PRESBY SEPTIC PERMIT APPLICATION

STOP: Before submitting your Presby Small Wastewater permit . . . Have you done the following?

PRE-APPLICATION SOIL CUT
NOTE: An Appointment must be scheduled (24 hours in advance) for a County representative to be on-site for the Soil Cut (see phone numbers for North or South Lincoln County Planning Offices below).

The following must be provided to the Planning Office prior to the onsite appointment for the Soil Cut:
1. Property Description: Subdivision Name & Lot No. or Parcel ID, Township, Range, Section
2. Property Owner Name
3. Site Plan, including marked driveway access on plan and marked at location site
4. See Page 1 - Show on Site Plan where Soil Cut planned & Small Wastewater Facility planned

The above required information can be delivered to the appropriate office below or emailed to: North Lincoln County: Steve Johnson (sjjohnson@lccy.org) or John Woodward (jwoodward@lccy.org); South Lincoln County: Jeanette Fagnant (jfagnant@lccy.org)

SOIL CUT INSPECTION REQUIRED PRIOR TO SUBMISSION OF ATTACHED APPLICATION

Before application is complete, the following must be attached.

☐ Enclosed fee
☐ Owner’s signature
☐ Copy of recorded deed
☐ Complete site plan showing the following:
   1. Property lines
   2. Intended building location
   3. Water lines
   4. Replacement drain field
   5. Driveway Access

Return to: North Lincoln County:
Lincoln County Planning, Afton Office
(mail) 421 Jefferson St. Suite 701,
(physical) 61 E. 5th Ave.
Afton, WY 83110 (307) 885-3106
OR
South Lincoln County:
Lincoln County Planning, Kemmerer Office
925 Sage Avenue Suite 201
Kemmerer, WY 83101 (307) 877-2103, Fax (307) 877-6439
PRESBY SMALL WASTEWATER FACILITY PERMIT APPLICATION
LINCOLN COUNTY, WYOMING

Updated 2/19/2020 website: www.lcwy.org, Planning

$100.00 FEE – New Facility
$50.00 FEE – Replacement or Modification

APPLICANT/OWNER(S)

NAME: ________________________________________
ADDRESS: _____________________________________
PHONE: _________________________________________
EMAIL: _________________________________________

FOR OFFICE USE ONLY

Date Rec’d:
Date Accepted:
PIN #:

SYSTEM STATUS: ( ) New ( ) Renewal
( ) Modify ( ) Replace ( ) Enhanced

Physical Address:

BUILDER/INSTALLER/REPRESENTATIVE

NAME: ________________________________________
ADDRESS: _____________________________________
PHONE: _________________________________________
EMAIL: _________________________________________

PROJECT LOCATION: TOWNSHIP / RANGE / SECTION:
OR SUBDIVISION NAME and LOT NUMBER

The compliance with construction standards and operation and maintenance of the facility to meet the applicant’s design are the responsibility of the applicant, owner, or operator. This permit shall become null and void two years from the issuance. A renewal may be requested prior to the expiration date of the permit. A copy of your Warranty Deed is required along with this application. Refer to Lincoln County, Wyoming Land Use Regulations (LUR) Appendix E Small Wastewater Design Standards.

- PRE-APPLICATION SOIL CUT INSPECTION REQUIRED! (SEE COVER)

- INSPECTION IS REQUIRED BEFORE BACKFILLING OF COMPLETED SYSTEM!

I certify to the best of my knowledge, that the information and materials submitted with this application are true and correct.

OWNER’S or AUTHORIZED SIGNATURE

NAME: ________________________________________ DATE: ______________________

Signing this permit application authorizes county personnel the right of ingress and egress from said lands for any and all inspection purposes necessary to the exercise of this permit.

