

1 Instructions for Using the Model Ordinance

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3
4 This Model Ordinance is intended to be a tool to assist you in getting your own
5 ordinance-writing process started, to provide some standard language, and to suggest
6 some of the possible options. There is a great variety of language used in existing
7 Aquifer/Wellhead Protection Ordinances in place throughout Florida. This Model
8 Ordinance is by no means an exhaustive listing of the possibilities. You should use this
9 document in conjunction with other sources, such as the existing ordinances used by
10 Aquifer/Wellhead Protection Programs that have objectives similar your program's.

11
12 In any ordinance creation, process it is important to involve local legal staff, such as your
13 City or County lawyers. Their expertise can aid you in creating an ordinance which is
14 both legal and defensible within the legal context of your community.

15
16 You should of course feel free to alter any and all portions of this document to meet your
17 needs. Throughout the Model Ordinance, there are sections in which you must insert text
18 in order to customize it. These sections are denoted by text placed in bold type within
19 curved brackets--**{ }**. By using this Model Ordinance and customizing these sections, you
20 can create a viable local ordinance with minimal editing.

21
22 **{Curved brackets surrounding bold text}** indicate a section of text which *must* be
23 customized. For instance, you will frequently see the following--**{Your City/County}**.
24 By searching through the text for these curved brackets, you can quickly verify that you
25 have made all the necessary replacements to customize the ordinance. NOTE: Text
26 which is underlined within the curved brackets indicates *specific choices* from which you
27 should *choose only one* or which you can replace with your own text.

28
29 **[Bold text surrounded by square brackets]** should be interpreted as comments,
30 instructions, or information to assist the ordinance writer. This text *should not appear* in
31 your final ordinance.

32
33 An electronic version of this Model Ordinance will be available on-line at the City of
34 Tallahassee's Worldwide Web site on the Aquifer Protection page
35 (<http://fcn.state.fl.us/citytlh/water/apintro.html>). Disk copies will also be available.
36 Contact Jay Johnson, (904) 891-1200, for more information.

37
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10		

1 Ordinance No. {97-00}

2 [This number will be typically be assigned by the year and sequence of prior
3 ordinances.]

4
5 AN ORDINANCE OF {Your City/County}, FLORIDA TO BE KNOWN AS THE
6 {Your City/County} AQUIFER/WELLHEAD PROTECTION ORDINANCE;
7 RELATING TO AQUIFER/WELLHEAD PROTECTION REGULATIONS;
8 AQUIFER/WELLHEAD PROTECTION IDENTIFICATION OF POTENTIAL
9 SOURCES; REGISTRATION; STORMWATER; AQUIFER/WELLHEAD
10 PROTECTION PREVENTATIVE MEASURES; FACILITY INSPECTION;
11 REPORTING OF DISCHARGES; REPORTING OF SINKHOLES; BEST
12 MANAGEMENT PRACTICES TO PREVENT DISCHARGES OF REGULATED
13 SUBSTANCES; MONITORING AND INVESTIGATION OF SUSPECTED OR
14 KNOWN DISCHARGES; INJECTION WELLS/DRAINAGE WELLS; WELL
15 ABANDONMENT AND GEOTECHNICAL BORINGS; SEPTIC TANKS/DRAIN
16 FIELDS; INVENTORY PROOF OF PROPER DISPOSAL/RECYCLING REGULATED
17 SUBSTANCES; FACILITY CLOSURE REQUIREMENTS; WELLHEAD
18 PROTECTION AREA DELINEATION AND PREVENTATIVE MEASURES;
19 REGULATED BUSINESS REVIEW FOR COMPREHENSIVE PLAN AND AQUIFER
20 PROTECTION CONSISTENCY; PROGRAM FUNDING; REMEDIATION
21 ACTIVITIES; VIOLATIONS, PENALTIES, AND ENFORCEMENT CONFLICTS
22 WITH OTHER ORDINANCES; SEVERABILITY; AND PROVIDING AN
23 EFFECTIVE DATE

24
25 WHEREAS, Ground water is an important resource within {Your City/County} which
26 must be protected; and

27
28 WHEREAS, {All or The majority of or other verbage as appropriate to your local
29 condition} potable water used in {Your City/County} is derived from ground water; and

30
31 WHEREAS, {Goal 1 of the Aquifer Recharge and Potable Water Elements of the
32 Comprehensive Plan} requires protection of ground water resources; and

33
34 [In this legal preface, several references are made to specific elements, goals, or
35 objectives of the Comprehensive Plan. The specific references used by
36 Tallahassee/Leon County were left intact as examples; however, you should consult
37 your local Comprehensive Plan or other planning documents to ensure that the
38 references appropriate to your community are used.]

1 WHEREAS, **{Objective 1.1 of the Aquifer Recharge and Potable Water Elements}**
2 requires that a Comprehensive Aquifer/Wellhead Protection Policy be implemented by
3 **{some specific date}**; and

4

5 WHEREAS, **{Your City/County}** has agreed to implement the Aquifer Protection
6 Elements of the Comprehensive Plan through the adoption of an Aquifer/Wellhead
7 Protection Ordinance; and

8

9 WHEREAS, It is in the best interest of public health, safety, and welfare of the citizens of
10 **{Your City/County}** to establish ground water protection criteria for the **{Your**
11 **City/County}** existing and future potable water resources; and

12

13 **[The next five WHEREAS statements apply to the creation of a joint program that**
14 **encompasses several local government jurisdictions. In Tallahassee/Leon County**
15 **for example, this language establishes the legal framework for a program which**
16 **transcends political boundaries. Omit the next five WHEREAS statements if your**
17 **program is limited to a single jurisdiction, or has no significant intergovernmental**
18 **components.]**

19

20 WHEREAS, The area through which ground water migrates in **{Your City/County}**
21 transcends City/County jurisdictional boundaries; and

22

23 WHEREAS, The City and County Governments agree that a single program should be
24 coordinated through the Aquifer/Wellhead Protection Program of the **{Your**
25 **City/County}**; and

26 **[In the case of Tallahassee/Leon County for example, this section would read**
27 **“should be coordinated through the Aquifer/Wellhead Protection Program of the**
28 **City of Tallahassee.”]**

29

30 WHEREAS, **{Objective 1.3 of the Intergovernmental Coordination Element of the**
31 **adopted 1990 Comprehensive Plan}** requires the identification and elimination of
32 duplication of functions and services of **{Your City}** and **{Your County}**; and

33

34 WHEREAS, The City and County currently have a number of programs which through a
35 coordinated effort would provide the best possible protection for ground water resources;
36 and

37

1 WHEREAS, The City and County agree that protection of ground water is in the best
2 interest of all citizens of {Your County}.

3

4 NOW, THEREFORE BE IT ORDAINED BY THE {BOARD OF COUNTY
5 COMMISSIONERS or CITY COMMISSION or CITY COUNCIL, ETC.} OF
6 {YOUR CITY/COUNTY}, FLORIDA, THAT:

7

8 **Section 1 Short Title**

9 There is hereby created a new Chapter in the {Your City/County} Code of Laws which
10 shall be known as and may be cited as the {Your City/County} Aquifer/Wellhead
11 Protection Ordinance and shall be as follows:

12

13 **Section 2 Legislative Intent and Purpose**

14 **[Keep only those items in this section that are consistent with your program's intent**
15 **and purpose.]**

- 16 1. The intent and purpose of this Ordinance is to protect and maintain the quality and
17 quantity of ground water in {Your City/County}, Florida.
- 18 2. This Ordinance shall provide criteria for regulating the use, handling, production,
19 storage, or disposal of regulated hazardous substances so as to preclude the
20 introduction of these substances into ground water.
- 21 3. The contents of this Ordinance shall meet or exceed the goals, objectives and
22 policies established in the adopted {insert date} Comprehensive Plan.
- 23 4. It shall be a violation of this Ordinance to discharge any substance in a manner that
24 may cause ground water contamination.
- 25 5. The Aquifer/Wellhead Protection area shall include **{all land and surface water}**
26 **within {Your City/County}. [Customize this item according to whether your**
27 **program will regulate activity throughout the entire jurisdiction, or just in the**
28 **vicinity of wellheads.]**
- 29 6. For the purpose of this Ordinance it shall be the policy that the property owner
30 and/or responsible party shall be held liable for all activities that may contribute to
31 ground water contamination that occur on their property.
- 32 7. This Ordinance shall establish strict performance standards for the use, handling,
33 production, storage, or disposal of regulated hazardous substances that are
34 applicable to facilities so as to preclude the introduction of these substances into
35 ground water.
- 36 8. This Ordinance, through its provisions, shall protect the quality of water obtained
37 from public supply wells, potable water supply wells, other public water systems

1 and private water systems regarding future reported discharges of Regulated
2 Substances.

