The link for this form is: https://www.rcgov.org/departments/public-works/water-reclamation-division

BEFORE SUBMITTING THE ONSITE WASTEWATER PERMIT APPLICATION:

1. Hire a State Certified On-Site Wastewater Installer. For a list of installers, can call the SD Plumbing Commission @605-773-3429 or visit: list_of_small_wastewater.pdf (sd.gov).
2. Dig a profile hole four feet below the lowest construction joint on a pre-cast concrete septic tank and/or lift station, unless encountering groundwater or bedrock first.
3. Call Engineering Services at 605-394-4154 and ask for the on-site wastewater or septic coordinator so you can schedule a profile hole inspection.
4. Complete percolation testing as outlined at the bottom of this page.
5. You will need approval from the South Dakota Department of Agriculture and Natural Resources (SD DANR) if any of the following apply:
    a. You want to install a holding tank
    b. You have a commercial property
    c. You are installing a mound or evapotranspiration system
    d. You want to install an experimental system
    e. Your profile hole did not pass inspection.
    f. Your percolation rate was above the state minimum or maximum.
    g. You are asking for a variance to any other state requirement.

    Do not submit this permit application without their approval letter. Visit their website at: South Dakota Feedlot Permit Program - Septic Tank Systems (sd.gov) or call (605)773-4647.

Manner for conducting test/profile hole(s) and percolation tests*:

A soil percolation test shall be made in at least 3 test holes within 5 feet of where the proposed absorption system or shallow wastewater system is to be located. If the contractor moves the drainfield location following approval of a design, he or she is responsible for completing the percolation tests as required by the ARSD and § RCMC and resubmitting the design change for approval.

The horizontal dimension or diameter of the percolation test hole shall be from 6 to 12 inches and the vertical sides shall extend to the maximum depth of the proposed absorption system or to a depth of at least 30 inches, whichever is greater. The bottom and sides of the holes shall be carefully scarified to remove any smearing from the excavation of the hole and to provide a natural soil surface into which water may penetrate.

Test holes shall be located in unfrozen soil and shall be filled at least 50 percent full with water and maintained at least 25 percent full for at least 8 hours but not more than 16 hours before starting the soil percolation test. Immediately before performing the test, each hole shall be re-filled with water to at least 50 percent of its volume. When the water level reaches the lower 25 percent of the test hole, the test shall begin. The percolation rate of a test hole shall be expressed in the number of minutes it takes the water level to drop 1 inch. The percolation rate for the area where the subsurface infiltration system is desired is the average percolation rate of all the test holes. The percolation tests shall be conducted for 2 hours unless the percolation rate is slower than 45 minutes per inch, in which case the percolation tests shall be run for at least 4 hours.

*for additional information and requirements for mound systems, refer to § RCMC 13.20.210

CITY OF RAPID CITY
RAPID CITY, SOUTH DAKOTA
Public Works Department
Engineering Services Division
(605) 394-4154

Onsite Wastewater Permit Application

Updated May 21, 2014

To avoid delays in the application process, all items for the application request must be complete at the time of submittal. The contractor is responsible for verifying that all easement conditions and/or required setbacks are met. The contractor shall not start the installation, repair, alteration, replacement or upgrade prior to receiving approval from the City of Rapid City.

If State approval and/or variances are required, please attach a copy of the materials submitted to the South Dakota Department of Environment and Natural Resources as well as the approval letter.

The contractor is responsible for attaining all permits as required. Such permits may include an on-site wastewater permit, electrical permit, plumbing permit, or any other permit needed to complete the contracted work.

Address or legal description of property: _____ **Tax ID at time of application:** _____

Is a public sewer system located within 400 feet of the structure?	☐ YES	☐ NO (if yes, connect to public sewer)
Easements and setbacks have been verified?	☐ YES	☐ NO (verification is required)
Commercial property, mound system or experimental system?	☐ YES	☐ NO (if yes, need State approval)
Is the property in the flood plain? (Is a flood plain development permit needed?)	☐ YES	☐ NO

Number of finished bedrooms: _____
Unfinished area in home or structure: _____ ft^2
Number of bedrooms this on-site wastewater system is designed for:

Additional Tank & Drainfield Sizing for Unfinished Area:
144-1000 ft^2 requires one additional bedroom
1001-2000 ft^2 requires two additional bedrooms
2001+ ft^2 requires three additional bedrooms

Garbage disposal: _____**no** _____**yes (20% tank upsize & 2 compartment or multiple tanks)**

Clothes washer:	_____no	_____yes
Dishwasher:	_____no	_____yes
Water softener:	_____no	_____yes
Self cleaning dehumidifier:	_____no	_____yes
Whirlpool bathtub:	_____no	_____yes
Multi-head shower:	_____no	_____yes

Designed as a: _____**Class I onsite wastewater system;** _____***Class II onsite wastewater system (size per RCMC §13.20)**

Water Source: ___City/Sanitary District ___Community Well ___Private Well on Lot ___Cistern
Lot size (ft^2):_____
Based on the water source, the lot size meets or exceeds RCMC § 13.20.160: _____no _____yes

It is understood that drainage is not to enter wastewater systems per RCMC § 13.20.100 (contractor's initials): _____

The Contractor is responsible for providing an As Built at the final Observation (contractor's initials): _____

Contractor:_____ **Contractor's Phone:**_____
Contractor's Address:_____

Property Owner's Name(s):_____ **Signature (not required):**_____
Property Owner's Current Address:_____ **Phone:**_____

CITY OF RAPID CITY
RAPID CITY, SOUTH DAKOTA
Public Works Department
Engineering Services Division
(605) 394-4154

