# POWTS OWNER'S MANUAL & MANAGEMENT PLAN



**FILE INFORMATION**

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|---|
| Owner |
| Permit # |

**DESIGN PARAMETERS**

| | | |
|---|---|---|
| Number of Bedrooms: | | ☐ NA |
| Number of Public Facility Units: | | ☐ NA |
| Estimated (average) Flow : | | (gal/day) |
| Design (peak) Flow = (estimated × 1.5): | | (gal/day) |
| In Situ Soil Application Rate: | | (gal/day/ft$^2$) |
| Standard (Domestic) Influent/Effluent | Monthly average | |
| Fats, Oil & Grease (FOG) | ≤30 mg/L | |
| Biochemical Oxygen Demand ($BOD_5$) | ≤220 mg/L | ☐ NA |
| Total Suspended Solids (TSS) | ≤150 mg/L | |
| High Strength Influent/Effluent | Monthly average | |
| (FOG) | >30 mg/L | |
| ($BOD_5$) | >220 mg/L | ☐ NA |
| (TSS) | >150 mg/L | |
| Pretreated Effluent | Monthly average | |
| ($BOD_5$) | ≤30 mg/L | |
| (TSS) | ≤30 mg/L | ☐ NA |
| Fecal Coliform (geometric mean) | ≤$10^4$ | |
| Maximum Effluent Particle Size | ⅛ in dia. | ☐ NA |
| Other: | | ☐ NA |

**SYSTEM SPECIFICATIONS**

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|---|
| Tank Manufacturer: ☐ NA |
| ☐ Septic ☐ Dose ☐ Holding Volume: (gal) |
| Tank Manufacturer: ☐ NA |
| ☐ Septic ☐ Dose ☐ Holding Volume: (gal) |
| Vertical Distance Tank Bottom(s) to Service Pad: (ft) |
| Horizontal Distance Tank(s) to Service Pad: (ft) |
| Specific servicing mechanics must be provided if vertical is >15 feet or if horizontal is >150 feet. Specific instructions to be provided on back. |
| Effluent Filter Manufacturer: ☐ NA |
| Effluent Filter Model: |
| Pump Manufacturer: ☐ NA |
| Pump Model: |
| Pretreatment Unit ☐ NA |
| Manufacturer: |
| ☐ Mechanical Aeration ☐ Peat Filter |
| ☐ Disinfection ☐ Wetland |
| ☐ Sand/Gravel Filter ☐ Other: |
| Soil Absorption System ☐ NA |
| ☐ In-Ground (gravity) ☐ In-Ground (pressure) |
| ☐ At-Grade ☐ Mound |
| ☐ Drip-Line ☐ Other: |
| Other: ☐ NA |

**MAINTENANCE SCHEDULE**

| Service Event | Service Frequency | | |
|---|---|---|---|
| Pump out contents of tank(s) | ☐ When combined sludge and scum equals one-third (⅓) of tank volume<br>☐ When the high water alarm is activated | | |
| Inspect condition of tank(s) | At least once every: ☐ month(s) ☐ year(s) | **(Maximum 3 years)** | ☐ NA |
| Inspect dispersal cell(s) | At least once every: ☐ month(s) ☐ year(s) | **(Maximum 3 years)** | ☐ NA |
| Clean effluent filter | At least once every: ☐ month(s) ☐ year(s) | | ☐ NA |
| Inspect pump, pump controls & alarm | At least once every: ☐ month(s) ☐ year(s) | | ☐ NA |
| Flush laterals and pressure test | At least once every: ☐ month(s) ☐ year(s) | | ☐ NA |
| Other: | At least once every: ☐ month(s) ☐ year(s) | | ☐ NA |
| Other: | | | ☐ NA |

**MAINTENANCE INSTRUCTIONS**

Inspections of tanks and soil absorption systems shall be made by an individual carrying one of the following licenses or certifications: Master Plumber, Master Plumber Restricted Sewer, POWTS Inspector, POWTS Maintainer or Septage Servicing Operator (pumper). Tank inspections must include a visual inspection of the tank(s) to identify any missing or broken hardware, identify any cracks or leaks, measure the volume of combined sludge and scum and a check for any back up or ponding of effluent on the ground surface. The soil absorption system shall be visually inspected to check the effluent levels in the observation pipes and to check for any ponding of effluent on the ground surface. The ponding of effluent on the ground surface may indicate a failing condition and requires the immediate notification of the local regulatory authority.

When the combined accumulation of sludge and scum in any treatment tank equals one-third (⅓) or more of the tank volume, the entire contents of the tank shall be removed by a Septage Servicing Operator (pumper) and disposed of in accordance with chapter NR 113, Wisconsin Administrative Code.

