

5 Approved Installers, Pumpers, and Components

5.1 Approved Installers and Pumpers

Revision: April 24, 2000

Because of continual changes in the status of installers and pumpers state-wide, their listing in the TGM will no longer occur. To determine if an installer or pumper is licensed, or to receive a current list of local installers or local septic tank pumpers, contact the following health districts.

<p>Panhandle Health District 8500 N. Atlas Rd. Hayden, ID 83835 (208) 415-5100</p>	<p>Counties: Benewah, Bonner, Boundary, Kootenai, Shoshone</p>
<p>North Central District Health Department 215 10th Street Lewiston, ID 83501 (208) 799-3100</p>	<p>Counties: Clearwater, Idaho, Latah, Lewis, Nez Perce</p>
<p>Southwest District Health 920 Main Street Caldwell, ID 83605 (208) 455-5317</p>	<p>Counties: Adams, Canyon, Gem, Owyhee, Payette, Washington</p>
<p>Central District Health Department 707 N. Armstrong Place Boise, ID 83704 (208) 375-5211</p>	<p>Counties: Ada, Boise, Elmore, Valley</p>
<p>South Central Public Health District 1020 Washington St. North Twin Falls, ID 83301 (208) 737-5900</p>	<p>Counties: Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls</p>
<p>Southeastern District Health Department 1901 Alvin Ricken Drive Pocatello, ID 83201 (208) 233-9080</p>	<p>Counties: Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida, Power</p>
<p>Eastern Idaho Public Health District 1250 Hollipark Drive Idaho Falls, ID 83401 (208) 522-0310</p>	<p>Counties: Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, Teton</p>

5.2 Approved Septic Tanks

Revision: October 2, 2013

Table 5-1 lists septic tanks approved for use by DEQ.

Table 5-1. Approved septic tanks.

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Anderson Supply 630 E. Cottonwood Bozeman, MT 59715	1,000	—	Single compartment	9/13/88
	1,000, 1,500	—	Double compartment	9/13/88
	2,000	—	Double compartment	9/13/88
	1,000	—	With pump chamber	9/13/88
Atkinson Septic Tanks 1315 W. Idaho Blvd. Emmett, ID 83617 (208) 870-4326	1,150	—	Two-piece, three-compartment concrete, Jet Inc. ETPS tank	11/16/95
Bonner Concrete Products, Inc. P.O. Box 321 Sagle, ID 83860 (208) 263-3979	1,000, 1,250, 1,500	—	Concrete	12/12/84
	1,500	3	Concrete, single compartment, one piece	7/5/06
	2,000	3	Concrete, one and two compartment, one piece	6/27/06
Byington Memorial and Funeral Products, LLC P.O. Box 2062 Idaho Falls, ID 83403 (208) 552-5165	1,000	—	Two-piece concrete	10/14/97
	1,000	—	Two-compartment concrete	7/3/01
Clearwater Concrete, Inc. P.O. Box 446 Kooskia, ID 83539 (208) 926-0103	1,000	3	One-piece concrete	5/21/03

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Cooper Ready-Mix 11 Cooper Circle Salmon, ID 83467 (208) 926-0103	1,000	—	One-piece concrete	3/26/98
	1,500	—	One piece, one or two compartment	5/19/98
CXT Precast Concrete Prod. Spokane, WA 99216	1,000 vault	3	One-piece concrete vault	5/30/02
Dahle's Red-E-Mix, Inc. 522 River St. Salmon, ID 83467 (208) 756-2481	1,000	—	Two-piece concrete	7/26/94
	1,000	3 feet with 2,000# wheel load	One-piece steel and synthetic fiber-reinforced concrete, single compartment	6/3/10
	1,500	3 feet with 2,000# wheel load	One-piece steel and synthetic fiber-reinforced concrete, single compartment	6/3/10
	1,500	3 feet	One-piece, two-compartment	11/6/13
Delta Fiberglass Structure Salt Lake City, UT	1,000	—	Fiberglass tank	9/6/83
Duke's Septic Tanks Rt. 1 Box 116 Payette, ID 83661	1,000	—	Concrete	2/20/86 7/19/94
Dura-Crete, Inc. P.O. Box 65489 Salt Lake City, UT 84119 (801) 972-8686	1,000	—	One-piece concrete	7/21/94
	1,250	—	One-piece concrete	4/4/86
	1,750	—	One-piece concrete	7/21/94
	2,500	—	One-piece concrete	7/21/94
Evergreen Pre-Cast, Inc. P.O. Box 58 Sumner, WA 98390 (253) 863-6510	900	3	Specialty concrete septic tank, Delta Environmental Products ETPS tank	10/27/04

