County Inspection Responsibilities



Summary of SPS 383.26 (1) - Inspections & Testing

- Governmental Unit (GU) "may" inspect POWTS:
 - construction
 - installation
 - operation
 - maintenance
- Why? To ascertain conformance to:
 - approved plans
 - conditions of approval (read approval letters)
 - SPS 382, 383, 384, and 385 W.A.C.
- GU may issue orders to halt POWTS installation/modification
- GU may issue orders to abate POWTS-related health hazards
- No limit to GU authority to inspect a POWTS or to require a POWTS evaluation

Summary of SPS 383.26 (2) - Inspections & Testing

- No POWTS component may be covered or put into service until inspected by GU
 - Inspection Scheduling:
- responsible MP or MPRS must notify GU (in-person, writing, phone, electronic)
 when installation will be/is ready for inspection
 - responsible MP or MPRS shall maintain records of inspection notifications (include date, time, and person notified)
- responsible MP or MPRS may complete installation if inspection is not completed by the end of the next workday following appointed day (excluding weekends and holidays)
 - Additionally: responsible MP or MPRS shall provide necessary equipment and properly licensed personnel required for the inspection by GU

Summary of SPS 383.26 (3) - Inspections & Testing

• By ordinance, GU may require other inspections not specified in SPS 383

Summary of SPS 383.26 (4) - Inspections & Testing

- GU shall maintain a written record of each POWTS inspection which shall include Information relating to the following:
 - POWTS location
 - date of inspection
 - nature and findings of inspection

Summary of SPS 383.26 (5) - Inspections & Testing

• test POWTS components before implementing service in accordance with manufacturer's specifications or conditions of approval under SPS 383.22 and 384.10

MISCELLANEOUS CONSIDERATIONS

County GU not responsible for POWTS inspections on:

- federal land (including land held in trust for Native Americans)
- state land

Provide an as-built plot plan for future location of system components.

GU inspector required to be certified under SPS 305.66

Verify that water tightness testing was completed for existing tanks per SPS 384.25 (2).

Verify that tank and/or drywell abandonment was done per SPS 383.33.

Note any plan revisions (SPS 383.22 (4)) or variances required.

Summary of SPS 383.22 (4) - plan revisions

- Revision required for design modification to previously approve plan:
 - change in design flow or contaminant load
- replacement or addition of a POWTS component listed in Table 383.04-1 (drip irrigation lines, ATUs, disinfection units, sand/gravel/peat filters)
 - addition of a dispersal component
 - change to a dispersal component(s) involving:
- a) Location outside evaluated area or change in system elevation(s)
- b) Dimensions of dispersal cell or basal area
- c) Type of dispersal component
- d) Design of pressure distribution component (excluding changes to pumps, FM lengths, TDH, or pump control settings)

Summary of SPS 383.22 (4) - plan revisions

• Revision may be approved by GU which issued sanitary permit if not included in previous list (SPS 388.22 (4)(a) and if GU agrees to review proposed minor revision.

• Proposed modification may not be implemented until written approval is obtained from applicable reviewing agency.

Revisions to be reviewed in accordance with SPS 383.22 (3)

Approved revisions to be filed by GU which issued sanitary permit

Reviewing Soil/Site Evaluation Reports



Summary of SPS 385.50 (1) - Governmental Unit Review

- GU shall review all soil/site evaluation reports within 6 months of receipt.
- GU shall accept the report, reject the report, request additional information, or require verification.
- Acceptance of a report shall be indicated on the report, and the report shall be filed for future reference.
- For unacceptable reports, GU shall notify CST in writing regarding deficiencies to be corrected to achieve compliance with SPS 385 and/or 383

Summary of SPS 385.50 (2) - Governmental Unit Review

VERIFICATIONS:

