ORDINANCE NO. 08-03

AN ORDINANCE AMENDING ARTICLE 4, SECTION 4.05.08, APO: AQUIFER PROTECTION OVERLAY DISTRICT, OF THE ZONING ORDINANCE OF CLAY COUNTY, SOUTH DAKOTA.

NOW THEREFORE, BE IT ORDAINED BY THE COUNTY COMMISSION OF CLAY COUNTY, SOUTH DAKOTA AS FOLLOWS:

That Ordinance No. 05-01, Article 4, Section 4.05.08, APO: Aquifer Protection Overlay District, of Clay County, South Dakota is hereby amended in its entirety to read as follows:

4.05.08 APO: AQUIFER PROTECTION OVERLAY DISTRICT

Purpose

The district is intended to preserve the quality and quantity of the area's water resources so as to ensure a safe and adequate supply of drinking water for present and future generations. Restrictions shall apply to land use activities which have the potential to contaminate water resources, including aquifers in use and those having the potential for future use as a public water supply. The purpose of the district is to prohibit certain uses which pose the greatest threat to groundwater contamination and to impose reasonable and adequate safeguards on other uses which exhibit a potential to contaminate the groundwater. The Aquifer Protection Overlay District is an overlay whose boundaries are superimposed on all districts established by this ordinance. It is not intended that this district interfere with, abrogate, or annul any other rules or regulations of this ordinance, except that if the Aquifer Protection Overlay District imposes a greater restriction than the underlying zoning district regulations, the greater restriction shall apply.

Establishment / Delineation of an Aquifer Protection Overlay District

The shallow/surficial aquifer boundary was mapped using data from the South Dakota Geological Survey and the United States Geological Survey. The map only serves as a general guide to the locations and depths of the mapped aquifer units. Boundaries shown are general in nature and may be modified in the future as site/area specific information is obtained. Additional information shall be used whenever available to more precisely determine aquifer locations and depths. Actual site-specific aquifer boundaries and depths may differ from those shown on the map. The mapped boundaries are drawn at the discretion of geologists and hydrologists based on best available information. Site-specific hydro-geologic information may be necessary to verify the location of a proposed use in relation to an underlying shallow aquifer. Any applicant that is identified as being within the aquifer protection overlay zone, as denoted on the map, can

provide drilling logs from soil borings on and/or near the site of the proposed use to conclusively prove that it is not located above a shallow/surficial aquifer area. The standards utilized by the South Dakota Department of Environment and Natural Resources for soil borings will be followed.

Zone A – Aquifer Critical Impact Zones

Zone A, the wellhead protection area, is the mapped zone of contribution around all public water supply wells or wellfields in shallow/surficial aquifers and includes land upgradient from the well or wellfield to the ten year time of travel boundary plus any delineated adjacent lands not underlain by the aquifer with sufficient slope that contaminated surface water could flow directly onto Zone A.

Permitted Uses

All uses as outlined in the underlying zoning districts may be allowed provided they can meet the performance standards as outlined for the Aquifer Protection Overlay District.

Conditional Uses

All uses as outlined in the underlying zoning districts may be allowed provided they can meet the performance standards as outlined for the Aquifer Protection Overlay District.

Prohibited Uses

Animal Feeding Operations (AFO) installed after the adoption of this ordinance

Concentrated Animal Feeding Operations (CAFO) installed after the adoption of this ordinance

Manure storage areas except above ground tanks

Waste Disposal except the Spreading of Solid and Liquid Animal Waste

Unenclosed Storage of Road Salt

Disposal of Snow containing De-icing Chemicals

Disposal of Radioactive Waste

Injection Well (Class V Well)

Cemetery

Junk or Salvage Yard

Sanitary Landfill, Solid Waste Transfer Facility

Petroleum Products Terminal

Manufacture of a Regulated Substance

Land spreading of petroleum contaminated soil

Land spreading or dumping of waste oil

Chemigation

Transmission Facilities designed to transport liquid hydrocarbons or liquid hydrocarbon products

Zone B – Aquifer Secondary Impact Zones

Zone B is the remainder of the mapped shallow/surficial aquifer in the county not included in Zone A. Zone B is being protected because (1) the aquifer is a valuable natural resource for future development, (2) the aquifer provides drinking water supply for individual domestic users, (3) contamination is not justified just because this area is not currently used for public water supply and (4) contaminants from this area could eventually enter Zone A.

Permitted Uses

All uses as outlined in the underlying zoning districts may be allowed provided they can meet the performance standards as outlined for the Aquifer Protection Overlay District.

