

**UNDERGROUND INJECTION CONTROL
CLASS V
APPLICATION FOR INDIVIDUAL PERMIT
(Domestic Wastewater Facilities (Septic Systems))
UIC Application Form UIC-1-Vb**

APPLICATION INSTRUCTIONS

The following instructions outline the procedures to follow and information needed for a domestic wastewater Class V application as required by WWQRR Chapter 27. For Non-Domestic Wastewater Disposal Facilities, contact the Underground Injection Control (UIC) Program for the correct application form. The WDEQ has sixty (60) days to determine application completeness. Individual permit applicants have a mandatory thirty (30) day public notice period.

For guidance or to resolve permit application submittal issues, please call (307)777-7072.

- A.** The applicant shall submit the application one (1) electronic copy to: <https://bit.ly/2WvE30H> **OR** hard copy copy) to the following address:

Wyoming Department of Environmental Quality
Water Quality Division
ATTN: UIC Program
200 W 17th St - 2nd Floor
Cheyenne, WY 82002

- B.** Applications shall be signed as follows:
- 1) An application submitted by a corporation must be signed by a president, secretary, vice president or treasurer of the corporation in charge of a principal business function, or other person who performs a similar decision-making function for the corporation.
 - 2) An application submitted by a partnership or sole proprietorship shall be signed by a general partner or the proprietor, respectively.
 - 3) An application submitted by a municipality, or a state, federal, or other public agency shall be signed by either the principal executive officer or ranking elected official. "For" or "by" signatures are not allowed. Electronic signatures are not allowed.
- C.** Applications are reviewed for completeness and technical adequacy. During the completeness review, the applicant may be contacted for clarification or additional information. An application will not be processed until all required information has been submitted. Severely lacking applications, applications submitted solely as electronic forms, applications without original signatures, applications with illegible information, or applications with information not submitted in a timely manner shall be returned to the applicant. If your application is determined to be complete and technically adequate, a draft permit shall be prepared by the UIC Program and transmitted to you for review. In addition, notification shall be provided to other interested entities. A mandatory thirty (30)-day public comment period is required and if no comments or requests for a public hearing are made during the public comment period, the Administrator shall make a final determination for permit issuance or denial within thirty (30) days after the public comment period has ended.

- D.** Applicants shall complete the entire application form. If you feel that any portion of the application does not apply to your facility, respond “not applicable” and provide your rationale as to why you believe the requirement does not apply to your facility. Applicants are not required to submit the instruction/example pages (annotated in the footer) with their applications.
- E.** Use TABLE 1 (below) to determine your facility type (see Section 5 of permit application). Please note that 5C4 and 5E2 facilities are prohibited (banned), if you have one of these facilities, please contact our office immediately.

TABLE 1: UIC Facility Types (Check only one box corresponding to your facility)

UIC DOMESTIC WASTEWATER PERMIT TYPES (WWQRR Chapter 27, Section 9)				
Type		Description	Details	Permitting Mechanism
<input type="checkbox"/>	5C6	Small Commercial Disposal Systems	Inject wastewater which is of similar quality to domestic sewage which does not technically meet the definition of domestic sewage, in quantities of less than 2,000 gallons per day.	General Permit (new facilities only) Existing facilities covered under Individual Permits.
<input type="checkbox"/>	5E3	Domestic Subsurface Fluid Distribution Systems	Receive more than 2,000 gallons per day of domestic sewage with only primary treatment such as effluent from a septic tank. In addition, any facility injecting domestic sewage within any five (5) acres of land is a class 5E3 facility whenever multiple 5E facilities under one owner inject a cumulative maximum peak design flow of more than 2,000 gallons per day of domestic sewage	Permit by Rule
<input type="checkbox"/>	5E4	Domestic Wastewater Treatment Plant Disposal Facilities	Dispose of treated domestic waste after treatment to at least secondary treatment standards.	Individual Permit
<input type="checkbox"/>	5E5	Small Domestic Subsurface Fluid Distribution Systems	Receive less than 2,000 gallons per day as an average of a typical week, of domestic sewage with only primary treatment in a septic tank. These systems are designed to accept more than 2,000 gallons per day at a peak and are not small wastewater systems. No class 5E5 system has a required design capacity in excess of 5,000 gallons per day.	General Permit (new facilities only) Existing facilities covered under Individual Permits.

BANNED (PROHIBITED) FACILITY TYPES (WWQRR Chapter 27, Section 20) – Contact WDEQ to resolve		
Type	Description	Details
5C4	Automotive Waste Disposal Facilities	Inject waste from floor drains or sinks where repair work is done on machinery of any description
5E2	Untreated Domestic Sewage Disposal Facilities	Receive untreated domestic sewage from single or multiple sources. Does not include subsurface fluid distribution systems with septic tanks ahead of the subsurface fluid distribution system. Includes all cesspools, regardless of capacity.

F. AREA OF REVIEW CALCULATIONS

The Area of Review is the area for which information and analyses shall be submitted as part of an Underground Injection Control (UIC) permit application. The Area of Review (AOR) must include all portions of an aquifer that will be affected in a measureable way within ten (10) years of permit issuance.

- 1) For individual permits, the applicant may use an area of review that includes the quarter/quarter section (40-acre tract) where the facility is located and all of the adjacent quarter/quarter sections, provided the radius of volumetric fillup (calculations provided below) is less than the default radius (a circle of approximately 2,230-ft in radius). This will yield a total AOR of nine (9) quarter/quarters or a total of 360 acres with the injection facility near its center.
- 2) A radius of volumetric fillup may be used to establish the AOR. The simplest formula allowable assumes that the injectate completely displaces all formation water in a circle around the point of injection. Other formulas may be used, if so, provide documentation as to applicability, source, and data used in the calculation. The simplest formula is:

$$R = \sqrt{\frac{Qt}{\pi Hp}} =$$

Where:

R = Radius of Volumetric Fillup (feet)

H = Thickness of the Injection Zone (feet)

t = Time of injection (days, proposed life of well)

Q = Injection Rate (cubic feet per day)

p = Porosity, expressed as a pure decimal

$\pi = 3.14$

Note: Conversion Factor for gallons to cubic feet = 0.13368, for barrels to cubic feet = 5.61458

- 3) Other methodologies/formulas may be used. If electing to use an alternative formula/methodology, the formula/methodology must be provided and described. All inputs must be provided along with a description of how the inputs were calculated and/or determined, including any citations. Also provide

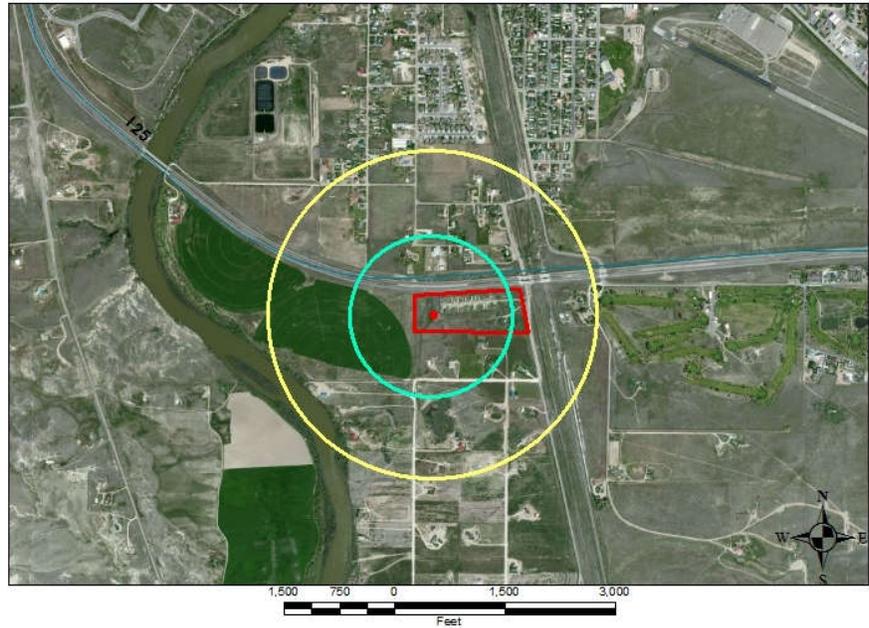
a rationale as to why the alternative formula/methodology was selected, and its applicability in this instance.