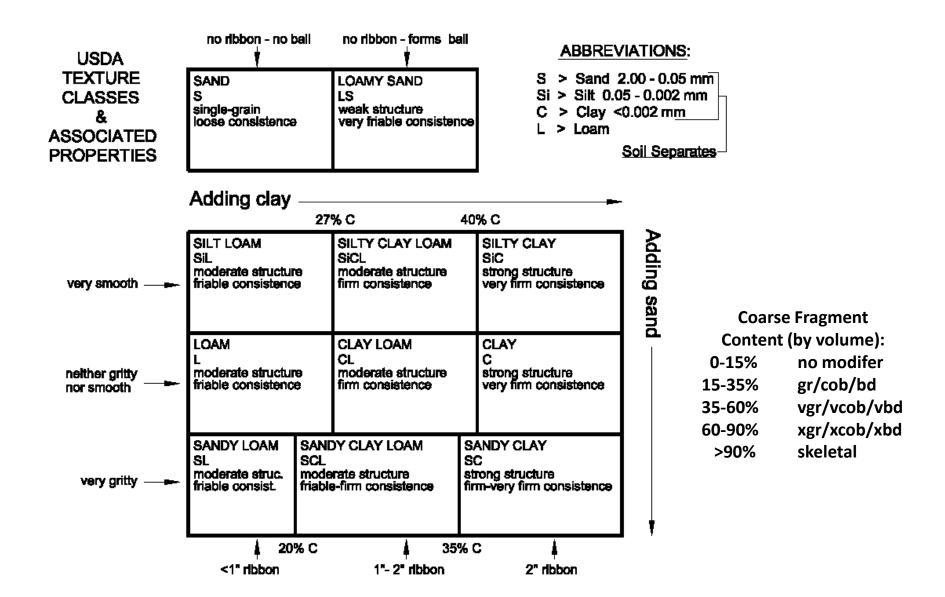
- GU may require backhoe pits for verification
- GU may require soil tester to be present for verification
- Soil verifications may not be conducted under adverse weather or light conditions
- GU may require property owner or CST to assist or to provide equipment for verification
- GU shall complete a written report for each verification to be filed with the CST report

