Presby Environmental, Inc.

Advanced Enviro-Septic® Design Worksheet for Idaho

Project: _____

Step #1 AES pipe required (residential):

_____ (first three bedrooms x 70) ft/bedroom = _____ ft

+ _____ (additional bedrooms x 25) ft/bedroom = _____ total ft. required minimum

AES pipe required (non-residential):

_____ GPD ÷ 2.14 GPD/ft = _____ total ft. required minimum (round up)

Step #2 Minimum System Sand Bed Area (SSBA):

_____ GPD ÷ _____ GPD/sf application rate (Table A) = _____ sq. ft. minimum

Table A

Soil Group	Soil Design Subgroup	Soil Textural Classification	USDA Field Test Textural Classification	AES Application Rate (gpd/ ft²)
A	A-1	Medium Sand	30–60 Mesh	1.7
	A-2a	Medium Sand	Poorly Graded	1.2
	A-2b	Fine Sand	Sand 60-140 Mesh	1.0
		Loamy Sand	Sand	
B	B-1	Very Fine Sand	Sand 140-270 Mesh	0.8
		Sandy Loam	Sandy Loam	
		Very Fine Sandy Loam	Sandy Loam	
	B-2	Loam	-	0.6
		Silt Loam	Silt Loam	
		Sandy Clay Loam	(≤27% Clay)	
C	C-1	Silt	Silt Loam	0.4
		Sandy Clay Loam	Clay Loam (≥27% Clay)	
		Silty Clay Loam	Clay Loam	
	C-2	Clay Loam	Clay Loam	0.3

Step #3 Select Trench Length (102 ft maximum): _____ ft.

Step #4 Determine number of AES pipe rows required:

_____ total pipe required (Step #1) ÷ (_____ trench length Step #3 – 2 ft.) = _____ rows
(round up to nearest whole number)

Step #5 Determine trench width and number of trenches required: (3 ft with one row, to 6 ft. with 3 rows)

_____ sq. ft. SSBA (Step #2) ÷ _____ ft. trench width = _____ ft. total trench length minimum

_____ total trench length ÷ _____ ft. trench length (Step #3) = _____ number of trenches
(round up to whole number)

_____ number of rows (Step #4) ÷ _____ number of trenches = _____ rows per trench

Step #6 Verify SSBA equal to or greater than Step #2:

_____ ft. trench width x (_____ row length + 2) x # of trenches = _____ sq. ft. provided

Notes:
_____
_____
_____
_____

System Illustration (optional):