance requires that primary consideration be given to protection of the groundwater and that economic hardship to landowner shall not prevent the prescription of measures.

Section 5.0 Enforcement

A. Civil Enforcement

1. Any person may submit to the county a verbal or written complaint alleging a violation of this ordinance or the existence of a Class 1 sinkhole with respect to which corrective and protective measures have not been prescribed.
2. Upon receipt of a complaint, the county shall proceed pursuant to Section 4.A.
3. Based upon a determination that there is a violation of this ordinance, the county shall conduct an informal reconciliation with the violator. As a part of such informal reconciliation, the county shall:
 - a. notify the violator, by mail, of the violation. The notice shall include:
 - (1) a statement of the violation;
 - (2) with respect to a violation of Section 3, a statement that the county may remove from the sinkhole involved the offending substances and objects, and that the violator will be obligated to the county for the reasonable cost of such removal;

- (3) with respect to a violation of Section 4.B or 4.C, a statement that the county may take the already prescribed corrective and protective measures and the violator will be obligated to the county for the reasonable cost of such action; and
 - (4) a statement of the desire of the county to correct the violation and resolve any disputes with the violator through informal reconciliation.
- b. make a good-faith effort to meet with the violator to resolve the correction of the violation.
- 4. If after taking steps above and after a period of ninety (90) days following the mailing of the notice of the violation, the county in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the county shall notify the violator, by mail, of the termination of the informal reconciliation.
- 5. With respect to a violation of Section 3, thirty (30) days after mailing of the notice of termination of informal reconciliation, the county may remove from the sinkhole involved the offending substances and objects and bill the violator for the reasonable cost of such action.
- 6. With respect to a violation of Section 4.B or 4.C, thirty (30) days after the mailing of the notice of termination of informal reconciliation, the county may take the already prescribed corrective and protective measures it deems necessary to minimize, and, if possible, eliminate, the entry of pollutants into subsurface water through the sinkhole, and bill the violator for the reasonable cost of such action.
- 7. In an action brought by the county to enforce the obligation of the violator created by Section 5.A.5 and 5.A.6, the county shall have the burden of proving by a preponderance of the evidence that the county has complied with all applicable procedures contained in the ordinance; provided, however, with respect to violations of Section 4.B and 4.C, the defense that the sinkhole was not a Class 1 sinkhole at the time such measures were prescribed and/or the defense that the corrective and protective measures prescribed were neither reasonable nor necessary, may only be asserted as affirmative defenses. With respect to such defenses the violator shall have the burden of going forward and the burden of persuasion. If the violator proves that the sinkhole was not a Class 1 sinkhole, or that the corrective and protective measures were neither reasonable nor necessary, the violator shall not be obligated to the county.

8. The exclusive means of obtaining judicial review of any action of the county pursuant to this ordinance shall be by defending an action brought by the county to enforce the obligation created by Section 5.A.5 and 5.A.6. The intention of this subsection is to prevent the entry of a temporary restraining order, preliminary injunction, or permanent injunction which would prevent or delay the county from proceeding pursuant to Section 5.A.5 or 5.A.6.

B. Criminal Enforcement

In lieu of proceeding under Section 5.A, a person who is alleged to have violated Section 3 may be prosecuted for the commission of a crime. Violation of Section 3 is a misdemeanor and may be punished by imprisonment of not more than ninety (90) days or imposition of a fine of not more than \$700, or both.

Purpose--Although the ordinance assumes the county will establish a program whereby it will actively seek out potential Class 1 sinkholes, it is also possible the existence of potential Class 1 sinkholes will be brought to the attention of the county by concerned citizens. This section addresses that possibility by requiring the county to proceed with the steps set forth in Section 4.

The overall objective of the civil enforcement provision is to create an informal procedure which will correct the situation which is polluting the groundwater and afford the alleged violator due process of law. Under Section 4 the enforcement procedure is designed to produce a negotiated agreement which when implemented will protect the groundwater. If such a negotiated agreement cannot be arrived at, or if the landowner will not take the corrective and protective measures prescribed, then the county proceeds with Section 5.A.3 by notifying the violator and attempting to meet with them and resolve the violation with ninety (90) days. If that fails, the county may terminate informal reconciliation and bill the violator for the reasonable cost of carrying out the corrective and protective measures which were previously prescribed. Section 5 A.7 makes the violator carry the burden of proof if they choose to challenge the county's bill for taking corrective and protective measures. Section 5.A.8 ensures that judicial review of the county's action will not impede swift correction of the pollution problem. In cases where a county feels that civil enforcement will not solve the problem, they may also resort to criminal enforcement.

