

TITLE V - BUILDING AND PROPERTY REGULATIONS  
ZONING, LAND USE AND SUBDIVISIONSCHAPTER 128  
PUBLIC WATER SUPPLY WELL FIELD PROTECTION REGULATIONS

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128.01 PURPOSE. The purpose of this chapter is to institute land use regulations and restrictions to protect the City's water supply and well fields, restrict the location of potential sources of contamination in close proximity to a public water supply, and to promote the public health, safety and general welfare of the residents of the City.

128.02 DEFINITIONS. For use in this chapter the following terms are defined:

1. "Alluvium" means sand, clay, etc., gradually deposited by moving water.
2. "Aquifer" means 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" means the presence of any harmful or deleterious substances in the water supply.
4. "Groundwater" means subsurface water in the saturated zone from which wells, springs, and groundwater runoff are supplied.
5. "Hazardous Substances" means those materials specified in Section 128.03 of this chapter.
6. "One-Foot Drawdown Contour" means the locus of point around a well or well field where the free water elevation is lowered by one (1) foot due to the pumping of the well or well field.

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7. "Permitted Pumping Capacity" means the amount of water authorized to be pumped from a well during a one (1) year period.
8. "Person" means 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" means fuels (gasoline, diesel fuel, kerosene, and mixtures of these products), lubricating oils, motor oils, hydraulic fluids, and other similar products.
10. "Pollutant Travel Time" means the time required by pollutants to travel from one point to another.
11. "Pollution" means the presence of any substance (organic, inorganic, radiological, or biological) or condition (temperature, pH, turbidity) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.
12. "Potable Water" means water that is satisfactory for drinking, culinary, and domestic purposes, meeting current drinking water standards.
13. "Primary Containment" means 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.
14. "Public Utility" means any utility (gas, water, sewer, electrical, telephone, cable television, etc.) whether publicly owned or privately owned.
15. "Secondary Containment" means the level of product-tight containment external to and separate from the primary containment. Secondary containment shall consist of leak-proof 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.
16. "Shallow Well" means 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.

17. "Toxic Substance" means any substance that has the capacity to produce personal injury or illness to humans through ingestion, inhalation, or absorption into the body.

18. "Transmissivity" means the rate at which water is transmitted through a unit width of any aquifer under a unit of hydraulic gradient.

19. "Travel-Time Contour" means a locus of points from which water takes an equal amount of time to reach a given designation such as a well field.

20. "Travel Time Zones" means the area bounded by travel time contours.

21. "Water Pollution" means the introduction in any surface or underground water, of 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.

22. "Well" means a pit or hole sunk into the earth to reach a resource supply such as water.

23. "Well Field" means a tract of land that contains a number of wells for supplying water.

24. "Zones of Influence" means zones delineated by fixed radius around wellfields, within which toxic substances will be regulated to protect the quality of the underground resource.

128.03 SUBSTANCES REGULATED. The materials regulated by this chapter shall consist of the following:

1. Petroleum products as defined in Section 128.02(9).
2. Substances listed in 40 CFR part 261, subparts C and D, the Federal Hazardous Waste List.
3. Substances listed by the Iowa Labor Commissioner pursuant to Section 89B.12 of the Iowa Code (Hazardous Chemicals Risks-Right to Know).

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**128.04 MAPS OF ZONES OF INFLUENCE.**

1. Maps. Zones of influence maps and any amendments thereto are incorporated by reference and made a part of this chapter. These maps are on file in the Water Department. At the time of adoption of the ordinance codified by this chapter the location of all wells in the City supplying potable water to the City water system shall be located on the Official Zoning District Map with primary and secondary protection zones indicated. No land within the primary protection zone that is currently not zoned commercial or industrial will be allowed to be rezoned to a commercial or industrial classification. Said maps shall be provided to the City Clerk, Planning Commission, Building Official, Zoning Officer, Benton County Health Department, and any other agency requesting said maps.
2. Map Maintenance. The zone of influence maps may be updated on an annual basis. The reasons 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 well fields.
  - C. Additions of wells to existing well fields.
  - D. Designation of new well fields.
3. Zones of Influence. The zones of influence indicated on the zone of influence maps are as follows:
  - A. PRIMARY PROTECTION ZONE — An area extending two hundred (200) feet radially from any well supplying potable water to the City water system.
  - B. SECONDARY PROTECTION ZONE — An area extending one thousand six hundred (1,600) feet radially from the center of the City West Well field, also known as the two-year capture zone, but not including the primary protection zones.
  - C. ZONE OF SENSITIVITY — The land area situated within one mile of the center of the City West Well field. The zone of influence is the NW quadrant of this zone.

*(Paragraphs B and C - Ord. 846 - Sep. 02 Supp.)*

128.05 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 uses.

A. Parks, provided there is no on-site waste disposal or fuel storage tank facilities associated within this use, and the Iowa DNR "SEPARATION DISTANCES FROM WELLS" for sources of contamination is complied with.

2. Prohibited Uses. All other uses are prohibited within the Primary Protection Zone. Additional restrictions are as follows:

A. No person shall discharge or cause or permit the discharge of a hazardous substance (including herbicide and pesticide applications) 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 City Coordinator.

B. New sanitary landfills are prohibited within the Primary Protection Zone.

C. The use, handling, production, and storage of hazardous substances is prohibited in the Primary Protection Zone except as provided under Section 128.07. All persons who presently engage in nonexempt activity within the protection zone who store, handle, use or produce any hazardous substances shall cease to do so within two (2) years from the effective date of the ordinance codified by this chapter except as provided herein.

D. Feedlots or other concentrated animal facilities are prohibited within the Primary Protection Zone.

E. Wastewater treatment plants, percolation ponds, dredge spoil deposits and similar facilities are prohibited within the Primary Protection Zone.