CONSIDER USING USDA SOIL MAPS AS AN AID

PRACTICE

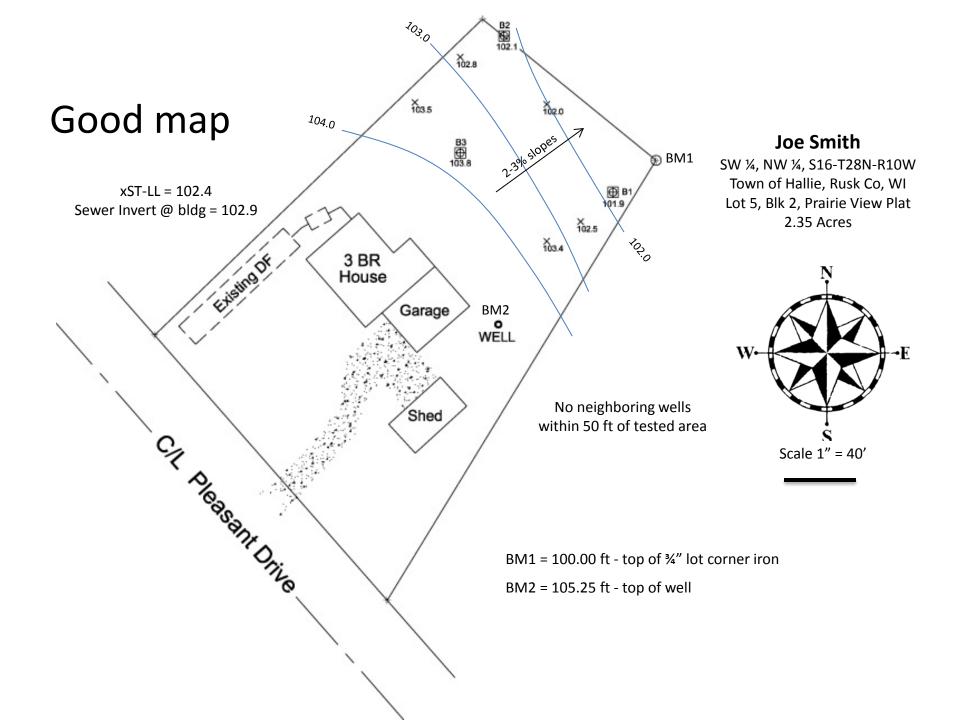
1	_	Boring Sub	surface trenches @ 0	.7 gpd/ft ² desi	gn loading rate	below 30" (T or F)				4		Boring 6'x7	5' mound area with 2	7" of sand fill r	equired @ 0.6 (gpd/ft ² basal lo	oading rate	(T or	F)	
Bori		Pit Ground su	urface elev. 91.7 ft.	Denth	to limiting factor	>72 in		Soi	l Applica	tion Rate	DUI	ring #	☑ Pit Ground s	urface elev. 91.7 ft.	Depth	to limiting factor	9 in.		Soï	il Applica	ation Rate
Horizon	Depth	Dominant Color	Redox Description	Texture	Structure	Consistence	Boundary			D/ft ²	Horizon	Depth	Dominant Color	Redox Description	Texture	Structure	Consistence	Boundary	Roots	GP	PD/ft²
	in.	Munsell	Qu. Sz. Cont. Color	İ	Gr. Sz. Sh.		,		Eff#1	Eff#2		in.	Munsell	Qu. Sz. Cont. Color	aux.	Gr. Sz. Sh.					Eff#2
1 Ap	0-16	10YR 4/2	#	SiL	2 f-m gr-sbk	mfr	cw	3f-2m-1c	0.6	0.8	1	0-6	10YR 3/3	#	SiL	2 f-m gr-sbk	mfr	cw	3f-2m-1c	c 0.6	0.8
2 Bt1	16-21	10YR 4/4	#	SiCL	2 m sbk	mfi	gw	2f-2m-1c	0.4	0.6	2	6-9	5YR 4/4	#	SiCL	2 m sbk	mfi	gw	2f-2m-1c	c 0.4	0.6
3 Bt2	21-29	10YR 4/4	c2d 10YR 5/2 & 5/6	SiCL	2 m-c sbk	mfi	aw	2f-2m-1c	0.4	0.6	3	9-40	5YR 4/4	#	SiC	msv	mfi	#	#	0.0	0.0
4 2Bt	29-37	7.5YR 4/4	#	(xgr-cb) LS	1 c sbk	mvfr	di	1f-1m	0.7	1.6							i				
5 2C	37-72	7.5YR 6/4	#	(vgr-cb) S	msv	ml	#	#	0.7	1.6											
		Boring Sub	surface trenches @ 0	.4 gpd/ft ² desi	gn loading rate	below 40" (T or F)				5		☐ Boring Sub	surface trenches @ 0	.4 gpd/ft² desi	gn loading rate	(T or F)				
2 Bori	ng #						,					ring #	_								
			urface elev. 91.8		to limiting factor				l Applica		<u> </u>			urface elev. 91.8		to limiting factor	ļ	1		il Applica	
Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	GP Eff#1	D/ft ² Eff#2	Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots		PD/ft ² Eff#2
1 Ap	0-9	10YR 3/2	#	SiL	2 f-m gr-sbk	mfr	cw	3f-2m-1c		0.8	1 Ap	0-7	10YR 3/2	#	SL	2 f-m gr-sbk	mfr	as	3f-2m-1c		0.8
2 E	9-13	10YR 5/3	#	SiL	2 m sbk	mfr	cw	3f-2m-1c	0.6	0.8	2 Bt1	7-31	7.5YR 4/4	#	LS	1 c sbk	mfr	aw	2f-2m-1c	0.7	1.6
3 Bt / E	13-21	10YR 4/4 / 10YR 5/3	#	SiCL / SiL	2 m sbk	mfi / mfr	cw	2f-2m-1c	0.4	0.6	3 2Bt2	31-42	10YR 4/4	#	SiCL	2 m sbk	mfi	cw	2f-2m-1c	0.4	0.6
4 Bt	21-32	10YR 4/4	c2d 10YR 5/2 & 5/6	SiCL	2 m-c sbk	mfi	aw	2f-2m-1c	c 0.4	0.6	4 2BC	42-56	10YR 5/4	#	SiL	1 c sbk	mfr	#	lf	0.4	0.6
5 2C	32-120	5YR 5/4	#	gr-cb SL	1 mpl	mfr	#	#	0.4	0.6						+ +	1				-
																	1				
																	1				+
3 Bori	ng #		surface trenches @ 0		gn loading rate		T or F)	Soi	il Applica	ition Rate	6 Bot	ing#	·	4" mound (T or F)	ft. Depth	to limiting factor	12 in.		Soi	il Applica	ation Rat
Horizon	Depth	Dominant Color	Redox Description	Texture	Structure	Consistence	Boundary	Roots		D/ft ²	Horizon	Depth	Dominant Color Munsell	Redox Description	Texture	Structure	Consistence	Boundary	Roots		D/ft ²
1 Ap	in. 0-9	Munsell 10YR 3/3	Qu. Sz. Cont. Color	fSL	Gr. Sz. Sh.	mfr	cw	3f-2m-1c		Eff#2	1	in.	10YR 3/2	Qu. Sz. Cont. Color	SiL	Gr. Sz. Sh.	mfr	cw	3f-2m-1c		Eff#2 0.8
2 E	9-13	10YR 5/3	#	L	2 m sbk	mfr	cw	3f-2m-1c	0.6	0.8	2	7-12	10YR 3/3	#	SiL	2 m sbk	mfr	cw	3f-2m-1c	c 0.6	0.8
3 Bt/E	13-21	10YR 4/4 / 10YR 5/3	#	gr-cb CL / L	2 m sbk	mfi / mfr	cw	2f-2m-1c		0.6	3	12-21	10YR 4/4	c2d 10YR 5/2 & 5/6	SiCL	2 m sbk	mfi	cw	2f-2m-1c		0.6
4 Bt	21-32	10YR 4/4	#	gr-cb CL	1 m sbk	mfi	aw	2f-2m-1c		0.3	-								<u> </u>	<u> </u>	+
5 C	32-84	5YR 5/4	#	gr-cb SL	1 m sbk	mfr	#	#	0.4	0.7									 	\vdash	-
				-																	-
	İ																				