APPROVAL FOR CONSTRUCTION BY
ADMINISTRATOR: __________________________________ DATE: ______________________

INSPECTION PERFORMED BY: ______________________________ DATE: ______________________

APPROVAL BY
ADMINISTRATOR: __________________________________ DATE: ______________________

If you need assistance or information contact the Planning Office at (307) 877-2103
Fax: (307) 877-6439, 925 Sage Avenue Suite 201, Kemmerer, WY 83101

OR
the Planning Office at (307) 885-3106
Septic System Application for a Permit to Construct

**Pre Application Soil Cut**

Soil type, ground water level and slope must be considered for septic system design.

Leach field shall be no deeper than 5 feet and no closer than 4 feet to ground water.

Soil exploration pit must be dug at least 4 feet below proposed leach field.

County inspection

Date: __________________________

Inspected by: _________________________

Depth of cut: __________________________

Soil type: __________________________

Ground water depth: __________________________

Site slope: __________________________

Other potential site conditions to consider, surface water, wetlands, pipelines, driveway, canals, irrigation ditches etc.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Septic System Application for a Permit to Construct

**Basic Design Requirements for Septic Tanks**

1. Tanks must have a minimum of 1,000-gallon capacity for residences with up to four bedrooms; add 150 gallons of capacity for each additional bedroom.
2. The tank must be watertight, including all joints and connections, and constructed of a durable, non-corrodible material such as concrete, fiberglass, thermoplastic or other approved material. Steel tanks not allowed, refer to WY DEQ approved tanks. **NOTE, Lincoln County no longer allows Norwesco Yellow Legacy tanks.**
3. The liquid depth shall be between three (3) and six (6) feet deep.
4. A single chamber tank shall have at least a 2:1 length to width ratio or be partitioned to prevent short-circuiting.
5. The first chamber in any two-chambered tank must accommodate at least 50 percent of the capacity.
6. Each chamber must have an access opening with a minimum dimension of 20 inches, from which both inlet and outlet tees shall be accessible.
7. Each chamber must have riser that extends to a maximum of six (6) inches below the ground surface.
8. The inlet and outlet tees should be (4) inch diameter, schedule 40 PVC or equivalent, and should extend into undisturbed soil.
9. Tanks used in a series shall be installed such that the inlet to each successive tank shall be at least two (2) inches below the outlet of the preceding tank.

**Diagram of a Typical Two-Chambered Septic Tank**

![Diagram of a Typical Two-Chambered Septic Tank]

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Drawing modified from CIDWT. 2009. *Installation of Wastewater Treatment Systems* Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT) Iowa State University, Midwest Plan Service. Ames, IA.
Septic system Application for a Permit to Construct

General information

1. Property size in acres: ________________________________
2. Water source: on site well __________ Community water __________ other ________
3. Number of proposed bedrooms: ________________________________
   (Note: where unfinished basement is proposed add 2 bedrooms)
4. Septic tank sizing: up to 4 bedrooms, 1000 gal. tank __________
   Up to 7 bedrooms. 1500 gal. tank __________
5. Tank manufacturer: ________________________________
6. Tank material: concrete __________ poly __________ other __________
7. Piping shall be minimum 4 inches in diameter schedule 40 ABS or PVC
   (Note: SDR 35 may be used if pipe is bedded in washed pea gravel.)
8. Cleanouts:
   1. Inlet pipe shall have a cleanout above surface within 3 feet of foundation.
   2. Where elbows are greater that 22.5 degrees in inlet side of tank.
   3. Where inlet pipe exceeds 100 feet in length.
9. Leach field sizing: number of bedrooms 3 and above __________

   Select Design Flow gallons per day (gpd):
   1 br = 150 gpd ________
   2 br = 280 gpd ________
   3 br = 390 gpd ________
   4 br = 470 gpd ________
   5 br = 550 gpd ________

10. Loading rate value (page 6) ________ 2 x ________

11. Design Flow divided by loading rate = minimum leach field area
    Design Flow ________/Loading rate ________ = Leach field area ________ sq. ft.