3 9. This Ordinance shall authorize the establishment of a funding mechanism for the
4 operation and implementation of Aquifer Protection remediation.

5

6 **Section 3 Public Education/Commission Reporting Requirement**

7 1. Public education activities shall be conducted in order to correct current practices
8 regarding the use, storage and manufacturing of regulated substances to ensure
9 protection of water resources in **{Your City/County}**.

10 2. The Aquifer/Wellhead Protection Coordinator shall report annually to the **{Your**
11 **City/County}** Commission(s) as to the extent of public education activities and the
12 status of the program goals and objectives.

13

14 **Section 4 Definitions**

15 **[Add definitions appropriate to your ordinance; delete any definitions you do not**
16 **reference in the ordinance.]**

17 The following words and phrases used in this Ordinance shall have the following
18 meaning:

19 1. Abandoned Well. A well which is no longer in use for its intended purposes, and
20 for which there is no planned future use.

21 2. Air Entrainment. Any process by which air is introduced into ground water.

22 3. Animal Feedlot. A lot or building or combination of lots and buildings intended for
23 the confined feeding, breeding, raising, or holding of animals and specifically
24 designed as a confinement area in which manure may accumulate, or where the
25 concentration of animals is such that a vegetative cover cannot be maintained within
26 the enclosure. For the purpose of this Ordinance, open lots used for the feeding and
27 rearing of poultry (poultry ranges) shall be considered to be animal feedlots.
28 Pastures shall not be considered animal feedlots under this Ordinance.

29 4. Aquifer or Aquifer System. Any saturated, permeable geologic unit or group of
30 units that can transmit significant quantities of water under ordinary hydraulic
31 gradients and/or yield significant quantities of water to wells or springs.

32 5. Aquifer/Wellhead Protection Coordinator. The person designated and authorized by
33 **{Your City/County}** to supervise the implementation and enforcement of this
34 Ordinance. **[If your community does not allocate a staff member to this**
35 **function full-time, it might be filled by the Planning Director, Chief of**
36 **Environmental Permitting, Water Superintendent, etc.]**

- 1 6. Best Management Practices. Those practices which may be utilized by a person or
2 within a facility to minimize the potential for a release of Regulated Substances to
3 ground water, surface water, or soils.
- 4 7. Confined Aquifer. An aquifer bounded above and below by impermeable layers
5 (confining units) and in which the potentiometric surface exceeds the elevation of
6 the top of the unit. **[This is a commonly misunderstood term. Less formal usage
7 of the term generally only extends to the first portion of the definition, i.e., the
8 aquifer is overlain by impermeable sediments.]**
- 9 8. Containment. Physical systems or operational practices that are used to prevent the
10 release of Regulated Substances to the environment. Physical containment systems
11 should be capable of containing 110 percent of the volume of the largest container
12 or storage system.
- 13 9. Contamination. The presence of a Regulated Substance in the water supply, surface
14 water, or on the land surface such that it degrades the quality of the resource so as to
15 constitute a hazard and/or to impair its use. **[A more detailed definition might
16 define contamination as the presence of certain compounds in concentrations
17 exceeding defined criteria, such as the FDEP ground water standards.]**
- 18 10. Continuous Transit. The nonstop movement of a vehicle except for stops required
19 by traffic laws.
- 20 11. Discharge. Includes, but is not limited to, the spilling, leaking, seeping, pouring,
21 misapplying, emitting, emptying, or dumping of any Regulated Substance which
22 may affect the ground water.
- 23 12. Drawdown. The vertical distance the ground water elevation is lowered, or the
24 amount the pressure head is reduced, at a given location due to the withdrawal of
25 ground water by a well or wells.
- 26 13. Drawdown Contour, one-foot. The contour line defined by a reduction in ground
27 water elevation or pressure head of one-foot due to the withdrawal of ground water
28 by a well or wells at their permitted pumpage rate.
- 29 14. EPA. The United States Environmental Protection Agency.
- 30 15. FDEP. The Florida Department of Environmental Protection.
- 31 16. Geotechnical Boring. Any excavation that is drilled, cored, washed, driven, or dug
32 and is used for geological investigation purposes or for obtaining a soil sample.
- 33 17. Ground Water. Water in the sub-surface of the earth in both soils and geologic
34 formations that are saturated.
- 35 18. Hazardous Substance. A substance that has one or more of the following
36 characteristics: ignitability, corrosivity, reactivity, or toxicity as defined in 40 CFR
37 Part 261 (as amended), bioaccumulative effect, or persistence in nature. **[This
38 definition is distinct from Regulated Substances, which will usually include,
39 but not be limited to, Hazardous Substances.]**

- 1 19. Heat Exchange Wells. Any well or wells constructed for the purpose of
2 withdrawing water for air conditioning or heat exchange purposes and then
3 returning the water to underground formations.
- 4 20. Impervious Surface. A surface covered by a material which is relatively
5 impermeable to water.
- 6 21. Karst. A type of topography that is formed over limestone, dolomite, or gypsum by
7 dissolution and that is characterized by closed depressions or sinkholes, caves, and
8 underground drainage.
- 9 22. Other Public Water System. Any potable water system that provides piped water
10 for human consumption, culinary purposes, or dishwashing to one or more non-
11 residential establishments or which serves more than four (4) residences but that is
12 not a public water system as defined by the Federal Safe Drinking Water Act. Other
13 public water systems include the water source, treatment facilities and distribution
14 lines.
- 15 23. Person. An individual, corporation, joint venture, incorporated association, public
16 or private corporation, partnership, governmental body or other similar entity,
17 public or private.
- 18 24. Petroleum Product. Fuels (gasoline, diesel fuel, kerosene, and mixtures of these
19 products), lubricating oils, motor oils, hydraulic fluids, and other similar products.
20 **[Optionally you may include language such as “does not include liquefied
21 petroleum gas, bunker C residual oils, and intermediate fuel oils used for
22 marine bunkering with a viscosity of 30 and higher.” This language will
23 identify products which either exist as gases at normal temperature and
24 pressures, or display characteristics which retard their mobility in the
25 environment.]**
- 26 25. Potable Water Supply Well. Any well constructed for the purpose of conducting
27 ground water to the surface, by pumping or natural flow, and the ground water from
28 such excavation is to be used for drinking or other potable water uses.
- 29 26. Potentiometric Surface. A surface defined by the elevation to which ground water
30 will rise in a tightly cased well or wells.
- 31 27. Primary Containment. The first level of product containment, i.e., the container
32 which is in direct contact with the Regulated Substance being contained.
- 33 28. Primary Wellhead or Well Field Management Zone. The innermost protective zone
34 around a well or well field as defined by:
- 35 **{(1) arbitrary radius from the wellfield, or**
- 36 **(2) geologic boundaries, such as the recharge area, the unconfined area, etc.,**
37 **or**
- 38 **(3) a drawdown contour, such as the one-foot drawdown contour, or**

1 (4) a travel time contour, such as the 180 day travel time contour or 5 year
2 travel time contour, or

3 (5) any other method as designed by your local program.}

4 [The specific numbers listed above are for example purposes only.
5 Determination of the appropriate management zones for your local program
6 should be developed in conjunction with your Technical Advisory Committee,
7 as discussed in “A Model Approach to Aquifer and Wellhead Protection in
8 Florida.”]

