

## CHAPTER 5. APPROVED INSTALLERS AND COMPONENTS

### 5.1 Approved Installers

Because of continual changes in the status of installers state-wide, their listing in the Technical Guidance Manual will no longer occur. To determine if an installer is licensed, or to receive a current list of local installers or local septic tank pumpers, please contact the following Health Districts.

Panhandle Health District  
8500 N. Atlas Rd.  
Hayden, ID 83835  
208-415-5100

Counties: Benewah, Bonner, Boundary,  
Kootenai, Shoshone

North Central District Health Department  
215 10th Street  
Lewiston, ID 83501  
208-799-3100

Counties: Clearwater, Idaho, Latah, Lewis,  
Nez Perce

Southwest District Health  
920 Main Street  
Caldwell, ID 83605  
208-455-5317

Counties: Adams, Canyon, Gem, Owyhee,  
Payette, Washington

Central District Health Department  
707 N. Armstrong Place  
Boise, ID 83704  
208-375-5211

Counties: Ada, Boise, Elmore, Valley

South Central Public Health District  
1020 Washington St. North  
Twin Falls, ID 83301  
208-737-5900

Counties: Blaine, Camas, Cassia, Gooding,  
Jerome, Lincoln, Minidoka, Twin  
Falls

Southeastern District Health Department  
1901 Alvin Ricken Drive  
Pocatello, ID 83201  
208-233-9080

Counties: Bannock, Bear Lake, Bingham,  
Butte, Caribou, Franklin, Oneida,  
Power

Eastern Idaho Public Health District  
1250 Hollipark Drive  
Idaho Falls, ID 83401  
208-522-0310

Counties: Bonneville, Clark, Custer, Fremont,  
Jefferson, Lemhi, Madison, Teton

## 5.2 Approved Septic Tank Pumpers

Because of continual changes in the status of septic tank pumpers state-wide, their listing in the Technical Guidance Manual will no longer occur. To determine if a septic tank pumper is licensed, or to receive a current list of local installers or local septic tank pumpers, please contact the following Health Districts.

Panhandle Health District  
8500 N. Atlas Rd.  
Hayden, ID 83835  
208-415-5100

Counties: Benewah, Bonner, Boundary,  
Kootenai, Shoshone

North Central District Health Department  
215 10th Street  
Lewiston, ID 83501  
208-799-3100

Counties: Clearwater, Idaho, Latah, Lewis,  
Nez Perce

Southwest District Health  
920 Main Street  
Caldwell, ID 83605  
208-455-5317

Counties: Adams, Canyon, Gem, Owyhee,  
Payette, Washington

Central District Health Department  
707 N. Armstrong Place  
Boise, ID 83704  
208-375-5211

Counties: Ada, Boise, Elmore, Valley

South Central Public Health District  
1020 Washington St. North  
Twin Falls, ID 83301  
208-737-5900

Counties: Blaine, Camas, Cassia, Gooding,  
Jerome, Lincoln, Minidoka, Twin  
Falls

Southeastern District Health Department  
1901 Alvin Ricken Drive  
Pocatello, ID 83201  
208-233-9080

Counties: Bannock, Bear Lake, Bingham,  
Butte, Caribou, Franklin, Oneida,  
Power

Eastern Idaho Public Health District  
1250 Hollipark Drive  
Idaho Falls, ID 83401  
208-522-0310

Counties: Bonneville, Clark, Custer, Fremont,  
Jefferson, Lemhi, Madison, Teton

### 5.3 Approved Septic Tanks

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

**Table 5-1. Approved Septic Tanks**

SUPPLIER	UNIT Liquid Volume (Gallons)	MAX. BURY DEPTH (ft.)	DESCRIPTION Materials	EFFECTIVE DATE (m/d/yr)
AAA Tanks Idaho Falls, ID	1500	3	One-piece Concrete, single compartment rebar or synthetic structural materials. <b>(Lid requires rebar in all configurations.)</b>	1/11/05
	1000	3		1/11/05
	1500		Two-compartment Concrete	8/23/00
Amcor Precast Oldcastle Precast 2240 S. Yellowstone Idaho Falls, ID 83402	1000, 1250, 1500		Two-piece Concrete	
	4000		Two-piece Concrete	6/12/92
	3140		Two-piece Concrete	7/30/93
	1500		Low-profile, 2 compartment	8/24/94
	2000		Two-piece Concrete	8/24/94
	1000		Low-profile, 2 compartment	3/9/98
	1500		Two-Compartment 1000 gal + 500 gal pump chamber	5/17/99
	1150	3	Two-piece, three-compartment Concrete, Jet Inc. Septic Tank	9/16/02
	1000	8 or HS20	One-piece, baffled	1/18/08
	1500	8 or HS20	One-piece, single compartment	1/18/08
1500	8 or HS20	One-piece, two-compartment	1/18/08	
Anderson Supply 630 E. Cottonwood Bozeman, MT 59715	1000		Single Compartment	9/13/88
	1000, 1500		Double Compartment	9/13/88
	2000		Double Compartment	9/13/88
	1000		w/ pump chamber	9/13/88
Associated Tank & Vault Mesa, ID	1000		Concrete Septic Tank	8/5/96
Atkinson Septic Tanks 1315 W. Idaho Blvd. Emmett, ID 83617	1150		Two-piece, three-compartment Concrete, Jet Inc. Septic Tank	11/16/95