B1	0-8 8-36 36-117	10YR 3/2 10YR 5/4 10YR 4/6	Si C S	iL 2 m g L 2 m s 0 sg	
B2		10YR 3/2 10YR 5/4 10YR 4/6	Sil CL S	O	
В3	0-8 8-36 36-117	10YR 3/2 10YR 5/4 10YR 4/6	Sil CL S	O	

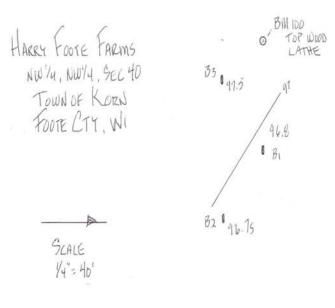


Site Maps

- Project name
- Project address
- PLS location (to nearest ¼ section)
- North arrow
- Scale with scale bar
- Benchmark location and elevation (identify)
- Distance to nearest road from BM
- Wells (including neighboring wells if relevant)
- Soil boring locations and elevations
- Ground elevation points for generating elevation contours
- Contour lines in proposed drainfield area (max. 2-ft equal intervals and <u>based on accurately located ground elevations</u>)
- Buildings
- Property lines (as applicable)
- All relevant setback features (navigable water, water lines, etc.)
- Disturbed / filled / compacted areas (existing system/tanks)
- Ordinary high water mark
- 100-yr flood elevation (when applicable)



