STATE OF SOUTH DAKOTA DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

Application for a Permit to Inject - Class II Underground Injection Control

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SD Department of Agriculture and Natural Resources Minerals and Mining Program 2050 West Main, Suite #1 Rapid City, SD 57702 Telephone: 605-773-4201

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1.0 General	l Information
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1.0	General Information
1.1	Application Type
	☐ New Permit to Inject
	☐ Major Modification to Existing Permit to Inject
	☐ Minor Modification to Existing Permit to Inject
1.2 propo	If requesting a new permit or major modification, provide a brief description of the new activity or sed modification (include additional attachments as needed).
1.3	If requesting a minor modification, select the type(s) of modification requested (ARSD 74:12:07:09)
	Correction of typographical errors and language changes that have no legal or substantive effect
	Correction of typographical errors and language changes that have no legal or substantive effect
	A change in ownership or operational control of the well if the secretary determines that no other change in the permit is necessary, provided a written agreement containing a specific date for transfer of responsibility for the injection well, coverage, and liability between the current and new owner or operator has been submitted to the secretary pursuant to ARSD 74:12:07:06
	A change in quantities or types of fluids injected which are within the capacity of the injection well as permitted and, in the judgement of the secretary, would not interfere with the operation of the injection well or its ability to meet conditions described in the permit, and would not change its classification
	A change in construction requirements approved by the secretary pursuant to this chapter if the alteration complies with the conditions of the permit to inject and this section
	Amendment of a plugging and abandonment plan which has been updated pursuant to this article
	Recementing, reworking, or reconditioning a well
	☐ Deepening, extending, or sidetracking an existing well within the permitted injection horizon

As described in ARSD 74:12:07:09, if the department determines that a minor modification request has the potential to degrade or threaten freshwater resources, it will be treated as a major modification and subject to the Notice of Recommendation procedures (ARSD 74:12:09)

1.4 Operator Information (ARSD 74:12:07:03(8))					
	Name:				
	Address:				
	Telephone	2:			
	Email:				
1.5	Basic informa	tion about the well(s)	covered by the requested pern	nit to inject	
API N	lumber	Well Name	Legal Location	Latitude	Longitude
			wn in the application form; le location of the information		
1.6 parties		elivery (ARSD 74:12 pplication has been de	:07:04) - Include an affidavit s	showing the names	and addresses of the
1	☐ Included				
	Location:				
2.0	Specific Appl	ication Requirement	t's		
2.1	Maps (ARSD	74:12:07:03(1))			
2.1.		lls (ARSD 74:12:07:0	· / · / /		
	existing or p abandoned;	proposed; the location the location of all other arrent drilling location	of review plat which shows the of all oil and gas wells; the loc er wells, including plugged and as; the names of operators; the	cation of all water values;	wells, active and abandoned locations;
	☐ Included				
	Location:				

A one-half mile fixed radius area of review plat extending in all directions from the horizontal well and any sidetracks. The plat must show the location of the injection well or wells, existing or proposed; the location of all oil and gas wells; the location of all water wells, active and abandoned; the location of all other wells, including plugged and abandoned wells; abandoned locations; dry holes; current drilling locations; the names of operators; the surface and mineral owners; and each offset operator ☐ Included Location: Formation or formations from which oil, gas, and water wells are producing or have produced within the 2.2 area of review (ARSD 74:12:07:03(2)) ☐ Included Location: The name, stratigraphic and structural description, and depth of the receiving formation or formations and 2.3 the overlying and underlying confining zone(s) or formation(s) (ARSD 74:12:07:03(3)) ☐ Included Location: 2.4 The well type, construction, spud date, total depth, formation tops, record of completion or recompletion, and plugging for all oil, gas, and injection wells within the area of review, and any additional pertinent information which the secretary determines is necessary to make an informed judgement on the issuance of a permit, including drill stem tests and well logs for all oil and gas wells identified in the area of review (ARSD 74:12:07:03(4)) ☐ Included Location: 2.5 Information on abandoned and active water wells within the area of review, as follows (ARSD 74:12:07:03(5)) 2.5.1 Abandoned water wells: 2.5.1.1 The legal location 2.5.1.2 Well name 2.5.1.3 Method and supporting information on abandonment, if available 2.5.2 Active Water Wells 2.5.2.1 The legal location 2.5.2.2 Well name 2.5.2.3 An analysis of water quality, including information on total dissolved solids content, chlorides, sodium, sulfates, nitrates, and hydrocarbons 2.5.2.4 The construction program, including casing size and type, if available 2.5.2.5 Depth of the well, if available

2.5.2.6 A geologic / driller's log, if available

2.5.2.7 The water level and pump type, if available

2.1.2 Horizontal Wells (ARSD 74:12:07:03(1)(b))

	Location:	
2.6 testing	A description of the injection well's casing and the proposed casing program, and the proposed the casing for mechanical integrity before use as an injection well (ARSD 74:12:07:03(6))	osed method for
	☐ Included	
	Location:	
2.7 injection	The geologic name and the depth to and interval of all freshwater resources which may be on (ARSD 74:12:07:03(7))	affected by
	☐ Included	
	Location:	
2.8 the gai	Schematic drawings of the surface and subsurface construction details of the well with detauge connections (ARSD 74:12:07:03(9))	iled drawings of
	☐ Included	
	Location:	
injecte include	The source and nature of the substance or substances to be injected, its viscosity, its comparing formation, including stability indices, and the estimated average and maximum daily amed. If the nature of the injected fluid is produced water, a water quality analysis must be subset information on total dissolved solids content, chlorides, sodium, sulfates, nitrates, and hydrogram (10))	ounts to be mitted and must
	☐ Included	
	Location:	
2.10	The average and maxium estimated injection pressure (ARSD 74:12:07:03(11))	
	Location:	
-	A narrative description of any proposed production stimulation program, including a feasible structure description, and an explanation of how the data were determined, such as working calculation 07:03(12))	•
	☐ Included	
	Location:	

		(1) in need of corrective action or where corrective action ow the corrective action will protect freshwater resources.
	☐ Included	
	Location:	
2.13 includ	The injection zone characteristics including porosity e the reference or source of the information. (ARSD 7	
	☐ Included	
	Location:	
2.14	The expected project life (ARSD 74:12:07:03(15))	
	☐ Included	
	Location:	
2.15	Surface owner name, address, and telephone number	r (ARSD 74:12:07:03(16))
	☐ Included	
	Location:	
	Certification of Applicant Certification of Applicant (Form 13). The applicant ant (Form 13). This form can be found at https://dansForms.aspx or by contacting the Minerals and Mining	r.sd.gov/Environment/MineralsMining/OilGas/
	☐ Included	
	Location:	
3.2	Applicant's Signature	
Signa	ture	Date
Printe	d Name of Person Signing	Title