<b>SUPPLIER</b>	<b>UNIT Liquid Volume (Gallons)</b>	<b>MAX. BURY DEPTH (ft.)</b>	<b>DESCRIPTION Materials</b>	<b>EFFECTIVE DATE (m/d/yr)</b>
B.C. Tanks, L.L. C. 2193 McGrath Eagle, ID 83616	1000		Two-piece Concrete	9/6/96
Big Wood River Septic Jerome, ID	1000		Two-piece Concrete	12/9/93
Boise Vault 608 Carnation Dr. Nampa, ID 83687	750, 900, 1000		One-piece Concrete	1/1/77
	1250, 1500		Two-piece Concrete	12/29/77
	900		Low-profile	4/2/86
Bonner Concrete Products Sagle, ID	1000, 1250, 1500		Concrete	12/12/84
	1500	3	Concrete, single compartment, 1-piece	7/5/06
	2000	3	Concrete, 1- & 2-Compartment, 1-piece	6/27/06
Clearwater Concrete, Inc. Kooskia, ID	1000	3	One-piece Concrete	5/21/03
Cooper Redi-Mix Salmon, ID	1000		One-piece Concrete	3/26/98
	1500		One-piece, one or two- compartment	5/19/98
C.V. Concrete Orofino, ID	1000		Three-piece Round Concrete	8/1/87
CXT Precast Concrete Prod. Spokane, WA 99216	1000 Vault	3	One-piece Concrete Vault	5/30/02
Dahle's Red-E-Mix Salmon, ID	1000		Two-piece Concrete	7/26/94
Delta Fiberglass Structure Salt Lake City, UT	1000		Fiberglass Tank	9/6/83
Design Concrete Products Idaho Falls, ID	1000, 1250, 1500		Concrete	4/20/94
Duke's Septic Tanks Rt. 1 Box 116 Payette, ID 83661	1000		Concrete	2/20/86
				7/19/94

<b>SUPPLIER</b>	<b>UNIT Liquid Volume (Gallons)</b>	<b>MAX. BURY DEPTH (ft.)</b>	<b>DESCRIPTION Materials</b>	<b>EFFECTIVE DATE (m/d/yr)</b>
Dura-Crete Inc. Salt Lake City, UT	1000		Two-piece Concrete	7/21/94
	1250		Two-piece Concrete	4/4/86
	1750		Two-piece Concrete	7/21/94
	2500		Two-piece Concrete	7/21/94
Early Bird Supply Clarkston, WA	1000		Concrete	11/5/86
Evergreen Pre-Cast, Inc. P.O. Box 58 Sumner, WA 98390	900	3	Specialty Concrete Septic Tank, Delta Environmental Products Tank Only (ETPS)	10/27/04
Everlasting Concrete Products	750, 900, 1250		Two-piece Concrete	12/1/84
	1000	3	Two-piece concrete	12/03/07
15824 Gunfire Rd Caldwell, ID 83605	500 GPD tank, Norweco ETP	3	Two-piece Norweco 500 GPD Extended Treatment Package System tank	7/17/2008
Fiber Septic Systems 1049 Port Way Clarkston, WA 99403	1000		Single and Double Compartment	4/2/86
	1250		Fiberglass Tanks	9/8/93
	1500		Fiberglass Tanks	9/8/93
Fiberglass Contractors Kennewick, WA	1000, 1300, 1500		Single and Double Compartment Fiberglass Tanks	11/2/76
Hancey Concrete Precast Millville, UT	1000	10	Single compartment, Two-piece, deep burial concrete	12/2/08
	1250	10	Single compartment, Two-piece, deep burial concrete	12/2/08
Horrocks Precast 9659 North Philbin Rd. Pocatello, ID 83202	1000		Low-profile Concrete	10/27/99
	1500		Concrete	10/27/99
Infiltrator Systems, Inc. P.O. Box 768 Old Saybrook, CT 06475	900	3	TW-900, 1-Piece, 1-Compartment, Molded Plastic (Outlet hole "C")	4/15/09
	1050	3	TW-1050, 1-Piece, 1-Compartment, Molded Plastic (Outlet hole "C")	4/15/09
	1250	3	TW-1250, 1-Piece, 1-Compartment, Molded Plastic (Outlet hole "C")	4/15/09
	1500	3	TW-1500, 1-Piece, 1-Compartment, Molded Plastic (Outlet hole "C")	4/15/09