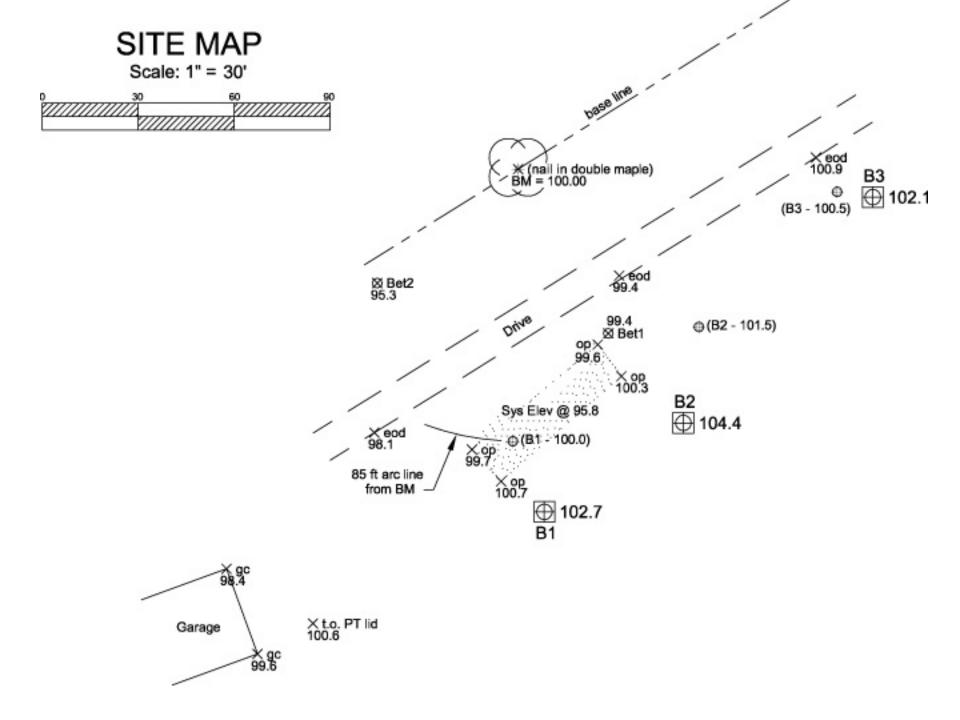
Not so good map



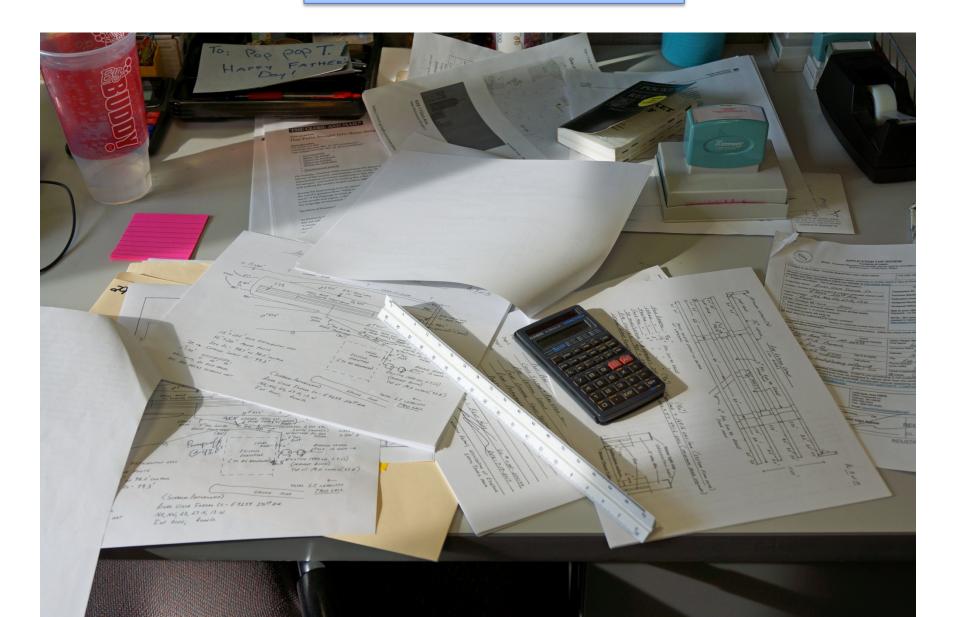
PEA FIELD

HAZRY FOOTE, JR CST 499666 * 40 Acres + NO WEUS <50 + PROPERTY LINES > 100'

