

STANDARD AQUATIC ANIMAL ISOLATION BUILDING UNIT

The basic unit described below contains tanks, but could be configured to have raceways, living streams, etc. (instead of tanks) for a similar unit price, or may be configured for total or partial flow-through. The system represents an approximate high-cost scenario for a moderate capacity unit. The actual facility and/or Region may use these calculations for approximating facility up-grade to include a basic isolation unit [as defined as Level A in 713 FW 5.6.F].

Site-specific needs may vary and may require multiple basic units and/or changes to unit configuration.

Line No.	Description of Offered Item	Estimated Quantity	Unit	Unit Price	Estimated Cost
1	Building [see Detailed Description #1 below]	1	ea	\$210,000	\$210,000
2	Fish Holding System [see Detailed Description #2 below]	1	ea	\$36,000	\$36,000
3	Construction Subtotal [Line 1+ Line 2]				\$246,000
4	Construction contingency [10% of Construction Subtotal (Line 3)]			10%	\$24,600
5	Construction total [Line 3 + Line 4]				\$270,600
6	A/E Services [17% of Construction Total (Line 5)]			17%	\$46,002
7	Construction management [7% of Construction Total (Line 5)]			7%	\$18,942
8	Miscellaneous Construction Costs [Line 6 + Line 7]				\$64,944
9	CAM [5.71% of Misc. Construction costs + Construction Total (5.71% of Line 5 + Line 8)]			5.71%	\$19,160
10	Total 2002 Estimated cost [Line 5 + Line 8 + Line 9]				\$354,704
11	2004 Estimate for Construction [6% of 2002 Cost (Line 10)]			6.0%	\$21,282
12	Total 2004 Estimate for Project [Line 10 + Line 11]				\$375,986

Detailed Description #1: Building

Size: 35' x 50'.

Mfg: To be determined

Doors: 2 roll-ups for vehicles w/ 2 exterior doors w/ interior doors as necessary

Insulation: Yes

HVAC and Heating: Yes

Basic Plumbing and Electrical Completed: Yes

Floor: Concrete

Detailed Description #2: Fish Holding System

Type: Recirculation

4 ea.. - 6' dia. insulated fiberglass circular tanks or equivalent (one serves as a biological filter)

2 ea. - Water pump to circulate water (1 backup)

1 ea. - Living Stream Aquarium (Model LS-120, FrigidUnit – \$8,000 ea.)

1 ea. - live-food rearing system (misc. aquaria; – \$1,000)

1 ea. - water quality alarm system (telephone notification; – \$1,000)

2 ea. - sand filters

1 ea. - water chiller

1 ea. - UV water sterilizer

Misc. PVC pipe, valves and fittings.

As depicted, this system consists of three circular tanks for holding fish. A fourth tank serves as a biological filter. The filter tank contains bags of biological filter media to remove ammonia

plus a chiller for cooling the water (if needed). The pump pulls the water from the biological filter, runs it through the sand filter and UV sterilizer and returns it to the three circular tanks. Effluent is created when tanks are cleaned. The effluent is routed to two ground level holding tanks (common to any additional isolation units installed) where it is chlorinated with a floating swimming pool chlorinator. Once a holding tank is full, effluent is routed to the second tank, while the content of the first is dechlorinated for disposal.