

**CHAPTER 94**  
**PUBLIC WATER SUPPLY WELLHEAD**  
**PROTECTION REGULATIONS**

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**94.01 DEFINITIONS.**

1. "Alluvium" – Sand, clay, etc., gradually deposited by moving water.
2. "Aquifer" – A rock formation, group of rock formations or part of a rock formation that contains enough saturated permeable material to yield significant quantities of water.
3. "Contamination" – The presence of any harmful or deleterious substances in the water supply.
4. "Flow System Boundaries" – A delineation criterion that uses groundwater divides, surface water bodies, or other hydrologic/physical features to delineate a Wellhead Protection Area.
5. "Groundwater" – Subsurface water in the saturated zone from which wells, springs, and groundwater runoff are supplied.
6. "Hazardous Substances" – Those materials specified in the most recent version of Title 40 of the Code of Federal Regulation, Section 261, subparts A, B, C and D, Federal Hazardous Waste, Section 302, and substances listed by the Iowa Labor Commissioner pursuant to Section 89B.17 of the Code of Iowa.
7. "Labeled Quantities" – The maximum quantity of chemical as recommended on the label, for specific applications.
8. "Person" – Any natural person, individual, public or private corporation, firm association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, or any other entity whatsoever or any combination of such, jointly or severally.
9. "Petroleum Product" – Fuels, (gasoline, diesel fuel, kerosene, and mixtures of these products), lubricating oils, motor oils, hydraulic fluids, solvents, and other similar products.
10. "Pollution" – The presence of any substance (organic, inorganic, radiological, or biological) or condition (temperature, pH, turbidity) in water that tends to degrade usefulness of the water.
11. "Potable Water" – water that is satisfactory for drinking, culinary, and domestic purposes, meeting current drinking water standards.
12. "Primary Containment" – The first level of product-tight containment, i.e., the inside portion of that container which comes into immediate contact on its inner surface with the hazardous material being contained.
13. "Public Utility" – Any utility (gas, water, sewer, electrical, telephone, cable television, etc.) whether publicly owned or privately owned.

14. “Secondary Containment” – The level of product-tight containment external to and separate from the primary containment. Secondary containment shall consist of leakproof trays under containers, floor curbing or other containment systems and shall be of adequate size and design to handle all spills, leaks, overflows, and precipitation until appropriate action can be taken. The specific design and selection of materials shall be sufficient to preclude any substance loss. Containment systems shall be sheltered so that the intrusion of precipitation is effectively prevented.
15. “Shallow Well” – A well located and constructed in such a manner that there is not a continuous five-foot layer of low-permeability soil or rock between the aquifer from which the water supply is drawn and a point 25 feet below the normal ground surface.
16. “Time-Related Capture Zone” – The surface or subsurface area surrounding a pumping well(s) that will supply groundwater recharge to the well(s) within some specified period of time.
17. “Toxic Substance” – Any substance that has the capacity to produce personal injury or illness to humans through ingestion, inhalation, or absorption into the body.
18. “Transit” – The act or process of passing through the wellhead protection zones, where the vehicle in transit may be parked (within the wellhead protection area) for a period not to exceed two (2) hours.
19. “Water Pollution” – The introduction in any surface or underground water, or any organic or inorganic deleterious substance in such quantities, proportions, and accumulations that are injurious to human, plant, animal, fish, and other aquatic life or property or that unreasonably interferes with the comfortable enjoyment of life or property or the conduct of business.
20. “Well” – A pit or hole sunk into the earth to reach a resource supply such as water.
21. “Well Field” – A tract of land that contains a number of wells for supplying water.
22. “Wellhead Protection Zones” – Zones delineated fixed radii criterion around wellheads, within which toxic substances will be regulated to protect the quality of the underground resource.
23. “Zone of Contribution” – The area surrounding a pumping well that encompasses all areas or features that supply groundwater recharge to the well.

#### **94.02 MAPS OF ZONES OF INFLUENCE.**

1. Maps. Zone of Protection maps and any amendments thereto are incorporated by reference and made a part of this chapter. These maps shall be on file at City Hall. At the time of adoption of the ordinance codified by this chapter the location of all wells in the City of Dyersville supplying potable water to the City Water System shall be located on the official Wellhead Protection Map with Primary Zone and Secondary Zone indicated.
2. Map Maintenance. The Zone of Protection Maps may be updated on an annual basis. The basis for such an update may include, but is not limited to, the following:
  - A. Changes in the technical knowledge concerning the aquifer.
  - B. Changes in permitted pumping capacity of City wells.

