

Property Owner's Guide to Getting a Septic System Permit

February 2010

GETTING STARTED:

The process for getting a septic permit is largely dependent on:

1. The size of your property, and
2. When and how your parcel was created.

Parcels 20 acres or larger

If your property is at least 20 acres, you will need a satisfactory site evaluation before we can issue you a permit. (See the Site Evaluation section for more detailed information.)

Parcels less than 20 acres

If your property is less than 20 acres, you will need either a:

1. DEQ subdivision approval document, or
2. Satisfactory site evaluation.

Which one of these applies depends on when and how your parcel was created. Most parcels are either part of a subdivision or certificate of survey. However, there are also some older parcels which were divided using meets and bounds or other descriptive methods. The best way to start is to figure out whether your parcel has a DEQ approval.

DEQ approval document exists

Many subdivisions and certificate of surveys have gone through the subdivision review process and have been issued an approval document by DEQ. We have copies of the DEQ approval documents at our office. They are also available at the Clerk and Recorder's office. Unfortunately, they are not currently available on the internet.

If a DEQ approval document exists for your parcel, you must develop it as outlined in the approval. Approvals typically designate where your well and septic system must be located and limit the number of dwellings or amount of commercial development that can occur on the site. If you want to change where you want the well and septic system, you will likely have to go through a Site Modification process. If you want to change the type of usage or number of allowed dwellings you will have to go back through the DEQ subdivision process. Depending on the changes, an abbreviated subdivision application may be possible.

No DEQ approval document exists for the parcel

If no DEQ approval document exists for your parcel, you have to figure out when and how the parcel was created:

Subdivision

- If it's part of a subdivision created before 1961, a site evaluation is needed.
- If it's part of a subdivision created after 1961, you'll have to go through DEQ's subdivision process to see if the parcel can be developed. The parcel has to meet all current requirements.

Certificate of Survey (COS)

- If the parcel was part of a certificate of survey, contains 5 or more acres and was created before 1973, a site evaluation is required.
- If the parcel was part of a certificate of survey, contains 10 or more acres and was created before 1975, a site evaluation is required.
- If the parcel is part of a certificate of survey and contains at least 20 acres, a site evaluation is required.

If your parcel does not fit into any of these categories, you will need to find the purpose of the survey that created the parcel. Some parcels are created by using exemptions that restrict their use. Depending on the exemption, you might need to go through DEQ's subdivision review process. A purpose statement will be on the plat on file at the Clerk and Recorder's office. These are also available on line at <http://www.co.missoula.mt.us/research/>.

Older Parcels

Older parcels that were created before DEQ subdivision regulations existed usually need to have a satisfactory site evaluation completed before a septic permit can be issued. However, it is important to note that some old parcels (especially small ones or those in or near the floodplain) may not meet the current requirements for getting a septic permit.

Important Note:

There are plenty of parcels that were created without going through DEQ's subdivision review process that may not be able to have a septic system on them at all. Parcels that cannot meet the requirements for water and septic and may not be able to be developed.

Need Help?

Because there are so many ways parcels can be created, this can be a rather confusing and daunting process. We are happy to help you determine which process you will need to go through to see if you can get a septic permit for your parcel. To do this, we need you to bring in your legal description including: Subdivision Name or COS number, Township, Range and Section and geocode. It is also helpful for you to bring along your proposed site plan, showing your house, septic and well location. (A more detailed site plan is required at the time of septic permit application.)

The Health Department will not assess the development potential of a property. For that, you'll need a consultant. We only evaluate a specific location based on your development proposal.

SITE EVALUATIONS

Site evaluations can be performed by the Health Department, professional engineers and others who are certified by the Department.

At a minimum, site evaluations include:

1. Assessing one or more soil profile holes (these are 10 feet deep, so you'll need to hire an excavator),
2. Looking at the physical conditions of the site, and
3. Checking distances from surface water, floodplain and existing wells and septic systems. (The latter sometimes requires knocking on your neighbor's doors. The Health Department will

identify properties we have questions about, and may require you to do the leg work to figure out where neighboring wells and septics are located.)

Site evaluations may also include:

1. Deciding whether groundwater monitoring is needed
2. Percolation Tests
3. Non-degradation analysis

PERCOLATION TESTS

Percolation tests (commonly referred to as “perc tests”) are not required for all properties; only when the soil is either very coarse (like gravels and sands) or relatively fine (like silts and clays.) The Health Department **does not** do perc testing; for that you will need to hire a qualified engineer or site evaluator.

To do a perc test, the evaluator digs a hole and records how fast the water soaks in. This gives us an idea of how well the soil can treat and absorb wastewater. Very fast perc rates (the water soaks in quickly) mean your septic system will have to be sand lined to slow down the wastewater to allow more time for treatment before it hits the groundwater. Very slow perc rates (the water soaks in slowly) mean your septic system needs to be large enough to give the wastewater time to soak into the soil.