Onsite Wastewater Permit Application

Page Two of Four
Updated May 21, 2014

Address or Legal: _____

City personnel will make a cursory observation of the profile hole and may request assistance from State or Federal agencies for determination of bedrock and/or mottling. Depth to Bedrock: _____ Depth to Groundwater or Mottling: _____

The percolation test holes must be within 5' of the absorption system and be completed per RCMC § 13.20.
Individual Percs (mpi): _____, _____, _____ Average Percolation Rate: _____minutes per inch (mpi)
Name of person completing percolation test(s): _____
Signature:_____ Date Completed:_____
Address:_____ Phone:_____

Anticipated Maximum daily flow: _____gpd
Class 1 = 120 gpd per bedroom or Class 2 = 150 gpd per bedroom

Tank size: _____; _____; _____
Tank Material: _____; _____; _____
Tank Manufacturer: _____
#of compartments: _____; _____; _____
Lift Station Size: _____gallons (500 minimum)

☐ Chambers (brand/model):_____
(DENR variance needed for serial distribution with chamber)

☐ Drop Box/Distribution Box (brand/model): _____

☐ Gravel/River Rock (depth below pipe):_____inches

☐ Pump (brand/model): _____

☐ High water alarm (brand/model): _____

Type of treatment system (i.e. trench, mound, serial, bed, experimental, etc.):
Required area:_____ft^2 - Reduction:_____ft^2 = **Total Proposed:_____ft^2** (1200+ requires dosing / 1800+ requires alt. dosing)
[#of trench lines: _____Trench length: _____ Trench width: _____] [Bed (length & width):_____x_____]

All provisions of the Laws and Ordinances of the City of Rapid City and the State of South Dakota governing the type of work being done will be complied with, whether specified herein or not. The granting of a permit does not presume to give authority to violate, cancel or set aside any of the provisions of the building code, zoning ordinances or any other local law or ordinance regulating construction or the performance of construction in the City of Rapid City. The field observation(s) is primarily to determine compliance with the minimum sanitary requirements and does not cover items, such as quality of materials, structural soundness, electrical and mechanical design features. Approval does not in any way release the applicant/owner from the responsibility that the on-site wastewater system will be operable when construction is completed.

Printed name of State Certified Installer: _____ Phone: _____
Signature of State Certified Installer:_____ Date: _____

City of Rapid City Engineering Division use only	
Conditions for approval:	Reviewed by:_____ Date: _____ Observed by: _____ Date: _____

CITY OF RAPID CITY
RAPID CITY, SOUTH DAKOTA
Public Works Department
Engineering Services Division
(605) 394-4154

Onsite Wastewater Permit Application

Page Three of Four
Updated May 21, 2014

A	Wells > 100 ft deep
B	Wells < 100 ft deep, springs, or water suction lines
C	Cisterns or Reservoirs
D	High-water line of lakes, streams, or impoundments (meandered or ordinary, whichever is higher)
E	Pressurized water lines
F	Dwelling or occupied building
G	Property line - all sides

	Ground and Terrain Features						
Wastewater System Components	A	B	C	D	E	F	G
Septic tank, aerobic system, or holding tank	50	75	50	50	25	10	10
Absorption field, mound, evapo-transpiration, seepage pit, or graywater system	100	150	100	100	25	20	10
Sewer lines of tightly jointed tile or equivalent material	50	75	50	50	10	0	0
Sewer lines – materials, construction, testing comply with AWWA standards for water mains	30	30	25	3	10	0	0
Unconventional systems	50	75	50	50	25	0	10

Please consider future pumping, repairs, sensitive area setbacks, and additions.
Also, consider a backup treatment area and future connections to sanitary sewer.

Address or Legal Description: _____ **All setbacks have been verified:** _____ **(initials)**

☐ Proposed Design is not to scale but shows measurements
☐ See attached Proposed Design sheet(s)

Proposed Design

Please show all system components and all that apply in A-G as well as all easements and impervious surfaces.
The contractor is responsible for verifying and meeting all setbacks.

CITY OF RAPID CITY
RAPID CITY, SOUTH DAKOTA
Public Works Department
Engineering Services Division
(605) 394-4154

Onsite Wastewater Permit Application

Updated May 21, 2014

A	Wells > 100 ft deep
B	Wells < 100 ft deep, springs, or water suction lines
C	Cisterns or Reservoirs
D	High-water line of lakes, streams, or impoundments (meandered or ordinary, whichever is higher)
E	Pressurized water lines
F	Dwelling or occupied building
G	Property line - all sides

	Ground and Terrain Features						
Wastewater System Components	A	B	C	D	E	F	G
Septic tank, aerobic system, or holding tank	50	75	50	50	25	10	10
Absorption field, mound, evapo-transpiration, seepage pit, or graywater system	100	150	100	100	25	20	10
Sewer lines of tightly jointed tile or equivalent material	50	75	50	50	10	0	0
Sewer lines – materials, construction, testing comply with AWWA standards for water mains	30	30	25	3	10	0	0
Unconventional systems	50	75	50	50	25	0	10

"As Built" Provided by Contractor

Address or Legal Description: _____ **All setbacks have been verified:** _____ **(initials)**

☐ As built is not to scale but shows measurements
☐ See attached As Built sheet(s)

Please show <u>all</u> system components and all that apply in A-G as well as all easements and impervious surfaces.
<u>The contractor is responsible for verifying and meeting all setbacks.</u>

I hereby certify that the installation, repair, upgrade or alteration related information submitted is true and correct, and that, in the exercise of my reasonable professional judgment, the work completed complies with the City of Rapid City wastewater system rules, RCMC § 13.20, and the State of South Dakota Article 74:53:01 Individual and Small On-Site Wastewater systems.

Printed Name of State Certified Installer: _____

Signature of State Certified Installer: _____ **Date:** _____