- C. Addition of wells or elimination of existing wells.
  - D. Designation of new well fields.
3. Wellhead Protection Zones. The zones of protection indicated on the zone of protection maps are as follows:
- A. Primary Protection Zone. The area within a zero (0) to fifty (50) feet capture zone of any well supplying potable water to the City of Dyersville water system.
  - B. Secondary Protection Zone. The area within a fifty (50) to one hundred fifty (150) feet capture zone, excluding the Primary Protection Zone, of any well supplying potable water to the City of Dyersville water system.

#### **94.03 RESTRICTIONS WITHIN THE PRIMARY PROTECTION ZONE.**

1. Permitted Uses. The following uses are permitted uses within the Primary Protection Zone. Uses not listed are to be considered prohibited.
- A. Industrial buildings within the Primary Protection Zone, provided there is no on-site waste disposal or fuel storage tank facilities associated within this use, and the Iowa DNR "separation distances for wells" for sources of contamination is complied with. All sites must comply with the restrictions and covenants set by the City of Dyersville.
  - B. Playgrounds/parks.
  - C. Wildlife areas, open spaces.
  - D. Lawns and gardens.
  - E. Residential development.
  - F. Non-motorized trails, such as biking, skiing, nature and fitness trails.
2. Additional restrictions are as follows:
- A. No person shall discharge or cause or permit the discharge of a hazardous substance to soils, groundwater, or surface water within the Primary Protection Zone. Any person knowing or having evidence of a discharge shall report such information to the Wellhead Protection Officer.
  - B. Any person(s) responsible for discharging or causing or permitting such discharge of hazardous substances will be financially responsible for all environmental cleanup costs, and may be subject to fines as specified in this chapter.
  - C. No person shall discharge or cause or permit the discharge of fertilizers or pesticides in excess of labeled quantities to the soils, ground water, or surface water within the Primary Protection Zone. Any person knowing or having evidence of a discharge shall report such information to the Wellhead Protection Officer.

#### **94.04 RESTRICTION WITHIN THE SECONDARY PROTECTION ZONE.**

1. Permitted Uses. The following uses are permitted in the Secondary Protection Zone. Uses not listed are to be considered prohibited.
- A. All uses listed as permitted in the Primary Protection Zone.
  - B. Sewer - residential and commercial.

- C. Above ground storage tanks when noncompliant with State Fire Marshal's regulations.
  - D. Basement storage tanks.
  - E. Livestock grazing and field cropping activities.
2. Additional restrictions are as follows:
- A. No person shall discharge or cause or permit the discharge of a hazardous substance to the soils, groundwater, or surface water within the Secondary Protection Zone. Any person knowing or having evidence of a discharge shall report such information to the Wellhead Protection Officer.
  - B. Any person(s) responsible for discharging or causing or permitting such discharge of hazardous substances will be financially responsible for all environmental cleanup costs, any may be subject to fines specified in this chapter.
  - C. Any person who stores, handles, produces or uses chemicals within the Secondary Protection Zone shall make available the relevant MSDS sheets to the Wellhead Protection Officer regardless of their status under 94.05(4).

#### **94.05 EXCEPTIONS.**

1. The following activities or uses are exempt from the provisions of this chapter.
- A. The transportation of any hazardous substance through the well field protection zones provided the transporting vehicle is in transit.
  - B. The use of any hazardous substance solely as fuel in a vehicle fuel tank or as a lubricant in a vehicle.
  - C. Fire, police, emergency medical services, emergency management center facilities, or public utility transmission facility.
  - D. Retail sales establishments that store and handle hazardous substances for resale in their original unopened containers only in the Secondary Protection Zone.
  - E. Consumer products limited to use at a facility solely for janitorial or minor maintenance purposes.
  - F. Consumer products located in the home which are used for personal, family, or household purposes.
  - G. The storage and use of hazardous substances as a fuel or lubricant to provide auxiliary power for emergency use to the well field provided an enclosed secondary containment system is provided for the hazardous substance.
  - H. The use of water treatment chemicals connected with the operation of the well or plant.
2. The use of structures or facilities existing at the time of the adoption of the ordinance codified by this chapter may be continued even though such use may not conform to the regulations of the chapter. However, the storage and use of hazardous substances within the primary protection zone must provide an enclosed secondary containment system. Such structure or facility may not be enlarged, extended, reconstructed or substituted subsequent to adoption of said ordinance exemption is granted by the City Council.

