

WELLHEAD PROTECTION AREA (Less Restrictive)

1.0 PURPOSE AND AUTHORITY

The residents of the City of Ogallala depend exclusively on ground water for a safe drinking water supply. Certain land use practices and activities can seriously threaten or degrade ground water. The purpose of this Wellhead Protection Ordinance is to institute land use regulations and restrictions to protect the City's municipal water supply and well fields, and to promote the public health, safety and general welfare of the residents of the City of Ogallala.

The statutory authority of the City to enact these ground water protection regulations was established by the Nebraska Legislature as Statute 46-1504. Under this statute, the City has the authority to enact this ordinance, effective in the incorporated areas of the City, to encourage the protection of its ground water resources.

1.1 APPLICATION OF REGULATIONS

The regulations specified in this Wellhead Protection Ordinance shall apply only to those lands designated as the recharge areas for the City of Ogallala municipal wells which also lie within the corporate limits of the City.

1.2 DEFINITIONS

- (1) **AQUIFER.** "Aquifer" means a saturated, permeable geologic formation that contains and will yield significant quantities of water.
- (2) **RECHARGE AREA.** "Recharge area" means the area in which water reaches the zone of saturation by surface infiltration and encompasses all areas or features that supply ground water recharge to a well.
- (3) **WELL FIELD.** "Well Field" means a piece of land used primarily for the purpose of locating wells to supply a municipal water system.

2.0 WELLHEAD PROTECTION AREA

2.1 INTENT

The area to be protected as a Wellhead Protection Area are the areas within 1,500 feet of the current City of Ogallala municipal water supply wells, South Tower Well, South Nursing Home Well, North Nursing Home Well, North Well Field Wells, 1, 2, 3 and 4 and the 20 year ground water travel zone upgradient from each well as shown on the attached Wellhead Protection Area map. This ordinance will also apply to any new municipal wells constructed by the City of Ogallala.

2.2 PERMITTED USES

The following uses are permitted within the Wellhead Protection Area.

- (1) Parks and playgrounds, provided there are no on-site waste disposal or storage of hazardous and/or toxic materials
- (2) Sewered residential units
- (3) Above ground petroleum product storage tanks up to 660 gallons
- (4) Basement heating fuel storage tanks
- (5) Commercial and/or industrial uses served by municipal sanitary sewer, except those listed as prohibitive uses in Section 2.4 Prohibited Uses
- (6) Unsewered (single family) residential development on existing lots of record on the effective date of this Ordinance and subject to conditions in Section 3.0.

2.3 CONDITIONAL USES

- (1) Commercial uses served by municipal sanitary sewer except those listed in Section 2.4

2.4 PROHIBITED USES

The following uses are prohibited within the Wellhead Protection Area boundaries. These uses are prohibited based on the high probability that activities routinely associated with these uses (storage, use and handling of potential pollutants) will cause ground water contamination. Uses not listed shall not be considered permitted uses.

- (1) Underground storage tanks of any size
- (2) Septic and/or sludge spreading
- (3) Animal waste landspreading
- (4) Animal waste facilities
- (5) Animal confinement facilities
- (6) Gas stations
- * (7) Garages for repair and servicing of motor vehicles, including body repair, painting or engine rebuilding if not on City water and sewer
- (8) Printing and duplicating businesses
- (9) Any manufacturing or industrial businesses
- (10) Bus or truck terminals
- * (11) Repair shops, motor and machinery service and assembly shops if not on City water and sewer systems
- (12) Landfills or waste disposal facilities
- (13) Wastewater treatment facilities
- (14) Spray wastewater facilities
- (15) Junk yards or auto salvage yards
- (16) Bulk fertilizer and/or pesticide facilities
- (17) Asphalt products manufacturing
- (18) Dry cleaning businesses
- (19) Salt storage
- (20) Electroplating facilities
- (21) Exterminating businesses
- (22) Paint and coating manufacturing

- (23) Hazardous and/or toxic materials storage
- (24) Hazardous and/or toxic waste facilities
- (25) Radioactive waste facilities
- (26) Recycling facilities
- (27) Cemeteries
- (28) Electronic circuit manufacture or assembly plants

- 2.5 Where any of the uses listed in 2.4 above exist within the Wellhead protection Area on the effective date of this Ordinance, owners of these facilities will be allowed to upgrade the facilities to facilitate or enhance ground water protection. Plans for the proposed upgrade must be approved by the City Council and appropriate permit issued by the City Inspection Department, prior to any work being initiated. Expansion of the prohibited use will not be allowed.