<b>SUPPLIER</b>	<b>UNIT Liquid Volume (Gallons)</b>	<b>MAX. BURY DEPTH (ft.)</b>	<b>DESCRIPTION Materials</b>	<b>EFFECTIVE DATE (m/d/yr)</b>
Jerome Precast 312 E. 400 S (Box 425) Jerome, ID 83338	1000		Concrete	7/8/96
	1250		Concrete	8/26/96
	1250		Two-Compartment Concrete	6/11/98
	1000		Two-Compartment Concrete	10/1/98
	1500	3	One or Two Compartment Concrete	03/24/03
	1000	3	Single Piece & Compartment, BioMicrobics 0.5 MicroFAST ETPS	05/20/09
	1500	3	Single Piece & Compartment, BioMicrobics 0.75 & 0.9 MicroFAST ETPS	05/20/09
Johnson Precast 551 East Moody Rd. Rigby, ID 83440	1000	3	Two-piece Concrete	8/1/03
	1500	3	One-piece Concrete	9/16/05
	1000	3	500 GPD Norweco ETP System tank	12/02/08
Jo-Mac Construction P.O. Box 54 Richfield, ID 83349	1000		Concrete	8/20/91
K.G. Septic Tanks Bonners Ferry, ID	1000		Two-piece Concrete	6/22/94
Kanta Manufacturing P.O. Box 96 Three Forks, MT 59752	1000		Concrete	10/24/85
L/R Schuldt Inc. DBA K&G Contractors 2535 North Blvd Idaho Falls, ID 83402	1000	8	One-piece Round	5/14/98
	1000, 1500	8	One-Piece Rectangular Concrete	10/16/09
	1000		Specialty Concrete Tank, ETPS Southern	7/22/02
	2000	4	One-piece Concrete	11/20/02
Lar-Ken 411 Remington Boise, ID 83714	1000, 1250, 1500		Concrete	5/13/81
	1000		Two-piece Concrete	9/11/95
	2000		Two-piece Concrete	12/18/98
	2500		Concrete	12/18/98
	800		Concrete	5/24/99
	1250		One or Two-Compartment (900 gal + 300 gal pump chamber)	7/21/00

<b>SUPPLIER</b>	<b>UNIT Liquid Volume (Gallons)</b>	<b>MAX. BURY DEPTH (ft.)</b>	<b>DESCRIPTION Materials</b>	<b>EFFECTIVE DATE (m/d/yr)</b>
Miller Septic Tanks 319 Orchard Dr. Twin Falls, ID 83303	1000		Two-piece Concrete	3/22/95
	1000		Two-piece Concrete	6/13/95
	1250,1350		Two-piece Concrete	7/18/95
	1000, 1500	3	One-piece Concrete	6/24/04
	1000, 1500	3	One-piece, Two-Compartment Concrete	6/24/04
Missoula Concrete Const. Missoula, MT	3000		Concrete	11/1/94
	6000		Two-piece Concrete	11/1/94
	1000 STEPS		Two-piece Concrete	11/16/95
	2000		Two-piece Concrete	11/16/95
	1000		Vault Privy	7/11/02
Norwesco 4365 Steiner St. St. Bonifacius, MN 55375	750, 1000, 1250, 1500		Polyethylene, one and two manhole	5/13/81 11/06/95
	1000, 1250, 1500		Polyethylene Cisterns	12/17/96
	1000, 1250	3	Polyethylene "Bruiser"	11/13/03
Oldcastle Precast (Amcors) 16419 Ten Lane Nampa, ID 83687	2,990	HS-25	Traffic Rated, reinforced concrete, two-piece, single compartment tank	05/08/2009
Orenco Systems, Inc. 814 Airway Avenue Sutherlin, OR 97479	1000, 1500	3	Fiberglass	6/24/04
Owyhee Sand and Gravel P.O. Box 326 Homedale, ID 83628	1000		Two-piece Concrete	3/10/00
Panhandle Precast Concrete P.O. Box 60 Coeur d'Alene, ID 83814	1000		Two-piece Concrete	12/14/81
	1500, 2000		Two-piece Concrete w/ 500 gal pump chamber	12/14/81
	2500, 3000		Two-piece Concrete	01/30/85
Paulson Precast Rt. 1 Box 291 Rupert, ID 83350	1000		Low-profile Concrete	7/1/94
	1250		Low-profile Concrete	7/1/94

