

POWTS OWNER'S MANUAL AND MANAGEMENT PLAN

FILE INFORMATION

Owner	
Permit #	

DESIGN PARAMETERS

Number of Bedrooms (100 gpd/bedroom)	
Number of Commercial Units	
Estimated flow (average)	gal/day
Design flow (DWF) = estimated x 1.5	gal/day
Soil Application Rate	gal/day/ft ²
Influent/Effluent Quality (<input type="checkbox"/> NA) Fats, Oil & Grease (FOG) Biochemical Oxygen Demand (BOD ₅) Total Suspended Solids (TSS)	Monthly Average ≤ 30 mg/L ≤ 220 mg/L ≤ 150 mg/L
Pretreated Effluent Quality (<input type="checkbox"/> NA) Biochemical Oxygen Demand (BOD ₅) Total Suspended Solids (TSS) Fecal Coliform (geometric mean)	Monthly Average ≤ 30 mg/L ≤ 30 mg/L ≤ 10 cfu/100mL
Maximum Effluent Particle Size	1/8 inch diameter

SYSTEM SPECIFICATIONS

Septic Tank Capacity	gal	<input type="checkbox"/> NA
Septic Tank Manufacturer		<input type="checkbox"/> NA
Effluent Filter Manufacturer		<input type="checkbox"/> NA
Effluent Filter Model		<input type="checkbox"/> NA
Pump Tank Capacity	gal	<input type="checkbox"/> NA
Pump Tank Manufacturer		<input type="checkbox"/> NA
Pump Manufacturer		<input type="checkbox"/> NA
Pump Model		<input type="checkbox"/> NA
Pretreatment Unit (<input type="checkbox"/> NA)		
<input type="checkbox"/> Sand/Gravel Filter		<input type="checkbox"/> Peat Filter
<input type="checkbox"/> Mechanical Aeration		<input type="checkbox"/> Wetland
<input type="checkbox"/> Disinfection		<input type="checkbox"/> Other:
Manufacturer:		Model:
Soil Absorption Component (<input type="checkbox"/> NA)		
<input type="checkbox"/> In-ground (gravity)		<input type="checkbox"/> In-ground (pressurized)
<input type="checkbox"/> At-grade		<input type="checkbox"/> Mound
<input type="checkbox"/> Drip-line		<input type="checkbox"/> Other:
Vertical Distance Tank Bottom to Service Pad: _____ ft		
Horizontal Distance Tank(s) to Service Pad: _____ ft		

Dispersal Unit Mfg./Model Number: _____ NA

Calculations:

$$\text{DWF} \div \frac{\text{Soil Application Rate}}{\text{Dispersal Area Required}} = \text{End Cap EISA} \div \text{or (Trench Width)} = \text{\# Units or Total Length of Trench(s)}$$

DESIGN CRITERIA

- "Design of Pressure Distribution Networks for Septic Tank-Soil Absorption Systems" Publication 9.6 (SSWMP Manual)
- "ICC Flowtech Mound Component Manual" Version 1.2
- "EZ Flow Mound Component Manual" Version 8/20/2007
- SBD - 10854-P (R.1/12) "At-Grade Component Manual Using Pressure Distribution" Version 2.0
- SBD - 10705-P (N.01/01) "In Ground Soil Absorption Component Manual" Version 2.0
- SBD - 10691-P (N.01/01) "Mound Component Manual" Version 2.0
- SBD - 10657-P (R.6/99) "Drip-line Effluent Disposal Component Manual"
- SBD - 10706-P (N.01/01) "Pressure Distribution Component Manual" Version 2.0
- Other:

MAINTENANCE MONITORING SCHEDULE - MAINTENANCE AND MANAGEMENT

Service Event	Service Frequency
Pump/inspect dispersal cell(s), clean filter	At least once every: <input type="checkbox"/> 13 months <input type="checkbox"/> 3 years <input type="checkbox"/> Other:
Inspect pump & pump controls, alarm, pretreatment unit	At least once every: <input type="checkbox"/> __ months <input type="checkbox"/> 3 years <input type="checkbox"/> NA
Flush and pressure test laterals	At least once every: <input type="checkbox"/> __ months <input type="checkbox"/> 3 years <input type="checkbox"/> NA