F. Septic tanks are prohibited within the Primary Protection Zone.

G. Other prohibited uses are: Septage and/or sludge and/or animal waste landspreading, salt storage, and radioactive waste facilities.

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128.06 RESTRICTIONS WITHIN THE SECONDARY PROTECTION ZONE.

1. Permitted Uses. The following uses are permitted within the Secondary Protection Zone. Uses not listed are to be considered prohibited uses.

A. All uses listed as permitted in the Primary Protection Zone.

B. Sewered residential, commercial and/or industrial uses except those listed as prohibited uses in Section 128.06(2).

C. Above ground storage tanks 660 gallons or less.

D. Basement storage tanks.

2. Prohibited Uses. All other uses are prohibited within the Secondary Protection Zone. Additional restrictions are as follows:

A. No person shall discharge or cause or permit the discharge of a hazardous substance (including herbicide and pesticide applications) to the soils, ground water, or surface water within the Secondary Protection Zone. Any person knowing or having evidence of a discharge shall report such information to the City.

B. New sanitary landfills are prohibited within the Secondary Protection Zone.

C. The use, handling, production, and storage of hazardous substances is prohibited in the Secondary Protection Zone, except where secondary containment is provided, or underground storage tanks in compliance with Chapter 135 of the Iowa Administrative Code, above ground storage tanks in compliance with requirements of the State Fire Marshall, or as provided under Section 128.07.

D. Feedlots or other concentrated animal facilities are prohibited within the Secondary Protection Zone.

E. Wastewater treatment plants, percolation ponds, dredge spoil deposits and similar facilities are prohibited within the Secondary Protection Zone.

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128.07    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. Silviculture uses and mosquito control spraying providing that said uses shall comply with the Iowa commercial and public Pesticide Applicators and Dealers Licensing through the Iowa Department of Agriculture. The use and storage of herbicides and pesticides for silviculture uses is prohibited within the Primary Protection Zone but is allowed within the Secondary Protection Zone.

C. The use of any hazardous substance solely as fuel in a vehicle fuel tank or as lubricant in a vehicle.

D. Fire, police, emergency medical services, emergency management center facilities, or public utility transmission facilities.

E. Retail sales establishments that store and handle hazardous substances for resale in their original unopened containers.

F. Consumer products limited to use at a facility solely for janitorial or minor maintenance purposes.

G. Consumer products located in the home which are used for personal, family, or household purposes.

H. The storage and use of hazardous substances as a fuel or lubricant to provide auxiliary power for emergency use to the wellfield, provided an enclosed secondary containment system is provided for the hazardous substance.

I. The use of water treatment chemicals connected with the operation of the well.

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 with the regulations of this chapter. However, such structure or facility may not be enlarged, extended, reconstructed or substituted subsequent to adoption of said ordinance.

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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 written requests to permit variances or special exceptions in the Vinton Wellfield Protection Zones will be to the Board of Adjustment and must include an environmental assessment report. Any exemptions granted will be made conditional and may include environmental and safety monitoring and/or a bond posted for future monitoring and cleanup costs. The exemption will be made void if environmental and/or safety monitoring indicates the facility is emitting any releases of harmful contaminants to the surrounding environment. The facility will be held financially responsible for all environmental cleanup costs.

#### 128.08 DETERMINATION OF LOCATIONS WITHIN ZONES.

1. In determining the location of properties within the zones depicted on the Zone of Influence Maps, the following rules shall apply:

A. Properties located wholly within one (1) zone reflected on the applicable Zone of Influence Map shall be governed by the restrictions applicable at that zone.

B. For properties having parts lying within more than one (1) zone as reflected on the applicable Zone of Influence Map, each part shall be governed by the restriction applicable to the zone in which it is located.

#### 128.09 ENFORCEMENT AND PENALTIES.

1. The Water Division Superintendent is designated as the Well Field Protection Officer unless another person is specifically designated by the City Coordinator to supervise the implementation and enforcement of this chapter.

2. No building permit shall be issued which is a violation of the Iowa DNR "SEPARATION DISTANCES FROM WELLS," a violation of this chapter or a source of contamination for a City well.

3. No new underground tanks will be allowed for auxiliary fuel storage in the Primary or Secondary zones.

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4. Any person, firm or corporation who fails to comply with the provisions of this chapter shall be subject to provisions and penalties provided in Chapter 8, entitled "Municipal Infractions," of this Code of Ordinances.

128.10 INSPECTIONS.

1. The Well Field Protection Officer or Inspector shall have the power and authority to enter and inspect all buildings, structures and land within well field zones of influence for the purpose of making an inspection. Failure of a person having common 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 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 Well Field Protection Officer or Inspector shall inspect each well field annually and shall maintain an inventory, if applicable, of all hazardous substances which exist within each well field zone. An emergency plan shall be prepared and filed with the County Emergency Management Agency indicating the procedures which will be followed in the event of spillage of a Regulated Substance so as to control and collect all such spilled materials.

4. It shall be the duty of all law enforcement officers to assist in making inspections when such assistance is requested by the officer or inspector.

128.11 NOTICE OF VIOLATION AND HEARING.

1. Whenever an officer or an inspector determines that there is a violation of this chapter, the officer or inspector shall give notice thereof in the manner hereinafter provided.

A. 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;

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(4) State that said violation(s) shall be corrected within a specified period of time as issued in writing by the inspector.

128.12 INJUNCTIVE RELIEF.

1. If any person who engages in nonresidential activities stores, handles, uses, and/or produces toxic substances within the well field zones of influence, as indicated on the Zone of Influence 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.

(Chapter 128 added by Ordinance No. 608)