OWTS Construction Permit Application Guidance

Identify Key Design Requirements

➢ Utilize RIDEM Environmental Resource Map. To view the RIDEM Environmental Resource Map go to the DEM Home Page www.dem.ri.gov, click on online permits & licenses, click on Data & Maps, next click on Environmental Resource Map.

Enable the Following Map Layers on the Environmental Resource Map by clicking on Layer List Icon:

✧ Groundwater Layer (CWHPA and NCWHPA) to assist in identifying public well locations (OWTS Rule 6.23, Table 6.23.E) – If applicable contact RIDOH – Public Drinking Water Program at (401) 222-5960 for specific public well locations.
✧ OWTS Priority (Critical Resource Area) Layer
✧ Drinking Water Supply Watersheds Layer
✧ Wetland Jurisdiction Layer - determine if site is in DEM or CRMC Jurisdiction

➢ Is the system sited within a Critical Resource Area? If Yes, nitrogen reducing technology is required (See OWTS Rule 6.42 and 6.43).

➢ Is the system in a Water Supply Watershed? If Yes, design must comply with OWTS Rule 6.44.

➢ Is there a cesspool on the lot? If Yes, clearly identify on plan and specify proper abandonment practices on plan per OWTS Rule 6.56. (This also applies to all other existing OWTS components that will no longer be used.)

➢ If the applicant’s lot or an adjacent lot is served by a private or public well, or if there is a drinking water well within 200ft of the proposed OWTS and the proposed design flow exceeds 345 gpd per 20,000 sq. ft. of the applicant's lot area, a nitrogen reducing technology must be specified in the design per OWTS Rule 6.45 or Nitrogen Credit Land must be designated per OWTS Rule 6.45.F.

➢ Identify Correct Construction Permit Application Type per OWTS Rule 6.18:

✧ New Building Construction – applicable to new construction, adding 2 or more bedrooms to existing residential structure, or proposing >25% increase to current design flow for existing commercial structure.
✧ Alteration – applicable to residential structures where 1 bedroom will be added to an existing dwelling, or where the structure itself will be modified but number of bedrooms proposed will not change, or if proposing ≤25% increase to current design flow for an existing commercial structure
✧ Repair – applicable when an OWTS is being repaired or a substandard system or cesspool is being replaced with no proposed change of use, no proposed design flow increase, and where there will be no significant renovations to a commercial or residential structure.

➢ Variance Application Reminders:

✧ If the application is an Alteration Variance with no increase in flow, list variance(s) requested on the site plan (Note: Variance fee & variance request form are not required.)
If the application is an **Alteration Variance with a proposed increase in flow** submit a variance request form, variance fee, and list all proposed variances on the site plan.

If the application is a **New Building Construction Variance** submit a variance request form, variance fee, provide 200 ft radius map, list of ownership within 200ft, and list all proposed variances on the site plan.

**OWTS Application Form**

- Verify that all information on the application form is complete and accurate.
- Be sure to provide designer’s email address (ensure it is legible) to expedite the application process should revisions be required.

**Soil Evaluation/Wet Season Verification Form**

- Clearly identify the Seasonal High-Water Table (SHWT) elevation and existing grade elevations at design point.
- Establish soil category and loading rate per OWTS Rule 6.33 or per Advanced Technology Certification and Advanced Technology Design Manual, clearly indicate on plan.

**Treatment System Design**

- Verify that minimum required separation distance(s) to the SHWT and restrictive layer are provided per OWTS Rule 6.33, 6.43, or 6.44 or per Advanced Technology Certification and Advanced Technology Design Manual.
- Verify that each major component was designed in compliance with OWTS Rules, as applicable.
  - Building Sewers – OWTS Rule 6.25
  - Septic Tanks – OWTS Rule 6.27
  - Holding Tanks – OWTS Rule 6.29
  - Pumps – OWTS Rule 6.31
  - Provide System Sizing Calculations
  - Concrete Chambers – OWTS Rule 6.35
  - Grease Tanks – OWTS Rule 6.26
  - Septic Tank Effluent Pipe – OWTS Rule 6.28
  - Pump Tanks – OWTS Rule 6.30
  - Distribution Boxes – OWTS Rule 6.32
  - Dispersal Trenches – OWTS Rule 6.34

- If Applicable, verify that the design satisfies Alternative/Experimental Technology Approval Requirements (See link here: [http://www.dem.ri.gov/programs/water/owts/regulations-reports/altextek.php](http://www.dem.ri.gov/programs/water/owts/regulations-reports/altextek.php))
- If Applicable, verify that the design complies with OWTS Rule 6.37 – Advanced Pressure Drainfields (APDs).
- Review Plan for conformance with OWTS Rule 6.19 “Required Content of OWTS Submissions”.
- Verify that offsets from all OWTS components to property lines and structures are shown.
- Review all notes on plans for consistency with plan design details.