3.0 DESIGN STANDARDS

The following standards and requirements shall apply to all uses permitted within the Wellhead Protection Area.

- 3.1 Minimum lot size for unsewered residential uses shall be (two) acres, except for existing lots of record on the effective date of this Ordinance and developments that will be served by municipal sewer within (five years) of the approval of the development. In order to provide for efficiently serving these developments with municipal sewer, lots smaller than two acres can be approved provided that sufficient land area will be maintained in an undeveloped state such that no more than one residence is allowed for each two acres of the overall development.
- 3.2 All commercial and industrial uses are allowed a maximum of 50 percent of the lot area to be maintained in manicured lawn or grass. However, the area of the lot in manicured lawn or grass shall not exceed the area of impervious surfaces on the lot.
- 3.3 Sewered residential uses are allowed to have a maximum area of manicured lawn or grass covering 50 percent of the lot area.
- 3.4 Unsewered residential uses are allowed to have a maximum of manicured lawn or grass covering 25 percent of the lot area.
- 3.5 Natural vegetative covers, not requiring the use of pesticides or fertilizers after initial establishment, are encouraged as an alternative to manicured lawn or grass.
- 3.6 All petroleum storage tanks shall provide leakproof containment not less than 125 percent of the tank volume, except basement heating fuel storage tanks.

- 3.7 All storm drainage shall be retained on site or discharged to a municipally operated storm drain. If retained on site, storm water shall be discharged to settling ponds where water will percolate through at least six inches of topsoil. The use of drywells or other subsurface drains for stormwater drainage is prohibited.
- 3.8 Pesticide and fertilizer storage is permitted at the location of retail sales of these products, provided that the products are delivered in retail quantity containers and no repackaging and/or mixing is done on site.
- 3.9 Pesticide and fertilizer storage is permitted at the location of agricultural use of these products.

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WELLHEAD PROTECTION AREA (More Restrictive Covenants)

1.0 PURPOSE AND AUTHORITY

The residents of the City of Ogallala depend exclusively on ground water for a safe drinking water supply. Certain land use practices and activities can seriously threaten or degrade ground water. The purpose of this Wellhead Protection Ordinance is to institute land use regulations and restrictions to protect the City's municipal water supply and well fields, and to promote the public health, safety and general welfare of the residents of the City of Ogallala.

The statutory authority of the City to enact these ground water protection regulations was established by the Nebraska Legislature as Statute 46-1504. Under this statute, the City has the authority to enact this ordinance, effective in the incorporated areas of the City, to encourage the protection of its ground water resources.

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- (1) **AQUIFER.** "Aquifer" means a saturated, permeable geologic formation that contains and will yield significant quantities of water.
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2.2 PERMITTED USES

The following uses are permitted within the Wellhead Protection Area.

- (1) Parks and playgrounds, provided there are no on-site waste disposal or storage of hazardous and/or toxic materials
- (2) Sewered residential units
- (3) Basement heating fuel storage tanks
- (4) Commercial and/or industrial uses served by municipal sanitary sewer, except those listed as prohibitive uses in Section 2.4 Prohibited Uses
- (5) Unsewered (single family) residential development on existing lots of record on the effective date of this Ordinance and subject to conditions in Section 3.0
- (6) Public Utilities to include electric and telephone substations, gas regulator and meter station buildings, police and fire stations that do not contain maintenance facilities and electric transmission towers.

2.3 CONDITIONAL USES

- (1) Commercial uses served by municipal sanitary sewer except those listed in Section 2.4

2.4 PROHIBITED USES

The following uses are prohibited within the Wellhead Protection Area boundaries. These uses are prohibited based on the high probability that activities routinely associated with these uses (storage, use and handling of potential pollutants) will cause ground water contamination. Uses not listed shall not be considered permitted uses.