Section 6.0 Duties of the County

In order to carry out the provision of this ordinance, the county shall take the following actions upon passing the ordinance:

- A. Send written notice to owners of land located in the county describing:

1. The significance of the subsurface water pollution,
 2. The role that sinkholes play in subsurface water pollution,
 3. A summary of the content of this ordinance, and
 4. The availability of assistance from the county.
- B. Disseminate information to owners of land on techniques to minimize the amount of pollutants which enter the subsurface water through sinkholes.
- C. Randomly monitor compliance with this ordinance by visits to lands in the county for the purpose of observing the condition of sinkholes and areas surrounding sinkholes.
- D. Prepare an annual report to the County commissioners which includes information on the general status of sinkholes, compliance with this ordinance, and recommendations for future county actions with respect to sinkholes.

Purpose--A primary purpose of this ordinance is to educate residents of the county about the problems of sinkhole-related groundwater pollution. To carry out this purpose, and to put landowners on notice regarding their potential obligations under the ordinance, the county is directed to provide certain information to the public. Also, the county is obligated to employ someone, at least on a part-time basis, who is qualified to inspect sinkholes and prescribe the necessary measures. Because this person may only be employed on a part-time basis, it is possible for a group of counties to consolidate their effort and employ only one person.

Section 7.0 Administration

Except where otherwise specifically indicated, in implementing and enforcing this ordinance the county shall act through its _____ (Agency or Department).

MINNESOTA PROJECT MODEL GROUNDWATER ORDINANCE
WATER WELL ABANDONMENT

Section 1 Findings and Declaration of Policy

The _____ County Board finds that _____ County relies on a clean supply of subsurface water to foster and promote human health and welfare and the economic and social development of the county. The soils, topography, and geology of the county are such as to lead to potential pollution of the subsurface water supply from pollution entering abandoned water wells.

Therefore, it is declared to be the policy of _____ County to promote, preserve, and enhance the quality of the subsurface water in the county to protect human health and welfare.

These provisions are adopted for the purpose of halting the travel of pollutants to the subsurface water supply through abandoned water wells.

Purpose--The purpose of Section 1 is to establish the basic rationale and legal basis for adopting this ordinance by setting forth the findings, policy, and purpose for adopting this ordinance.

Section 2 Definitions

When used in this ordinance the following terms have the meanings given to them.

- A. Abandoned Water Well--A well whose use has been permanently discontinued or which is in such disrepair that its continued use for the purpose of obtaining groundwater is impracticable or may constitute a health hazards.
- B. Minnesota Water Well Construction Code--The Minnesota Water Well Construction Code, codified in 7 MCAR Section 1.210, and 1.224-1.230 (1982).
- C. Owner of Land or Landowner--Any person who holds title to, or is in possession of, any land lying within the county, whether as owner, lessee, renter, tenant, or otherwise.
- D. Person--Any natural person, any state, municipality, or other governmental or other political subdivision or other public agency or instrumentality, and public or private corporation, any receiver, trustee, assignee, agent or other legal representative of any of the foregoing, and any other entity.
- E. Pollutants--Anything which, when introduced into water, alters the chemical, physical, biological, or radiological properties of water.

- F. Substances and Objects--All substances and objects, whether or not manmade and whether in liquid, solid, or gaseous form, excluding, however rain, snow, and other forms of natural precipitation.
- G. Subsurface Water--Any water below the surface of the ground including, but not limited to, water in the saturated and unsaturated zones.
- H. Violation--Any violation of this ordinance.
- I. Violator--Any person who is determined by the county to be in violation of this ordinance.
- J. Well--Any water well, as defined in Minnesota Statutes Section 156A-02 subdivision 1 (1982).

Purpose--Section 2 is necessary to define and clarify some of the terms used in this ordinance as related to abandoned water wells. Several references are made to State legislation controlling water well abandonment.

