

## 14. ARTICLE 14 – “WHPO” – WELLHEAD PROTECTION OVERLAY

14.1 PURPOSE - The purpose of this chapter is to institute land use regulations and restrictions to protect public water supply(s) 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 Jasper County.

### 14.2 DEFINITIONS

14.2.1 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.

14.2.2 Alluvium - Sand, clay, etc., gradually deposited by moving water.

14.2.3 Contamination - The presence of any harmful or deleterious substances in the water supply.

14.2.4 Groundwater - Subsurface water in the saturated zone from which wells, springs, and groundwater runoff are supplied.

14.2.5 Hazardous Substances Those materials defined in Section 14.2 of this ordinance.

14.2.6 Labeled Quantities - The maximum quantity of chemical as recommended on the label for specific applications.

14.2.7 Livestock maintenance including grazing, feedlots, and concentrated animal facilities - Activities that involve the maintenance or production of livestock.

14.2.8 Permitted Pumping Capacity - The amount of water authorized to be pumped from a well during a one (1) year period.

14.2.9 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.

14.2.10 Petroleum Product - Fuels (gasoline, diesel fuel, kerosene, and mixtures of these products), lubricating oils, motor oils, hydraulic fluids, and other similar products.

14.2.11 Pollution - 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.

14.2.12 Potable Water - Water that is satisfactory for drinking, culinary, and domestic purposes, meeting current drinking water standards.

14.2.13 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.

14.2.14 Public Utility - Any utility (gas, water, sewer, electrical, telephone, cable television, etc.) whether publicly owned or privately owned.

14.2.15 Secondary Containment - 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.

14.2.16 Shallow Well - A well located and constructed in such a manner that there is not a continuous five (5) foot layer of low permeability soil or rock between the aquifer from which the water supply is drawn and a point twenty-five (25) feet below the normal ground surface.

14.2.17 Toxic Substance - Any substance that has the capacity to produce personal injury or illness to humans through ingestion, inhalation, or absorption into the body.

14.2.18 Water Pollution - 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, property, or the conduct of business.

14.2.19 Well - A pit or hole sunk into the earth to reach a resource supply such as water.

14.2.20 Well Field - A tract of land that contains a number of wells for supplying water.

14.2.21 Wellhead Protection Zones - Zones delineated by fixed radii around wellheads, within which toxic substances will be regulated to protect the quality of the underground resource.

14.3 SUBSTANCES REGULATED - The materials regulated by this ordinance shall consist of the following:

14.3.1 Petroleum Products as listed in Section 14.2

14.3.2 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 898.12 of the Iowa Code (Hazardous Chemicals Risks-Right to know).

14.4 MAPS OF ZONES OF INFLUENCE

14.4.1 Maps - Zone of Influence maps and any amendments thereto are incorporated by reference and made a part of this ordinance. 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.

14.4.2 Map Maintenance - The Wellhead Protection Zone maps may be updated on an annual basis. The basis for such an update may include, but is not limited to, the following:

14.4.2.1 Changes in the technical knowledge concerning the aquifer.

14.4.2.2 Changes in permitted pumping capacity of public well fields.

14.4.2.3 Addition or deletion of wells in existing well fields.

14.4.2.4 Designation of new well fields.

14.4.3 Wellhead Protection Zones - The-zones of protection indicated on the Zone of Influence maps are as follows:

14.4.3.1 Primary Protection Zone - An area extending two hundred (200) feet

radially from any well supplying potable water to any public water system in Jasper County.

14.4.3.2 Secondary Protection Zone - An area extending between two hundred (200) feet and two thousand (2,000) feet radially from any well supplying potable water to any public water system in Jasper County.

#### 14.5 RESTRICTIONS WITHIN THE PRIMARY PROTECTION ZONE

14.5.1 Permitted Uses - The following uses are permitted uses within the Primary Protection Zone. Uses not listed are to be considered prohibited uses.

14.5.1.1 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.

14.5.2 Prohibited Uses - All uses except "Permitted Uses" listed above are prohibited within the Primary Protection Zone. Additional restrictions are as follows:

14.5.2.1 No person shall discharge or cause or permit the discharge of a hazardous substance to the 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 County Zoning Administrator.

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

14.5.2.3 Installation of water wells are prohibited within the Primary Protection Area.

14.5.2.4 The use, handling, production, and storage of hazardous substances are prohibited in the Primary Protection Zone except as provided under Section 14.7. All persons who presently engage in nonexempt activity(s) 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 this ordinance except as provided herein.

14.5.2.5 Livestock maintenance or production activities that involve grazing,

feedlots, or other livestock facilities are prohibited within the Primary Protection Zone.

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

14.5.2.7 Septic tanks are prohibited within the Primary Protection Zone.

14.5.2.8 Other prohibited uses are: Septage and/or sludge and/or animal waste land spreading, salt storage, and radioactive waste facilities.

#### 14.6 RESTRICTIONS WITHIN THE SECONDARY PROTECTION ZONE

14.6.1 Permitted Uses - The following uses are permitted in the Secondary Protection Zone.

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

14.6.1.2 Severed residential, commercial and/or industrial uses except those listed as prohibited uses in Section 14.6.2.

14.6.1.3 Above ground storage tanks of five hundred and fifty (550) gallons or less.

14.6.1.4 Basement storage tanks

14.6.1.5 Liquid Propane (LP) storage tanks

14.6.2 Prohibited Uses - All uses except "Permitted Uses" listed above are prohibited within the Secondary Protection Zone. Additional restrictions are as follows:

14.6.2.1 No person shall discharge or cause or permit the discharge of a hazardous substance, in excess of labeled quantities, 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 County Zoning Administrator.

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

14.6.2.3 The use, handling, production, and storage of hazardous substances is

prohibited in the Secondary Protection Zone, except where secondary containment is provided, underground storage tanks are in compliance with Chapter 135 of the Iowa Administrative Code, above ground storage tanks are in compliance with requirements of the State Fire Marshall, or as provided under Section 14.7.

14.6.2.4 Livestock maintenance or production activities that involve grazing, feedlots, or other livestock facilities are prohibited within the Secondary Protection Zone except as exempted under Section 14.7.

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

## 14.7 EXCEPTIONS

14.7.1 The following activities or uses are exempt from the provisions of this ordinance:

14.7.1.1 The transportation of any hazardous substance through the well field protection zones, provided the transporting vehicle is in transit.

14.7.1.2 Silva culture 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 silva culture uses is prohibited within the Primary Protection Zone but is allowed within the Secondary Protection Zone.

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

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

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

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

14.7.1.7 Consumer products located in the home which are used for personal,

family, or household purposes.

14.7.1.8 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.

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

14.7.2 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.

14.7.3 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 ordinance by law shall not be subject to the restrictions contained herein.

14.8 BUILDING PERMITS AND REZONING - Jasper County will not issue a building permit for construction in, or rezone any portion of, the Primary or Secondary Wellhead Protection Zones without prior approval from the local authority responsible for the well head affected by such construction or rezone.