SUPPLIER	UNIT Liquid Volume (Gallons)	MAX. BURY DEPTH (ft.)	DESCRIPTION Materials	EFFECTIVE DATE (m/d/yr)
Pocatello Precast 3650 Hwy 30 Pocatello, ID 83201	1000	3	Low-profile Concrete	4/6/95
	1600	3	Low-profile Concrete	4/11/95
	1600	3	Two-Comp. 1100 gal + 500 gal.	3/21/96
	1250	3	Concrete, 6' x 8'	5/19/98
	1050	3	Two-Compartment Concrete	7/9/98
	2000	3	Two-piece Concrete	7/9/98
	1050	6	One-piece, single compartment tank	10/1/08
	1500	6	One-piece, single compartment tank	10/1/08
Quadel Industries Coos Bay, OR	Q21-1000		Polyethylene	9/22/84
	Q21-1250		One or Two Compartment	6/22/94
	Q21-1500		1500 gal.	6/22/94
	Q21-1000+500		1000 gal. + 500 gal. pump chamber	6/22/94
Robertson MFG. 455 East 80 South Hyde Park, UT 83418	1000		Two-piece Concrete	9/14/94
	1250, 1500		One-piece Concrete	11/7/96
	2,000	4	One-piece Concrete	11/02/2009
	2,500	4	One-Piece Concrete	11/02/2009
	3,000	4	One-Piece Concrete	11/02/2009
Rocky Mountain Precast P.O. Box 2062 Idaho Falls, ID 83403	1000		Two-piece Concrete	10/14/97
	1000		Two-compartment Concrete	7/3/01
Rotational Molding Inc. 716 North 11th Ave. Caldwell, ID 83605	1000		Polyethylene	4/11/88
Roth Global Plastics, Inc. P.O. Box 245 Syracuse, NY 13211	1060	3	RMT-1060 HDPE. RMT-1250 HDPE. RMT-1500	6/1/09
	1250	3	HDPE. Five (5) inch dia. inlet/outlet hole @ "A"	6/1/09
	1500	3	Single compartment tanks only, baffles are not water tight.	6/1/09
RotoTech Industries 201 Carlisle Coos Bay, OR 97420	CPI 1250		Polyethylene	9/22/84

<b>SUPPLIER</b>	<b>UNIT Liquid Volume (Gallons)</b>	<b>MAX. BURY DEPTH (ft.)</b>	<b>DESCRIPTION Materials</b>	<b>EFFECTIVE DATE (m/d/yr)</b>
Rupp Trucking Ent., Inc. 7905 West 9600 North Tremonton, UT 84337	1000		Two-piece Concrete	4/4/86
	1250		Two-piece Concrete	11/18/99
Snake River Precast 3640 Highway 30 Pocatello, ID 83201	1000	3	Concrete	4/25/06
	1500	3	Concrete	4/25/06
Synder Industries Inc. Marked Tree, AR 72365	1050		One compartment Polyethylene	2/21/03
	1500		One compartment Polyethylene	2/21/03
Triple C Concrete P.O. Box 95 Rupert, ID 83350	1000		Two-piece concrete	7/17/86
	1000		Low-profile, two-piece Concrete	5/13/96
	1000	2	Single piece, concrete	6/16/08
	1500	2	Single piece, concrete	6/16/08
	1500	2	Single piece, dual compartment, concrete	6/16/08
Valley Precast Inc., 6633 Summer Hill Rd. Boise, ID 83703	1000	3	One-piece Concrete, alt. inlet/outlet locations (5/20/08)	11/23/99
	1250	3	One-piece Concrete, alt. inlet/outlet locations (5/20/08)	11/23/99
	1000	3	Low-profile Concrete, alt. inlet/outlet locations (5/20/08)	5/8/00
	1500	3	One or two compartment 1000 gal. w/ 500 gal. Pump chamber Concrete, alt. inlet/outlet locations (5/20/08)	7/17/00
	1000	3	Specialty Tanks ETPS, Biomicrobics, alt. inlet/outlet locations (5/20/08)	12/21/00
	1500	3	Specialty Tanks ETPS, Biomicrobics, alt. inlet/outlet locations (5/20/08)	07/11/03
White Block Company 6219 East Trent Ave. Spokane Valley, WA 99207	750, 900, 1000, 1100, 1250, 1500, 2000, 2500		Concrete	4/2/86

