CLACKAMAS COUNTY

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DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

GUIDE FOR SEPTIC TANK REPLACEMENT (MINOR REPAIR)

PERMIT APPLICATION:

- A completed Septic Application signed by the property owner or applicant (with a completed Authorizing Representative Form).
- A complete Septic Plot Plan submitted that meets the requirements shown on the back for the form.
- Septic tank information (Cut sheet) and other applicable information such as float measurements and pump calculations.
- Applications that are mailed, faxed, or emailed may take 2-3 days for processing.
- Many tank replacement permits can be issued within 24-48 hours.

SEPTIC TANK SELECTION:

- A septic tank that serves a single-family dwelling up to 4 bedrooms must have a minimum volume of 1,000 gallons.
- A home with 5-8 bedrooms must use a septic tank having a minimum volume of 1,500 gallons.
- The tank must be on the DEQ list of Approved Tanks and Distribution Units.
- **Be aware that some DEQ approved tanks may not be suitable for your site based on groundwater and soil/site conditions** therefore we require the make and model of the proposed tank to be shown on your application. *Call our Department if you have questions on what tanks may be suitable for your site.

SEPTIC TANK PLACEMENT FOR SYSTEMS BUILT AFTER JUNE OF 1977:

- INSTALLATION GUIDE: Each tank manufacturer has prepared an installation guide that provides instructions to follow when installing that manufacturer's tank. It is very important that you closely follow the manufacturer's guide to ensure the tank remains structurally sound and watertight after installation.
- SETTING THE TANK: Install the tank level from side-to-side and end-to-end. The depth of excavation must be determined before installing the tank to ensure that the building sewer pipe has the minimum/maximum grade set by the plumbing code once connected to the tank inlet fitting.
- GRAVITY OR PUMP: Similarly, the effluent sewer pipe that connects to the tank outlet fitting must have a minimum fall of 2 inches, and maintain a minimum grade of 4 inches per 100 feet. Be aware that the tank outlet invert must also be at least 8 inches higher than the invert of the header pipe on the first/highest trench. A pump will be required to lift sewage to the drainfield if the minimum fall and grade requirements for the effluent sewer pipe cannot be met.

SEPTIC TANK PLACEMENT FOR SYSTEMS THAT WERE BUILT BEFORE JULY OF 1977:

Clackamas County has found that some septic systems built prior to July of 1977 do not have sufficient fall between the septic tank and the drainfield to meet current DEQ requirements. If it is reasonably possible to do so, the tank placement must meet the same placement standards for systems built after June of 1977 described above. If this minimum elevation difference cannot be met, it is possible to comply with DEQ standards by using a pump to lift septic tank effluent to the drainfield, however at additional cost.

Clackamas County may issue a minor repair permit for a septic tank replacement for a system built before July 1977 without requiring a pump if all the following requirements are met:

A. The system must have been installed prior to July of 1977, substantially in compliance with the standards that were in effect at the time of installation;

B. The system serves an owner-occupied single family residence;

C. The septic tank installer must check and verify that the effluent sewer pipe between the septic tank and the drainfield has at least two (2) inches of fall; and

D. The property owner(s) must submit a signed affidavit on a County form stating that the installation of a pump (and other necessary components) to lift septic tank effluent to the drainfield is an unreasonable requirement, and that he/she understands that the useful life of the system may significantly be reduced without the pump. Additionally, the property owner(s) shall hold harmless the County, its employees and agents if the system should fail or otherwise not perform in a satisfactory manner.

MAINTAIN SETBACKS: A replacement septic tank must meet established minimum setbacks from buildings, property lines, wells and other features present on the landform if reasonably possible to do so.

SERVICE ACCESS RISER AND COVER REQUIREMENT: The septic tank must have at least one access riser assembly with cover that extends to finished grade or higher. The riser must be securely attached to the septic tank and be watertight. It must be at least 20 inches in diameter when the soil cover over the tank does not exceed 36 inches of depth. The minimum diameter of the riser must be at least 30 inches if the backfill depth exceeds 36 inches. Multi-compartment tanks must have an above-described riser above each compartment. The riser cover(s) must be fastened securely to prevent unauthorized access and have a gasket for odor control.

SEPTIC TANK ANTI-FLOTATION REQUIREMENT: A septic tank installed where a groundwater table is present at any time during the year may be required to have anti-flotation measures. The need to use anti-flotation measures may not be apparent until after the County has conducted an initial tank inspection. Tank manufacturers have prepared instructions to follow if anti-flotation measures are required. Please be aware that some septic tanks cannot be used at locations where the groundwater level rises higher than the bottom of the septic tank.

TESTING THE TANK FOR LEAKAGE:

- THE 24 HOUR WATER TEST**:** After the septic tank has been installed according to manufacturer's guidelines, it must be tested to demonstrate that it is watertight by the procedure established by DEQ:

    1. The tank must be filled with clean water to a level that is 2 inches higher than the connection point between the riser and top of the tank. **CAUTION, THE TANK CAN BE DAMAGED IF IT IS FILLED WITH WATER ANY HIGHER THAN 2 INCHES ABOVE THE RISER/TANK TOP JOINT.**
    2. Mark the water level, time, date and your initials inside the riser using a permanent marker.
    3. After 24 hours, check the water level. If it has dropped more than one inch over the test period, the cause of the loss must be determined and fixed.
    4. The tank must successfully pass the water test before calling the County for an inspection.
    5. **Do not remove or add any water to the tank during or after the 24-hour test so that the inspector can verify the watertight test.**

CONNECTION TO EXISTING SYSTEM: The connection point between the tank and the absorption system must be exposed for inspection. This requires locating and uncovering the first box of a serial system, the distribution box of an equal distribution system, the connection point to an existing drywell, or the transition from effluent sewer line to absorption trench in older systems without a box.

TANK DECOMMISSIONING: The old tank must be decommissioned in accordance with standards established by DEQ. A licensed sewage disposal service must first pump the tank to remove all of the remaining septage. The old tank must be removed from the property and disposed of properly, or left in place and filled with reject sand or bar-run gravel. The tank installer must provide the **County** with a completed Tank Decommissioning Certificate and the pumping receipt once the decommissioning work is completed.

PLUMBING PERMIT. Connections between the septic tank and a building require a permit from the Plumbing department. Please contact them for further details at 503-742-4240