9 29. Private Water System. A water system that provides piped potable water for human
10 consumption and other domestic purposes to no more than 4 family units.

11 30. Public Supply Well. A well that is connected to a system that provides piped water
12 to the public for human consumption, assuming it has at least fifteen service
13 connections or regularly serves at least twenty-five individuals daily at least 60 days
14 out of the year.

15 31. Recharge Area. Any area which contributes significant quantities of water to the
16 underlying aquifer system either by the downward percolation of water through
17 permeable geologic units or by the more direct introduction of water into the aquifer
18 through localized karst features or sinkholes.

19 32. Regulated Business. Any publicly or privately-owned operation that produces, uses,
20 stores, or disposes of a Regulated Substance, unless specifically exempted.

21 33. Regulated Substances. Any substance, hazardous or not, which is regulated under
22 this Ordinance as described in Section 5.2.1, which, due to its chemical
23 characteristics and behavior, may cause ground water contamination.

24 34. Responsible Party. Person or persons that through their actions have caused or are
25 suspected to have caused a discharge of a Regulated Substance.

26 35. Secondary Containment. Physical structures such as curbing, trays, double-walled
27 tanks, spill pallets, or other structural controls used to prevent the release of a spill
28 of Regulated Substances to the environment. Physical containment systems should
29 be capable of containing 110 percent of the volume of the largest container or
30 storage system within the containment area.

31 36. Secondary Wellhead or Well Field Management Zone. The protective zone
32 surrounding the Primary Wellhead or Well Field Management Zone and extending
33 outward to a distance defined by:

34 {(1) arbitrary radius from the well or wellfield, or

35 (2) geologic boundaries defined elsewhere in the ordinance, such as the
36 recharge area, the unconfined area, etc., or

37 (3) a drawdown contour, or

38 (4) a travel time contour, such as the 365 day travel time contour or 10 year
39 travel time contour, or

1 **(5) other method as designed by your local program.**

2 **[The specific numbers listed above are for example purposes only. Additional**
3 **zones may also be defined, i.e., tertiary zone. Determination of the appropriate**
4 **management zones for your local program should be developed in conjunction**
5 **with your Technical Advisory Committee, as discussed in “A Model Approach**
6 **to Aquifer and Wellhead Protection in Florida.”]**

- 7 37. Sinkhole. A closed depression in the land surface formed by solution of the
8 underlying limestone.
- 9 38. Spill. [See definition of Discharge.]
- 10 39. Standard Industrial Classification (SIC). The federal classification system that is
11 used to categorize the entire field of economic activities (both private sector and
12 public sector) throughout the national economy either at a 2-digit, 3-digit, or 4-digit
13 level of detail.
- 14 40. Storage System. Any tank, container, drum, or storage component including all
15 integral piping or pumping equipment used or designed to be used for the storage of
16 a Regulated Substance.
- 17 41. Surface Water. Water that occurs at the surface of the earth, including lakes, ponds,
18 rivers, streams, drainage ditches, and percolation ponds.
- 19 42. Time of Travel. The time required for ground water to move from a specific point
20 to a well. This is typically determined by analytical or numerical modeling.
- 21 43. Unconfined Aquifer. An aquifer which has a freely fluctuating water table as its
22 upper boundary.
- 23 44. Well. Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or
24 otherwise constructed for conveying ground water to the surface, monitoring ground
25 water levels or other characteristics, providing cathodic protection, or providing a
26 method of injecting water into the aquifer system from above the earth's surface.
- 27 45. Wellhead Protection Area (WHPA). A zone or zones surrounding a well or group
28 of wells which has (have) been delineated as an area where special protective
29 measures will be implemented to protect the quality of water contributing to the
30 well(s).
- 31 46. Zone of Contribution. The area above and below the earth's surface which
32 contributes ground water to a given well.
- 33 47. Zone of Influence. The area surrounding a pumping well within which the
34 potentiometric surface has been drawn down by the action of the well.
- 35

1 **Section 5 Identification of Potential Sources**

2
3 **Section 5.1 {Registration or Permitting} of Facilities**

4 **[This section assumes that your program will include a facility inspection or**
5 **tracking component.]**

- 6 1. Any business or agency that, at any time, manufactures, stores, or uses Regulated
7 Substances listed in Section 5.2 in quantities greater than **{5 gallons if liquid or**
8 **greater than 50 pounds if solid, or suitable criteria for your area}**, shall be
9 required to register on appropriate forms within 120 days of the effective date of this
10 ordinance. **[You must decide whether to impose a fee for this**
11 **registration/permitting function. Leon County currently charges no fee.]**
- 12 2. Any business or agency currently being inspected under Chapter 17-761 or Chapter
13 17-762, Florida Administrative Code (F.A.C.) Storage Tank Compliance Verification
14 Program or the **{Your City/County}** Small Quantity Generator Program shall be
15 registered by a transfer of existing records and will not be required to complete the
16 Aquifer/Wellhead Protection Registration Form unless the information obtained in
17 the records transfer is incomplete. In such cases the registration form will be sent for
18 completion. **[This paragraph seeks to avoid burdening facilities which are**
19 **already permitted or otherwise registered.]**
- 20 3. The **{Aquifer/Wellhead Protection Coordinator or Wellhead Protection**
21 **Program Manager, etc.}** shall maintain a list of Regulated Businesses with their
22 associated 4 digit Standard Industrial Classification (SIC) Code. This list will be
23 made available upon request and will be on file with the Business/Occupational
24 License Department of the **{Your City/County}**.

25
26 **Section 5.2 Regulated Substances**

- 27 1. Regulated Substances, including degradation and interaction products, shall include
28 the following:
- 29 A. Substances, including degradation and interaction products, which because of
30 concentration, physical/chemical characteristics (including ignitability,
31 corrosivity, reactivity and toxicity), radioactivity, mutagenicity,
32 bioaccumulative effect, or persistence in nature, may cause or significantly
33 contribute to the degradation of ground water resources; OR
- 34 B. Those substances set forth in the lists, as amended from time to time, entitled:
35 **{(1) Lists of Hazardous Waste (40 CFR Part 261, Subpart D),**
36 **(2) Hazardous Constituents-Appendix VIII, (40 CFR Part 261),**

1 **(3) EPA Designation Reportable Quantities and Notification**
2 **Requirements for Hazardous Substances Under CERCLA (40 CFR**
3 **302.4),**

4 **(4) Florida Substances List (Chapter 38F-41, F.A.C.),**

5 **(5) Superfund Amendments and Reauthorization Act (SARA) of 1986,**
6 **Section 302 Extremely Hazardous Substances List (40 C.F.R. 300, App.**
7 **A and B)); OR**

8 **[There are many additional lists which may be cited; however a**
9 **comprehensive list of lists doesn't contribute much to the overall effect of**
10 **the ordinance, and provision 5.2.1.A essentially extends the Regulated**
11 **Substance definition to cover all the situations within the**
12 **Tallahassee/Leon County Program's experience.]**

13 C. Substances which have known hazardous properties as listed in 40 CFR 302
14 by the EPA; OR

15 D. Substances that are restricted-use pesticides according to Chapter 487,
16 Florida Statutes or which are listed in Chapters 5E-2 and 5E-9 F.A.C.; OR

17 E. Water which contains total dissolved solids (TDS) in excess of 10,000 parts
18 per million (ppm) or chlorides in excess of 500 ppm; OR

19 F. The generic items listed below and by-products, reaction products, or waste
20 products generated from the use, handling, storage, or production of these
21 items.

