

**CONVENTIONAL ONSITE SEWAGE SYSTEM
INSTALLATION OR REPLACEMENT WITH PUMP**

DEQ Specifications for No. RB-4P

This document specifies terms and conditions that are applicable to all contracts entered into with respect to the *Conventional Onsite Sewage System Installation or Replacement with Pump* best management practice in NPS implementation areas.

A. Description

Installation of a conventional onsite sewage system to replace a non-complying discharging system (e.g., straight pipe), which delivers untreated, raw sewage directly to a stream, pond, lake, or river or an installation to correct a malfunctioning conventional sewage system or replace a system not VDH-approved that can potentially impact water quality. A malfunctioning system could be contributing raw or partially treated sewage on the ground's surface or resulting in a direct source of sewage to adjacent ditches or waterways or potentially impacting groundwater. A conventional onsite sewage system refers to a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity-distributed subsurface drainfield. Sewage refers to water-carried or non-water-carried human excrement, kitchen, laundry, shower, bath, or lavatory wastes separately or together with such underground, surface, stormwater, or liquid waste as may be present from a residence.

B. Purpose

To improve water quality by removing raw or partially treated sewage on the land surface that can enter surface water or groundwater during storm events or sewage that is direct source of contamination to surface water or groundwater. Sewage means water-carried and non-water-carried human excrement, kitchen, laundry, shower, bath, or lavatory wastes separately or together.

C. Policies and Specifications

1. Cost-share is authorized:

- i. For the pump-out and removal of solids from the septic tank.
- ii. For inspection of the distribution box or multiple boxes, or other components of the system to determine if the effluent is being properly distributed to the drainfield, and to assess if components of the system are functioning properly, but only in conjunction with the installation or replacement of eligible components of a conventional onsite sewage system.
- iii. For the installation (new construction or replacement of components of) a conventional onsite sewage system including the septic tank, drainfield pumping, and subsurface drainfields.
- iv. For the installation of a pump to move the septic tank effluent from a lower elevation to a conveyance line, distribution box, and ultimately to subsurface drainfields at a higher elevation.
- v. Gray water (from an identified non-complying discharging system, e.g., straight pipe), often considered kitchen, laundry, shower, or bath water, is considered sewage. If gray water is not connected to an onsite sewage system, this is a source eligible for connection, but only during the repair or replacement of a failing or failed onsite system. Gray water connections to public sewer independent of

connections to replace a malfunctioning septic system (conventional or alternative) or straight pipe do not qualify. Costs can include the connection of gray water discharge from a dwelling that is discharging on the ground or in a wet/dry ditch to the existing system that will then be connected to public sewer. Any plumbing or equipment that is needed inside the dwelling to make the gray water connection to the system is not eligible for cost-share.

- vi. For the installation of an inspection port (three-inches or larger pipe or structure that allows access to the septic tank for the purpose of measuring sludge and scum accumulation) or an effluent filter. Cost-share for these components would apply to systems that have a pre-2000 septic tank. In accordance with 12VAC5-610-817 (Maintenance), as of July 1, 2000, all septic tanks shall be designed for routine inspection without being uncovered, or have an effluent filter, or be designed for reduced maintenance.
 - vii. To re-stabilize and establish a vegetative cover on disturbed areas by regrading and planting seed as appropriate. Disturbed areas need to be stabilized by planting seed in accordance with the Virginia Erosion and Sediment Control Standard and Specifications 3.31 (Permanent Seeding) and Specification 3.35 (Mulching). For slopes of 3:1 or greater, use 3.36 (Blankets and Matting).
 - viii. For the cost associated with design of the system using an appropriately licensed Conventional (or Alternative) Onsite Soil Evaluator or Professional Engineer (PE).
 - ix. For permit fees associated with construction of conventional onsite sewage system (reimbursable upon installation and final approval of system by VDH).
2. A sewage system replacement must be in accordance with a written repair or construction permit from the Virginia Department of Health and inspection from the Virginia Department of Health, or a licensed Onsite Soil Evaluator (OSE), or a Professional Engineer (PE).
 3. The owner or agent shall obtain any other permit(s) as required for the installation or replacement of the conventional sewage system.
 4. The owner or agent shall obtain and comply with any designs as required in the Health Department permit.
 5. All construction in accordance with the VDH-issued permit must be inspected by the local Health Department, a licensed Onsite Soil Evaluator, or the Professional Engineer who designed the system.
 6. If the old septic tank is not usable and is to be replaced, it must be properly abandoned by a licensed septic contractor. Proper abandonment includes pumping and proper disposal of the tank contents, crushing the tank lids or top into the tank, breaking the bottom so that it will not hold water, filling it with sand or other suitable fill material, and restoring the area to its original condition.
 7. The lifespan for this practice is 10 years. The period of lifespan starts on January 1 of the calendar year following the year of installation of the practice.
 8. Operation and Maintenance Statement: Acceptance of payment for this practice results in the recipient agreeing to maintain the onsite septic system for a minimum of 10 years