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Everlasting Concrete Products P.O. Box 362 Baker City, OR 97814 (208) 941-4191	750, 900, 1,250	—	Two-piece concrete	12/1/84
	1,000	3	Two-piece concrete	12/3/07
	500-GPD tank, Norweco ETPS	3	Two-piece Norweco 500 GPD ETPS tank	7/17/08
Hancey Concrete Precast P.O. Box 305 Millville, UT 84326 (435) 770-5164	1,000	10	Single-compartment, two-piece, deep burial concrete	12/2/08
	1,250	10	Single-compartment, two-piece, deep burial concrete	12/2/08
Infiltrator Systems, Inc. P.O. Box 768 Old Saybrook, CT 06475 (800) 221-4436	900	4	TW-900, one compartment, plastic (outlet hole “C”)	4/15/09
	1,050	4	TW-1050, one compartment, plastic (outlet hole “C”)	4/15/09
	1,250	4	TW-1250, one compartment, plastic (outlet hole “C”)	4/15/09
	1,500	4	TW-1500, one compartment, plastic (outlet hole “C”)	4/15/09
	1,060	4	IM-1060, one compartment, molded PE or PP plastic	7/25/11
Jerome Precast, LLC P.O. Box 5789 Twin Falls, ID 83301 (208) 280-2158	1,000	—	Concrete	7/8/96
	1,250	—	Concrete	8/26/96
	1,250	—	Two-compartment concrete	6/11/98
	1,000	—	Two-compartment concrete	10/1/98
	1,500	3	One- or two-compartment concrete	3/24/03
	1,000	3	Single piece and compartment, BioMicrobics 0.5 MicroFAST ETPS	5/20/09
	1,500	3	Single piece and compartment, BioMicrobics 0.75 and 0.9 MicroFAST ETPS	5/20/09
Johnson AAA Tanks, LLC 159 W. 1 st N. Rigby, ID 83442 (208) 552-1717	1,500	3	One-piece concrete, single-compartment rebar or synthetic structural materials. (Lid requires rebar in all configurations.)	1/11/05
	1,000	3		1/11/05
	1,500	—	Two-compartment concrete	8/23/00

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Johnson Precast, LLC 551 East Moody Rd. Rigby, ID 83440 (208) 656-9977	1,000	3	Two-piece concrete	8/1/03
	1,500	3	One-piece concrete	9/16/05
	1,000	3	500-GPD Norweco ETPS tank	12/2/08
Kanta Products, Inc. P.O. Box 96 Three Forks, MT 59752 (406) 285-3261	1,000	—	Concrete	10/24/85
	1,500	3	One-compartment, two-piece concrete	11/8/11
L/R Schuldt Inc. DBA K&G Contractors 6211 S. 15 th W. Idaho Falls, ID 83402	1,000	8	One-piece round	5/14/98
	1,000, 1,500	8	One-piece rectangular concrete	10/16/09
	1,000	—	Specialty concrete tank, Southern ETPS	7/22/02
	2,000	4	One-piece concrete	11/20/02
Lar-Ken Septic Tanks, Inc. 411 Remington Boise, ID 83714 (208) 377-2440	1,000, 1,250, 1,500	—	Concrete	5/13/81
	1,000	—	Two-piece concrete	9/11/95
	2,000	—	Two-piece concrete	12/18/98
	2,500	—	Concrete	12/18/98
	800	—	Concrete	5/24/99
	1,250	—	One or two compartment (900-gal + 300-gal pump chamber)	7/21/00
Miller Septic Tanks 319 Orchard Dr. Twin Falls, ID 83303	1,000	—	Two-piece concrete	3/22/95
	1,000	—	Two-piece concrete	6/13/95
	1,250, 1,350	—	Two-piece concrete	7/18/95
	1,000, 1,500	3	One-piece concrete	6/24/04
	1,000, 1,500	3	One-piece, two-compartment concrete	6/24/04

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Missoula Concrete Const. 8012 Deschamps Ln. Missoula, MT 59808 (406) 549-9682	3,000	—	Concrete	11/1/94
	6,000	—	Two-piece concrete	11/1/94
	1,000	—	Vault privy	7/11/02
Norwesco 4365 Steiner St. St. Bonifacius, MN 55375 (800) 328-3420	750, 1,000, 1,250, 1,500	—	Polyethylene, one and two manhole	5/13/81 11/6/95
	1,000, 1,250, 1,500	—	Polyethylene cisterns	12/17/96
	1,000, 1,250	3	Polyethylene “Bruiser”	11/13/03
Oldcastle Precast (Amcors) 2240 S. Yellowstone Idaho Falls, ID 83402 (208) 522-6150	1,000, 1,250, 1,500	—	Two-piece concrete	—
	4,000	—	Two-piece concrete	6/12/92
	3,140	—	Two-piece concrete	7/30/93
	1,500	3	Two-piece concrete, low profile, two compartment	8/24/94
	2,000	—	Two-piece concrete	8/24/94
	1,000	—	Low profile, two compartment	3/9/98
	1,500	—	Two-compartment 1,000-gal + 500-gal pump chamber	5/17/99
	1,150	3	Two-piece, three-compartment concrete, Jet Inc. septic tank	9/16/02
	1,000	8 or HS20	One piece, baffled	1/18/08
	1,500	8 or HS20	One piece, single compartment	1/18/08
1,500	8 or HS20	One piece, two compartment	1/18/08	
Oldcastle Precast (Amcors) 16419 Ten Lane Nampa, ID 83687	2,990	8 (HS-25)	Traffic-rated, reinforced concrete, two-piece, single-compartment tank	5/8/09
	4,180	8 (HS-25)	Traffic-rated, reinforced concrete, two-piece, single-compartment tank	4/3/13