3. Any person who engages in nonresidential activities relating to the storage, handling, use and/or production of any toxic or hazardous substances who is exempt from this chapter by law shall not be subject to the restrictions contained herein.

4. All requests for permits or special exceptions in the City of Dyersville Wellhead Protection Zones must be made in writing to the City Council. All requests must include a list of all hazardous chemicals (MSDS sheets will be made available upon request) to be stored, handled, used, or produced under the permit or special exception. All requests may be required to include an environmental assessment report at the discretion of the City Council. Any exemptions or permits granted will be made conditional and may include environmental monitoring and cleanup costs. The exemption or permit will be made void if environmental and/or safety monitoring indicate that the facility or activity is emitting any releases of harmful contaminants to the surrounding environment. The facility will be held financially responsible for all environmental cleanup costs.

**94.06 DETERMINATION OF LOCATIONS WITHIN ZONES.** In determining the location of properties within the zones depicted on the Zone of Protection Maps, the following rules shall apply:

1. Properties located wholly within one (1) zone reflected on the applicable Zone of Protection Map shall be governed by the restrictions applicable to that zone.
2. For properties having parts lying within more than (1) zone as reflected on the applicable Zone of Protection Map, each part shall be governed by the restrictions applicable to the zone in which it is located.

**94.07 ENFORCEMENT AND PENALTIES.**

1. The Director of Public Works of the City or any duly authorized assistant, agent or representative is designated as the Wellhead Protection Officer to supervise the implementation and enforcement of this chapter.
2. The Wellhead Protection Inspector(s) shall be the Director of Public Works of the City or any duly authorized assistant, agent or representative.
3. No building permit shall be issued which is a violation of the Iowa DNR "SEPARATION DISTANCE FROM WELLS," as published in the Iowa Administrative Code: IAC [567] 43.3 (7) Table A. 'Separation Distances', or its replacement.
4. No new underground tank(s) will be allowed for auxiliary fuel storage in the Primary or Secondary zones.
5. Any person, firm or corporation who fails to comply with the provisions of this chapter shall be subject to the provisions and penalties provided therein.

**94.08 INSPECTIONS.**

1. The Wellhead Protection Inspector(s) shall have the power and authority to enter and inspect all buildings, structures and land within all wellhead protection zones for the purpose of making an inspection. Failure of a person having authority over a property to permit an inspection shall be sufficient grounds and probable cause for a court of competent jurisdiction to issue a search warrant to the Protection Officer or Inspector to inspect such premises.
2. In the event a building or structure appears to be vacant or abandoned, and the owner cannot be readily contacted in order to obtain consent for an inspection, the

officer or inspector may enter into or upon any open or unsecured portion of the premises in order to conduct an inspection thereof.

3. The Wellhead Protection Officer or Inspector shall inspect each City well annually and shall maintain an inventory, if applicable, of all hazardous substances which exist within the Primary and Secondary Protection Zones. One format that may be used is Iowa DNR Form, OMB No. 2050-0072. MSDS sheets on these chemicals will be made available to the Inspector as under 94.05(4).

**94.09 NOTICE OF VIOLATION AND HEARING.** Whenever an officer or an inspector determines that there is a violation of this chapter, he shall give notice thereof in the manner hereinafter provided. A notice of violation shall:

1. Be in writing;
2. Be dated and signed by the officer or inspector;
3. Specify the violation or violations; and
4. State that said violation(s) shall be corrected within ten (10) days of the date on which the inspector issued the notice of violation.

**94.10 INJUNCTIVE RELIEF.** If any person who engages in nonresidential activities stores, handles, uses, and/or produces toxic substances within the wellhead protection zones, as indicated on the Zone of Protection Maps, continues to operate in violation of the provisions of this chapter, then, the City may file an action for injunctive relief in the court of jurisdiction.

*(Ch. 94 Added by Ord. 733 – Mar. 08 Supp.)*