22 Acid and basic cleaning solutions

23 Antifreeze and coolants, new or used

24 Arsenic and arsenic compounds

25 Batteries

26 Brake and transmission fluid

27 Oils/Greases/Lubricants

28 Brine solution

29 Casting and foundry chemicals

30 Caulking agents and sealants

31 Cleaning solvents

32 Cutting fluids

33 Degreasing solvents

34 Disinfectants

35 Electroplating solutions

36 Explosives

37 Fertilizers

38 Food processing wastes

- 1 Fuels and additives
- 2 Glues, adhesives, and resins
- 3 Greases
- 4 Hydraulic fluid
- 5 Industrial and commercial janitorial supplies
- 6 Industrial sludges and stillbottoms
- 7 Inks, printing and photocopying chemical
- 8 Laboratory chemicals
- 9 Metal finishing solutions
- 10 Oils (petroleum base)
- 11 Paints, primers, thinners, dyes, stains, wood preservatives, paint solvents and
- 12 paint removing compounds
- 13 Pesticides and herbicides
- 14 Plastic resins and catalysts
- 15 Plasticizers
- 16 Photo development chemicals
- 17 Pool chemicals
- 18 Roofing chemicals and sealers
- 19 Solders and fluxes
- 20 Tanning industry chemicals
- 21 Transformer and capacitor oils/fluids
- 22 Used batteries

23 **[Item F duplicates many of the items in the previously cited lists; however, it is**
 24 **much more comprehensible to most readers. If there are specific industrial**
 25 **chemicals which are unique to your area, or which pose an unusual hazard to**
 26 **ground water quality, you may want to explicitly list them.]**

27

28 **Section 5.3 Exemptions From Registration**

- 29 1. Emergency Services. Fire, Police, Emergency Medical Services and County
 30 Emergency Management Center facilities are exempt from the registration
 31 provisions of this Ordinance.
- 32 2. Continuous Transit. The transportation of any Regulated Substance shall be exempt
 33 from the registration provisions of this Ordinance provided that the transporting
 34 motor vehicle is in continuous transit and meets all applicable State and Federal
 35 requirements.
- 36 3. Vehicular and Lawn Maintenance Fuels & Lubricants. The use of any Regulated
 37 Substance in a vehicle or lawn maintenance equipment as a fuel or lubricant shall be
 38 exempt from registration.

- 1 4. Retail/Wholesale Activities. Retail/Wholesale establishments that store or handle
2 Regulated Substances for resale in their original unopened containers shall be
3 exempt from the registration requirements provided that no individual container of
4 Regulated Substances exceeds **{five (5) gallons if liquid or fifty (50) pounds, if**
5 **solid or other local program-specific criteria}**.
- 6 5. Office Use. Office uses, including the use of Regulated Substances for the
7 maintenance and cleaning of office buildings, shall be exempt from the registration
8 requirements of this Ordinance.
- 9 6. Residential Use. The use of Regulated Substances for cleaning, maintaining, pest
10 control, or any other use by households, that are not a Regulated Business, shall be
11 exempt from the registration requirements of this Ordinance. Farming operations
12 which are greater than 3 acres, and animal feedlots are not exempted under this
13 section.
- 14 7. Construction Activities. The activities of constructing, repairing or improving any
15 facility shall be exempt from the registration provisions of this ordinance provided
16 that all contractors, subcontractors, laborers, materialmen and their employees,
17 when using, handling, storing, or producing Regulated Substances, use the
18 applicable Best Management Practices set forth in Section 6.4.
- 19 8. Special Exemptions. An affected person may request a special exemption from the
20 registration requirements of this ordinance. In order to obtain such an exemption,
21 such person must demonstrate by a preponderance of competent, substantial
22 evidence to the **{Aquifer/Wellhead Protection Coordinator}** that special or
23 unusual circumstances and adequate technology exist to isolate the facility or
24 activity from soils, ground water, or surface water.

25 **[In granting the Special Exemption, the Aquifer/Wellhead Protection**
26 **Coordinator may prescribe additional appropriate conditions that are**
27 **necessary to protect soils, ground water, or surface water.]**

28
29 **Section 5.4 Stormwater**

30 Stormwater Quality Treatment provisions are regulated through the applicable provisions
31 of **{Your City/County's Appropriate Environmental Management Ordinance}**.

32 **[This section assumes that your program is not going to directly regulate**
33 **stormwater discharge quality or stormwater infrastructure. Many of the same**
34 **material management practices and disposal issues can affect both surfacewater and**
35 **ground water, so it makes sense to integrate the two to some extent. In**
36 **Tallahassee/Leon County, for example, we have worked to share information**
37 **between our Aquifer/Wellhead Protection and County Stormwater Programs and**
38 **have even conducted some joint inspections, but creating one ordinance that fully**
39 **addresses both surfacewater and ground water would be an ambitious task.]**

1 **Section 6 Aquifer Protection Preventative Measures**

2
3 **Section 6.1 Facility Inspections**

- 4 1. The Aquifer/Wellhead Protection Coordinator and designated inspectors are hereby
5 authorized and empowered to make inspections at normal operational hours of all
6 facilities or activities regulated by this Ordinance including non-residential
7 buildings, structures and land in {Your City/County} in order to determine if a
8 discharge has occurred.
- 9 2. Inspections shall be conducted upon 24 hour notification except that inspection may
10 be conducted without notice provided there is sufficient evidence that a discharge
11 has occurred or is occurring.
- 12 3. In the event a person who has common authority over a building, structure, or land
13 does not permit an inspection, the inspection may be rescheduled and shall be
14 noticed by United States certified mail. Failure of such person to thereafter permit
15 an inspection will be sufficient grounds and probable cause for a court of competent
16 jurisdiction to issue an administrative warrant for the purpose of inspecting,
17 surveying, or examining said premises.
- 18 4. In the event a building, structure or land appear to be vacant or abandoned, and the
19 property owner cannot be readily contacted in order to obtain consent for an
20 inspection, the Aquifer/Wellhead Protection Coordinator or Inspector may enter
21 into or upon any open or unsecured portion of the premises in order to conduct an
22 inspection.
- 23 5. The Aquifer/Wellhead Protection Coordinator and Inspectors shall have available
24 and upon request present official identification when making inspections.
- 25 6. It shall be the duty of all City or County law enforcement officers to assist in
26 making inspections when such assistance is requested by the Aquifer/Wellhead
27 Protection Coordinator or Inspector.

28
29 **Section 6.2 Reporting of Discharges**

- 30 1. Any discharge of a Regulated Substance at the reporting thresholds established in
31 this Ordinance in {Your City/County} shall be reported immediately by the
32 facility owner, operator, or responsible party to the {Your City/County}
33 Aquifer/Wellhead Protection Coordinator. Such notification shall in no way
34 alleviate the owner, operator, or responsible party from other local, state, and
35 federal reporting obligations as required by law. The Aquifer/Wellhead Protection
36 Coordinator shall inform the Fire Department of the substance discharged, the
37 amount, location, duration of discharge and the potential hazard to ground water if
38 known. **[This can also work in the reverse order. In Tallahassee/Leon County,**
39 **the Fire Department is typically the first responder to petroleum spills**
40 **resulting from vehicular accidents. The Aquifer/Wellhead Protection**

1 **Coordinator, or designee, is then notified by dispatchers and this is considered**
2 **to constitute adequate notification.]**

3 2. Threshold Reporting Quantities

4 A. The following substances and chemicals shall be reported if discharged in an
5 amount equal to or greater than one (1) gallon.

6 1) Chlorinated Hydrocarbon Solvents including but not limited to:

7 a. Carbon Tetrachloride

8 b. Tetrachloroethylene

9 c. Trichloroethylene

10 d. 1,1,1,-Trichloroethane

11 e. 1,2-Dichloroethane

12 f. Methylene Chloride

13 B. The following substances and chemicals shall be reported immediately if
14 discharged in an amount equal to or greater than five (5) gallons:

15 1) Pesticides (Specifically Generic Names)

16 a. Fenuron

17 b. Terbacil

18 c. Bromacil

19 2) Phenolic Compounds

20 C. Petroleum or Petroleum Products including Petroleum Based Solvents shall be
21 reported if discharged in an amount equal to or greater than twenty five (25)
22 gallons.

23 D. All other Regulated Substances shall be reported immediately if discharged in
24 quantities greater than or equal to twenty-five (25) gallons of liquid or fifty
25 (50) pounds if solid.

26
27 **Section 6.3 Reporting of Sinkholes**

28 The Aquifer/Wellhead Protection Coordinator shall establish a contact point for the
29 reporting of sinkholes. Sinkholes shall be reported prior to backfilling. Backfilling
30 material shall be uncontaminated and of lower permeability than the surrounding soil.