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Orenco Systems, Inc. 814 Airway Avenue Sutherlin, OR 97479 (800) 348-9843	1,000, 1,500	3	Fiberglass	6/24/04
Owyhee Sand and Gravel 2085 River Rd. Homedale, ID 83628 (208) 337-5057	1,000	—	Two-piece concrete	3/10/00
Panhandle Concrete Products, Inc. 6285 N. Pleasant View Rd. Post Falls, ID 83854 (208) 773-0606	1,000 1,500, 2,000 2,500, 3,000	— — —	Two-piece concrete Two-piece concrete with 500-gal pump chamber Two-piece concrete	12/14/81 12/14/81 1/30/85
Robertson Manufacturing, Inc. P.O. Box 3 Hyde Park, UT 83418 (435) 563-1000	1,000 1,000 1,000	— 3 —	Two-piece concrete One-piece concrete (from Snake River Precast) One-piece concrete (from Boise Vault)	9/14/94 4/25/06 1/1/77
Robertson Manufacturing, Inc. P.O. Box 2555 Pocatello, ID 83206 (208) 237-6100	1,250, 1,500 1,500 2,000 2,500 3,000	— 3 4 4 4	One-piece concrete One-piece concrete (from Snake River Precast) One-piece concrete One-piece concrete One-piece concrete	11/7/96 4/25/06 11/2/09 11/2/09 11/2/09
Roth Global Plastics, Inc. P.O. Box 245 Syracuse, NY 13211 (315) 475-0100	1,060 1,250 1,500	3 3 3	RMT-1060 HDPE. RMT-1250 HDPE. RMT-1500 HDPE. Five-inch dia. inlet/outlet hole @ "A" Single-compartment tanks only; baffles are not water tight.	6/1/09 6/1/09 6/1/09
Rupp Trucking Ent., Inc. 7905 West 9600 North Tremonton, UT 84337 (435) 257-7333	1,000 1,250	— —	Two-piece concrete Two-piece concrete	4/4/86 11/18/99

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Triple C Concrete P.O. Box 923 Twin Falls, ID 83303 (208) 733-7141	1,000	—	Two-piece concrete	7/17/86
	1,000	—	Low-profile, two-piece concrete	5/13/96
	1,000	2	Single-piece concrete	6/16/08
	1,500	2	Single-piece concrete	6/16/08
	1,500	2	Single-piece, dual compartment concrete	6/16/08
Valley Precast, Inc. 6633 Summer Hill Rd. Boise, ID 83714 (208) 853-0661	1,000	3	One-piece concrete, alt. inlet/outlet locations (5/20/08)	11/23/99
	1,250	3	One-piece concrete, alt. inlet/outlet locations (5/20/08)	11/23/99
	1,000	3	Low-profile concrete, alt. inlet/outlet locations (5/20/08)	5/8/00
	1,000	8	One-piece, single-compartment concrete, Deep Bury	6/21/11
	1,500	3	One or two compartment 1,000 gal. with 500-gal. pump chamber concrete, alt. inlet/outlet locations (5/20/08)	7/17/00
	1,000	3	Specialty Tanks ETPS, Bio-Microbics, alt. inlet/outlet locations (5/20/08)	12/21/00
	1,500	3	Specialty Tanks ETPS, Bio-Microbics, alt. inlet/outlet locations (5/20/08)	07/11/03
	1,250	3	Specialty Tanks ETPS, Bio-Microbics, two-compartment, alt. inlet/outlet locations (5/20/08)	10/6/03
White Block Company, Inc. 6219 East Trent Ave. Spokane Valley, WA 99212 (509) 543-0651	1,000, 1,250, 1,500, 2,000, 2,500	—	Concrete	4/2/86

Supplier	Unit Liquid Volume (gallons)	Maximum Bury Depth (feet)	Materials Description	Effective Date (month/day/year)
Wilbert Precast, Inc. 2215 East Brooklyn Spokane, WA 99217 (509) 325-4573	1,000 + 500 pump vault	3	1-piece, 2-compartment concrete tank with integral 500-gallon pump vault (3 chambers)	6/12/13
	750, 1,000, 1,250, 1,500	—	Concrete	2/6/81
	1,000 + 500	—	Two-piece concrete with 500-gallon pump chamber	3/21/97
	1,500	—	Two-compartment concrete	3/21/97
	2,000	3	Two-piece, single compartment	9/19/13
	3,000	—	Multipiece concrete	4/4/03
	5,215	HS20	Four-piece, single compartment, traffic rated	12/7/06
	5,215	HS20	Four-piece, dual compartment, traffic rated	8/15/13
Xerxes Corporation 7901 Xerxes Ave. South Minneapolis, MN 55431	2,500	7	Single-wall, FRP	6/7/06
	3,400	7		6/7/06
	4,200	7	(Contact manufacturer for special bedding requirements for burial depths exceeding 7 feet)	6/7/06
	5,000	7		6/7/06

Notes: extended treatment package system (ETPS); polyethylene (PE); polypropylene (PP); high-density polyethylene (HDPE); fiberglass-reinforced plastic (FRP)

5.3 Approved Dosing Chambers

Revision: February 6, 2014

Table 5-2 lists dosing chambers approved for use by DEQ.

Table 5-2. Dosing chambers approved for use by DEQ.