- (4) Underground storage tanks of any size
- (5) Septic and/or sludge spreading
- (6) Animal waste landspreading
- (7) Animal waste facilities
- (8) Animal confinement facilities
- (9) Gas stations
- * 7 (10) Vehicle repair establishments, including auto body repair
- 8 (11) Printing and duplicating businesses
- 9 (12) Any manufacturing or industrial businesses
- 10 (13) Bus or truck terminals
- 11 (14) Repair shops
- 12 (15) Landfills or waste disposal facilities
- 13 (16) Wastewater treatment facilities
- 14 (17) Spray wastewater facilities
- 15 (18) Junk yards or auto salvage yards
- 16 (19) Bulk fertilizer and/or pesticide facilities
- 17 (20) Asphalt products manufacturing
- 18 (21) Dry cleaning businesses
- 19 (22) Salt storage
- 20 (23) Electroplating facilities
- 21 (24) Exterminating businesses
- 22 (25) Paint and coating manufacturing
- 23 (26) Hazardous and/or toxic materials storage

- 24 (27) Hazardous and/or toxic waste facilities
- 25 (28) Radioactive waste facilities
- 26 (29) Recycling facilities
- 27 (30) Cemeteries
- 28 (31) Electronic circuit manufacture or assembly plants
- * 29 (32) Petroleum refining
- * 30 (33) Wood preserving operations
- * 31 (34) Battery recycling and reprocessing

* 2.5 The uses prohibited by this Ordinance represent the state of present knowledge and most common description of said uses. As other potential polluting uses are discovered, or other terms of description become necessary, it is the intention to add them to the list of uses prohibited in the Well Head Protection Area.

2.6 Where any of the uses listed in 2.4 above exist within the Wellhead Protection Area on the effective date of this Ordinance, owners of these facilities will be allowed to upgrade the facilities to facilitate or enhance ground water protection. Plans for the proposed upgrade must be approved by the City Council and appropriate permit issued by the City Inspection Department, prior to any work being initiated. Expansion of the prohibited use will not be allowed.

3.0 DESIGN STANDARDS

The following standards and requirements shall apply to all uses permitted within the Wellhead Protection Area.

3.1 Minimum lot size for unsewered residential uses shall be (two) acres, except for existing lots of record on the effective date of this Ordinance and developments that will be served by municipal sewer within (five years) of the approval of the development. In order to provide for efficiently serving these developments with municipal sewer, lots smaller than two acres can be approved provided that sufficient land area will be maintained in an undeveloped state such that no more than one residence is allowed for each two acres of the overall development.

3.2 All commercial and industrial uses are allowed a maximum of 50 percent of the lot area to be maintained in manicured lawn or grass. However, the area of the lot in manicured lawn or grass shall not exceed the area of impervious surfaces on the lot.

* 3.3 Sewered residential uses are allowed to have a maximum area of manicured lawn or grass as shown below:

<u>Lot Area</u>	<u>Lawn Area (square feet)</u>
16,000 sq feet	6,000
0.5 acre	8,000

0.75 acre	11,000
1 acre	14,000
1.5 acres	20,000
2 acres	26,000

- * 3.4 Unsewered residential uses are allowed to have a maximum of manicured lawn or grass as shown below:

<u>Lot Area</u>	<u>Lawn Area (square feet)</u>
2 acres	8,000
3 acres	21,000
4 acres	31,000
5 acres	44,000

Maximum lawn areas for lot sizes not listed shall be based on a weighted average of the percentage of lawn area allowed on the two nearest lot sizes listed.

- 3.5 Natural vegetative covers, not requiring the use of pesticides or fertilizers after initial establishment, are encouraged as an alternative to manicured lawn or grass.
- * 3.6 All storm drainage shall be retained on site or discharged to a municipally operated storm drain. If retained on site, storm water shall be discharged to settling ponds where water will percolate through at least six inches of topsoil. The use of drywells or other subsurface drains for stormwater drainage is prohibited.
- 3.7 Pesticide and fertilizer storage is permitted at the location of retail sales of these products, provided that the products are delivered in retail quantity containers and no repackaging and/or mixing is done on site.
- 3.8 Pesticide and fertilizer storage is permitted at the location of agricultural use of these products.