31
32 **Section 6.4 Best Management Practices to Prevent Discharges of Regulated**
33 **Substances**

34 1. Best Management Practices (BMPs) shall be developed and made available to
35 potential dischargers.

1 A. Construction

2 **[In order to be effective, this section of the ordinance should be developed by**
3 **working together with the development community to identify significant**
4 **concerns and to develop reasonable standards. Although Section 5.3.7 exempts**
5 **construction activity from registration requirements, it does not provide**
6 **exemption from prohibiting discharges, reporting spills exceeding the**
7 **established thresholds, etc.]**

- 8 1) The property owner shall be responsible for assuring that each
9 contractor or subcontractor evaluates each site before construction is
10 initiated to determine if any site conditions may pose particular
11 problems for the handling of any regulated substances (e.g., the
12 handling of regulated substances proximal to water bodies or wetlands).
- 13 2) Regulated Substances stored on the construction site during the period
14 of construction shall be stored in a manner which will minimize the risk
15 of release to the environment.
- 16 3) Each contractor shall be familiar with the manufacturer's material safety
17 data sheet supplied with each material containing a regulated substance
18 and shall be familiar with the procedures required to contain and clean
19 up any releases of the regulated substance.
- 20 4) Upon completion of construction, all unused or waste regulated
21 substances and containment systems shall be removed from the
22 construction site by the contractor and shall be disposed of in a proper
23 manner as prescribed by law.
- 24 5) Contractors shall be responsible for taking measures for preventing
25 vandalism which may cause releases of regulated substances from
26 containers or vehicles on the construction site.
- 27 6) If a discharge occurs, it shall be the responsibility of the **{general**
28 **contractor or the property owner}** to follow the provisions of this
29 Ordinance. It shall be considered a violation of this Ordinance if a
30 discharge of Regulated Substances occurs and cleanup actions are not
31 performed. **{Your City/County}** reserves the right to deny the issuance
32 of a Certificate of Occupancy until all provisions of this Ordinance have
33 been met.

34 B. General Business Practices/Containment

- 35 1) All regulated businesses shall inspect weekly containers holding a
36 Regulated Substance for leaks. Visual inspection is satisfactory
37 provided that the location of the containers can be inspected to a degree
38 which reasonably assures that breakage or leakage can be detected by
39 such inspection.

- 1 2) New Construction Containment of Regulated Substances. Leak-proof
2 trays, floor curbing or other secondary containment systems shall be
3 installed under container of liquid Regulated Substance. The secondary
4 containment shall be of adequate capacity to handle all spills, leaks,
5 overflows, and precipitation until appropriate action can be taken. The
6 specific design and selection of materials shall be appropriate to
7 preclude any Regulated Substance loss to the environment.
8 Containment systems shall be operated so that the intrusion of
9 precipitation is effectively managed. These requirements shall apply to
10 all production and handling areas, storage areas, loading and off-loading
11 areas, and aboveground and underground storage tank areas.
- 12 3) Retrofitting. All property owners who store, handle, use, or produce a
13 Regulated Substance shall retrofit (upgrade) to new construction
14 containment standards whenever building improvements are planned or
15 by **{date}**. Storage Facilities regulated by 17-761 or 17-762, F.A.C.
16 must meet the required retrofitting schedule. All new construction
17 provisions must be met and reviewed either during building plan review
18 or by the inspection as required by this Ordinance.

19

20 **Section 6.5 Investigation, Monitoring and Cleanup of Suspected or Known**
21 **Discharges**

- 22 1. If, during inspection by **{Your City/County}** personnel, a facility is found to have
23 visible signs of contamination or if a reportable discharge has occurred that may
24 affect soil, surface water, or ground water, the facility owner may be required to
25 conduct an investigation which may include, but not be limited to, soil borings, soil
26 or ground water sampling and analysis, or monitoring well installation pursuant to
27 the provisions of this section.
- 28 2. Applicable Rules and Guidance
- 29 A. Chapter 17-770, Florida Administrative Code (F.A.C.) establishes the
30 procedures that shall be followed for Petroleum and Petroleum Product
31 contamination.
- 32 B. Chapter 17-761 and 17-762, F.A.C. establishes the procedures that shall be
33 followed for closure of storage tanks.
- 34 C. Established DEP enforcement cases shall follow DEP’s “Model Orders for
35 Corrective Action” or the procedures established by consent order.
- 36 D. Sampling procedures and laboratory analysis shall meet the requirements of
37 Section 403.0625, Florida Statutes.
- 38 3. All facilities with discharges of Regulated Substances shall undertake steps to
39 minimize the possibility of ground water contamination.

1 **Section 6.6 Injection Wells/Heat Exchange Wells/Drainage Wells**

2 1. Injection Wells. Any well used for the purpose of injecting Regulated Substances to
3 ground water is hereby prohibited.

4 2. Heat Exchange Wells

5 A. Any well used for the purpose of withdrawal and subsequent reinjection to the
6 Floridan Aquifer shall not alter existing chemical, radiological, or biological
7 water quality.

8 B. All reinjected water from Heat Exchange Wells shall meet all primary,
9 secondary and Chapter 17-3, F.A.C. drinking water standards.

10 C. The owner of Heat Exchange Wells operated in **{Your City/County}** shall not
11 discharge refrigerants to ground water.

12 D. All newly installed Heat Exchange Wells shall be designed to prevent air
13 entrainment in the reinjection process. All other existing Heat Exchange
14 Wells must be retrofitted in order to prevent air entrainment by January 1995.

15 E. All owners of Heat Exchange Wells shall install a sampling tap on the
16 withdrawal and the reinjection well that will be suitable for sample collection
17 for both wells within one year of the effective date of this Ordinance.

18 F. Within one year of the effective date of this Ordinance the Heat Exchange
19 Well system operator shall be required to have a flow-measuring device and
20 method for totalizing annual flow in the withdrawal and reinjection wells. The
21 flow information must be provided to the Aquifer/Wellhead Protection
22 Coordinator in addition to the sampling results on an annual basis.

23 G. All wells used for withdrawal and subsequent reinjection for the Heat
24 Exchange process that pump greater than 100,000 gallons per day shall be
25 required to sample the reinjection water annually for water quality standards
26 as of the effective date of this Ordinance and annually thereafter. The results
27 shall be provided annually to the Aquifer/Wellhead Protection Coordinator.

28 H. Corrective Action

29 1) In the event of a discharge to the reinjection system of any regulated
30 substance, or if the reinjection water does not meet all primary drinking
31 water quality standards, the well owner will be required to remediate the
32 reinjection water and the affected withdrawal water to all primary
33 drinking water standards at their own expense.

34 2) Remediation must be conducted using sound hydrogeologic and
35 engineering principles and must continue until the withdrawal and
36 reinjection water meets all primary drinking water quality standards.

37 3) The responsible party for all remediation projects is required to keep the
38 Aquifer/Wellhead Protection Coordinator informed of their progress,
39 any problems or changes in status of the remediation process. The

1 Aquifer/Wellhead Protection Coordinator reserves the right to conduct
2 split water sampling to verify any and all results.

3 3. Drainage Wells

- 4 A. As of the effective date of this Ordinance, the installation of any well for the
5 purpose of surface drainage is prohibited.
- 6 B. All owners of property that contain drainage wells must properly abandon all
7 such wells one year from the effective date of the Ordinance. The appropriate
8 abandonment permit must be obtained from FDEP and the **{Northwest
9 Florida Water Management District}**.
- 10 C. Any drainage well that is identified in a new development project study must
11 be properly abandoned prior to commencement of any construction.