Section 3 Incorporation of the Minnesota Water Well Construction Code

The provisions of the Minnesota Water Well Construction Code relating to temporary or permanent abandonment of wells are hereby adopted by reference and made a part of this ordinance.

Any person who abandons a well, or intends to abandon a well, shall do so in accordance with the provisions of the Minnesota Water Well Construction Code. This includes, among other things, the removal of debris or material, and the sealing of the well with suitable material such as concrete, cement, or grout. The abandonment of any well shall be performed by or under the supervision of a licensed well driller.

Purpose--This section incorporates by reference the State standards and procedures for the temporary or permanent abandonment of wells. Those counties that wish to include the total section dealing with abandonment of wells should refer to 7 MCAR 1.218.C. It should be noted that the abandonment of the well must be performed by a licensed well driller. This is to ensure that the proper procedures as set forth in the Minnesota Water Well Construction Code are followed.

Section 4 Reporting

Any person who abandons or intends to abandon a well shall make a written report to the county which shall include the location of the well. The landowner shall follow the procedures for sealing the well as specified in the State Water Well Construction Code.

Purpose--The purpose of this section is to ensure that the county is notified when a well is to be abandoned in order to improve county records of abandoned wells and to provide the opportunity to the county to inspect the well after it has been sealed.

Section 5 Placing Substances or Objects in Abandoned Wells

No person shall place, or cause to be placed, any substances or objects other than those approved by the county, in any well.

Purpose--This section has been included to ensure that the landowner does not deposit any materials in the well that are likely to cause pollution prior to it being sealed as required by the State.

Section 6 Implementation

- A. The county shall take steps necessary to locate and identify abandoned wells located in the county and prescribe protective measures deemed necessary to minimize the entry of pollutants into the subsurface water supply through the well, including the sealing of the well according to standards and procedures established in the Minnesota Water Well Construction Code. Before prescribing protective measures with respect to a particular abandoned well, the county shall meet with the landowners involved and discuss with them the reasons why abandoned wells present a significant subsurface water pollution hazard and the need for protective measures. In prescribing protective measures, the county shall consider all relevant factors including, but not limited to, the expense of implementing such measures and the effect which implementation will have upon the use by the landowners of their land. However, economic hardship alone shall not prevent the prescription or protective measures. The protective measures prescribed, together with the date by which such measures must be completed, shall be set forth in writing and sent to the landowner.
- B. The owner of land upon which an abandoned well is located shall take the protective measures prescribed by the county within the time period specified.

Purpose--This section sets forth the procedures for implementing the ordinance for wells that have been abandoned at any time in the past. It authorizes the county to prescribe appropriate measures, including the sealing of the well, to minimize pollution entering the well. It should be noted that economic hardship alone is not sufficient to evade the prescriptive measures. As a practical matter, the county may want to consider subsidizing all or part of the cost of sealing existing abandoned wells to encourage landowners to locate and properly seal abandoned wells in order to protect the public health and safety of the citizens of the county. This section could be omitted entirely, with the effect that the ordinance would apply only to newly abandoned wells, or those for which a complaint is submitted.

Section 7.0 Enforcement

A. Civil Enforcement

1. Any person may submit to the county a verbal or written complaint alleging a violation of this ordinance or the existence of an abandoned well with respect to which corrective and protective measures have not been prescribed.
2. Upon receipt of a complaint, the county shall conduct an investigation of the substance of the complaint. The investigation shall include a meeting with the landowner involved and an inspection of the abandoned well and the area surrounding the abandoned well to which the complaint pertains. Upon receipt of a complaint alleging the existence of an abandoned well with respect to which protective measures have not been prescribed, the county shall proceed pursuant to Section 6.
3. Based upon a determination that there is a violation of this ordinance, the county shall conduct an informal reconciliation with the violator. As part of such informal reconciliation, the county shall:
 - a. notify the violator, by mail, of the violation of this ordinance and a desire of the county to correct the violation and resolve any disputes with the violator through informal reconciliation. The statement shall also indicate that should the violator refuse to follow the recommended corrective actions within the time limit set forth by the county, the county may take action to correct the violation and bill the violator for the cost of taking the corrective action.
 - b. make a good-faith effort to meet with the violator and resolve the correction of the violation.
4. If after taking the steps above and after a period of thirty (30) days following the mailing of the notice of the violation, the county in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the county shall notify the violator, by mail, of the termination of the informal reconciliation.
5. The county may take the corrective action prescribed above following thirty (30) days after notifying violator, by mail, of the notice of termination of the informal reconciliation and bill the violator for the reasonable cost of such action.