NOTE: For a facility injecting a maximum of less than 10,000 gallons per day, the AOR is determined using method (1) above.

For a facility injecting a maximum of 10,000 gallons per day or more, the AOR is the larger of the values determined using all the above methods. (See following examples A and B).

EXAMPLES: AREA OF REVIEW CALCULATIONS

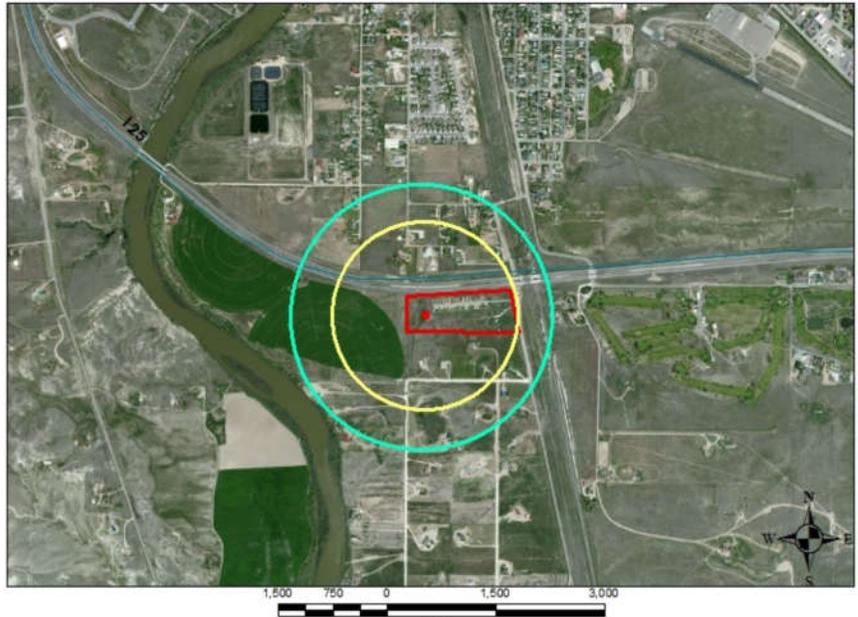
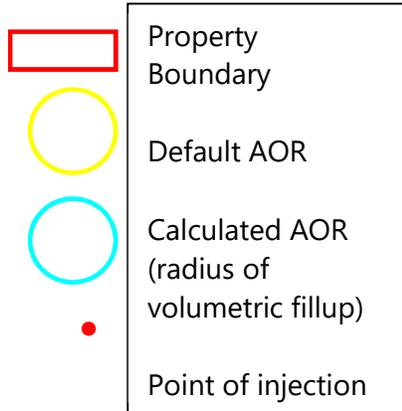
	Property Boundary
	Default AOR
	Calculated AOR (radius of volumetric fillup)
	Point of injection (injection well)



AOR Visual Representation – Example A

In Example A, the yellow circle depicts the default AOR radius. The radius of volumetric fillup was calculated and is represented by the blue circle. In this case, the default AOR is larger, therefore the AOR for this injection well is the default (yellow circle) AOR.

AOR Visual Representation – Example B



In Example B, the yellow circle depicts the default AOR radius. The radius of volumetric fillup was calculated and is represented by the blue circle. In this case, the radius of volumetric fillup is larger, therefore the AOR for this injection well is the calculated radius of volumetric fillup (blue circle) AOR.

G. EXAMPLE: Completed Area of Review Legal Description (See Section 5, Item 4 of permit application)

In this example, the facility has one injection well (DW #1) located in the NENE, Section 15, Township 44N, Range 102W. The permittee has elected to use the default method of calculating their AOR, as their maximum proposed wastewater flows are below 10,000 gallons per day. The AOR should then be described as follows:

Well ID	Township	Range	Section	Quarter	Quarter/Quarter
DW #1	44N	102W	15	NE	NE*
				NE	NW
				NE	SW
				NE	SE
			14	NW	SW
				NW	SW
			11	SW	SW
			10	SE	SE
SE	SW				

*Denotes injection well location

Complete additional tables for each injection well being permitted or renewed.

If the facility's injection well(s) are located in more than one quarter/quarter, the AOR shall be expanded to include all the quarter/quarters that the injection well(s) are located within and all adjacent quarter/quarters. For example, using the above example, if the facility has, in addition to the injection well described above (DW #1), an additional injection well located in the NENW, Section 15, Township 44N, Range 102W, (DW #2) the AOR should then be described as follows:

Well ID	Township	Range	Section	Quarter	Quarter/Quarter
DW #1	44N	102W	15	NE	NE*
				NE	NW
				NE	SW
				NE	SE
			14	NW	SW
				NW	SW
			11	SW	SW
			10	SE	SE
				SE	SW
			DW #2	44N	102W
NE	SW				
NE	SE				
NE	NE				
NW	NE				
NW	SE				
10	SE	SE			
	SE	SW			
	SW	SE			

*Denotes injection well location(s).



UNDERGROUND INJECTION CONTROL PROGRAM

CLASS V
APPLICATION FOR PERMIT OR COVERAGE
(Domestic Wastewater Disposal Facilities)

Table with 3 columns: Date Application Received, Permit Number, Facility Number. Header: AGENCY USE ONLY

Use this application for Class V domestic wastewater disposal wells (see attached Table 1 for a list of facility types that require permit coverage). Please answer every item on this form to the best of your knowledge and attach the required documents. The WDEQ has sixty (60) days to determine application completeness.

SECTION 1: TYPE OF APPLICATION (Check one)

- NEW FACILITY PERMIT
PERMIT RENEWAL
PERMIT MODIFICATION

SECTION 2: COMPANY/OWNER CONTACT INFORMATION

COMPANY NAME:
COMPANY MAILING ADDRESS:
COMPANY CONTACT: PHONE NUMBER:
TITLE: EMAIL ADDRESS:
CONTACT TYPE: OPERATOR CONSULTANT OWNER
OTHER (Please specify)
PRIMARY CONTACT: YES NO

SECTION 3: FACILITY CONTACT INFORMATION

List all persons or firms authorized to act on behalf of the applicant during the processing of the application. Provide contact names, mailing addresses, phone numbers, and e-mail addresses for all additional contacts.

FACILITY NAME: _____

FACILITY PHYSICAL ADDRESS: _____

FACILITY MAILING ADDRESS: _____

FACILITY CONTACT: _____ PHONE NUMBER: _____

TITLE: _____ EMAIL ADDRESS: _____

CONTACT MAILING ADDRESS: _____

CONTACT TYPE: OPERATOR CONSULTANT OWNER
(Choose one or more) OTHER (Please specify) _____

PRIMARY CONTACT: YES NO

SECTION 4: FACILITY LOCATION INFORMATION

FACILITY LOCATION: Township _____ Range _____ Section: _____ Quarter/Quarter _____

Latitude: NAD83, decimal degrees: _____

Longitude: NAD83, decimal degrees: _____

COUNTY: Choose an item.