START UP AND OPERATION: For new construction, prior to using the POWTS check treatment tank(s) for the presence of painting products or other chemicals that may impede the treatment process and/or damage the dispersal cell(s). If high concentrations are detected have the contents of the tank(s) removed by a septage servicing operator prior to use. **System start up shall not occur when soil conditions are frozen at the infiltrative surface.**

The property owner is responsible for the operation and maintenance of the POWTS and submission of required reports. The quantity and quality of the wastewater stream will affect the performance and longevity of your POWTS. The installation of water-saving appliances and fixtures along with prompt repair of leaks reduces the wastewater volume. Also the brine or waste from water softeners, iron removal units, other clear water treatment devices and foundation drains should be discharged to the ground surface whenever possible. Note: this does not include laundry waste, showers, dishwasher, etc.

This system is designed to handle domestic strength wastewater; however, the disposal of food based greases, oils, vegetable/fruit peels, seeds, bones, and food solids, such as those produced by a garbage disposal should be minimized. Toilet tissue is the only paper that should be discharged into the system. Other non-biodegradable items, such as baby wipes, tampons, sanitary napkins condoms, cigarette butts, dental floss, and cotton swabs, should not enter the system. Chemicals, such as petroleum products, paint, disinfectants, pesticides, antibiotics, solvents, etc., should not be flushed into the system because they can seriously damage your POWTS and contaminate your

drinking water supply. Maintain a regular steady flow by spreading laundry washing throughout the week. Avoid vehicle traffic over all system components. Compaction of snow over the dispersal unit may cause it to freeze up.

INSPECTIONS & MAINTENANCE: Inspection shall be made by an individual carrying one of the following licenses or certifications: Master Plumber, Master Plumber Restricted Sewer, POWTS Maintainer, or Septage Servicing Operator (per the attached Maintenance Schedule). Tank inspections must include a visual inspection of the tank to identify any missing or broken hardware, identify any cracks or leaks, measure the volume of combined sludge and scum and check for any backup or ponding of effluent to the ground surface and test all electrical equipment such as pumps and alarms. Any defects shall be promptly corrected. Exposed openings greater than 8 inches in diameter shall be secured with effective locking devices to prevent accidental or unauthorized entry the tanks.

When the combination of sludge and scum in any tank exceeds one-third (1/3) or more of the tank volume, the entire contents of the tank shall be removed by a Septage Servicing Operator and disposed of in accordance with Ch. NR 113, Wisconsin Admin. Code. Specific servicing mechanics must be provided if vertical is >15 feet or if horizontal is >150 feet and instructions to be provided below.

The outlet filter(s) shall be inspected and cleaned to remove any accumulated solids according to manufacturer's specifications. Solids washed from the filter shall be retained in the tank. Filter cleaning may be necessary at more frequent intervals than stated in the maintenance schedule to keep the system operating.

Alarms should be tested on a regular basis by the home owner. If an alarm sounds, contact an individual licensed to service POWTS, There is normally a 1 day reserve under regular operating conditions, however water should be conserved until any problems with the system are corrected to prevent back-up of sewage into the dwelling or surfacing.

ABANDONMENT: When the POWTS fails and/or is permanently taken out of service the following steps shall be taken to ensure that the system is properly and safely abandoned in compliance with Ch. SPS 383.33, Wisconsin Admin. Code:

- All piping to tanks and pits 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.
- After pumping, all tanks and pits shall be excavated and removed or their covers removed and the void space filled with soil, gravel, or other 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 renders it unusable. Replacement systems must comply with the rules in effect at the time of replacement.
- A suitable replacement area is not available due to setback and/or soil limitations. Barring advances in POWTS technology a holding tank may be installed as a last resort to replace the failed POWTS.
- 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!!!! SEPTIC, PUMP, AND OTHER TREATMENT TANKS MAY CONTAIN LETHAL GASES AND/OR INSUFFICIENT OXYGEN. DO NOT ENTER A SEPTIC, PUMP, OR OTHER TREATMENT TANK UNDER ANY CIRCUMSTANCES. DEATH MAY RESULT. RESCUE OF A PERSON FROM THE INTERIOR OF A TANK MAY BE DIFFICULT OR IMPOSSIBLE.

ADDITIONAL COMMENTS: _____

POWTS INSTALLER

Name:
Phone:

POWTS MAINTAINER

Name:
Phone:

SEPTAGE SERVICING OPERATOR (Pumper)

Name:
Phone:

LOCAL REGULATORY AUTHORITY

Name:
Phone: