

## ARTICLE XIII. WELLFIELD PROTECTION\*

\***Editor's note:** Art. XIII was formerly art. XII, div. 4. The section numbers have not changed.

Sec. 27-376. Definitions.

The following definitions apply only to this article. Applicable definitions found in other articles shall be used in this article.

*Continuous transit* is the nonstop movement of a mobile vehicle.

*Hazardous material wellfield license* is a license issued by the county to a person operating a facility that stores, handles, uses or produces regulated substances, as defined herein, to comply with this division. Upon the effective date of this division, all wellfield protection permits issued by the Broward County Water Resources Management Division pursuant to the Wellfield Protection Ordinance (Ordinance No. 84-60), as amended, and Resolution 84-2025 [§ 34-182 et seq.], as amended, shall be converted to hazardous material wellfield licenses. All conditions and requirements of the wellfield protection permit and information provided to Broward County Water Resources Management Division as part of the wellfield protection permit shall be incorporated into the hazardous material wellfield protection License issued for the facility.

*Nonresidential activity* means any activity which occurs in any building, structure or open area which is not used primarily as a private residence or dwelling.

*Permitted pumping capacity* refers to the amount of water authorized by the South Florida Water Management District to be pumped from a well, expressed as gallons per day.

*Pollutant travel time* is the time required by pollutants to travel from one point to another.

*Potable water* is that water that is satisfactory for drinking, culinary and domestic purposes, meeting current state and federal drinking water standards.

*Public utility* is 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.

*Regulated substances* are those substances contained in the list of hazardous and toxic substances appended to this division.

*Travel time contour* is the locus of points from which water takes an equal amount of time to reach a given destination such as a well or wellfield.

*Travel time zones* are the areas bounded by travel time contours.

*Well* means an artificial excavation that derives water from the interstices of the rocks or soil which it penetrates.

*Wellfield* means a tract of land which contains a number of existing or proposed wells for supplying water as specified in the wellfield protection maps, as amended, approved by the Broward County Board of Commissioners.

*Zones of influence* refers to zones delineated by isotravel time contours around existing or proposed wellfields as specified in the wellfield protection maps, as amended, approved by the Broward County Board of Commissioners, within which hazardous materials are regulated to protect the quality of the groundwater.

*Zone 1:* The land area situated between the well(s) and the ten-day travel time contour.

*Zone 2:* The land area situated between the ten-day and the thirty-day travel time contours.

*Zone 3:* The land area situated between the thirty-day and the 210-day travel time contours, or the thirty-day and the one-foot drawdown contours, whichever is greater.

(Ord. No. 90-49, § 1(27-12.20), 12-18-90)

Sec. 27-377. Incorporation of regulated substances list.

The list of regulated substances shown in the appendix to this article is hereby incorporated to provide for simplicity of transfer of authority to the county. Existing county regulations include every item on this list.

(Ord. No. 90-49, § 1(27-12.21), 12-18-90)

Sec. 27-378. Incorporation of zones of influence maps.

The zones of influence maps completed in January 1984 and subsequent amendments to these maps approved by the Broward County Board of Commissioners are incorporated and made a part of this article and shall be on file and maintained by the Broward County Office of Environmental Services with up-to-date copies provided to the county.

(Ord. No. 90-49, § 1(27-12.22), 12-18-90)

Sec. 27-379. Prohibitions, restrictions and licensing within zones of influence.

(a) *Zone 1:*

(1) Within zone 1 a nonresidential activity which includes the storage, handling, usage or production of any regulated substances shall not be permitted except as provided herein.

(2) All persons who previously engaged in nonresidential activities within a zone 1 who store, handle, use or produce any regulated substances shall cease to do so by August 28, 1986, except as provided herein.

(3) Any facility in zone 1 which is allowed to continue to store, handle or use regulated substances in accordance with the exemptions set forth shall obtain a hazardous material wellfield license which indicates the special conditions to be instituted and the dates on which those conditions apply. Such facilities shall also comply with all zone 2 prohibitions and restrictions as set forth here and any of the conditions set forth below for zone 2 as designated in said license.

(b) *Zone 2:*

(1) Those facilities in zone 2 which stored, handled, used or produced any regulated substances on August 28, 1986, or any new facility established thereafter, may continue to do so in accordance with the provisions and exemptions set forth here upon obtaining a hazardous material wellfield license. Licensed facilities in zone 2 shall be subject to the following conditions.

a. *Inventory:* A recorded inventory of all regulated substances shall be maintained on a form provided by the county. The inventory shall list the substances and the quantities present, etc., and shall be submitted with the application for the hazardous materials wellfield license. Such inventory shall be updated quarterly and forwarded to the county.

b. *Containment:* Containment of hazardous materials shall be in accordance with this chapter except that it shall be of adequate size to provide not less than one hundred (100) percent containment for any spill. The containment devices used shall be confirmed in the license.

c. *Emergency collection devices:* Vacuum suction devices or absorbent scavenger materials shall be present on site in sufficient magnitude so as to control and collect the total quantity of hazardous materials present. Emergency containers shall be present of such capacity as to hold the total quantity of hazardous materials plus absorbent material. The presence of such emergency collection devices shall be confirmed in the hazardous material wellfield license and application.