Pump Vault Manufacturer	Model #	Unit Dimensions	Certification Date	NSF Certification
Johnson AAA Tanks, LLC 159 W. 1 st N. Rigby, ID 83442 (208) 552-1717	500 gallon	One-piece concrete pump tank, single compartment, rebar and synthetic structural materials	1/11/05	
Bonner Concrete Products, Inc. P.O. Box 321 Sagle, ID 83860 (208) 263-3979	500 gallon	One-piece, single-compartment, concrete pump vault	6/21/11	
Cooper Ready-Mix 11 Cooper Circle Salmon, ID 83467 (208) 756-4475	500 gallon	One-piece concrete pump tank	11/22/00	
L/R Schuldt Inc., DBA K&G Contractors 6211 S. 15 th W. Idaho Falls, ID 83402	500 gallon	Two-piece round concrete pump tank	5/14/98	
Miller Septic Tanks 319 Orchard Dr. Twin Falls, ID 83303	500 gallon	One-piece concrete pump tank	6/24/04	

5.4 Extended Treatment Package Systems

Revision: April 19, 2013

Table 5-3 lists extended treatment package systems certified by DEQ.

Table 5-3. Extended treatment package systems certified by DEQ.

Aerobic Treatment Device (Std 40)	Gallons per day	BOD ₅ Removal	Total Suspended Solids Removal	Trench Size	Certification Date
A-Aerobic-1, LLC A-Aerobic-1 Class I	500	Ave. 21 mg/L	Ave. 26 mg/L	Intermittent sand filter drainfield	10/14/02
Advanced Septic Treatment System				Intermittent sand filter drainfield	
TRD-1000-500 Class I	500				
TRD-1000-600 Class I	600				
TRD-1000-700 Class I	700	—	—		11/3/03
TRD-1000-800 Class I	800				
TRD-1000-900 Class I	900				
TRD-1000-1000 Class I	1,000				
Aero-Tech Aerobic Treatment Units				Intermittent sand filter drainfield	
AT-500 Class I	500				
AT-600 Class I	600				
AT-750 Class I	750	—	—		11/26/08
AT-1000 Class I	1,000				
AT-1500 Class I	1,500				
Alternative Wastewater Systems Inc.				Intermittent sand filter drainfield	
SYBR-AER Class I	500				
SYBR-AER Class I	600				
SYBR-AER Class I	800	—	—		11/3/03
SYBR-AER Class I	1,000				
SYBR-AER Class I	1,500				

Aerobic Treatment Device (Std 40)	Gallons per day	BOD₅ Removal	Total Suspended Solids Removal	Trench Size	Certification Date
American Wastewater Systems Inc. BEST 1 AWS-500 Class I	500	—	—	Intermittent sand filter drainfield	11/03/03
BEST 1 AWS-800 Class I	800				
BEST 1 AWS-1000 Class I	1000				
BEST 1 AWS-1200 Class I	1,200				
BEST 1 AWS-1500 Class I	1,500				
Aquapoint Bioclere 16/12/500: Class I	500	Ave. 11 mg/L	Ave. 13 mg/L	Intermittent sand filter drainfield	3/19/91
Aquarobic International Mini-Plant 54291 Concrete Filter Kit [1]: Class I	500 to 1,500 in	Ave. 7 mg/L	Ave. 11 mg/L	Intermittent sand filter drainfield	11/03/03
Mini-Plant 54291 Fiberglass Class I	100 gal units				
Bio-Microbics®, Inc. RetroFAST® 0.375: Class I	375	—	—	Intermittent sand filter drainfield	—
Bio-Microbics®, Inc. BioBarrier® MBR 0.4 Class I	400	—	—	Intermittent sand filter drainfield	—
BioBarrier® MBR 0.4-N Class I	400				
BioBarrier® MBR 0.5 Class I	500				
BioBarrier® MBR 0.5-N Class I	500				
BioBarrier® MBR 1.0 Class I	1,000				
BioBarrier® MBR 1.0-N Class I	1,000				
BioBarrier® MBR 1.5 Class I	1,500				
BioBarrier® MBR 1.5-N Class I	1,500				
Bio-Microbics®, Inc. MicroFAST® 0.5 Class I	500	92%–95% Ave. 11 mg/L	95%–97% Ave. 16 mg/L	Intermittent sand filter drainfield	3/5/97 6/5/00 12/27/02
MicroFAST® 0.75 Class I	750				
MicroFAST® 0.9 Class I	900				
MicroFAST® 1.5 Class I	1,500				
Busse Innovative Systeme GmbH MF-B-400	400	—	—	Intermittent sand filter drainfield	7/7/09

Aerobic Treatment Device (Std 40)	Gallons per day	BOD₅ Removal	Total Suspended Solids Removal	Trench Size	Certification Date
Clearstream Wastewater Systems					
Model 500 N/C Class I	500			Intermittent sand filter drainfield	3/28/96
Model 600 N/C Class I	600				
Model 750 N/C Class I	750	95%–97%	93%–98%		
Model 1000 N/C Class I	1,000	Ave. 14 mg/L	Ave. 48 mg/L		
Model 1500 N/C Class I	1,500				
Consolidated Treatment System Inc.					
Multi-Flo FTB: Class I	500 to	96%–97%	97%–98%	Intermittent sand filter drainfield	4/2/96
0.5, 0.6, 0.6-C, 0.75, 1.0, 1.5	1,500	Ave. 5 mg/L	Ave. 6 mg/L		
Nayadic M: Class I	500 to	96%–97%	96%–98%		
6A, 8A, 1050A, 1200A, 2000A	1,500	Ave. 6 mg/L	Ave. 7 mg/L		4/2/96
Delta Env. Products					
DF40-C, F, CC, CA, FF-Class I	400			Intermittent sand filter drainfield	2/3/97
DF50-C, F, CC, CA, FF-Class I	500				
DF60-C, F, CC, CA, FF-Class I	600	95%-98%	96%-97%		
DF75-C, F, CC, CA, FF-Class I	750	Ave. 6 mg/L	Ave. 7 mg/L		
DF100-C, F, CC, CA, FF-Class I	1,000				
DF150-C, F, CC, CA, FF-Class I	1,500				
Desoto Concrete Products					
H-Two-O Series: Class I	500	—	—	Intermittent sand filter drainfield	11/3/03
	750				
	1,000				
Ecological Tanks, Inc.					
AA, AS 500 Class I	500			Intermittent sand filter drainfield	11/1/97
AA, AS-650 Class I	650				
AA, AS-750 Class I	750	AA Ave. 2.0 mg/L	AA Ave. 2.2 mg/L		
AA, AS-100 Class I	1,000	AS Ave. 2.0 mg/L	AS Ave. 1.6 mg/L		
AA, AS-1500 Class I	1,500				
Enviro-Flo: Class I					
E-500, E-550	500			Intermittent sand filter drainfield	12/18/02
E-550	550				
E-600	600	Ave. 14 mg/L	Ave. 15 mg/L		
E-750	750				
E-1000	1,000				