JUNIOR RD



Reviewing Plans



Relevant Information

- Limitation depth (shallowest)
 - Daily design flow
 - Design loading rate
 - Linear loading rate
- Available area \ Setback features
- Elevations \ Contours \ Slope gradient

Design Flow (gpd) =

Estimated Flow x 1.5

(Table 4)

Table 4	4	
Public Facility Wastew	ater Flows	阿罗斯 克斯
Source	Unit	Estimated Wastewater Flow (gpd)
Apartment or Condominium	Bedroom	100
Assembly hall (no kitchen)	Person (10 sq. ft./person)	1.3
Bar or cocktail lounge (no meals served)	Patron (10 sq. ft./patron)	4
Bar or cocktail lounge* (w/meals – all paper service)	Patron (10 sq. ft./patron)	8
Beauty salon	Station	90
Bowling alley	Bowling lane	80
Bowling alley (with bar)	Bowling lane	150
Camp, day and night	Person	25
Camp, day use only (no meals served)	Person	10
Campground or Camping Resort	Space, with sewer connection and/or service building	30
Campground sanitary dump station	Camping unit or RV served	25
Catch basin	Basin	65
Church (no kitchen)	Person	2
Church* (with kitchen)	Person	5
Dance hall	Person (10 sq. ft./person)	2
Day care facility (no meals prepared)	Child	12
Day care facility* (with meal preparation)	Child	16
Dining hall* (kitchen waste only without dishwasher and/or food waste grinder)	Meal served	2
Dining hall* (toilet and kitchen waste without dishwasher and/or food waste grinder)	Meal served	5
Dining hall* (toilet and kitchen waste with dishwasher and/or food waste grinder)	Meal served	7
Drive-in restaurant* (all paper service with inside seating)	Patron seating space	10
Drive-in restaurant* (all paper service without inside seating)	Vehicle space	10
Drive-in theater	Vehicle space	3
Employees (total all shifts)	Employee	13
Floor drain (not discharging to catch basin)	Drain	25
Gas station / convenience store	Patron (minimum 500 patrons)	3
Gas station (with service bay) Patron	Patron	3 50
Service bay	Service bay	
Hospital*	Bed space	135
Hotel, motel or tourist rooming house	Room	65
Medical office building		50
Doctors, nurses, medical staff	Person	50
Office personnel	Person	6.5
Patients	Person	
Migrant labor camp (central bathhouse)	Employee	20
Mobile Home (Manufactured home) (served by its own POWTS)	Bedroom	100
Mobile home park	Mobile home site	200
* = May be high strength waste		

Design Flow / Soil Loading Rate (gpd) (gpd/ft^2)

SAFETY AND PROFESSIONAL SERVICES SPS 383.44

Table 383.44-1

Maximum Soil Application Rates Based Upon Percolation Rates

	Maximum Monthly Average					
Percolation Rate (minutes per inch)	$\begin{aligned} BOD_5 &> 30 \text{mg/L} \leq 220 \text{ mg/L} \\ &\text{TSS} &> 30 \text{ mg/L} \\ &\leq 150 \text{ mg/L} \text{ (gals/sq ft/day)} \end{aligned}$	$BOD_5 \le 30 \text{ mg/L TSS} \le 30 \text{ mg/L}$ (gals/sq ft/day)				
0 to less than 10	0.7	1.2				
10 to less than 30	0.6	0.9				
30 to less than 45	0.5	0.7				
45 to less than 60	0.3	0.5				
60 to 120	0.2	0.3				
greater than 120	0.0	0.0				