- d. *Emergency plan:* An emergency plan shall be prepared and filed with the hazardous material wellfield license 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.
- e. *Daily monitoring:* The emergency plan shall designate a responsible person who 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 county inspector at any reasonable time for examination.
- f. *Proper and adequate regular maintenance of containment and emergency equipment:* Procedures shall be established for the quarterly in-house 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 county inspector.
- g. *Reporting of spills:* Any spill of a regulated substance in an amount greater than that indicated on appendix A shall be reported to the county 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 county within five (5) days of discovery of the spill.
- h. *Monitoring for regulated substances in groundwater monitoring wells:* One (1) or more groundwater monitoring wells shall be installed at the expense of the licensed facility in a manner approved by the county. Certified analytical results of the quantity present in each monitoring well of each of the regulated substances listed in the facility's license shall be filed with the county by the fifteenth day of the month following each quarter.
- i. *Alterations and expansion:* The county shall be notified prior to the expansion, alteration or modification of a facility holding a hazardous material wellfield license. Any such expansion, alteration or modification shall be in conformity with county regulations. Any existing hazardous material wellfield license shall be amended to reflect the introduction of new regulated substances resulting from the change.
- j. *Reconstruction after catastrophe:* If any structure or building in which there is any activity subject to the provisions of this division is damaged by fire, flood, explosion, collapse, wind, war or other catastrophe any reconstruction shall be in conformity with county regulations.
- k. In the event that an accumulation of one (1) or more of the regulated substances listed in the hazardous material wellfield license shall appear in a potable water well at any time, then one (1) of the following actions shall become mandatory.
1. All persons who engage in nonresidential activities within the affected zone 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 facility shall be subject to these mandatory actions. If the owner or operator of a facility can present acceptable technical data that substantiates it is not the source of the regulated substances appearing in the potable water well that facility shall not be subject to these mandatory actions. In complying with this subsection no new regulated substance(s) may be introduced in the place of any regulated substance removed to comply with cessation.
  2. The affected well(s) shall be reconfigured within three (3) years by change of pumping rate or relocation such that the affected facility is no longer within zone 2.
- l. Monitoring of all regulated substances shall be an ongoing activity; and in the event an accumulation, as defined in this section shall occur, the mandatory provisions of subparagraph k. shall apply.

m. If upon the effective date of this article all the requirements for compliance necessary for the issuance of a wellfield protection permit have not been completed, and the applicant had made a diligent effort to do so, a hazardous material wellfield license may be issued contingent on compliance within a time certain.

(2) The raw water from each well designated on the zones of influence maps shall be monitored on a quarterly basis for all the regulated substances listed in the hazardous materials wellfield licenses issued to the facilities in the zone 2 for that particular well. It shall be the responsibility of the public utility to provide for the sampling and analyses and to collect the cost which shall be borne by the licensed facilities. The quarterly analyses submitted to the Broward County Division of Water Resources Management beginning March 6, 1987, pursuant to the Wellfield Protection Ordinance (Ordinance No. 84-60) [§ 34-182 et seq.] shall be transferred and incorporated into the wellfield protection program administered under this division.

Compositing of Samples: A public utility system may reduce the total number of samples that must be analyzed as required above, by compositing samples in accordance with rule 62-550, F.A.C., as amended.

(3) Certified quarterly reports of the analyses for regulated substances shall be submitted to the county by the utilities for the purpose of determining the accumulation of regulated substances in the potable water wells. These reports will be due by the thirtieth day of the month following each quarter as specified below:

1st quarter: January 1 to March 31.

2nd quarter: April 1 to June 30.

3rd quarter: July 1 to September 30.

4th quarter: October 1 to December 30.

(4) 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 facility from the mandatory actions set forth in paragraph (1)k.

(5) The county shall make a determination of the accumulation of each of 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.

(c) *Zone 3:*

(1) Those facilities storing, handling, producing, using or manufacturing regulated substances in zone 3 shall require a hazardous material license in accordance with article XII of this chapter.

a. Within thirty (30) days of any spillage in an amount greater than that indicated in the appendix to this article of a regulated substance, the hazardous material license shall be replaced with a hazardous material wellfield license which will include the conditions set forth in subsection (b)(1)a. through g.

b. If a facility in zone 3, on its own initiative, meets the conditions of subsection (b)(1)a., b., c. and f., then the hazardous material license shall so indicate and the conditions of subparagraph a. above shall not apply.

(Ord. No. 90-49, § 1(27-12.23), 12-18-90; Ord. No. 1999-52, § 2, 9-28-99)

Sec. 27-380. Exemptions.

(a) *Exemption for Public Utilities:* Public utilities shall be exempt from zone 1 and zone 2 prohibitions as set forth in section 27-379(a)(1) and (2). However, all such utilities in zone 1 and zone 2 shall comply with all provisions of section 27-379(b)(2) through (4). The license exemption set forth in subsection (h) of this section for regulated substances

contained in storage tanks and licensed under article X of this chapter shall apply. However, compliance in zone 1 and zone 2 with the requirements set forth in article X of this chapter shall be completed by August 28, 1988.

(b) *Exemption for Continuous Transit:* The transportation of any regulated substances through zone 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 substances solely as fuel in a vehicle fuel tank or as lubricant in a vehicle shall be exempt from the provisions of this article.

(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 registries and as indicated on the containers in which the substances are sold; and

(2) In all zones, use in strict conformity with the requirements as set forth in Chapter 482, F.S. Chapter 487, F.S. and chapters 5E-2 and 5E-9, Florida Administrative Code.

(3) In a zone 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 applicators under his or her supervision that they are working at a site located in a zone 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 a zone 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 1 and zone 2 shall comply with all the provisions of section 27-379(b). 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 article. However, commercial or government services in all zones shall not be required to obtain individual licenses for every site at which they use the regulated substances, and these services shall be exempt from the provisions of this article with regard to the sites they serve provided the use is in accordance with (1), (2), (3) and (4) above. However, all records for such sites as required by Chapter 482, F.S. and Chapter 10D-55, Florida Administrative Code, shall be available for inspection by the county.

(e) *Exemption for the Use of Nitrates Contained in Fertilizers:* The use of fertilizers containing nitrates shall be allowed in zone 1, zone 2 and zone 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 exceed neither forty (40) pounds of nitrogen per acre per month average for the total activity nor two (2) pounds per one thousand (1,000) 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 1.

(4) All nonresidential uses of regulated substances in zone 1 and zone 2 shall comply with all the provisions of section 27-379(b). 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 regulation. However, commercial services in all zones shall not be required to obtain individual licenses for every site at which they use

the regulated substances, and these services shall be exempted from the provisions of this regulation. However, all records of application for such sites shall be available for inspection by the county.

(f) *Exemption for Laboratory or Instrument Use in Zone 1:* Regulated substances shall be exempted from the prohibitions of zone 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 hazardous material wellfield license and 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 allowed, provided that those establishments shall obtain a hazardous materials wellfield license. In order to obtain the license said establishments need only provide an inventory of regulated substances and a quarterly update.

(h) *Exemption in Zone 2 for Storage Tanks:* Exemption from the permitting requirements in zone 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 article X of this chapter and said activity complies with the provisions of section 27-379(b).

(i) *Exemption in Zone 3 for Storage Tanks:* Storage tanks in zone 3 which are licensed under article X of this chapter shall be exempt from this article.

(j) *Exemption in Zone 3 for Automotive Service Accessory Uses at Gasoline Service Stations:* Automotive service accessory uses at gasoline service stations in zone 3 shall be exempted from the provisions of this article upon the installation of monitoring wells along the down-gradient 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 article X of this chapter.

(k) *Special Exemptions:* Special exemptions granted an affected person in zone 1 or zone 2 by the Broward County Water Resources Management Division pursuant to the Wellfield Protection Ordinance (Ordinance No. 84-60, as amended) and Resolution 84-2025, as amended [§ 34-182 et seq.], from the prohibitions set out in section 27-379(a) and (b) shall remain in effect provided that conditions still exist at the facility as follows:

(1) That special or unusual circumstances exist which are peculiar to the particular nonresidential activity and 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.

In renewing the special exemption, the director may prescribe any additional appropriate conditions and safeguards which are necessary to protect the wellfields.

(Ord. No. 90-49, § 1(27-12.24), 12-18-90)

#### Sec. 27-381. Determination of location within wellfields.

In determining the location of properties within the zones depicted on the zones of influence maps, the following rules shall apply:

(1) Properties located 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 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 August 28, 1986.

(Ord. No. 90-49, § 1(27-12.25), 12-18-90)

Sec. 27-382. Hazardous material wellfield license.

(a) *When Required:* In zone 1 and zone 2, prior to the commencement of construction, closure, alteration, replacement or operation of any facility that may cause or be a source of pollution, or that may eliminate, reduce or control pollution of the ground, groundwater or surface water, the owner shall obtain a county hazardous material wellfield license. All persons who have obtained a special exemption pursuant to section 27-380(k) shall be required to comply only with the license conditions provided therein.