All other services, including but not limited to the servicing of effluent filters, mechanical or pressurized components, pretreatment units, and any servicing at intervals of ≤12 months, shall be performed by a certified POWTS Maintainer.

A service report shall be provided to the local regulatory authority within 30 days of completion of any service event.

**START UP AND OPERATION**

For new construction, prior to use of the POWTS check treatment tank(s) for the presence of painting products, solvents or other chemicals or sediment that may impede the treatment process and/or damage the soil absorption system. If high concentrations are detected have the contents of the tank(s) removed by a Septage Servicing Operator (pumper) prior to use.

Pump tanks may fill above normal highwater levels prior to startup or due to pump failures. Start up or restoration of power under these conditions is not recommended, as the excess wastewater will be discharged to the soil absorption system in one large dose causing an overload that may result in the backup or surface discharge of effluent and damage to the system. To avoid this situation have the contents of the pump tank removed by a Septage Servicing Operator (pumper) prior to restoring power to the pump or contact a Plumber or POWTS Maintainer to assist in manually operating the pump controls until normal effluent levels are restored within the pump tank.

System start up shall not occur when soil conditions are frozen at the infiltrative surface.

Do not drive or park vehicles over tanks or the soil absorption system. Do not drive or park over, or otherwise disturb or compact, the area within 15 feet down slope of any mound or at-grade soil absorption area.

Reduction or elimination of the following from the wastewater stream may improve the performance and prolong the life of the treatment tanks and soil absorption system: acids, antibiotics, baby wipes, cigarette butts, condoms, cotton swabs, degreasers, dental floss, diapers, disinfectants, fats, foundation drain (sump pump) discharge, fruit and vegetable peelings, gasoline, greases, herbicides, meat scraps, medications, oils, painting products, pesticides, sanitary napkins, solvents, tampons, and water softener brine discharge.

**ABANDONMENT**

When the POWTS fails and/or is permanently taken out of service the following steps shall be taken to insure that the system is properly and safely abandoned in compliance with s. Comm 83.33, Wisconsin Administrative Code:

- All piping to tanks, pits and other soil absorption systems shall be disconnected and the abandoned pipe openings sealed.
- The contents of all tanks and pits shall be removed and properly disposed of by a Septage Servicing Operator (pumper).
- After pumping, all tanks and pits shall be excavated and removed or their covers removed and the void space filled with soil, gravel or another inert solid material.

**CONTINGENCY PLAN**

If the POWTS fails and cannot be repaired the following measures have been, or must be taken, to provide a code compliant replacement system:

☐ A suitable replacement area has been evaluated and may be utilized for the location of a replacement soil absorption system. The replacement area should be protected from disturbance and compaction and should not be infringed upon by required setbacks from existing and proposed structure, lot lines and wells. Failure to protect the replacement area will result in the need for a new soil and site evaluation to establish a suitable replacement area. Replacement systems must comply with the rules in effect at the time of their permit issuance.

☐ A suitable replacement area is not available due to setback and/or soil limitations. If the soil absorption system cannot be rehabilitated and barring advances in POWTS technology, a holding tank may be installed as a last resort.

☐ The site has not been evaluated to identify a suitable replacement area. Upon failure of the POWTS a soil and site evaluation must be performed to locate a suitable replacement area. If no replacement area is available a holding tank may be installed as a last resort to replace the failed POWTS.

☐ Mound and at-grade soil absorption systems may be reconstructed in place following removal of the biomat at the infiltrative surface. Reconstructions of such systems must comply with the rules in effect at that time.

**WARNING**

**TREATMENT TANKS, PUMP TANKS, AND HOLDING TANKS MAY CONTAIN POISONOUS GASSES OR LACK SUFFICIENT OXYGEN TO SUSTAIN LIFE. NEVER ENTER ANY TANK UNDER ANY CIRCUMSTANCE. DEATH MAY RESULT. ESCAPE OR RESCUE FROM THE INTERIOR OF A TANK MAY NOT BE POSSIBLE.**

**ADDITIONAL INSTRUCTIONS:**

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**POWTS INSTALLER**

| Name |
|---|
| Phone |

**POWTS MAINTAINER**

| Name |
|---|
| Phone |

**SEPTAGE SERVICING OPERATOR (PUMPER)**

| Name |
|---|
| Phone |

**LOCAL REGULATORY AUTHORITY**

| Name |
|---|
| Phone |

This document was drafted by the staffs of the Green Lake, Marquette and Waushara County POWTS regulatory agencies in compliance with sections Comm 83.22(2)(b)(1)(d)&(f) and 83.54(1), (2) & (3), Wisconsin Administrative Code.