<b>SUPPLIER</b>	<b>UNIT Liquid Volume (Gallons)</b>	<b>MAX. BURY DEPTH (ft.)</b>	<b>DESCRIPTION Materials</b>	<b>EFFECTIVE DATE (m/d/yr)</b>
Wilbert Precast, Inc. 2215 East Brooklyn Spokane, WA 99217	750, 1000, 1250, 1500		Concrete	2/6/81
	1000 + 500		Two-piece Concrete w/ 500 gal. Pump chamber	3/21/97
	1500		Two-compartment Concrete	3/21/97
	3000		Multi-piece Concrete	4/04/03
Wilson Concrete Products Idaho Falls, ID	5,386	HS20	Two-piece, single compartment, Traffic Rated	12/07/06
	1000		Two-piece Concrete	10/1/98
Wilson & Dodge Contractors Box 93 Mountain Home, ID 83647	1500	3	One-piece, single compartment, reinforced concrete	10/16/2009
	1000		Concrete	6/15/92
Xerxes Corporation 7901 Xerxes Ave. South Minneapolis, MN 55431	2,500	7	Single Wall, Fiberglass Reinforced Plastic (FRP). (Contact manufacturer for special bedding requirements for burial depths exceeding 7 feet.)	6/7/06
	3,400	7		6/7/06
	4,200	7		6/7/06
	5,000	7		6/7/06

## 5.4 Extended Treatment Package Systems

Table 5-2 lists extended treatment package systems certified by DEQ.

**Table 5-2. Extended Treatment Package Systems Certified by DEQ**

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

Aerobic Treatment Device (Std 40)	Gallons per day	BOD <sub>5</sub> Removal	Total Suspended Solids Removal	Trench Size	Certification Date
BEST 1 AWS-1200 Class I BEST 1 AWS-1500 Class I	1200 1500				
Aquapoint Bioclere 16/12/500 Class I	500	Ave 11 mg/L	Ave 13 mg/L	Intermittent sand filter drain field	3/19/91
Aquarobic International Mini-Plant 54291 Concrete Filter Kit [1] Class I Mini-Plant 54291 Fiberglass Class I	500 to 1500 in 100 gal units	Ave 7 mg/L	Ave 11 mg/L	Intermittent sand filter drain field	11/03/03
Bio-Microbics, Inc. Micro Fast 0.50 Class I Micro Fast 0.75 Class I Micro Fast 0.90 Class I Micro Fast 1.5 Class I	500 750 900 1500	92-95% Ave 11 mg/L	95-97% Ave 16 mg/L	Intermittent sand filter drain field	03/05/97 6/5/2000 12/27/02
Busse Innovative Systeme GmbH MF-B-400	400			Intermittent sand filter drain field	07/07/09
Clearstream Wastewater Systems Model 500 N/C Class I Model 600 N/C Class I Model 750 N/C Class I Model 1000 N/C Class I Model 1500 N/C Class I	500 600 750 1000 1500	95-97% Ave 14 mg/L	93-98% Ave 48 mg/L	Intermittent sand filter drain field	03/28/96
Consolidated Treatment Sys., Inc. Multi-Flo FTB Class I 0.5, 0.6, 0.6-C, 0.75, 1.0, 1.5 Nayadic M Class I 6A, 8A, 1050A, 1200A, 2000A	500 to 1500 500 to 1500	96-97% Ave 5 mg/L 96-97% Ave 6 mg/L	97-98% Ave 6 mg/L 96-98% Ave 7 mg/L	Intermittent sand filter drain field	04/02/96 04/02/96
Delta Env. Products DF40-C, F, CC, CA, FF-Class I DF50-C, F, CC, CA, FF-Class I DF60-C, F, CC, CA, FF-Class I DF75-C, F, CC, CA, FF-Class I DF100-C, F, CC, CA, FF-Class I DF150-C, F, CC, CA, FF-Class I	400 500 600 750 1000 1500	95-98% Ave 6 mg/L	96-97% Ave 7 mg/L	Intermittent sand filter drain field	02/03/97

<b>Aerobic Treatment Device (Std 40)</b>	<b>Gallons per day</b>	<b>BOD<sub>5</sub> Removal</b>	<b>Total Suspended Solids Removal</b>	<b>Trench Size</b>	<b>Certification Date</b>
Desoto Concrete Products H-Two-O Series Class I	500 750 1000			Intermittent sand filter drain field	11/03/03
Ecological Tanks, Inc. AA, AS 500 Class I AA, AS-650 Class I AA, AS-750 Class I AA, AS-1000 Class I AA, AS-1500 Class I	500 650 750 1000 1500	AA Ave 2.0 mg/L AS Ave 2.0 mg/L	AA Ave 2.2 mg/L AS Ave 1.6 mg/L	Intermittent sand filter drain field	11/1/97 5/2/02
Enviro-Flo Class I E-500, E-550 E-600 E-750 E-1000	500 550 600 750 1000	Ave 14 mg/L	Ave 15 mg/L	Intermittent sand filter drain field	12/18/02
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 1000	96.5% Ave 7 mg/L Ave 13 mg/L	97.2% Ave 13 mg/L Ave 19 mg/L	Intermittent sand filter drain field	6/5/2000 12/5/97 12/30/02
Hoot Aerobic Systems, Inc. Class I H 500, 600, 750, 1000 LA 500, 1000	500 to 1000	Ave 3.2 mg/L	Ave 3.6 mg/L	Intermittent sand filter drain field	2/6/01
Hydro-Action, Inc. Class I AP-500, 600, 750, 900, 1500	500- 1500	Ave 9 mg/L	Ave 15 mg/L	Intermittent sand filter drain field	04/02/96 3/99 8/1/03
Jet Inc. Class I J-500, J-600 J-750, 1000, 1250, 1500	500 600 750-1500	88-96% Ave 15 mg/L	91-97% Ave 12 mg/L	Intermittent sand filter drain field	10/96 5/93 7/29/97
MICROSEPTEC Class I				Intermittent sand filter	6/25/99