12
13 **Section 6.7 Well Abandonment and Geotechnical Borings**

14 1. Well Abandonment

- 15 A. Any well that is not being used for removing ground water from an aquifer;
16 recharge; determining quantity, quality, level or movement of ground water;
17 and removing or exchanging heat shall be properly abandoned at the property
18 owner's expense following the guidelines established by the **{Northwest
19 Florida Water Management District}** within one year of the effective date
20 of this Ordinance.
- 21 B. In instances that can be determined by the Aquifer/Wellhead Protection
22 Coordinator, the well may not need to be abandoned but the evaluation and
23 determination of the necessity of abandonment shall be coordinated through
24 the **{Northwest Florida Water Management District}**.

25 2. Geotechnical Borings

- 26 A. All borings deeper than 25 feet shall be neat cement grouted to the surface to
27 prevent downward migration of surface and subsurface contaminants along
28 the borehole to the Floridan Aquifer.
- 29 B. All borings less than 25 feet deep shall be backfilled with the original drilled
30 soil to the surface to prevent the creation of a sump. Where the boring is
31 advanced through asphalt or concrete it shall be patched at the surface with a
32 similar impervious material.
- 33 C. If contamination is detected in any geotechnical boring, the contaminated soil
34 shall not be used as replacement material and the horizontal and vertical
35 extent of the contamination must be assessed and reported following the
36 applicable provisions of Section 5.5 of this Ordinance.

1 **Section 6.8 Septic Tanks/Drain Fields**

- 2 1. The discharge of any Regulated Substance to a septic system shall be considered a
3 violation of this ordinance.
- 4 2. Any Regulated Business that is found to have discharged Regulated Substances to a
5 septic system shall be required within 30 days to connect to the sanitary sewer
6 system if such system is available and within 1000 feet of the property.
- 7 3. Upon testing, if a Regulated Substance is identified in the septic tank or drain field
8 and may cause violation of ground water standards, the Regulated Business will be
9 required to conduct the investigation required by Section 5.5 of this Ordinance.
- 10 4. As of the effective date of this Ordinance, the following types of Regulated
11 Businesses may not be constructed with septic systems except as allowed by State
12 Law and Local Ordinances for domestic purposes:

13 **[This provision is intended to prevent discharge of Regulated Substances to a**
14 **drainfield. Depending on the geographic extent to which it is applied, this item**
15 **could be a serious restriction. This prohibitive language should be reviewed**
16 **carefully for potential impacts to your local business community and land**
17 **owners before including it in your ordinance. This language was in an early**
18 **draft of the Leon County Aquifer/Wellhead Protection Ordinance, but was**
19 **removed during the review process.]**

- 20 A. Agricultural Chemical Warehouse and Distribution Centers
- 21 B. Asphalt Batching Plants/Pavers/Asphalt Products
- 22 C. Automobile Repair Facilities Using or Dispensing Fuels, Greases, Oils or Solvents
- 23 D. Automobile Paint and Body Shops
- 24 E. Boat Sales/Repair Facilities
- 25 F. Bus Lines/Repair Shops
- 26 G. Cabinet Makers and Distributors
- 27 H. Chemical Manufacturing Plants
- 28 I. Chemical Warehousing and Distribution Facilities
- 29 J. Cleaning Supplies Manufacturing/Distribution Facilities
- 30 K. Commercial Laundries
- 31 L. Contamination Control Companies/Waste Management Service Companies
- 32 M. Dry Cleaning Establishments
- 33 N. Electrical and Electronic Manufacturing Facilities
- 34 O. Electroplaters, Circuit Board Manufacturers or Metal Finishers

- 1 P. Small Engine Repair Facilities
- 2 Q. Equipment Rental Operations
- 3 R. Fiberglass Formers or Acrylic Manufacturers
- 4 S. Funeral Homes
- 5 T. Furniture Manufacturers and Refinishers
- 6 U. Golf Courses/Country Clubs
- 7 V. Industrial Facilities
- 8 W. Laboratories -- Photo, Chemical, Industrial Environmental, Dental-X-Ray, and
- 9 Medical
- 10 X. Machine Shops
- 11 Y. Manufacturers Using Acids, Caustics or Solvents
- 12 Z. Medical Facilities
- 13 AA. Paint Manufacturers and Paint Stores
- 14 BB. Painting Shops
- 15 CC. Pest Control Operations
- 16 DD. Petroleum Products Production, Storage and Bulk Distribution Facilities
- 17 EE. Printers, Blue Printers and T-Shirt Screen Printers
- 18 FF. Service Stations and Fuel Depots
- 19 GG. Sign Companies
- 20 HH. Tractor Sales and Service
- 21 II. Transformer Use and Storage Areas
- 22 JJ. Trucking/Transport Companies
- 23 KK. Wood Preserving/Treatment Facilities
- 24 5. Floor drains, grease traps and oil water separators shall be constructed to prevent
- 25 infiltration of Regulated Substances to soil, ground water, or surface water.

26

27 **Section 6.9 Inventory/Proof of Proper Disposal/Recycling of Regulated Substances**

- 28 1. Inventory and Proof of Proper Disposal
- 29 A. Inventory/Manifest documentation required by the Resource Conservation and
- 30 Recovery Act (RCRA)-40 CFR, Part 262 Subpart B shall be required to be
- 31 kept by each facility that is regulated by RCRA for all substances that are used

- 1 or considered waste products to ensure that all substances are handled in an
2 environmentally acceptable manner for each Regulated Substance.
- 3 B. All regulated businesses that are not regulated by RCRA shall be required to
4 keep an inventory of the type(s) of Regulated Substances that are used or
5 considered waste products to ensure that all substances are handled in an
6 environmentally acceptable manner. The method of record keeping may be of
7 their own choosing, however, such records shall allow inspectors to determine
8 if used or waste products are being disposed of in compliance with Federal,
9 State and Local laws.
- 10 C. Each Regulated Business shall provide documentation such as a contract or
11 agreement with a Certified Waste Hauler or documentation that shows that
12 used or waste by-products are being disposed of using environmentally
13 acceptable methods or are being recycled.
- 14 D. Disposal records shall be made available at normal operational hours for the
15 purpose of inspection.

16 2. Recycling Regulated Substances

17 It shall be required that Regulated Substances should be recycled or reused if
18 economically and technically feasible.

19
20 **Section 6.10 Facility Closure Requirements**

21 Any business that has stored, used, or produced a Regulated Substance and that proposes
22 to abandon, replace or retrofit any aspect of the business operation, or change the nature
23 of the business or land use shall be required to obtain a closure permit and follow the
24 provisions of this section.

25 **[This provision would be useful in identifying and correcting problems created by a**
26 **Regulated Business leaving waste or contaminated soil behind when the business**
27 **moves or goes out of business. This provision was in an early draft of the Leon**
28 **County Aquifer/Wellhead Protection Ordinance, but was removed during the**
29 **review process. Close coordination with your local permitting authorities would be**
30 **required to implement this provision.]**

31 1. Closure Permit

- 32 A. A Regulated Business must complete a closure permit before the property
33 owner or operator of any new business at the facility, including those not
34 regulated by this Ordinance, will be issued an Occupational License.
- 35 B. The Closure Permit Form can be obtained from the Aquifer/Wellhead
36 Protection Coordinator.
- 37 C. The **{City/County Commission}** shall be authorized to establish by
38 Resolution a schedule of fees for the closure permit.

- 1 D. The Closure Permit must be secured at least fifteen (15) working days prior to
2 the commencement of closure activities. The Aquifer/Wellhead Protection
3 Coordinator or designated person shall have ten (10) working days to review
4 and approve or request additional information to approve the permit. The
5 permit shall be approved, if complete, within five (5) working days upon
6 receipt of any requested additional information.
- 7 E. If the Regulated Substance is or has the possibility of being flammable or
8 explosive, the **{Your City/County}** Fire Department shall be notified by the
9 permittee at least five (5) working days before the closure procedures are
10 implemented in order to establish requirements necessary to protect health,
11 safety, and welfare.
- 12 F. In addition to the completed Closure Permit Application Form, the following
13 information shall be provided:
- 14 1) A schedule of events to complete the closure to facilitate inspections
15 and coordination with other agencies.
- 16 2) The proposed disposition of all Regulated Substances and contaminated
17 containers.
- 18 3) Certification by the property owner that any cleanup of discovered
19 contamination will follow technically acceptable methods that meet all
20 Local, State and Federal rules and regulations as specified by law which
21 shall preclude leaching of unacceptable levels or residual Regulated
22 Substances into the Floridan Aquifer. Certification may be waived if
23 the applicant provides evidence that all of the following conditions are
24 met concerning the subject land use or activity:
- 25 a. The entire operation is maintained inside the building(s) of the
26 facility;
- 27 b. The standard method used for managing hazardous or industrial
28 waste is not by septic tank, sewer mains, or floor drains;
- 29 c. There is no evidence of spills;
- 30 d. There are no outstanding or past notices of a violation from any
31 regulatory agency concerned with hazardous, industrial or
32 domestic waste or materials; and
- 33 e. There is no evidence of past contamination in the public supply
34 well(s), potable water supply well(s), other public water system,
35 private water system or site specific monitoring wells.