LAND OWNERSHIP Choose an item. If Other, describe: _____

SECTION 5: WELL/FACILITY CLASSIFICATION AND PERMIT TYPE

A. Determine your Class V facility classification (select one, see Table 1, Item E in "Instructions"):

Well/Facility Classification: Choose an item.

B. Select your permit type: Area Permit Single Permit

If the facility only has one injection well, select "Single Permit", if it has multiple injection wells,

select "Area Permit", provided that:

- a. The receiving formation is the same for all injection wells.
- b. The wells are owned by the same person or company.
- c. The injectate for all wells is similar in terms of chemistry and composition (similar waste streams).

If applying for an Area permit, provide information (as an attachment to this application) to satisfy all items in this application for each injection well.

- C. Attach a list of all other permits your facility has been required to obtain prior to construct and/or commencement of operations. Include permit number or permit designation and regulating authority.

SECTION 6: WELL/FACILITY PERMIT INFORMATION

- A. If the facility owner/operator is not the owner of the surface rights where the facility is located, attach copies of the access agreement between the owner(s) and the facility owner/operator. This requirement can be met by having the owner(s) of the property write a letter consenting to the activities proposed in this application. If there are more than one surface rights owners, attach a table detailing surface rights owner's names, mailing addresses, and telephone numbers.

- B. Provide a brief description of the nature of the business and the activities at the facility being permitted:

- C. Provide the types, sources, and general descriptions of the fluids proposed for injection, including chemical, physical, radiological, and toxic characteristics (attach analytical data to this application, if available, and/or MSDS sheets).

- D. Facility's average disposal capacity in gallons or barrels per day (circle one): _____
- E. Facility's maximum disposal capacity in gallons or barrels per day (circle one): _____
- F. Depth of injection zone (feet below ground surface) : _____

G. Required permit application attachments:

- 1) Plan view of the facility and property showing the location of the leachfield(s), septic tank(s), distribution line(s) and box(es), property boundaries, roads, and buildings. The plan view map may be integrated into the topographic map described in item (2) below, in which case only one (1) facility map is required.
- 2) A topographic map and other pertinent maps, extending at least one (1) mile but not less than the Area of Review for Individual Permit applications.

The topographic map shall depict all of the following:

- a) Property boundaries and surrounding land uses,
 - b) The facility and each of its intake and discharge structures,
 - c) Each well, drywell, or subsurface fluid distribution systems where fluids from the facility are injected underground,
 - d) Other wells, springs, surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant.
 - e) North arrow
 - f) Map scale
 - g) Topographic interval (feet)
- 3) Construction and engineering details in accordance with WWQRR Chapter 25 (septic systems), Chapter 26 (wells) and/or Chapter 27 (Class V systems) including all of the following:
 - a) Facility Construction Information
 - i. Drainfield top and bottom elevations
 - ii. Size and location of drainfield,
 - iii. Size, construction, and location of all holding tanks (septic tanks),
 - iv. Piping details
 - v. Provide all calculations used in determining wastewater flow volumes, facility sizing, leachfield dosing, and any other items pertinent to the facility. Include all calculation inputs and the sources used for the calculations and/or inputs.
 - b) Facility Information
 - i. Depth to static water level
 - ii. Percolation test results
 - iii. A description of how the percolation test(s) were conducted
 - iv. A description of the soils in the area(s) of the leachfields, including porosity, general geologic formation information, slope(s) in the area(s) of the leachfield, and any other factors that might affect leachfield disposal capacity and/or efficiency
 - v. Distance from the leachfield(s) to all of the following:
 - 1) Wells (including neighboring wells and Wyoming State Engineer's Office Well ID numbers)
 - 2) Public water supply wells
 - 3) Property lines
 - 4) Foundation walls
 - 5) Potable water pipelines
 - 6) Septic tanks

- 7) Surface waters (including seasonal and/or intermittent surface waters)
- 8) Cisterns

Details should be sufficient to show compliance with all applicable sections found in Chapters 25, 26 and 27, Wyoming Water Quality Rules and Regulations.