Aerobic Treatment Device (Std 40)	Gallons per day	BOD₅ Removal	Total Suspended Solids Removal	Trench Size	Certification Date
H.E. McGrew, Inc. Class I Alliance 500, 750, 1000 Mighty Mac, 500, 600, 750 Cajun Aire Basic 500, 750, 1000 Cajun Aire Advanced, 500, 750, 1000	500 to 1,000	96.5% Ave. 7 mg/L Ave. 13 mg/L	97.2% Ave. 13 mg/L Ave. 19 mg/L	Intermittent sand filter drainfield	6/5/00 12/5/97 12/30/02
Hoot Aerobic Systems, Inc. Class I H 500, 600, 750, 1000 LA 500, 1000	500 to 1,000	Ave. 3.2 mg/L	Ave. 3.6 mg/L	Intermittent sand filter drainfield	2/6/01
Hydro-Action, Inc.: Class I AP-500, 600, 750, 900, 1500	500 to 1,500	Ave. 9 mg/L	Ave. 15 mg/L	Intermittent sand filter drainfield	4/2/96 3/99 8/1/03
Jet Inc.: Class I J-500, J-600 J-750,1000, 1250, 1500	500 600 750–1,500	88%–96% Ave. 15 mg/L	91–97% Ave. 12 mg/L	Intermittent sand filter drainfield	10/96 5/93 7/29/97
MICROSEPTEC: Class I Enviroserver, ENFG 600, 1200, 1500	600 1,200 1,500	Ave. 6 mg/L	Ave 8 mg/L	Intermittent sand filter drainfield	6/25/99
National Wastewater Systems Inc., Solar Air 500, 800, 1000, 1200	500 800 1,000 1,200	Ave. 13 mg/L	Ave. 19 mg/L	Intermittent sand filter drainfield	8/1/03
Norweco, Inc. Singulair 950 series Class I Singulair 960 series Class I	600–1,500 500–1,500	>85% Ave. 6 mg/L	>85% Ave. 10 mg/L	Intermittent sand filter drainfield	4/3/96 8/96

Aerobic Treatment Device (Std 40)	Gallons per day	BOD ₅ Removal	Total Suspended Solids Removal	Trench Size	Certification Date
Orenco Systems Inc.				Intermittent sand filter drainfield	
AdvanTex AX20N	500				
AdvanTex AX20-RT	500				4/10/02
AdvanTex AX15-2N	800				
AdvanTex AX20-2N	1,000	Ave. 5 mg/L	Ave. 4 mg/L		3/1/10
AdvanTex AX15-3N	1,200				
AdvanTex AX20-3N	1,500				6/11/12
AdvanTex AX25-RT3N	625				
Pro Flo Aerobic Systems				Intermittent sand filter drainfield	
Pro Flo 500 TL	500	—	—		11/3/03
Pro Flo 750 SL	750				
Pro Flo 1000 TC	1,000				
Rogers Treatment Systems				Intermittent sand filter drainfield	
Mudbug 5	500				11/3/03
Mudbug 10	1,000	Ave. 15 mg/L	Ave. 22 mg/L		
Mudbug 15	1,500				
Southern Manufacturing				Intermittent sand filter drainfield	
SM-500 Class I	500				
SM-600 Class I	600	98.7%	98.1%		9/1/97
SM-750 Class I	750	Ave. 2.0 mg/L	Ave. 1.8 mg/L		8/28/00
SM-1000 Class I	1,000				
SM-1500 Class I	1,500				
SeptiTech				Intermittent sand filter drainfield	
M400/M400D	300				
M550/M550D	400				12/09
M750/M750D	500	Ave. 12 mg/L	Ave. 5 mg/L		
M1200/M1200D	1200				
M1500/M1500D	1500				
Zabel Environmental Technology				Intermittent sand filter drainfield	12/02
ATS-AD-500: Class I	500	—	—		Dropped

Notes: 5-day biological oxygen demand (BOD₅); milligram per liter (mg/L); average (ave.)

5.5 Composting Toilets

Revision: October 5, 2004

Table 5-4 lists composting toilets currently certified by DEQ.

Table 5-4. Composting toilets certified by DEQ.