6. The exclusive means of obtaining judicial review of any action of the county pursuant to this ordinance shall be by defending an action brought by the county to enforce the obligation created by Section 7.A.5. The intent of this subsection is to prevent the entry of a temporary restraining order, preliminary injunction, or permanent injunction which would prevent or delay the county from proceeding to correct the violation.

B. Criminal Enforcement

In lieu of proceeding under Section 7.A, a person who is alleged to have violated this ordinance may be prosecuted for the commission of a crime. Violation of this ordinance is a misdemeanor and may be punished by imprisonment of not more than ninety (90) days or imposition of a fine of not more than \$700, or both.

C. Injunctive Relief

The county may institute appropriate actions or proceedings, including the requesting of injunctive relief to prevent, restrain, correct, or abate violations of this ordinance.

Purpose--Section 7 sets forth the procedures for enforcing the ordinance and ensuring that violations of the ordinance area corrected. The ordinance provides for a process of informal reconciliation to work out a practical procedure to correct any violations. However, if that process does not work and the violator refuses to take the corrective action specified by the county, the county can then, after a period of time has elapsed, take the corrective action and bill the violator for the costs of taking the corrective action. In addition to any civil actions, the county also has the option of taking criminal actions for some of the violations under the ordinance. The county may also seek an injunction to correct violations.

Section 8.0 Duties of the County

In order to carry out the provisions of this ordinance, the county shall take the following actions upon passing the ordinance:

- A. Apply to the Minnesota Commissioner of Health for authorization to act as an inspection agent of the Commissioner to enforce the well abandonment provisions of the Minnesota Water Well Construction Code;
- B. Employ on a full-time or part-time basis at least one person who is deemed by the Commissioner of Health to be qualified to inspect abandoned wells and prescribe corrective and protective measures authorized by this ordinance;
- C. Disseminate information to landowners and occupiers on techniques to minimize the amount of pollutants which enter the subsurface water through abandoned wells;

- D. Randomly monitor compliance with this ordinance by visits to lands in the county for the purpose of observing the condition of abandoned wells and areas surrounding abandoned wells; and
- E. Prepare an annual report to the _____ County Board which includes information on the general status of abandoned wells, compliance with this ordinance, and recommendations for future county actions with respect to abandoned wells.

Purpose--This section specifies certain administrative actions which the county must take in order to ensure that the ordinance is properly enforced.

MINNESOTA PROJECT MODEL GROUNDWATER ORDINANCE
WATER WELL CONSTRUCTION

Section 1.0 Findings and Declaration of Policy

The _____ County Board finds that _____ County relies on a clean supply of subsurface water to foster and promote human health and welfare and the economic and social development of the county. The soils, topography, and geology of the county are such as to lead to potential pollution of the subsurface water supply from pollution entering water wells.

Therefore, it is declared to be the policy of _____ County to promote, preserve, and enhance the quality of the subsurface water in the county to protect human health and welfare.

These provisions are adopted for the purpose of halting the travel of pollutants to the subsurface water supply through water wells.

Purpose--The purpose of Section 1 is to establish the basic rationale and legal basis for adopting this ordinance by setting forth the findings, policy, and purpose for adopting this ordinance.

Section 2.0 Definitions

When used in this ordinance the following terms have the meanings given to them.

- A. Commissioner--The Minnesota Commissioner of Health or the designee of the Minnesota Commissioner of Health.
- B. Licensee--Any person who is licensed as a water well contractor pursuant to the provisions of the Minnesota Water Well Construction Code and Minnesota Statute Sections 156A.01-08, as amended.
- C. Minnesota Water Well Construction Code--The Minnesota Water Well Construction Code, codified in 7 MCAR Sections 1.210-1.230, as amended.
- D. Noncomplying Well--Any well which does not comply with Section 3 of this ordinance.
- E. Owner of Land or Landowner--Any person who holds title to, or is in possession of, any land lying within the county, whether as owner, lessee, renter, tenant, or otherwise.
- F. Permittee--Any person who obtains a permit from the county pursuant to Section 4 of this ordinance.