Conditional Uses

Small or medium Concentrated Animal Feeding Operations (CAFOs) or Animal Feeding Operations (AFOs) may obtain a conditional use permit provided that site specific borings made to current DENR standards and certified by a South Dakota licensed engineer demonstrate that the proposed site is not located over a shallow/surficial aquifer, and further provided that a SD General Water Pollution Control Permit has been obtained.

Small Animal Feeding Operations (AFOs) with fewer that one-fourth (1/4th) the maximum number of animals listed in Table 1. of Section 3.07.4, are not required to obtain a SD General Water Pollution Control Permit provided that such site specific borings demonstrated that the proposed site is not located over a shallow/surficial aquifer.

All uses as outlined in the underlying zoning districts provided they can meet the performance standards as outlined for the Aquifer Protection Overlay District.

Prohibited Uses

Large Concentrated Animal Feeding Operations (CAFO)

Animal Feeding Operations (AFO) located over a shallow/surficial aquifer

Land spreading of petroleum contaminated soil

Land spreading or dumping of waste oil

Class V injection wells

Performance Standards

The following standards shall apply to land uses in Zones A and B of the Aquifer Protection
Overlay Districts:

- 1. New or replacement septic tanks and associated drain fields for containment and disposal of human or animal wastes must conform with regulations established by the South Dakota Department of Environment and Natural Resources.
- 2. Manure storage areas may be permitted in Zone B but must be constructed in with good engineering practices as recommended by the Natural Resource Conservation Service and/or the South Dakota Department of Environment and Natural Resources for Waste Storage Ponds.
- 3. Storage of petroleum products in quantities exceeding one hundred (100) gallons at one locality in one tank or series of tanks must be in elevated tanks; such tanks larger than eleven hundred (1,100) gallons must have a secondary containment system where it is deemed necessary by the County Zoning Office.
- 4. Any commercial or industrial facility, not addressed by 2 or 3 above, involving the collection, handling, manufacture, use, storage, transfer or disposal of any solid or liquid material or waste, except for spreading of manure, in excess of 1,000 pounds and/or 100 gallons which has the potential to contaminate groundwater must have a secondary

containment system which is easily inspected and whose purpose is to intercept any leak or discharge from the primary containment vessel or structure. Underground tanks or buried pipes carrying such materials must have double walls and accessible sumps.

- 5. When pastured animals are concentrated for winter feeding, measures shall be employed to prevent runoff of manure.
- 6. Discharge of industrial process water on site is prohibited without County Zoning Office approval.
- 7. Auto service, repair or painting facilities and junk or salvage yards shall meet all State and Federal standards for storage, handling and disposal of petroleum products and shall properly dispose of all other potentially hazardous waste materials.
- 8. Any facility involving collection, handling, manufacture, use, storage, transfer or disposal of hazardous materials must prepare and have on file in the County Zoning Office an acceptable contingency plan for preventing hazardous materials from contaminating the shallow/surficial aquifer should floods, fire, other natural catastrophes or equipment failure occur:
- a. For flood control, all underground facilities shall include a monitoring system and a secondary standpipe above the 100 year frequency flood level. For above ground facilities, an impervious dike, above the 100 year flood level and capable of containing 120 percent of the largest storage volume, will be provided with an overflow recovery catchment area (sump).
- b. For equipment failures, plans shall include but not be limited to:

Below ground level, provision for removal and replacement of leaking parts, a leak detection system with monitoring and an overfill protection system.

Above ground level, provision for monitoring, replacement, repair and cleanup of primary containment systems.

- c. For other natural or man-caused disasters, the owner and/or operator shall report all incidents involving liquid or chemical material which may endanger health and/or safety of disaster personnel and/or general public.
- d. Agricultural operations are exempted from performance standard 8 unless chemicals stored which are on the Superfund Amendments and Re-authorization Act of 1986 (SARA Title III) extremely hazardous substance list in quantities exceeding the threshold planning quantity at any one time.
- 9. All abandoned wells should be plugged in conformance with South Dakota Well

Construction Standards, Chapter 74:02:67-70, to prevent contamination of groundwater by surface water.

- 10. The County Zoning Office and the Department of Environment and Natural Resources shall be informed within 24 hours of all leaks and spills of materials that might potentially contaminate groundwater.
- 11. Any Transmission Facilities, permitted in Zone B, designed to transport liquid hydrocarbons or liquid hydrocarbon products that will cross either the Yankton-Clay Ditch, Clay Creek or Vermillion River shall have a pipe wall thickness of not less than 0.622"

Dated this 1st day of July, 2008.

CLAY/COUNTY-BOARD OF COMMISSIONERS

Leo F. Powell, Chairman

Ralph Westergaard

Gerald A. Sommeryold

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Leslie K. Kephart

Ruth A. Bremer, Clay County Auditor

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