12. Number of Presby Chambers required:
    1 br = 5
    2 br = 10
    3 br = 13
    4 br = 16
    5 br = 19
### Site Plan Drawing

Attach a sketch of your site as a separate sheet, showing each of the items in the table below if applicable.

<table>
<thead>
<tr>
<th>Check Box If Shown On Site Plan</th>
<th>Element</th>
<th>Required Setback Distance To Septic Tank (feet)</th>
<th>Required Setback Distance To Leachfield (feet)</th>
<th>Is the Setback Distance Satisfied?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>Property lines</td>
<td>10</td>
<td>10</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>All buildings, roads, and driveways</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>☐</td>
<td>Setback to buildings w/out a foundation drain</td>
<td>5</td>
<td>10</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Setback to buildings with a foundation drain</td>
<td>5</td>
<td>25</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Private wells (including neighbors)</td>
<td>50</td>
<td>100</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Public water supply wells</td>
<td>100</td>
<td>200</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Potable water supply lines</td>
<td>25</td>
<td>25</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Surface water (ditch, pond, intermittent waterways, etc.)</td>
<td>50</td>
<td>50</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Septic tank</td>
<td>-</td>
<td>10</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Break in slope (where slope gets abruptly steeper)</td>
<td>15</td>
<td>15</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Cisterns</td>
<td>25</td>
<td>25</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>Leachfield &amp; Replacement Leachfield</td>
<td>10</td>
<td>-</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>☐</td>
<td>North arrow</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>☐</td>
<td>Slope (arrow pointing downslope)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>☐</td>
<td>Location of numbered percolation test holes (numbered)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>☐</td>
<td>Location of soil exploration pit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>☐</td>
<td>Location of cleanout port(s)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Example site plan:
Septic Systems Application for a Permit to Construct

Percolation Test Instructions

In order for a septic system to perform properly, the wastewater must move through the soil at an ideal rate, neither too fast nor too slow. A percolation test estimates the rate at which the water will percolate, or move, through the soil. The information provided by percolation tests is necessary to design leachfields correctly. Follow the steps below to complete a percolation test.

1. Location of Percolation Test Holes. The percolation (perc) test holes must be spaced uniformly over the proposed leachfield site. A minimum of three (3) test holes are required, although you can use more if desired.

2. Test Hole Preparation. Dig or bore each hole 12 inches wide and as deep as the proposed depth of the leachfield (usually between 30 and 40 inches). Make sure the sides are vertical and scrape the sides and bottom of the hole with a sharp pointed instrument to restore a natural soil surface. Remove loose soil from the hole and place 2 inches of coarse sand, washed gravel, or crushed stone in the bottom in order to prevent scouring or sealing.

3. Presoaking. Presoaking is absolutely required to get valid percolation test results. Presoaking allows the water conditions in the test hole to reach a stable condition that is similar to a leachfield. Presoaking time varies with soil conditions, but presoak holes for at least 4 hours. Maintain at least 18 inches of water in the test holes for at least 4 hours, then allow the soil to swell for 12 hours (overnight is good) before starting the perc test.

For sandy or loose soils, add 18 inches of water above the gravel or coarse sand. If the 18 inches of water seeps away in 18 minutes or less, add 18 inches of water a second time. If the second filling of 18 inches of water seeps away in 18 minutes or less, the soil is excessively permeable and the site is unsuitable for a conventional disposal system. If this is the case, contact your county small wastewater permitting authority or DEQ district office.

4. Perc Rate Measurements. Fill each hole with 12 inches of water and let the soil re-hydrate for 15 minutes prior to taking any measurements. Establish a fixed reference point such as a flat board placed across the top of the hole to measure the incremental water level drop at the constant time intervals. Measure the water level drop to the nearest 1/8 of an inch with a minimum time interval of 10 minutes. Normal time intervals are usually 10 or 15 minutes.

Refill the test hole to 12 inches above the gravel before starting the measurements. Measure down to the water from the fixed reference point. Record this value on the first line in the perc test data sheet (Page 6). Take another measurement after the time interval has elapsed and record on the second line of the table. Calculate the water level drop and record in the table.