36 2. Indemnification

37 A signed agreement must be provided with the Permit Application Form to
38 indemnify and hold the **{Your City/County}** harmless from any and all claims,
39 liabilities, causes of action, or damages arising out of issuance of the permit. The
40 **{Your City/County}** shall provide reasonable notice to the permittee of any claims.

1 3. Contamination

2 If contamination is found during site closure, the procedures described in Section
3 6.5 of this Ordinance shall be followed.

4 4. Closure Inspection

5 A. A closure inspection shall be performed by the **{Your City/County}** to ensure
6 compliance with the provisions of this Ordinance.

7 B. If closure takes place at a Petroleum Storage facility, the provisions of the
8 closure requirements of Chapter 17-761 or 17-762,. F.A.C. shall be followed
9 and coordination for inspection with the **{Your City/County}** Storage Tank
10 Section will be required.

11 C. If vapors are present that may potentially endanger health, safety, and welfare,
12 the facility owner or contractor must contact the Fire Department.

13 D. All other inspections will be performed by the Aquifer/Wellhead Protection
14 Coordinator or designee. The inspection shall be conducted at a time during
15 closure that provides the best possible access to determine if any potential for
16 ground water, surface water, or soil contamination has occurred.

17 E. A written acknowledgment of the results of the inspection will be sent to the
18 property owner within five (5) working days of completion of closure
19 activities if the site is not contaminated.

20

21 **Section 7 Wellhead Protection Area Delineation and Preventative Measures**

22 **[If you decide to implement wellhead protection areas and enhanced protection**
23 **within those areas, there are many issues you must consider. Provisions which are**
24 **highly restrictive may be difficult to implement and could lead to legal challenges.**
25 **Your delineated areas must also be based on technically defensible methods, and**
26 **they must make sense for the conditions found in your community. If protection of**
27 **resources within your entire jurisdiction through the provisions in Section 6 is**
28 **beyond your allocatable resources, you may phase your program in by**
29 **implementing Section 6 provisions only within the delineated wellhead protection**
30 **areas until such time as you acquire additional staff resources.]**

31

32 **Section 7.1 Establishment of Primary and Secondary Wellhead Protection Areas**

33

34 Wellhead Protection Areas shall be delineated for all Public Supply Wells within **{Your**
35 **City/County}**.

36 1. Primary Wellhead Protection Areas shall include all land between the wellhead and
37 **{the 5 year time of travel boundary}**. **[An appropriate time of travel is highly**
38 **dependent on your local hydrogeology and your community's threshold of**
39 **acceptable risk.]**

- 1 2. Secondary Wellhead Protection Areas shall include all land between the Primary
2 Wellhead Protection Area and the **{10 year time of travel boundary}**.

3
4 **Section 7.2 Methodology for Delineation of Wellhead Protection Areas**

5
6 Delineation of WHPAs shall be based on accepted hydrogeologic methods, which may
7 include, but not be limited to, numerical modeling, analytical modeling, or hydrogeologic
8 mapping.

9 **[Resources are available within FDEP and the Water Management Districts to assist**
10 **you in determining which delineation methodologies are appropriate to your area.]**

11
12 **Section 7.3 Restrictions within Wellhead Protection Areas**

13 **[The lists below are included only to provide an example of the general types of**
14 **activities that may be regulated within WHPAs. Much of the language is taken**
15 **from provisions discussed during the development of FDEP Rule 62-521. Like the**
16 **other various lists presented in this Model Ordinance, it should be tailored to meet**
17 **your local needs. Appropriate restrictions will be dependent on your local**
18 **hydrogeologic conditions -- it is unlikely that any local program should need to**
19 **adopt all these prohibitions. The larger your Primary Wellhead Protection Area is,**
20 **the more potential impact these restrictions will have. The impact of any adopted**
21 **prohibitions on land owners and facility operators should be carefully considered.**

- 22 1. The following restrictions shall apply within Primary Wellhead Protection Areas.
- 23 A. New domestic wastewater treatment facilities shall be provided with Class I
24 reliability as described in Chapter 62-600, F.A.C., and flow equalization.
25 Wastewater ponds, basins, and similar facilities shall be lined or sealed to
26 prevent measurable seepage. Unlined reclaimed water storage systems are
27 allowed for reuse projects permitted under Part III of Chapter 62-610, F.A.C.
 - 28 B. New reuse and land application projects shall be prohibited except for new
29 projects permitted under Part III of Chapter 62-610, F.A.C.
 - 30 C. New animal feedlots shall be prohibited.
 - 31 D. New commercial dairy operations shall be prohibited.
 - 32 E. New discharges to ground water of industrial wastewater, as regulated under
33 Chapters 62-660, 62-670, 62-671, 62-672, and 62-673, F.A.C., shall be
34 prohibited, except for non-contact cooling water discharges (without additives).
 - 35 F. New phosphogypsum stacks and lateral expansions of phosphogypsum stack
36 systems, as regulated under Chapter 62-673, F.A.C., are prohibited.
 - 37 G. New Class I and Class II underground injection control wells, as regulated in
38 Chapter 62-28, F.A.C., are prohibited.

- 1 H. New Class V underground injection control wells are prohibited except for
2 aquifer storage and recovery system wells, where the injected fluid meets the
3 applicable ground water quality standards in Rule 62-520.420, F.A.C.
- 4 I. New landfills regulated under Chapter 62-701, F.A.C., are prohibited.
- 5 J. New generators of hazardous waste, as regulated under Chapter 62-730, F.A.C.,
6 shall comply with the secondary containment requirements of 40 CFR Part 264
7 Subpart I (1994), hereby incorporated by reference.
- 8 K. New hazardous waste, treatment, storage, disposal, and transfer facilities
9 requiring permits under Chapter 62-730, F.A.C., are prohibited.
- 10 L. New aboveground and underground tankage of hazardous wastes regulated
11 under Chapter 62-730, F.A.C., are prohibited.
- 12 M. New underground storage tanks regulated under 62-761, F.A.C., shall not be
13 installed after the effective date of this ordinance. Replacement of an existing
14 underground storage tank of the same or less capacity is exempt from this
15 provision, provided that the replacement tank system is installed with secondary
16 containment as required in Chapter 62-761, F.A.C.
- 17 N. New aboveground storage tanks regulated under 62-761, F.A.C., shall not be
18 installed after the effective date of this ordinance. Replacement of an existing
19 underground storage tank of the same or less capacity is exempt from this
20 provision, provided that the replacement tank system is installed with secondary
21 containment as required in Chapter 62-761, F.A.C.
- 22 O. New fixed pesticide mixing/loading areas shall be constructed and operated in
23 accordance with the guidance contained in “DEP Minimum Construction and
24 Operation Standards for Chemical Mixing Centers used for Pesticide Mixing
25 and Loading,” November 1994, hereby incorporated by reference.
- 26 P. Existing fixed pesticide mixing/loading areas which do not meet the
27 requirements in (O) above shall be retrofitted to meet those requirements by
28 {date}, or shall not be used for mixing/loading after {date}.

