WAT033

FOR AGENCY USE ONLY	APPLICATION NUMBER		
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	DATE RECEIVED		
	YEAR	MO.	DAY

NEBRASKA

DEPT. OF ENVIRONMENT AND ENERGY

APPLICATION FOR A CLASS V INJECTION WELL AUTHORIZATION

This application covers ONLY Class V (five) injection wells that meet the requirements of Title 122, Chapter 6. Please answer **EVERY** item on this application to the best of your knowledge. **An incomplete application may be returned.** If you have questions while filling out this application please refer to Title 7122, Chapter 10 or call (402) 471-4290 and someone will assist you.

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1. Facility Information

Name of Facility:			
Operator's Name:			
Street Address:		City/Zip:	
Telephone Number:		County:	
Entity Status (i.e. Federal, State, Private, Other):			

2. Owner's Information

Owner's Name:			
Mailing Address:		City/Zip:	
Telephone Number:		County:	
Ownership Status (i.e. President, Partner, Stockholder):			
Entity Status (i.e. Federal, State, Private, Other):			
Owner's Signature:			

3. What type of Class V Well will be utilized? (Refer to list at the end of the application or Title 122, Chapter 2, Section 005.17)

4. Legal Location of the Injection Well including county and GPS Coordinates of Injection Well: County:

LEGAL LOCATION:	
GPS (Decimal Lat/Long):	

5. **Attach a scaled map of the entire property on which the injection is proposed.** The map should include but not be limited to the following items:

    a. All other injection wells (i.e. septic systems, heat pump returns)

    b. All major structures (i.e. buildings, streets, property lines)

    c. All underground utilities

    d. All water wells (i.e. irrigation, drinking, monitoring)

6. **Attach a scaled map or aerial photograph locating all water wells within a ½ mile radius of the proposed injection well.**

7. **Give a detailed description of the fluid to be injected, attach laboratory data if available:**

8. **What is the volume of fluid to be injected in a specific time period?** (i.e. 20 gallons per hour)

9. **Describe the nature of the business or activity that generates the waste:** (i.e. Auto Repair Shop)

10. **What is the status of the injection well?** (i.e. in use, proposed, under construction)

11. **Attach design or construction details of the proposed injection well as outlined in Title 122, Chapter 17, Section 005.** All well designs should be submitted by a Professional Engineer licensed in the State of Nebraska.

12. Complete <u>one</u> of the following tables for setback distances of the proposed injection well. Please read the description at the beginning of each table to ensure the proper table in being completed.

a. A Domestic Wastewater Disposal Well (5W11, 5W31, 5W32, 5W12) for a septic system or wastewater treatment plant effluent. These wells must meet the 4-foot separation from groundwater. Distances are in feet.

Receptor	Minimum Setback		Actual Distance	
Surface Water	50			
Domestic Water Well	100			
Community Water Well	1000			
All Other Water Wells	100			
Water Line (Pressure-Main)	25			
Water Line Pressure-Service Connection	25			
Water Line (Suction)	100			
Property Lines	5			
Foundations used for living quarters	Yours	Neighbors	Yours	Neighbors
Full basements or foundations below septic system	30	40		
Non-basement foundations higher than septic system	20	30		
Slab on grade **not** used as living quarters	10	20		

b. An injection well constructed above the groundwater table but not listed in the Domestic Wastewater Disposal category. These wells must meet the 4-foot separation from groundwater and cannot be greater than 20 feet deep.

Receptor	Minimum Setback	Actual Distance
Domestic Water Well	100	
Community Water Well	1000	
Non-Community Water Well	500	
All Other Water Wells	100	
Sewer Lines	25	
Pressure Water Lines	25	
Suction Water Lines	100	
Property Lines	5	
Basements/Footings	30	
Domestic Wastewater Disposal Wells	100	
Other injection wells of this type	25	
Other injection wells that fall into the next table	25	
Septic Tanks	50	
Surface Water	50	

c. An injection well constructed into or through a groundwater aquifer.