- G. Person--Any natural person, any State, municipality, or other governmental or other political subdivision or other public agency or instrumentality, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity.
- H. Subsurface Water--Any water below the surface of the ground including, but not limited to, water in the saturated and unsaturated zones.
- I. Well--Any water well, as defined in Minnesota Statutes Section 156.02 subdivision 1, as amended.
- J. Violation--Any violation of this ordinance.
- K. Violator--Any person who is determined by the county to be in violation of this ordinance.

Purpose--Section 2 is necessary to define and clarify some of the terms used in this ordinance related to water wells. Several references are made to State legislation controlling water well construction.

Section 3.0 Standards for Health, Safety, and Environmental Preservation

The provisions of the Minnesota Water Well Construction Code are hereby adopted by reference and made a part of the ordinance.

Purpose--This section incorporates by reference the State standards and procedures for well construction and abandonment (7 MCAR 1.210-1.224).

Section 4.0 Water Tests

A water test shall be taken for each new or modified water well. The water tests, including total coliform bacteria and nitrate-nitrogen water test results, shall be submitted to the _____ County Board. The water tests shall be tested at a laboratory certified by the Minnesota Department of Health.

Purpose--This section requires that the water tests for new or modified wells, specified by the Minnesota Water Well Construction Code, are submitted to the county board for review. In addition, most counties already have voluntary programs to test private water supplies upon request. Counties may decide to add a provision here to require periodic tests for existing water wells.

Section 5.0 Permits and Permit Fees

- A. No person shall drill, construct, modify, or repair a well in _____ County without first obtaining a permit from the county. Such permits shall be valid for a period of twelve (12) months from the date of issuance and shall be nontransferable.

- B. Each permit application shall be accompanied by a permit fee, the amount which shall be established by the _____ County Board.
- C. Permit application shall be made in writing on a form provided by the county and shall be signed by the applicant and the licensee. The application shall contain:
 - 1. Legal description of the land where the well is or will be located;
 - 2. Location description of such land; and
 - 3. Name, address, and telephone number of the landowner and licensee.
- D. No building permit shall be issued until the well permit is approved and issued by the county.
- E. The county may deny any permit application or renewal, or suspend or revoke any permit for violation of this ordinance by the applicant or permittee. If an application for a permit or permit renewal is denied, or if a permit is suspended or revoked, notice of such shall be sent by mail to the applicant or permittee. The notice shall state the reasons for denial, suspension, or revocation, state the steps to be taken by the applicant in order to secure approval or reinstatement, and inform the applicant of the applicant's or permittee's right to appeal pursuant to Section 5.
- F. The permittee shall provide the county with free access to the permittee's land at reasonable times to inspect wells and the land in which the well is located.

Purpose--Section 4 requires that anyone drilling or modifying a well acquire a permit from the county. In addition, the well permit is required before the building permit is issued. This is to ensure that a water source is available before the building or structure is erected. The county may also revoke the permit for any violation of the ordinance, the practical effect of which is to make the parcel or structure uninhabitable.

Section 6.0 Administrative Hearing

- A. Any person wishing to appeal any action taken by the county pursuant to Section 5.E may request a hearing. The appeal must be received by the county within thirty (30) calendar days, exclusive of the day of receipt of notice, after the person receives notice of the action taken by the county. The request shall be in writing stating the grounds of the appeal. If a person fails to submit an appeal within the required time period, the person shall forfeit any opportunity for a hearing. The county shall schedule a hearing within thirty (30) calendar days of receipt of the notice of appeal, and shall send to the appellant, by mail, notice of the hearing date, time, and location.

- B. The county board shall have the power to conduct hearings pursuant to this section. If the appellant or his or her authorized representative fails to attend the hearing, the appellant shall forfeit any right to a hearing. The county board shall send to the appellant, by mail, notice of the decision of the county board within ninety (90) days after the close of the hearing.

Purpose--Section 6 sets forth the procedures for appealing the decision by the county to deny or revoke a water well permit.

Section 7.0 Use and Maintenance of Wells

No person shall use, operate, or maintain a noncomplying well.