All new facilities must complete and submit an Injection Well Notification of Construction Completion, Form UIC-4, to the UIC Program upon construction completion for each new injection well.

H. Applicant must submit information necessary for the department to make an assessment of the vulnerability of the environmental and public health from the injection into the Class V well, as follows:

- 1) Depth to seasonally high groundwater in the shallowest aquifer: _____
- 2) For all wells identified within the area of review, provide a table containing the following:
 - a) Well ID,
 - b) Wyoming State Engineer's Office well permit number,
 - c) Well owner's name,
 - d) Well depth,
 - e) Well screening intervals,
 - f) Well use,
 - g) Well locations in relation to the facility.
- 3) Provide documentation that the disposal capacity of the facility in gallons per day was calculated according to Table 1, Chapter 25, Section 2.

Does the facility have a meter to measure injectate volume? Yes No

If yes, attach the previous two (2) years injectate volume records, if applying for a permit renewal or modification.

- 4) A calculation of the Area of Review (AOR) (see Instructions, Item F) for each injection well.
 - a) Attach documentation explaining the source and use of the data and calculation method(s) used to determine the AOR for the proposed/renewed/modified facility.
 - b) Attach a legal description of each injection well's AOR in Township, Range, Section, and Quarter/Quarter (general land survey system) coordinates to the nearest ten (10) acres in Table 3 below. An example of a completed Table 3 is located in the Instructions, Item G).

- Some part, or all, of my project falls within an SGCA and I have contacted the WGFD for an SGEO review. It does not comply with the SGEO. I have valid and existing rights related to this permit. I have committed to the attached recommendations that will minimize impacts to sage grouse.
- By checking this box, I certify that I have reviewed the SGCA's available on-line, and determined that no portion of my project falls within an SGCA. *(No additional requirements apply.)*

B. Access for Inspections:

As part of their [application/renewal/permit modification], the applicant shall certify under penalty of perjury that the applicant has secured and shall maintain permission for Department of Environmental Quality personnel and their invitees to access the permitted [site/facility], including (i) permission to access the land where the [site/facility] is located, (ii) permission to collect resource data as defined by Wyoming Statute § 6-3-414, and (iii) permission to enter and cross all properties necessary to access the [site/facility] if the [site/facility] cannot be directly accessed from a public road. A map of the access route(s) to the [site/facility] shall accompany the [application/renewal/transfer].

"I, _____, certify under penalty of perjury that [owner/applicant] has secured and shall maintain permission for the Department of Environmental Quality personnel and their invitees to access the permitted [site/facility], including (i) permission to access the land where the [site/facility] is located, (ii) permission to collect resource data as defined by Wyoming Statute § 6-3-414, and (iii) permission to enter and cross all properties necessary to access the [site/facility] if the [site/facility] cannot be directly accessed from a public road."

C. Permittee, Professional Engineer, and Professional Geologist Certifications:

Please note: Professional Engineer's and/or Geologist's Certifications are required for new and modified facilities.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment."

Printed Name of Applicant

Title

Signature of Applicant

Date Signed

CERTIFICATION OF PROFESSIONAL ENGINEER:

“The engineering designs, plans, and specifications which are included in this application were all done by me or by someone working directly for me. I have reviewed the designs, plans, and specifications and certify that they are all done according to the highest standards of Professional Engineering.”

Printed Name of Professional Engineer

P. E. Number

(SEAL)

Signature of Professional Engineer

Date Signed

CERTIFICATION OF PROFESSIONAL GEOLOGIST:

“The geologic interpretations, cross sections, and hydrologic studies which are included in this application were all done by me or by someone working directly for me. I have reviewed that work and certify that they are all done according to the highest standards of Professional Geology.”

Printed Name of Professional Geologist

P. G. Number

(SEAL)

Signature of Professional Geologist

Date Signed