Recycle/Reuse and Water Conservation Devices (NSF STD 41)	Treatment System	Model	Notes	Certification Date
Advanced Composting Systems	Composting toilets	ACS 200	CSA certified	8/94
BIOLET INTL	Composting toilets	BioLet XL	—	6/92
Biological Mediation Systems, Inc.	Composting toilets	Devap 2000	Not certified by NSF	12/95
Clivus Multrum, Inc.	Composting toilets	08 / 08 M-12 / M-15 M-18 / M-22 M-25 / M-28 M-32 / M-35	—	2/98
Composting Toilet Systems	Composting toilets	CTS-410 CTS 710, CTS 1010, CTS 904	—	6/93
EcoTech Batch Composting Toilet, Carousel	Composting toilets	Model 80 A	—	12/97
Sancor Industries, LTD	Composting toilets	Waterless self-contained Waterless remote	CSA certified	7/94
Sun-Mar Corp.	Composting toilets	Sun-Mar- Excel	—	6/93

Notes: National Sanitary Foundation (NSF); CSA International Group (CSA)

5.6 Incinerating Toilets

Revision: December 30, 2010

Table 5-5 shows incinerating toilets currently certified by DEQ.

Table 5-5. Incinerating toilets certified by DEQ.

Incinerating Toilets	Model	Notes	Certification Date
SWSLOO, Inc. 2005 FM 1704 Elgin, TX 78621-5522 Phone: (866) 797-3566 (ELOO) E-mail: info@swsloo.com Website: www.swsloo.com	THE ENVIRO LOO® 2010 Standard THE ENVIRO LOO® 2040 Standard	Solar and Wind Evaporative Toilet	2010
Global Inventive Industries, Inc. P.O. Box 3752 Costa Mesa, CA 92628 1-800-ECOJOHN (714-568-1077) GII, Inc. 17150 Newhope St. Ste. 707 Fountain Valley, CA 92708	ECOJOHN SR	Gas-fired	2007
Research Products/Blankenship Incinolet (800) 527-5551	CF (120v) TR (208v, 240v) RV (120v) WB (120v 208v, 240v)	120 V or 240 V Marine	2001
Storburn (519) 442-4731	60K	Gas-fired	1993

5.7 Gravelless Trench Components

Revision: October 31, 2013

Table 5-6 shows the components of gravelless trenches, along with their certification date. Table 5-7 provides trench and product width-to-rating correlation.

Table 5-6. Gravelless trench components.

Gravelless Drainfield Systems	Chambers, Bundled or Large Diameter Pipe	Model	Sizing Factor (%)	Rating (ft ² /ft)	Unit Dimensions	Certification Date
Eljen Corporation	Bundled module	HB ^{b, e}	25	4.00	36 x 24 x 7 in.	6/09
GSF Geotextile Sand Filter		Type B. ^{b, f}	25	4.00	36 x 48 x 7 in.	6/09
Infiltrator Systems, Inc.	Chamber	Quick4 Standard	25	4.00	34 x 48 x 12 in.	7/05
Advanced Drainage Systems ^a		Quick4 Plus Standard	25	4.00	34 x 48 x 12 in.	6/09
Bio-Diffuser Chambers ^a		Quick4 Plus Standard LP	25	4.00	34 x 48 x 8 in.	6/09
Hancor ^a		Quick4 Equalizer 36	25	2.67	22.8 x 48 x 10 in.	7/05
		Arc 36	25	4.00	34.5 x 60 x 13 in.	1/06
		Standard 1100BD	25	4.00	34 x 76 x 11 in.	12/92
		High capacity 1400BD	25	4.00	34 x 76 x 14 in.	12/92
		EPS pipe	1201P ^d and 1201P-Geo ^{c, d}	25	1.33	Ø12 x 60 in. Ø 12 x 120 in.
		1202H ^e and 1202H-Geo ^{c, e}	25	2.67	Ø 24 x 60 in. Ø 12 x 120 in.	2/04
		1203H ^f and 1203H-Geo ^{c, f}	25	4.00	Ø 24 x 60 in. Ø 12 x 120 in.	10/07
	Lg. dia. pipe	SB-2 (Ø8 in.)	25	1.33	20 ft rolls	9/82
		SB-2 (Ø10 in.)	25	1.33	20 ft rolls	
Plastic Tubing Industries, Inc.	Bundled pipe	9-pipe system	25	1.33	10 ft lengths	5/98
Multi-Pipe Rock Replacement Distribution System		11-pipe system	25	1.33	10 ft lengths	5/98
		13-pipe system	25	1.33	10 ft lengths	5/98

Gravelless Drainfield Systems	Chambers, Bundled or Large Diameter Pipe	Model	Sizing Factor (%)	Rating (ft ² /ft)	Unit Dimensions	Certification Date
Prinsco, Inc.	Lg. dia. pipe	Goldline GLP (Ø8 in.)	25	1.33	10 and 20 ft lengths	12/95
		Goldline GLP (Ø10 in.)	25	1.33	10 and 20 ft lengths	

Note: Expanded polystyrene (EPS)

- a. Infiltrator Systems, Inc. is now the parent company for Advanced Drainage Systems, Hancor, and Bio-Diffuser. Product markings may change to reflect new ownership.
- b. GSF system design includes 12 inches of modified ASTM C-33 sand at trench bottom.
- c. Geo suffix indicates product contains geotextile fabric inside the mesh. Geotextile should be oriented on top to limit soil intrusion.
- d. In 1-foot wide trench
- e. In 2-foot wide trench
- f. In 3-foot wide trench

Table 5-7. Trench and product width-to-rating correlation. (The measured width of the product must be at least 90% of the design trench width.)