Receptor	Minimum Setback	Actual Distance
Domestic Water Well	100	
Community Water Well	1000	
Non-Community Water Well	500	
All Other Water Wells	25	
Sewer Lines	25	
Pressure Water Lines	25	
Suction Water Lines	50	
Property Lines	5	
Basements/Footings	10	
Domestic Wastewater Disposal Wells	100	
Other injection wells of this type	25	
Other injection wells that fall into the next table	25	
Septic Tanks	50	
Surface Water	50	

13. What is the depth to groundwater (in feet) at the property?

14. How was the depth to groundwater obtained? (i.e. measured in well, drilling logs)

15. Describe the geologic material or formation into which the injection is planned.

16. Name and signature of the person completing this form.

Name of the person completing this form:	
Telephone Number:	
Email Address:	
Signature:	

Important Class V Well Construction Facts

- All Domestic Wastewater Disposal Wells (Title 122, Chapter 2, Section 005.17C), including septic systems must be constructed in accordance with Title 124 – Rules and Regulations for the Design, Operation, and Maintenance of On-Site Wastewater Treatment Systems.
- All Class V wells constructed above the groundwater table must maintain a separation distance from the deepest point of the well to the surface of the groundwater of 4 feet. This includes septic systems.
- No Class V well constructed above the ground water table shall exceed 20 feet in depth.
- Well casing used for all Class V wells, except Domestic Wastewater Disposal Wells, shall be pressure rated a minimum of 160 psi. The formula for calculating the minimum pressure rating is located in Title 122, Chapter 17, Section 005.04C1.
- Injection wells cannot inject into more than one aquifer.
- If ground water is removed from an aquifer, it must be injected back into that same aquifer (i.e. open loop heat pump wells, cooling water wells, remediation wells).
- Cement/bentonite grout is the only allowed media to fill the annulus of an injection well.
- There are 3 separate Tables in Title 122 listing the different setback distances for each type of injection well. All of the Tables can be found in Chapter 17, Section 005.

Questions about this application: (402) 471-4290

Return Completed Application to:

Nebraska Department of Environment and Energy
Ground Water Unit/UIC Program
P.O. Box 98922
Lincoln, NE 68509

Class V Category	Class V Subcategory	Class V Code Number
Drainage	Storm Water Drainage	5D2
	Improved Sinkholes	5D3
	Industrial Drainage	5D4
	Special Drainage	5G30
Geothermal Reinjection	Electric Power Reinjection	5A5
	Direct Heat Reinjection	5A6
	Heat Pump/AC Return Flow (open loop)	5A7
	Ground Water Aquaculture Return Flow	5A8
Domestic Wastewater Disposal	Septic System (undifferentiated disposal)	5W11
	Septic System (well disposal)	5W31
	Septic System (drainfield disposal)	5W32
	Wastewater Treatment Plant Effluent Disposal	5W12
Mineral and Fossil Fuel Recovery Related	Mining, sand & other backfill	5X13
	Solution Mining	5X14
	In-situ Fossil Fuel Recovery	5X15
	Spent-Brine Return Flow, after halogen extr.	5X16
Oil Field Production Waste Disposal	Air Scrubbed Waste Disposal	5X17
	Water Softener Regeneration Brine Disposal	5X18
Industrial/Commercial/Utility Disposal	Cooling Water Return Flow	5A19
	Industrial Process Water & Waste Disposal	5W20
Recharge	Aquifer Recharge	5R21
	Saline Water Intrusion Barrier	5B22
	Subsidence Control	5S23
Miscellaneous	Experimental Technology	5X25
	Aquifer Remediation Related	5X26
	Other (specify purpose & injection fluid)	5X27
Prohibited Injection Wells	Agricultural Drainage Wells	5F1
	Untreated Sewage Waste Disposal Wells	5W9
	Cesspools	5W10
	Radioactive Waste Disposal Wells	5N24
	Motor Vehicle Waste Disposal Wells	5X28
	Abandoned Drinking Water Wells used for Disposal of Waste	5X29