Purpose--This section prohibits anyone from using or operating a well which does not conform to the Minnesota Water Well Construction Code or this ordinance.

Section 8.0 Enforcement

A. Civil Enforcement

1. Any person may submit to the county a verbal or written complaint alleging a violation of this ordinance or the existence of a noncomplying well with respect to which corrective and protective measures have not been prescribed.
2. Upon receipt of a complaint, the county shall conduct an investigation of the substance of the complaint. The investigation shall include a meeting with the landowner involved and an inspection of the noncomplying well and the area surrounding the well to which the complaint pertains.
3. Based upon a determination that there is a violation of this ordinance, the county shall conduct an informal reconciliation with the violator. As part of such informal reconciliation, the county shall:
 - a. notify the violator, by mail, of the violation of this ordinance and a desire of the county to correct the violation and resolve any disputes with the violator through informal reconciliation. The statement shall also indicate that, should the violator refuse to follow the recommended corrective actions within the time limit set forth by the county, the county may take action to correct the violation and bill the violator for the cost of taking the corrective action.
 - b. make a good-faith effort to meet with the violator and resolve the correction of the violation.

4. If after taking the steps above and after a period of ninety (90) days following the mailing of the notice of the violation, the county in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the county shall notify the violator, by mail, of the termination of the informal reconciliation.
5. The county may take the corrective action prescribed above following thirty (30) days after notifying violator by mail of the notice of termination of the informal reconciliation and bill the violator for the reasonable cost of such action.

B. Criminal Enforcement

In lieu of proceeding under Section 8 A., a person who is alleged to have violated Section 7 may be prosecuted for the commission of a crime. Violation of Section 7 is a misdemeanor and may be punished by imprisonment of not more than ninety (90) days or imposition of a fine of not more than \$700, or both.

C. Injunctive Relief

The county may institute appropriate actions or proceedings, including the requesting of injunctive relief to prevent, restrain, correct, or abate violations of this ordinance.

Purpose--Section 8 sets forth the procedures for enforcing Section 7 which deal primarily with existing, noncomplying wells. It should be noted that the basic enforcement method for new wells is the permit system as set forth in Section 5. However, for the existing, noncomplying wells for which no permit has been issued, Section 5 will not bring about corrective actions. Therefore, if the county determines to take corrective actions with respect to existing noncomplying wells that are causing pollution problems, a procedure as indicated in Section 8 is necessary. If the county determines not to deal with existing, noncomplying wells, then Section 8 is not necessary. In addition to any civil actions, the county also has the option of taking criminal actions for some of the violations under ordinance. The county may also seek an injunction to abate any violations.

Section 9 Duties of the County

In order to carry out the provisions of this ordinance, the county shall take the following actions upon passing the ordinance:

- A. Apply to the Minnesota Commissioner of Health for authorization to act as an inspection agent of the Commissioner to enforce the well construction provisions of the Minnesota Water Well Construction Code;

- B. Employ on a full-time or part-time basis at least one person who is deemed by the Commissioner to be qualified to inspect wells, and prescribe corrective and protective measures authorized by this ordinance;
- C. Disseminate information to landowners and occupiers on techniques to minimize the amount of pollutants which enter the subsurface water through wells;
- D. Randomly monitor compliance with this ordinance by visits to lands in the county for the purpose of observing the condition of wells and areas surrounding wells; and
- E. Prepare an annual report to the _____ County Board which includes information on the general status of wells, compliance with this ordinance, and recommendations for future county actions with respect to abandoned wells.

Purpose--This section specifies certain administrative actions which the county must take in order to ensure that the ordinance is properly enforced.

RIB MOUNTAIN
MUNICIPAL WELL RECHARGE AREA
OVERLAY DISTRICT--MW

Statement of Intent: The town of Rib Mountain recognizes that the consequences of certain land use activities, whether intentional or accidental, can seriously impair groundwater quality. The purpose of the Municipal Well Recharge Area Overlay District (MW) is to protect municipal groundwater resources from certain land use activities by imposing appropriate restrictions upon lands located within the approximate groundwater recharge area of the town's municipal wells. The restrictions imposed herein are in addition to those of the underlying residential, commercial, or industrial zoning districts or any other provisions of the zoning ordinance.