29 2. The following restrictions shall apply within Secondary Wellhead Protection Areas.
30 **[Select a subset of the restrictions applied within the Primary WHPA. In**
31 **addition, you may want to allow certain uses, but impose safeguards; for**
32 **example, allowing reuse and land application projects with the stipulation that**
33 **monitoring well water quality data will be provided to the Aquifer/Wellhead**
34 **Protection Coordinator and must comply with water quality standards as**
35 **established in 62-550, F.A.C. A reasonable list of secondary restrictions is**
36 **dependent on the time of travel chosen for your delineations and on the nature**
37 **of development within your area. To reiterate, caution should be used when**
38 **selecting the list of restrictions. An ordinance with overly restrictive measures**
39 **will be more difficult to adopt and implement. It is important not to prohibit**
40 **uses that do not pose a real risk to the wellheads. The TAC evaluation of**
41 **hydrogeologic and existing water quality data can be a guide in this process.]**

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Section 8 Regulated Business Review for Comprehensive Plan and Aquifer Protection Consistency

No review and approval shall be required for existing operations provided that no occupancy change occurs, the site is registered with the Aquifer/Wellhead Protection Program, and all requirements of this Ordinance are being met.

Section 9 Program Funding

- 1. Fees may be established by Resolution to provide a funding mechanism for the implementation of the inspection program.
- 2. Fees may be established by Resolution to provide a funding mechanism for the operation and implementation of future Aquifer Protection remediation.

Section 10 Remediation Activities

Remediation by the responsible party for discharges of regulated substances shall begin within {number of} days. The following cleanup criteria shall apply:

- 1. Any affected ground or surface water must be remediated to drinking water standards or background water quality.
- 2. Affected soils shall be remediated using best available technologies for the particular contaminant that has been released.
- 3. If any soil work is to be performed, all stormwater sedimentation erosion controls must be in place in accordance with all {Your City/County} Environmental Management Codes.

Section 11 Violations, Penalties, and Enforcement

- 1. Enforcement procedures pursuant to this ordinance shall commence only after the data evidencing the unpermitted discharge of a Regulated Substance has been forwarded to the appropriate Federal and/or State enforcement program. Enforcement procedures under this ordinance for unpermitted discharges shall begin after enforcement activities of Federal and State regulations have been exhausted.
 - A. Notice of Violation. When a violation of this Ordinance has occurred the Aquifer/Wellhead Protection Coordinator or his/her designee shall issue written notice to the person in violation, identifying the nature and location of the violation and specify that remedial action is necessary to bring the violation into compliance. The person in violation shall immediately, conditions permitting, commence remedial action and shall have such time as

1 may be specified in the notice, to complete the remedial actions required to
2 bring the activity into compliance with this Ordinance.

3 B. Failure to Comply After Notice of Violation. If the person in violation fails to
4 complete remedial action within the time allowed, the Aquifer/Wellhead
5 Protection Coordinator may levy a fine as established by Resolution or may
6 initiate other enforcement actions as authorized by law.

7 C. Immediate Corrective Actions. Whenever it is determined by the
8 Aquifer/Wellhead Protection Coordinator or his/her designee that a discharge
9 of Regulated Substances is resulting in imminent threat of contamination of
10 ground water or danger to life or property from the contamination of ground
11 water, the Aquifer/Wellhead Protection Coordinator may require immediate
12 corrective action. Initiation of any required clean-up activities shall
13 commence within 24 hours and shall be completed within a time specified by
14 the Aquifer/Wellhead Protection Coordinator. Failure to take such immediate
15 corrective action when notified of the need for such action shall constitute a
16 violation of this Ordinance. If immediate corrective measures are not taken
17 and there is danger or hardship to the public, the Aquifer/Wellhead Protection
18 Coordinator or his/her designee may enter upon lands, take corrective actions,
19 and place a lien on the real property of such person or persons to recover the
20 costs of the corrective measures.

21 D. Notification

22 1) Notice of Violation. A copy of notice of violation issued pursuant to
23 this Ordinance shall be served upon the affected persons by either
24 delivery or certified mail and shall be posted on the site. A notice of
25 violation may be directed to the person owning the land upon which the
26 violation has occurred or to any person who has committed the violation
27 or both. When immediate corrective actions are warranted under the
28 provisions of Section 11.1.C, reasonable effort shall be made to provide
29 notice as specified above, but when such notice cannot be immediately
30 accomplished, sufficient notice may be given by physically leaving a
31 copy of the notice or order at the address of the owner of the property.

32 2) Notice of Compliance. Upon satisfactory completion of corrective
33 action and remedial steps required by a notice of violation, the
34 Aquifer/Wellhead Protection Coordinator shall issue a notice of
35 compliance. The notice of compliance shall cancel the notice of
36 violation.

37 3) Lien. Any lien issued pursuant to this Ordinance and determined under
38 the authority of this Ordinance shall be imposed only after the owner of
39 the property upon which the lien is sought to be imposed has been given
40 notice and a reasonable opportunity to be heard. Such lien shall be
41 recorded with the Clerk of the Circuit Court and may be enforced under
42 the provisions of Chapter 125, Florida Statutes.

43 2. Penalties

- 1 A. General. Any person violating any provision of this Ordinance shall be
2 punished according to law or in accordance with **{Your City/County}**
3 enforcement procedures. Each day any violation continues shall be considered
4 as a separate offense.
- 5 B. Building Permits/Occupational Licenses. No building permit or New
6 Business/Occupational License shall be issued for a site at which a violation
7 of this Ordinance exists on the site.
- 8 C. Injunctions. Affected persons may seek an injunction against any violation of
9 the provisions of this Ordinance and recover from the violator such damages
10 as he or she may suffer, including but not limited to, the damage to property as
11 a result of a release of Regulated Substances.
- 12 D. Publication of Violation. In addition to the penalties imposed under this
13 Ordinance, the Aquifer/Wellhead Protection Coordinator may recommend to
14 the Commission, and the Commission may require, that the violator publish in
15 a newspaper of daily publication and circulation in the County an
16 advertisement to notify the general public of the following:
- 17 1) The nature of the violation;
18 2) The date of occurrence;
19 3) The remedial work which is to be required to mitigate the violation;
20 4) The name and address of the responsible party or property owner; and
21 5) The names of the business owners, all general partners if a partnership,
22 all shareholders if a corporation, and all chief operating officers. If the
23 business is a corporation with more than twenty (20) stockholders, then
24 only stockholders holding more than twenty percent (20%) of the
25 outstanding stock shall be required to be identified.

26 3. Enforcement

27 This Ordinance shall be strictly enforced in accordance with the enforcement procedures
28 established by **{Your City/County}** in addition to any established Federal or State
29 Enforcement Procedures.

30

31

32 **Section 12 Conflicts**

33 All ordinances or parts of ordinances of the Code of Laws of **{Your City/County}**, Florida, in
34 conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

35

36 **Section 13 Severability**

1 If any word, phrase, clause, section or portion of this Ordinance shall be held invalid or
2 unconstitutional by a court of competent jurisdiction, such portion or words shall be
3 deemed a separate and independent provision and such holding shall not affect the
4 validity of the remaining portions thereof.

5

6 **Section 14 Effective Date**

7 In accordance with Section 125.66, Florida Statutes, a certified copy of this ordinance
8 shall be filed with the Department of State by the Clerk of the Board of **{City or County}**
9 Commissioners within ten (10) days after enactment, and this ordinance shall take effect
10 upon receipt of official acknowledgment that said ordinance has been filed, but the
11 provisions hereof shall not be implemented until **{date}**.

12 DULY PASSED AND ADOPTED BY that Board of **{City or County}** Commissioners
13 of **{Your County}**, Florida, the **{which}** day of **{which}** month, **{year}**.

14 BOARD OF **{CITY or COUNTY}** COMMISSIONERS
15 **{YOUR CITY/COUNTY}**, FLORIDA

16

17 BY: _____

18 **{Name}**, Chairman

19 ATTEST:

20 **{Name}**

21 Clerk of the Circuit Court

22

23 BY: _____

24 **{Name}**, Deputy Clerk

25 APPROVED AS TO FORM

26

27 _____

28 **{Name}**

29 **{City or County}** Attorney