Trench Width (inches)(feet)	Product Measured Width must be at least (inches)	Rating = Design Trench Width divided by 0.75 ft ² /lineal foot
36 (3.0)	32.4	4.00
30 (2.5)	27.0	3.33
24 (2.0)	21.6	2.67
18 (1.5)	16.2	2.00
12 (1.0)	10.8	1.33

5.8 Pump Vaults

Revision: February 6, 2014

Table 5-8 shows septic tank pump vaults certified by DEQ.

Table 5-8. Septic tank pump vaults certified by DEQ.

Pump Vault Manufacturer	Model #	Unit Dimensions	Certification Date	NSF Certification
Concentric Systems	PF-1645 series	16 in. dia. pump filter x 45, 50, 55, 60 in. tall	10/7/97	
	PF1445-FI series	14 in. dia. pump filter x 45, 50, 55, 60 in. tall	10/7/97	
	EF210, EF210-D	10 in. diameter case, 2 parallel EF210 filters	10/7/97	
Northwest Cascade, Inc.	Disk/Screen Effluent Filter	50 x 18 in. adjust filter stand length, six 1/8 in. screens	6/5/00	
		40 x 18 in. adjust filter stand length, six 1/8 in. screens	6/5/00	
Orengo Systems, Inc. 814 Airway Avenue Sutherlin, OR 97479 (800) 348-9843	PVU Series	Biotube pump vault	6/12/02	
	SV Series	Screened pump vault	12/13/99	
	OSI 12000	12 in. diameter x 48 in. tall	3/87	
Zabel Wastewater Systems	FPV-100	15-inch diameter filter pump vault, 36 or 48-inches tall (dosing chamber only)	5/19/98	
Zoeller Pump Co.		Filter and pump chamber 15 3/8 in. dia. x 34 in. tall		
	P/N 170-0101	Filter and pump chamber 17 9/16 in. dia. x 55 3/4 in. tall, field fitted for openings	10/31/02	
	P/N 170-0126	Does not include packages with pumps rated at >30 GPM.	10/31/02	

5.9 Septic Tank Effluent Filters

Revision: July 28, 2008

Table 5-9 shows septic tank effluent filters currently certified by DEQ.

Table 5-9. Septic tank effluent filters certified by DEQ.

Effluent Filter	Model #	Unit Dimensions	Septic Tank Liquid Depth	Approval Date	NSF Certification
Bio Weir Filters, Inc. 3 Milton Ave. Newnan, GA 30263 (770) 301-6603	D/F SC/9	—	—	—	11/3/03
Bowco Industries 5486 S.E. International Way Portland, OR 97222 (888) 232-9991	EF-235	Total overall height 27.5 in. Filter height 25 in. Total overall diameter 4.35 in. Filter diameter 4.00 in.	Fits 4 in SDR-35 or Schedule 40 outlet tees Flow rate up to 1,500 GPD	7/28/08	6/2/04
Norweco 220 Republic Street Norwalk, OH 44857-1196 (419) 668-4471	BK 2000	Separate settling/retention basin, 2 ft o.d. x 6 ft 4½ in.	Not applicable	10/18/99	5/6/02
Northwest Cascade, Inc. 16207 Meridian Puyallup, WA 98373 (800) 444-2371	Effluent Filter	24 x 18 in.	Adjust filter stand length	6/5/00	—
Orengo Systems, Inc. 814 Airway Avenue Sutherlin, OR 97479 (800) 348-9843	FT Series FT j Series FT i Series	Biotube Effluent Filters Biotube (jr) Effluent Filters 4 in. dia x 18 in. Biotube Insert Effluent Filters	Order to fit tank Up to 45 in. Fits in existing baffle	12/13/99 12/13/99 12/13/99	—

Effluent Filter	Model #	Unit Dimensions	Septic Tank Liquid Depth	Approval Date	NSF Certification
Polylock, Inc 173 Church Street Yalesville, CT 06492 (800) 234-3119	PL-122 PL-68	4.25 x 4.25 x 12.5 in. (depth) 4.2 x 14.4 in. (depth)	Up to 31.25 in. Fits in existing baffle	10/21/99	6/6/00 12/9/03
Premier Tech 2000 ITEE 1 Avenue Premier Rivière-Du-Loup, Quebec G5R 6C1 Canada (418) 867-8883	EFT-80	—	—	—	11/03/03
Tuf-Tite Inc. 500 Capital Drive Lake Zurich, IL 60047 (800) 382-7009	EF-4 / EF-4 Combo EF-6 / EF-6 Combo	4 in. diameter for vented tees (1/16 in. filtration) 6 in. diameter x 14 in. high (1/16 in. filtration)	Fits in existing baffle 35 in. liquid depth. Flow rate up to 1500 gallons per day	8/22/02 7/23/12	5/6/02 9/03
Zabel Wastewater Systems 6244 Old LaGrange Road Crestwood, KY 40014 (800) 221-5742	A100 A300 A1800	11.4 in. diameter x 16 in. high (residential, 1/16 in.) 11.4 in. diameter x 16 in. high (commercial, 1/32 in.) 4 in. diameter for vented tees (1/16 in. filtration)	Variable adjusts w/extension Variable adjusts w/extension Fits existing baffled tank	4/21/88 5/19/98 3/24/94	6/6/00 6/6/00 6/6/00
Zoeller Pump Co. 3649 Cane Run Road Louisville, KY 40211 (502) 778-2731	P/N 170-0078	4 in. diameter for vented tees (1/16 in. filtration)	Fits in existing baffle	8/22/02	5/6/02

Note: gallons per day (GPD)

5.10 Pipe Materials for Specified Uses

Revision: April 18, 2013

Table 5-10 shows pipe materials for specified uses.