Aerobic Treatment Device (Std 40)	Gallons per day	BOD <sub>5</sub> Removal	Total Suspended Solids Removal	Trench Size	Certification Date
Enviroserver, ENFG 600, 1200, 1500	600 1200 1500	Ave 6 mg/L	Ave 8 mg/L	drain field	
National Wastewater Systems Inc., Solar Air 500, 800, 1000, 1200	500 800 1000 1200	Ave 13 mg/L	Ave 19 mg/L	Intermittent sand filter drain field	8/1/03
Norweco, INC. Singular 950 series Class I Singular 960 series Class I	600-1500 500-1500	>85% Ave 6 mg/L	>85% Ave 10 mg/L	Intermittent sand filter drain field	04/03/96 8/96
Orenco Systems Inc., AdvanTex AX20N AdvanTex AX15-2N AdvanTex AX20-2N AdvanTex AX15-3N AdvanTex AX20-3N	500 800 1000 1200 1500	Ave 5 mg/L	Ave 4 mg/L	Intermittent sand filter drain field	4/10/02
Pro Flo Aerobic Systems Pro Flo 500 TL Pro Flo 750 SL Pro Flo 1000 TC	500 750 1000			Intermittent sand filter drain field	11/03/03
Rogers Treatment Systems Mudbug 5 Mudbug 10 Mudbug 15	500 1000 1500	Ave 15 mg/L	Ave 22 mg/L	Intermittent sand filter drain field	11/03/03
Southern Manufacturing SM-500 Class I SM-600 Class I SM-750 Class I SM-1000 Class I SM-1500 Class I	500 600 750 1000 1500	98.7% Ave 2.0 mg/L	98.1 % Ave 1.8 mg/L	Intermittent sand filter drain field	9/1/97 8/28/00
Zabel Environmental Technology ATS-AD-500 Class I	500			Intermittent sand filter drain field	12/02 Dropped

## 5.5 Composting Toilets

Table 5-3 lists composting toilets currently certified by DEQ.

**Table 5-3. Composting toilets certified by DEQ**

<b>Recycle/Reuse and Water Conservation Devices (NSF STD 41)</b>	<b>Treatment System</b>	<b>Model</b>	<b>Notes</b>	<b>Certification Date</b>
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, Carosel	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

## 5.6 Incinerating Toilets

Table 5-4 shows incinerating toilets currently certified by DEQ.

**Table 5-4. Incinerating Toilets Certified by DEQ**

Incinerating Toilets	Model	Notes	Certification Date
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 1-800-527-5551	CF (120v) TR (208v, 240v) RV (120v) WB (120v 208v, 240v)	120 V or 240 V  Marine	2001
Storburn 1-519-442-4731	60K	Gas-fired	1/93

## 5.7 Gravelless Trench Components

Table 5-5 shows the components of gravelless trenches, along with their certification date.

**Table 5-5. Gravelless Trench Components**

Gravelless Drainfield Systems	Chambers, Bundled or Large Dia. Pipe	Model	Sizing Factor	Rating (ft <sup>2</sup> /ft)	Unit Dimensions (W" x L" x H")	Certification Date
Advanced Drainage Systems <sup>a</sup> / Bio-Diffuser Chambers <sup>a</sup> / Hancor <sup>a</sup>	Chamber	Arc 36	25%	4.00	34.5" x 60" x 13"	01/06
		Standard 1100BD	25%	4.00	34" x 76" x 11"	12/92
		High Capacity 1400BD	25%	4.00	34" x 76" x 14"	12/92
	Lg. Dia. Pipe	SB-2 (Ø8")	25%	1.33	20' rolls	9/82
		SB-2 (Ø10")	25%	1.33	20' rolls	
Eljen Corporation GSF Geotextile Sand Filter	Bundled Module	HB <sup>b, c</sup>	25%	4.00	36" x 24" x 7"	6/09
		Type B <sup>b, f</sup>	25%	4.00	36" x 48" x 7"	6/09
Infiltrator Systems, Inc.	Chamber	Quick4 Standard	25%	4.00	34" x 48" x 12"	7/05
		Quick4 Plus Standard	25%	4.00	34" x 48" x 12"	6/09
		Quick4 Plus Standard LP	25%	4.00	34" x 48" x 8"	6/09
		Quick4 Equalizer 36	25%	2.67	22.8" x 48" x 10"	7/05
	EPS Pipe	1201P <sup>d</sup> & 1201P-Geo <sup>c, d</sup>	25%	1.33	Ø12" x 60" Ø 12" x 120"	02/04
		1202H <sup>e</sup> & 1202H-Geo <sup>c, e</sup>	25%	2.67	Ø 24" x 60" Ø 12" x 120"	02/04
		1203H <sup>f</sup> & 1203H-Geo <sup>c, f</sup>	25%	4.00	Ø 24" x 60" Ø 12" x 120"	10/07
Multi Pipe Rock Replacement Distribution System	Bundled Pipe	9-pipe system	25%	1.33	10' lengths	05/98
		11-pipe system	25%	1.33	10' lengths	05/98
		13-pipe system	25%	1.33	10' lengths	05/98