Continue the test until the water level drop rate has stabilized, i.e. three consecutive measurements within 1/8 inch of each other. Before the water level drops below 6 inch above the gravel, refill the test hole to 12 inches. Some test holes may take longer to stabilize than others. If the drop rate continues to fluctuate, use the smallest drop rate out of the last six intervals for your calculations.
# Septic Systems Application for a Permit to Construct

## Percolation Test Data Sheet

**Owner/Project Name:** ____________________________  
**Date:** ____________________________

Test holes were pre-soaked for: ________ (hours/minutes)  
**Time Interval:** ________ min

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*Do not perform percolation test if ground is frozen or if groundwater is present in holes. Holes must be 12 inches in diameter and evenly spaced over the leachfield area. Roughen sides and bottoms of holes and place 2 inches of gravel in each hole.*

<table>
<thead>
<tr>
<th>Depth of Hole:</th>
<th>Time of Day</th>
<th>Hole #1 (Required)</th>
<th>Hole #2 (Required)</th>
<th>Hole #3 (Required)</th>
<th>Hole #4 (Optional)</th>
<th>Hole #5 (Optional)</th>
<th>Hole #6 (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Interval (minutes)</strong></td>
<td><strong>Final Interval Drop (inches)</strong></td>
<td><strong>Perc Rate (min/inch)</strong></td>
<td>Measure to nearest 1/8 inch Water Level Drop</td>
<td>Measure to nearest 1/8 inch Water Level Drop</td>
<td>Measure to nearest 1/8 inch Water Level Drop</td>
<td>Measure to nearest 1/8 inch Water Level Drop</td>
<td>Measure to nearest 1/8 inch Water Level Drop</td>
</tr>
</tbody>
</table>

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To calculate drop: Subtract the water level measurement at the start of your time interval from the water level measurement at the end. The "Drop" is how far the water level went down during the stated time interval. Time intervals must be consistent for each hole throughout the test.

Leachfield percolation (Perc) rate: If 3 to 5 holes were tested, use the slowest (highest number) rate of the holes tested. If six or more holes were tested, use the average rate.

**Helpful Conversions:**  
1/8 = 0.125  
1/4 = 0.25  
3/8 = 0.375  
1/2 = 0.50  
5/8 = 0.625  
3/4 = 0.75  
7/8 = 0.875

To calculate perc rate (minutes per inch):  
\[
\text{Example Perc Rate} = \frac{\text{Time Interval (min)}}{\text{Final Interval Drop (in)}} = \frac{10 \text{ min}}{1 \frac{1}{8} \text{ in}} = 8.9 \text{ min/in}
\]

I certify that this perc test was done in accordance with WQRR Chapter 25, Appendix A and the instructions on the previous page.

**Test Performed by:** ____________________________  
**Signature:** ____________________________
BASIC SERIAL SYSTEM
(UP TO 5 BEDROOMS - 550 GPD)

END VIEW

PLANT VIEW
(NUMBER OF ROWS MAY VARY FROM THOSE SHOWN)

NOTES:
1. BASIC SERIAL SYSTEMS (AS SHOWN) DO NOT REQUIRE A DISTRIBUTION BOX.
2. SYSTEM BAND MUST MEET REQUIREMENTS SPECIFIED IN PRESBY DESIGN AND INSTALLATION MANUAL.
3. A 4" DIAMETER VENT STACK MUST BE ATTACHED TO THE END OF THE LAST ROW IN THE SERIES.
4. EFFLUENT FILTERS ARE NOT RECOMMENDED FOR USE WITH PRESBY SYSTEMS. THEY WILL RESTRICT AIR FLOW.
5. ALL PVC JOINTS MUST BE GLUED OR MECHANICALLY FASTENED.
6. CONSULT PRESBY DESIGN AND INSTALLATION MANUAL FOR COMPLETE SYSTEM REQUIREMENTS.