Table 5-10. Pipe materials for specified uses.

Pipe Material and Specification ^{a,b}		Function			
		Tank to Dosing Chamber	Tanks to Drainfield ^{c,d}	Gravity Drainfield ^{c,d}	Pressure Distribution System
ABS Sch. 40 ^e	ASTM D2661	X	X	X	X
	ASTM F628	X	X	X	X
PVC Sch. 40	ASTM F891-10	X	X	X	X
PVC	ASTM D3034 ^f	X	X	X	
	ASTM D2729			X	
	ASTM D2241	X	X	X	X
	AWWA C900	X	X	X	X
	ASTM D2665	X	X	X	
	ASTM D1785	X	X	X	X
PE	AWWA C906	X	X	X	X
	ASTM F810 ^g		X	X	
	ASTM F405 ^h			X	

Notes: polyvinyl chloride (PVC); acrylonitrile-butadiene-styrene (ABS); polyethylene (PE); American Society for Testing and Materials (ASTM); American Water Works Association (AWWA)

a. Or equivalent materials as specified by ASTM or AWWA.

b. See State of Idaho Division of Building Safety, Plumbing Bureau for requirements regarding approved building sewer lines between the structure and septic tank.

c. Specified in section 3.2.2 of the *Technical Guidance Manual for Individual and Subsurface Sewage Disposal Systems* (TGM).

d. Must use ASTM D3034 or equivalent as specified in section 3.2.3 of the TGM. ASTM D3033 piping was previously approved for use spanning the tank to dosing chamber, tank to drainfield, and in the drainfield.

e. ABS Schedule 40 or piping material of equal or greater strength. Required by IDAPA 58.01.03.007.21.a.

f. Excavation must be compacted with fill material to 90% standard proctor density, with a minimum of 12 inches of cover material. Required by IDAPA 58.01.03.007.02.b.

g. Smooth wall high-density polyethylene (HDPE), white suitable for effluent and drainfield piping.

h. Corrugated HDPE, black with stripe, flexible, suitable for drainfield piping.

5.11 Vault Toilets

Revision: June 1, 2009

See Table 5-11 for a list of vault toilets.

Table 5-11. Vault toilets.

Vault Manufacturer	Volume		Effective date (month/day/year)
Park and Restroom Structures, Inc. P.O. Box 13280 Spokane Valley, WA 99213-3280	1,200 gallon	One-piece concrete vault toilet tank, single compartment, reinforced concrete construction, building structure integral with vault lid.	6/1/09

5.12 Drainfield Remediation Components

Revision: June 8, 2011

Table 5-12 provides a list of drainfield remediation components.

Table 5-12. Drainfield remediation components.

Manufacturer and Distributor	Model and Remediation Type	Certification	Installation	Requirements
Bio-Microbics® www.biomicrobics.com	RetroFAST®—PR™ —0.150 —0.250 —0.375	NSF®/ANSI Standard #40 Verification letter	—Complex installer —Factory authorized	—Manufacturer’s checklist —Warranty —Operation and maintenance instructions
Alternative Wastewater Systems, LLC 15780 Racetrack Dr., Caldwell, Idaho 83706 (208) 453-9230 www.alternativewastewater.com	Aerobic			
Knight Treatment Systems, Inc. www.knighttreatmentsystems.com	White Knight™ WK-40 WK-78	—Section 4.9 Experimental Systems (TGM) —Idaho Professional Engineer	—Complex installer —Factory authorized	—Manufacturer’s checklist —Warranty —Operation and maintenance instructions
Wachusett Environmental Lew Reed, PE P.O. Box 129, Holden, Massachusetts 01520 (774) 535-1274 (866) 307- 4282 (fax)	Microbial Inoculation Generator (MIG)			
Infiltrator® Systems Inc. www.aquaworx.com	Aquaworx Remediator™	—IAPMO IGC 180-2003 —Licensing agreement through Pirana™	—Complex installer —Factory authorized	—Manufacturer’s checklist —Warranty —Operation and maintenance instructions
Mathew S. Gibbs P.O. Box 1275, Sandpoint, Idaho 83864 (800) 221-4436 (860) 577-7001 (fax) mgibbs@infiltratorsystems.net	Aerobic Bacteria Generator (ABG)			
SludgeHammer® Group Ltd. www.sludgehammer.net	SludgeHammer® —S-46 —S-86	—IAPMO IGC 180-2003 —Section 4.9 Experimental Systems (TGM) —Idaho Professional Engineer	—Complex installer —Factory authorized	—Manufacturer’s checklist —No warranty —Operation and maintenance instructions
Ken Morse Northwest Distributor P.O. Box 1771, Olympia, WA 98507 (360) 923-1080 Ken@netseptic.com	Aerobic Bacteria Generator (ABG)			

This page intentionally left blank for correct double-sided printing.