Note: > means greater than ≤ means less than or equal to

Table 383.44-2

Maximum Soil Application Rates Based Upon Morphological Soil Evaluation (in gals./sq. ft./day)

	Soil Characteristics	Maximum Monthly Average				
Textured	Struc	ture ^e	BOD ₅ >30 ≤220mg/L	BOD ₅ ≤30 mg/L ^c TSS ≤30 mg/L ^c		
	Shape	Grade	TSS >30 ≤150mg/L			
COS, S, LCOS, LS	-	0	0.7 ^a 0.5 ^{b,c}	1.6 ^a 0.5 ^b		
FS, LFS		0	0.5	1.0		
VFS, LVFS		0	0.4	0.6		
COSL, SL	-	0M	0.2	0.6		
	PL	1	0.4	0.6		
		2, 3	0.0	0.2		
	PR, BK, GR	1	0.4	0.7		
		2, 3	0.6	1.0		
FSL, VFSL		0M	0.2	0.5		
	PL	2, 3	0.0	0.2		
	PL, PR, BK, GR	1	0.2	0.6		
	PR, BK, GR	2, 3	0.4	0.8		
L		0M	0.2	0.5		
	PL	2, 3	0.0	0.2		
	PL, PR, BK, GR	1	0.4	0.6		
	PR, BK, GR	2, 3	0.6	0.8		
SIL		0M	0.0	0.2		
	PL	2, 3	0.0	0.2		
	PL, PR, BK, GR	1	0.4 ^c	0.6		
	PR, BK, GR	2, 3	0.6	0.8		
SI			0.0	0.0		
SCL, CL, SICL		0M 0.0		0.0		
	PL	1, 2, 3	0.0	0.2		
	PR, BK, GR	1	0.2	0.3		
		2, 3	0.4	0.6		
SC, C, SIC		0M	0.0	0.0		
	PL	1, 2, 3	0.0	0.0		
	PR, BK, GR	1	0.0	0.0		
	138 W.	2, 3	0.2	0.3		

Note a: With ≤60% rock fragments

Note b: With >60 to <90% rock fragments

Note c: Requires pressure distribution under sub. (5) (a)

SPS 383.44 WISCONSIN ADMINISTRATIVE CODE

COS - Coarse Sand LVFS - Loamy Very Fine Sand SCL - Sandy Clay Loam S-Sand COSL - Coarse Sandy Loam LCOS - Loamy Coarse Sand CL - Clay Loam SL - Sandy Loam LS - Loamy Sand FSL - Fine Sandy Loam SICL - Silty Clay Loam FS - Fine Sand VFSL - Very Fine Sandy Loam SC - Sandy Clay LFS - Loamy Fine Sand L-Loam C - Clay VFS - Very Fine Sand SIL - Silt Loam SIC - Silty Clay PL - Platy 0 - Structureless PR - Prismatis 1 - Weak BK - Blocky 2 - Moderate GR - Granular 3 - Strong

Table 383.44-3

Minimum Depth of Unsaturated Soil for Treatment Purposesa (in inches)

Soil Characteristics		Influent Quality ^e and Percent Coarse Fragments								
Texture ^d		Fecal Coliforn >10 ⁴ cfu/100m		Fecal Coliform ≤10 ⁴ cfu/100mL ^b						
	≤35%	>35 to ≤60%	>60 to ≤90% b,c	≤35%	>35 to ≤60%	>60 to ≤90% c				
COS, S, LCOS, LS	36	60	60	24	36	60				
FS, VFS, LFS, LVFS		36			24					
COSL, SL		36			24					
FSL, VFSL		36			24					
L		36			24					
SIL		36			24					
SI		36			24					
SCL, CL, SICL		36			24	ATT MAKE				
SC, C, SIC		36			24	Contract of the second				

Note a: Influent quality as per s. SPS 383.44 (2)

M - Massive

Note h: Requires pressure distribution under sub. (5) (a)