Gravelless Drainfield Systems	Chambers, Bundled or Large Dia. Pipe	Model	Sizing Factor	Rating (ft <sup>2</sup> /ft)	Unit Dimensions (W" x L" x H")	Certification Date
Prinsco, Inc.	Lg. Dia. Pipe	Goldline GLP (Ø8")	25%	1.33	10' & 20' lengths	12/95
		Goldline GLP (Ø10")	25%	1.33	10' & 20' lengths	

<sup>a</sup> Advanced Drainage Systems is now the parent company for both Hancor and Bio-Diffuser. Product markings may change to reflect new ownership.

<sup>b</sup> GSF system design includes 12" of modified ASTM 33 sand at trench bottom.

<sup>c</sup> "-Geo" suffix indicates product contains geotextile fabric inside the mesh. Geotextile should be oriented on top to limit soil intrusion.

<sup>d</sup> In one (1') foot wide trench; <sup>e</sup> In two (2') foot wide trench; <sup>f</sup> In three (3') foot wide trench.

**Table 5-6. Trench and Product Width to Rating Correlation Table** (The measured width of the product must be at least 90% of the design trench width)

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

## 5.8 Septic Tank Pump Vaults

Table 5-7 shows septic tank pump vaults certified by DEQ.

**Table 5-7. Septic Tank Pump Vaults Certified by DEQ**

Pump Vault Manufacturer	Model #	Unit Dimensions	Certification Date	NSF Certification
AAA Tanks Idaho Falls, ID	500 gallon	1-piece concrete pump tank, single compartment, rebar & synthetic structural materials.	1/11/05	
Concentric Systems	PF-1645 series	16" dia. pump filter x 45", 50", 55", 60" tall	10/07/97	
	PF1445-FI series	14" dia. pump filter x 45", 50", 55", 60" tall	10/07/97	
	EF210, EF210-D	10" diameter case, 2 parallel EF210 filters	10/07/97	
Cooper Redi-Mix Salmon, ID	500 gallon	1-piece concrete pump tank.	11/22/00	
L/R Schuldt Inc., DBA K&G	500 gallon	2-piece round concrete pump tank.	5/14/98	
Miller Septic Tanks 319 Orchard Dr. Twin Falls, ID 83303	500 gallon	1-piece concrete pump tank.	6/24/04	
Northwest Cascade Stuth	Disk/Screen Effluent Filter	50"x18" Adjust filter stand length, Six 1/8 inch screens	6/05/2000	
		40"x18" Adjust filter stand length, Six 1/8 inch screens	6/05/2000	
Orengo Systems, INC.	PVU - Series	Biotube Pump Vault	6/12/02	
	SV - Series	Screened Pump Vault	12/13/99	
	OSI 12000	12" diameter x 48" tall	3/87	
Pocatello Precast 3650 Hwy 30 Pocatello, ID 83201	680 gallon	Low-profile concrete pump tank.	07/09/98	

Pump Vault Manufacturer	Model #	Unit Dimensions	Certification Date	NSF Certification
Zabel Wastewater Systems	FPV-100	15" diameter filter pump vault, 36" or 48" tall (dosing chamber only)	05/19/98	
Zoeller Pump Co.	P/N 170-0101 P/N 170-0126	Filter and Pump Chamber 15 3/8" dia. x 34" tall Filter and Pump Chamber 17 9/16" dia. x 55 3/4" tall, field fitted for openings – Does not include packages w/ pumps rated at >30 GPM.	10/31/02 10/31/02	

## 5.9 Septic Tank Effluent Filters

Table 5-8 shows septic tank effluent filters currently certified by DEQ.