unless the system is eliminated by connection to public sewer (RB-2). The recipient agrees to refund all or part of the funds received if the practice is found not to meet applicable standards and specifications or if the BMP(s) is/are removed or not properly maintained during the lifespan of the practice. The sale, lease, or changed use of the property will not exempt the recipient from fulfilling this/these requirement(s). Should the property change ownership or leasehold during the lifespan of the practice, the recipient agrees to complete an Agreement Transferring Responsibility for Best Management Practice form signed by all involved parties and submit that signed form to the Grantee identified in this agreement. More information on operation and maintenance can be found in the DEQ BMP manual and the Residential Septic Guidelines.

9. Exemption to the operation and maintenance requirement: An exemption to the above-referenced operation and maintenance requirement may be granted by the Grantee (with approval from DEQ) in the event that a participant decides to connect the system to public sewer (RB-2).
 - i. Connection to Public Sewer (RB-2): The participant is not eligible for cost-share on the RB-2. However, if an exemption is granted, the participant will not be responsible for paying back the prorated cost-share amount remaining on the lifespan of the existing BMP if the participant agrees to maintain the new RB-2 practice for 10 years.
10. The cost-share application for permitted replacement application must include a copy of [VDH Condition Assessment Form](#) completed by VDH, OSE, a licensed installer, or a PE (if applicable).
11. “Assignment of Residential Septic Practice Cost-Share Authorization” and “Agreement Transferring Responsibility for Best Management Practice” forms for this practice are attached to the Residential Septic Guidelines.
12. Cost-share is not authorized:
 - i. For construction of new septic system or existing system upgrade on a lot to accommodate replacement of a residence with a new house or mobile home, nor for the permitted expansion of an existing septic system to accommodate the addition of a bedroom(s) being added to a residence.
 - ii. If the septic system is currently under lifespan of another septic BMP. For example, if the participant has already received cost-share for an RB-4 replacement practice, it is still under lifespan, and the system needs a pump, then that participant would not be eligible for additional DEQ NPS funds. The only exception to this rule is in those cases where the Grantee had issued a written (DEQ-approved) exemption to the original cost-shared practice, and it is issued with the BMP contract at the time that the original practice was installed (see the Residential Septic Guidelines for more information).

D. Rate

The cost-share amount is based upon a total average estimated practice cost of \$12,000 per practice and will not exceed 50% to 90% of the total eligible cost based on participant income levels (based upon verification) in accordance with *Virginia’s Nonpoint Source (NPS) Implementation Best Management Practice (BMP) Guidelines*. The cost-share payment for this

practice shall not exceed the BMP estimated average total cost-share cost, known as the practice cap, associated with the approved cost-share rate for the participant.

A Grantee will request from DEQ the ability to use either the No Fiscal Stress or Fiscal Stress table (see Table RB-4P below):

Table RB-4P: Conventional Onsite Septic System Installation/Replacement with Pump, rates based upon average total practice cost of \$12,000.

% of Median Family Income	No Fiscal Stress* Rate	No Fiscal Stress* CS Cap	Fiscal Stress** Rate	Fiscal Stress** CS Cap
> 120% or no income verification	50%	\$6,000	50%	\$6,000
100-120%	55%	\$6,600	65%	\$7,800
81-100%	60%	\$7,200	70%	\$8,400
61-80%	65%	\$7,800	75%	\$9,000
40-60%	75%	\$9,000	85%	\$10,200
<40%	80%	\$9,600	90%	\$10,800

* Located in locality with No Fiscal Stress (average, below average, or no FS)

** Located in Locality with Fiscal Stress (high or above average FS)

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