

**INDIVIDUAL SEWAGE TREATMENT SYSTEM PERMIT APPLICATION
BIG HORN COUNTY BOARD OF HEALTH**

PERMIT NO. _____

I. GENERAL INSTRUCTIONS

1. The application must be filled out **completely** and must be approved before construction begins.
2. Include the **\$75.00** fee for review made payable to the **Big Horn County Health Department**.
3. Owner must sign this permit or attach the signed authorized representative form.
4. **At least 48 hours notice must be given to perform the on-site inspection. Approved permit is valid for two (2) years.**
5. This application is for: New construction _____ Extensive repair to existing system _____ Replacement _____

II. APPLICANT INFORMATION (please type or print)

Land Owner's Name: _____ Phone: _____
Address: _____ City: _____ Zip: _____

III. SITE INFORMATION (attach a copy of USGS 7.5' or 15' location map)

Property location _____
(Subdivision lot number, COS number, T, R, Section, etc.)

Lot size _____ acres Type of building _____
(House, trailer, cabin, rental, etc.)

System designed for ___ number of bedrooms. Full basement? ___ Yes ___ No (For Full Basement add 1 bedroom)
 Absorption field area is: _____ Concave _____ Convex _____ Straight
 Have sanitary restrictions been lifted? ___ Yes ___ No If yes, is documentation attached ___ Yes ___ No
 If equal elevation, will absorption trenches be connected together? ___ Yes ___ No
 Deep absorption trenches requested? ___ Yes ___ No If yes, provide soil profile at least 6' below proposed
 bottom of trench. (seasonal soil saturation/groundwater monitoring may be required)
 Nitrate sensitivity analysis solution _____ mg/l Analysis sheet attached ___ Yes ___ No
 Phosphorous breakthrough analysis solution _____ years Analysis sheet attached ___ Yes ___ No
 Is Level II treatment required? ___ Yes ___ No If yes, is design attached? ___ Yes ___ No

IV. SITE EVALUATION (attach a copy of sanitary restrictions)

Test pit excavated to a depth of _____ feet Depth to seasonal high groundwater table is _____ feet
 Depth to bedrock is _____ feet Date groundwater was checked ____/____/____
 Slope in drainfield area _____ % Mottling (redox) ___ Yes ___ No If yes, what depth _____ feet
 Is the 100 year flood plain within 100 feet of the lot or water and wastewater system? ___ Yes ___ No
 If yes, show location on lot layout. If no, explain how determined _____
 Soil description log sheet attached ___ Yes ___ No
 Percolation rate _____ minutes/inch Test performed by _____ Test results attached ___ Yes ___ No

V. DISPOSAL SYSTEM (septic tank/drainfield sizing on back of application)

Septic tank/filter _____ gallons Total drainfield length _____ feet (2 foot width ___ Yes ___ No)
Distance from septic tank to:
 Well and suction lines ___ feet Foundation _____ feet Watercourse _____ feet
 Property line _____ feet Roadcuts, cliffs or banks _____ feet Cisterns _____ feet
Distance from drainfield to:
 Well and suction lines ___ feet Foundation _____ feet Watercourse _____ feet
 Property line _____ feet Roadcuts, cliffs, or banks _____ feet Cistern _____ feet

VI. SKETCH LAYOUT/DESIGN ON REVERSE SIDE, OR IS LAYOUT ATTACHED? ___ Yes ___ No

VII. ACKNOWLEDGMENT

I hereby declare that the information above is true, complete and correct to the best of my knowledge. I declare that the system will be installed in accordance with the Big Horn County Board of Health Regulations No.1 (effective October 1,1993) for Individual Sewage Treatment Systems and the terms of the permit. I acknowledge that Big Horn County has not designed the system and that these requirements do not bind or obligate the County to guarantee the system's operation. I agree to give a minimum 48 hours notice for the County's inspection of the system before covering, and that inspections will be arranged between 8:00 a.m. and 5:00 p.m. weekdays, except on County holidays.

Owners Signature _____ Date _____ **OR** Owners authorized representative signature (form attached)
Installer _____ Date _____

FOR OFFICE USE ONLY

Date Received: _____
 Date application approved: _____
 Date application denied: _____
 Date onsite inspection approved: _____
 Date onsite inspection denied: _____
 \$30 Reinspection fee required? ___ Yes ___ No ___x2 ___x3
 If yes, dates paid _____

RETURN TO:

BIG HORN COUNTY HEALTH DEPARTMENT
 Environmental Section
 809 N. Custer Avenue
 Hardin, MT 59034
 Phone (406) 665-8724 **FAX (406) 665-1025**

Comments: _____

LOT LAYOUT DETAILS REQUIRED:

Proposed and existing homesite(s), structures and their use; driveways, parking areas, utility lines, water wells, septic tanks, springs, surface waters and streams, including irrigation ditches, water or sewer lines, separation distances, absorption field and 100% replacement area, distances to existing neighboring water wells and septic tank/absorption fields, cleanouts, percolation test hole and soil profile test pit/hole location, and a north arrow.

Please submit/attach additional information as required by Circular DEQ 4 (2004 Edition) for systems that are not standard gravity flow septic tank/drainfield systems.

Scale: _____ = _____

Lot Layout Attached? Yes No

SIZING OF SEPTIC TANK: 1-3 Bedrooms (1,000 gallons); 4-5 bedrooms (1,500 gallons); 6-7 bedrooms (2,000 gallons).

WASTEWATER FLOW DESIGN: 1 BR (150gpd), 2 BR (225gpd), 3 BR (300gpd), 4 BR (350gpd), 5 BR (400gpd), each additional BR (50gpd).

SEWAGE EFFLUENT MAXIMUM APPLICATION RATES FOR SIZING STANDARD DRAINFIELDS

	Residential Square feet per 3 bedroom	Nonresidential Square feet for 100 gpd.	Estimated perc rate (min/in)	Application rate (gpd/ft ²)
1.	375	125	<3 (a)	0.8 (a)
2.	375	125	3 - <6	0.8
3.	500	167	6 - <10	0.6
4.	600	200	10 - <16	0.5
5.	750	250	16 - <31	0.4
6.	1000	333	31 - <51	0.3
7.	1500(b)(c)	500(b)(c)	51 - <121	0.2
8.	2000(d)	667(d)	≥ 121	0.15
9.			≥ 121	NP

(a) If the soil for 3 feet below the infiltrative surface is gravelly sand or very coarse sands, or there is less than 6 feet separation between the bottom of the trench and a limiting layer, the trench must be pressured-dosed or other treatment provided as approved. If the soil for 3 feet below the infiltrative layer is very gravelly sand or coarser textured, the trench also must be sand-lined or other treatment as approved.

(b) Pressure distribution will be required if more than 500 lineal feet (or 1000 square feet) of distribution line is needed.

(c) Comparison of soils profile report, percolation rate and USDA soils report will be used to select applicable square footage.

(d) Square footage is increased because the trench side-wall is not available in EVTA bed systems.

NP - Not permitted.

(1) Gravelly sand or very coarse sands (a) (2) Loamy sand, coarse sand (3) Medium sand, sandy loam (4) Fine sandy loam, loam, silt loams (5) Very fine sand, sandy clay loam (6) Clay loam, silty clay loam (7) Sandy clay, clay or silty clay (8) Clays, silts, silty clays (soil is reported throughout the soil profile)(USE EVTA BED) (9) Clays or silts, pan evaporation rates do not allow for EVTA use. Additional absorption system sizing for other nonresidential sources may be calculated using the formula found in DEQ4(8.4.2)