**Table 5-8. 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 Avenue Newnan, GA 30263 770-301-6603	D/F SC/9				11/03/03
Bowco Industries 5486 S.E. International Way Portland, OR 97222 888-232-9991	EF-235	Total overall Height 27.5" Filter Height 25" Total overall Diameter 4.35" Filter Diameter 4.00"	Fits 4" SDR-35 or Schedule 40 outlet tees Flow Rate up to 1,500 Gallons/day	07/28/2008	06/02/2004
Norweco 220 Republic Street Norwalk, OH 44857-1196 419-668-4471	BK 2000	Separate settling/retention basin, 2' o.d. x 6' 4½"	Not applicable	10/18/99	05/06/2002
Northwest Cascade Stuth 16207 Meridian Puyallup, WA 98373 1-800-444-2371	Effluent Filter	24" x 18"	Adjust filter stand length	6/05/2000	

Effluent Filter	Model #	Unit Dimensions	Septic Tank Liquid Depth	Approval Date	NSF Certification
Orenco Systems, Inc. 814 Airway Ave. Sutherlin, OR 97479 1-800-348-9843	FT - Series	Biotube Effluent Filters	Order to fit tank	12/13/99	
	FT j - Series	Biotube (jr) Effluent Filters 4" dia by 18"	Up to 45"	12/13/99	
	FT i - Series	Biotube Insert Effluent Filters	Fits in existing baffle	12/13/99	
Polylock, Inc 173 Church Street Yalesville, CT 06492 800-234-3119	PL-122	4.25" x 4.25" x 12.5" (depth)	Up to 31.25"	10/21/99	06/06/2000
	PL-68	4.2" x 14.4" (depth)	Fits in existing baffle		12/9/2003
Premeir Tech 2000 ITEE 1 Avenue Permeir 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	4" diameter for Vented Tees (1/16" filtration)	Fits in existing baffle	08/22/02	05/06/02
	EF-4 Combo	4" diameter with Vented Tees (1/16" filtration)		08/22/02	
Zabel Wastewater Systems 6244 Old LaGrange Road Crestwood, KY 40014 800-221-5742	A100	11.4" diameter x 16" high (residential, 1/16")	Variable adjusts w/extension	04/21/88	06/06/00
	A300		Variable adjusts w/extension	05/19/98	06/06/00
	A1800	11.4" diameter x 16" high (commercial, 1/32") 4" diameter for vented tees (1/16" filtration)	Fits existing baffled tank	03/24/94	06/06/00
Zoeller Pump Co. 3649 Cane Run Road Louisville, KY 40211 502-778-2731	P/N 170-0078	4" diameter for Vented Tees (1/16" filtration)	Fits in existing baffle	08/22/02	05/06/02

## 5.10 Pipe Materials for Specified Uses

Table 5-9 shows pipe materials for specified uses.

**Table 5-9. Pipe Materials for Specified Uses**

House to Tank	Septic Tank and Dosing Chamber Excavation	Effluent Line <sup>a</sup>	Drain Field <sup>a</sup>	Septic Tank Baffles <sup>b</sup>
<b>Plumbing Bureau</b>	<b>DEQ/HD</b>	<b>DEQ/HD</b>	<b>DEQ/HD</b>	<b>DEQ/HD</b>
ABS SCH 40 <sup>c</sup>	ABS SCH 40	ABS SCH 40	ABS SCH 40	ABS SCH 40
	ASTM D-3033 PVC <sup>d</sup>	ASTM D-3033 PVC	ASTM D-3033 PVC	
ASTM D-3034 PVC	ASTM D-3034 PVC <sup>d</sup>	ASTM D-3034 PVC	ASTM D-3034 PVC	ASTM D-3034 PVC
		ASTM D-2729 PVC	ASTM D-2729 PVC	Polylok Baffle
		ASTM F810 PE <sup>e</sup>	ASTM F810 PE	
			ASTM F405 PE <sup>f</sup>	

<sup>a</sup> Specified on page 22 of the Technical Guidance Manual for Subsurface Sewage Disposal.

<sup>b</sup> Must use ASTM D-3034 or equivalent as specified on page 22 of the Technical Guidance Manual for Subsurface Sewage Disposal.

<sup>c</sup> ABS Schedule 40 or material of equal or greater strength piping. Requirement by rule 58.01.03.007.21.a.

<sup>d</sup> Excavation must be compacted with Fill material to 90% standard proctor density, with a minimum of 12 inches of cover material. Requirement by rule 58.01.03.007.21.b.

<sup>e</sup> Smooth Wall High Density Polyethylene (PE), white suitable for effluent and drain field piping.

<sup>f</sup> Corrugated High Density Polyethylene (PE), black with stripe, flexible, suitable for drain field piping.

PVC = Poly Vinyl Chloride

ABS = Acrylonitrile-Butadiene-Styrene

## 5.11 Vault Toilets

See Table 5-10 for a list of vault toilets.

**Table 5-10. Vault Toilets**

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