Description of Zones: Through careful consideration of the geologic and hydrologic information available, the MW has been divided into two zones: Zone A and Zone B.

Zone A has been identified as the primary source of water for the municipal well aquifer and as the area most likely to transmit groundwater contaminants to the municipal wells. Due to its environmentally sensitive nature, Zone A has more land use restrictions than Zone B.

Zone B has been identified as a secondary source of water for the municipal well aquifer and as an area where there is a lower probability of surface contaminants reaching the municipal well fields. Since there is a reduced potential for groundwater contamination in Zone B, the restrictions developed for this area are less stringent than in Zone A.

ZONE A

Prohibited Uses: The following land uses have been found to have a high potential to contaminate or have already caused groundwater contamination problems in Wisconsin and elsewhere. These principal or accessory uses are thus prohibited within Zone A of the MW:

1. Areas for dumping or disposal of garbage, refuse, trash, or demolition material
2. Asphalt products manufacturing plants
3. Automobile laundries
4. Automobile service stations
5. Building materials and products sales
6. Cartage and express facilities
7. Cemeteries
8. Chemical storage, sale, processing, or manufacturing plants
9. Dry cleaning establishments
10. Electronic circuit assembly plants
11. Electroplating plants
12. Exterminating shops
13. Fertilizer manufacturing or storage plants

14. Foundries and forge plants
15. Garages--for repair and servicing of motor vehicles, including body repair, painting, or engine rebuilding
16. Highway salt storage areas
17. Industrial liquid waste storage areas
18. Junk yards and auto graveyards
19. Metal reduction and refinement plants
20. Mining operations
21. Motor and machinery service and assembly shops
22. Motor freight terminals
23. Paint products manufacturing
24. Petroleum products storage, or processing
25. Photographic studios including the developing of film and pictures
26. Plastics manufacturing
27. Printing and publishing establishments
28. Pulp and paper manufacturing
29. Residential dwelling units on lots less than 15,000 square feet; however, in any residential district, on a lot of record on the effective date of this ordinance, a single-family dwelling may be established regardless of the size of the lot provided all other requirements of the Rib Mountain Zoning Ordinance are met.
30. Septage disposal sites
31. Sludge disposal sites
32. Storage, manufacturing, or disposal of toxic or hazardous materials
33. Underground petroleum products storage tanks for industrial, commercial, residential, or other uses
34. Woodworking and wood products manufacturing

Conditional Uses: The following conditional uses may be allowed in the MW, subject to the provisions of Article VI, Section 6.10.

1. Any other business or industrial use not listed as a prohibited use
2. Animal waste storage areas and facilities
3. Center--pivot or other large scale, irrigated, agriculture operations

ZONE B

Prohibited Uses: Underground petroleum products storage tanks for industrial, commercial, residential, or other uses.

Conditional Uses: The following conditional uses may be allowed in the MW, subject to the provisions of Article VI, Section 6.10.

Any business or industrial use.

Prepared by Joe Pribanich
Marathon County Planning Department
November 14, 1984

Revised: April 25, 1985
Adopted by Town Board: August, 1985

APPENDIX A

Additional Ordinances of Potential Interest

1. City of Scottsdale, Arizona	Critical areas designated as parkland.
2. City of Manchester, Connecticut	Controls land use within one-mile radius of public wells.
3. Marion County, Indiana	Identification of critical areas, extension to sewers, ban on dry wells for sewage disposal.
4. Scott County, Iowa	Relates termination of well casings to flood level.
5. City of Deerfield, Maine	Pays rent to farmers with land in zone to ban pesticide use on farm.
6. City of Leverett, Maine	Pays utility company differential costs of nonchemical vegetations management in the utility right-of-way.
7. City of Wendell, Maine	Nonzoning bylaw to regulate pesticide spraying, especially on utility and railroad right-of-way.
8. Sussex County, New Jersey	Onsite septic tank management program, including some management of household hazardous wastes.
9. Upper Makefield, Pennsylvania	Requires hydrogeological study for all subdivisions over three lots.
10. Albemarle County, Virginia	Encourages light industrial by restricting groundwater use to 400 per site acre per day. Restricts rural population density by setting two-acre lot size minimum.

END

DATE FILMED

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