Note c: All coarse fragment voids must be filled with fine earth

 Note d:
 COS – Coarse Sand
 LVFS – Loamy Very Fine Sand
 SI – Silt

 S-Sand
 COSL – Coarse Sandy Loam
 SCL – Sandy Clay Loam

 LCOS – Loamy Coarse Sand
 SL – Sandy Loam
 CL – Clay Loam

 LS – Loamy Sand
 FSL – Fine Sandy Loam
 SICL – Sitty Clay Loam

 FS – Fine Sand
 VFSL – Very Fine Sandy Loam
 SC – Sandy Clay

LFS - Loamy Fine Sand L - Loam C - Clay

VFS - Very Fine Sand SIL - Silt Loam

SIC - Silty Clay

Note e: The values for fecal coliform are reported as a monthly geometric mean. The geometric mean shall be determined on the basis of measurements taken over 30

consecutive days, with at least 6 measurements occurring on 6 separate days.

(6) ORIENTATION. (a) 1. The infiltrative surface of a distribution cell within a POWTS treatment or dispersal component consisting in part of in situ soil and located in fill material above original grade shall be level.

The longest dimension of a POWTS treatment or dispersal component consisting in part of in situ soil shall be oriented along the surface contour of the component site location unless otherwise approved by the department.

- (b) The infiltrative surface of a distribution cell within a POWTS treatment or dispersal component consisting in part of in situ soil and located below the surface of the original grade shall be level.
- (c) POWTS treatment or dispersal components consisting in part of in situ soil shall be so located as to minimize the infiltration of storm water into the component.
- (7) GEOMETRY. The geometry of a subsurface treatment or dispersal component consisting in part of the in situ soil shall take into account linear loading rates that are based on soil texture, structure, consistence and distance to seasonal soil saturation and restrictive soil horizons.

History: Cr. Register, April, 2000, No. 532, eff. 7–1–00; CR 02–129; (3) (b) and (4) (c), r. and recr. (5) (a) and Tables 83.44–2 and 83.44–3 Register January 2004 No. 577, eff. 2–1–04; CR 07–100; am. (3) (b) 1. and Tables 83.44–2 and 83, r. (5) (b), renum. (5) (c) to be (5) (b) Register September 2008 No. 633, eff. 10–1–08; correction in (1), (3) (b) 1., (4) (a) 1. a., f., 2., (b), (5) (a) 1., Table 38.344–3 made under s. 13.92 (4) (b) 7, Stats, Register December 2011 No. 672.

- SPS 383.45 Installation. (1) GENERAL A POWTS shall be constructed and installed in such a manner to hold wastewater or reduce the contaminant load and disperse the flow of wastewater in accordance with this subchapter and the plan approval under s. SPS 383.22.
- (2) FROZEN SOIL. POWTS treatment and dispersal components consisting in part of in situ soil may not be installed if the soil is frozen at the infiltrative surface of the component.
- (3) SNOW COVER. Snow cover shall be removed before excavating or installing POWTS treatment and dispersal components consisting in part of in situ soil.
- (4) MOISTURE. The soil moisture content for a POWTS treatment or dispersal component consisting in part of in situ soil shall be evaluated immediately prior to installation of the component. If the soil at the infiltrative surface can be rolled into a ¼-inch wire, the installation may not proceed.
- (5) BEDDING. All vessels and pipes of a POWTS shall be bedded in accordance with a product approval under s. SPS 384.10 or a plan approval under s. SPS 383.22.
- (6) FLOODPLAIN. (a) All POWTS treatment tanks, holding and dispersal tanks that are located in floodplain areas shall be made and maintained watertight to prevent infiltration.

The Wisconsin Administrative Code on this web site is updated on the 1st day of each month, current as of that date. See also Are the Register February 2012 No. 674

Codes on this Website Official?

Plan Contents

- Index Page (optional)
- Plot Plan
- Cross-Section View
- Plan View
- Lateral Diagram (for pressure)
- Pump Tank (for dosing & pressure)
- Pump Curve (if using pump)
- Maintenance Plan