(1) *Closure license:* When any activity coming under this article is to be or has been permanently terminated, the licensee 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 licensee shall obtain a closure license that contains a schedule of events for removal, inspection and certification that all regulated substances have been removed.

(b) *Application for License:* Application for a license to construct or operate a facility that stores, processes, uses or manufactures hazardous materials shall be made on county forms and be accompanied by the following:

(1) A list of the regulated substances which are stored, handled, used or produced in the activity being permitted, including their quantities.

(2) A detailed description of the 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.

(3) A description of the inventory record that will be instituted to comply with the restrictions required for zone 2.

(4) A description of the containment and site plan, the emergency collection devices and containers, and the emergency plan that will be effected to comply with the restrictions required for zone 2 as set forth above. For zone 3 this particular documentation will only be required with the application for a new hazardous material wellfield license following any spillage.

(5) A description of the daily monitoring records that will be instituted to comply with the restrictions for zones 2 and 3 as set forth above.

(6) A description of the proper and adequate regular maintenance of containment and emergency equipment that will be required for zone 2 as set forth above. For zone 3, this particular documentation will only be required with application for a new hazardous material wellfield license following any spillage.

(7) A description of the groundwater monitoring wells that will be installed and the arrangements made for certified quarterly analyses for regulated substances.

(8) Evidence of arrangements made with the cognizant public utility for quarterly sampling analysis of the raw water from the potable water well.

(c) *License Conditions:*

(1) Any change in the facility or operating procedures that may affect the potential for discharging hazardous materials shall be approved prior to implementation.

(2) The license shall specify the hazardous materials to be allowed within the facility and state that any significant additions must have prior approval if said changes could affect the requirements for storage or secondary containment.

- (3) Any disposed hazardous material, including recycled materials, shall be reported to the county on a monthly basis by the fifteenth day of the following month, and be disposed of in accordance with EPA, DER and county requirements.
- (4) Any discharge of hazardous material shall be reported to the county immediately.
- (5) The spill contingency plan and emergency plan shall be implemented immediately upon discharge.
- (6) It is the licensee's responsibility to require that all facility personnel shall successfully complete a program of classroom instructions and/or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with this chapter. The training shall include proper handling and storage of all hazardous materials used at the facility. It shall also include training at least once a year in the spill contingency plan and the emergency plan. A record of the name of each employee and the fact that the person has completed the training shall be kept on file on the premises three (3) years after the employee's last work day or until a facility is closed.  
(Ord. No. 90-49, § 1(27-12.26), 12-18-90)

Sec. 27-383. Fee schedule.

- (a) *Effective Date:* The fees shown hereunder shall apply to all licenses required by this article issued after the effective date of this article.
- (b) *License Application Filing Fee:*
  - (1) Before any application for county license required under this article is accepted for review, a filing fee shall be delivered to the county.
  - (2) Prior to the issuance of the county license required under this article, the license fees prescribed in this section reduced by the licensed application filing fee shall be delivered to the county.
  - (3) The license application filing fee is not refundable and may not be applied to any license application other than the one for which it was originally paid.  
(Ord. No. 90-49, § 1(27-12.27), 12-18-90; Ord. No. 93-1, § 11, 1-12-93)

Sec. 27-384. License fees.

- (a) *Transfer Fee:* Where an application is filed for a license to operate any facility by reason of change of location or transfer from one person to another, or both, and where a license has previously been granted for the facility in accordance with this article and no unlicensed modifications have been made to the facility, the applicant shall pay only the appropriate filing fee.
- (b) *Hazardous Material Wellfield License Fee:* Any proposed or existing industry or other activity that stores, processes, manufactures or uses hazardous materials shall be assessed a construction or operation fee based on the quantity of hazardous materials used annually.

License fee may be prorated to establish convenient expiration dates.

These fees shall also apply to both licenses renewals and extensions.

- (c) *Hazardous Material Wellfield Closure Fee:* A license fee shall be assessed for a hazardous material facility spill closure. For a closure license of the type in section 27-382(a)(1), the fee shall be one-quarter of the operating license fee.

Those petroleum storage systems designated as qualified sites under the early detection incentive program, § 376.3071(9), F.S., are exempt from the payment of this fee.

- (d) *Special Exemption Fee:* Any person renewing a special exemption shall pay a fee, to defray the costs of processing the exemption request. All persons who have obtained a special exception pursuant to section 27-380(k) shall be required to comply with the license conditions provided therein.

(Ord. No. 90-49, § 1(27-12.28), 12-18-90; Ord. No. 93-1, § 12, 1-12-93)