NON DEGRADATION (aka “non-deg”) ANALYSIS

In accordance with state law, we can’t write a septic permit for a new or increased use without making sure a non-deg analysis has been completed. Like site evaluations, non-deg can be done by the Health Department or by a qualified consultant. It’s routinely done as a part of subdivision review, so if your property has a DEQ approval, a separate non-deg analysis is probably not required.

Non-deg looks at your septic system’s potential for pollution of groundwater and nearby surface water by calculating:

1. Nitrate levels at the end of the septic system’s mixing zone
2. The length of time it would take for phosphorus from your septic system to get to the nearest surface water.

These aren’t the only pollutants of concern in wastewater, but they are the only ones specifically considered in non deg.

For us to complete your non deg analysis, the following information is required:

1. A nitrate sample from a nearby well to establish current background levels. Provide the well log if one is available for this well. The depth of the well should be known.
2. The number of bedrooms your house or trailer will contain (see section on bedrooms for more information about what qualifies as a bedroom),
3. Depth from the surface of the ground to the upper most water-bearing layer (aquifer) or bedrock (this information can often be determined from well logs),
4. The distance to the nearest surface water, soil texture and, if applicable, the perc rates at the proposed drainfield site (this comes from your site evaluation).

APPLYING FOR THE PERMIT

Once you know that there is a DEQ approval for the parcel or the site evaluation has been completed, you can apply for the septic permit. Permit applications are available on line at <http://www.co.missoula.mt.us/EnvHealth/IndSepticSys/Permits/SepticPermit.html> or can be picked up at the Health Department.

1. Completely fill out the application. If required information is missing, it will take longer for your permit to be issued.
 2. Provide an accurate site plan. This is very important. It does not have to be drawn by an engineer or architect, but it does need to correctly show the property boundaries and everything on the list below. It needs to either be drawn to scale (with the scale identified) OR enough measurements need to be included to show where everything is located.
 - a. If your property was created with a DEQ approved site plan, you must place your well and septic system as shown on the approved site plan.
 - b. If there is a reason that the well and septic system cannot be placed as shown on the approved site plan, you may be required to obtain a Site Modification through our Department for approval of the new location(s).
 3. Provide a copy (no larger than 11x17) of the floor plans of all buildings that will be connected to the septic system.
 4. Submit required application fee & your completed application. We accept applications through the mail, by fax at (406) 258-4781, via electronic form at: <http://www.co.missoula.mt.us/ENVHealth/Land/IndSepticSys/Permits/pdfs/Septic%20&20Well%20Permit%20Application%20Form.pdf> or in person weekdays between 8 am. and 5 pm. at 301 W Alder, Missoula, MT 59802.
 5. We will issue the permit (as long as all requirements have been met) within 3 working days. We'll notify you when your permit is ready to be picked up.
 6. Pay the permit fee(s) and you're good to go.
 7. Have the system installed and inspected. Remember a certified installer must be the one to install the system and must have a copy of the permit on site. The permit is not finalized until we have inspected the installation. Once that happens, we'll give two copies of the inspection to the installer (one of which is for you) and we'll keep one on file at the Health Department.
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Required elements of a site plan:

- A. Property lines
- B. Existing and proposed buildings
- C. Existing and proposed water supplies, including piping
- D. Existing and proposed septic systems
- E. Nearby floodplain or floodprone areas
- F. Roads and driveways
- G. Nearby surface water, including irrigation ditches, ponds, streams, rivers, etc.
- H. Neighboring wells and septic systems within 100 feet of your property boundaries
- I. No build zones (if applicable)

There are several ways to get a to-scale drawing of your property to use as a starting point.

- On the internet:
 - a. The County Public Works' Mapping and GIS website allows you to search for plat maps using either the subdivision name or certificate of survey number. <http://www.co.missoula.mt.us/research/>
 - b. Missoula County Property Database. You can either search for your property using the map feature or by finding your property using another search method and then selecting the map tab on the upper right. <http://www.co.missoula.mt.us/Owner/default.aspx>
- At the Clerk and Records office in the county courthouse at 200 West Broadway in Missoula.

Site Plans for Septic Permits

Site plans can, but don't have to be drawn by a professional engineer or architect. A good site plan shows all the relevant features listed on the septic application. If the site plan is not drawn to scale, enough measurements should be given to accurately depict where everything is on the property.

Example of an adequate site plan:



Example of an inadequate site plan:

A site plan is not adequate if it does not show the property boundaries, nearby surface water, neighboring wells and septic, floodplain and other relevant features.

