

Item	Qt	Name	Vendor	Approval	Unit Cost	Total Cost	Total Spent	Total:	Notes:
1	2	Plusrite UV Bulb	New Egg	Delivered	\$8.39	\$16.78	\$700.88	\$750.00	Missing exp \$47.03
2	1	Carbon Block Filter	Home Depot	Delivered	\$16.50	\$16.50	w/ Shipping/Tax		
3	1	US Pleated Filter	US Water Systems	Delivered	\$4.99	\$4.99	\$747.91		
4	1	T9FB51502	Global Industrial	Delivered	\$12.37	\$12.37			
5	1	12V SLA Battery	Walmart	Delivered	\$17.99	\$17.99			
6	2	T5 Lampholde	New Egg	Delivered	\$4.99	\$9.98			
7	1	Double Pin lamp	1000Bulbs	Delivered	\$38.91	\$38.91			
8	1	Quartz Sleeve	AtlanticUV	Delivered	\$35.00	\$35.00			
9	1	UV Bulb Ballast	AtlanticUV	Delivered	\$29.00	\$29.00			
10	1	Solar Panel	Renogy	Delivered	\$43.99	\$43.99			
11	2	ATTINY85 Micro	DigiKey	Delivered	\$1.26	\$2.52			
12	1	ADC	DigiKey	Delivered	\$2.76	\$2.76			
13	1	Boost Regulator	DigiKey	Delivered	\$1.74	\$1.74			
14	1	10uF Cap.	DigiKey	Ordered	\$0.45	\$0.45			
15	3	0.1uF Cap.	DigiKey	Ordered	\$0.01	\$0.03			
16	1	200k Resistor	DigiKey	Ordered	\$0.39	\$0.39			
17	1	150k Resistor	DigiKey	Ordered	\$0.45	\$0.45			
18	1	100k Resistor	DigiKey	Ordered	\$0.39	\$0.39			
19	2	Schottky 3A,40V,0.5mV	Mouser	Ordered	\$0.64	\$1.28			
20	1	22uF Ceramic Cap.	DigiKey	Ordered	\$4.31	\$4.31			
21	1	39pF Cap.	DigiKey	Ordered	\$0.10	\$0.10			
22	1	68uF Cap.	DigiKey	Ordered	\$4.74	\$4.74			
23	1	Standard Diode	DigiKey	Ordered	\$0.27	\$0.27			
24	1	6.8uH Inductor	Mouser	Ordered	\$2.39	\$2.39			
25	1	2.2mH Inductor	Mouser	Ordered	\$1.71	\$1.71			
26	2	Solenoid Valve	Electric Solenoid Valves	Delivered	\$16.99	\$33.98			
27	1	Pump Kit	Home Depot	Delivered	\$12.33	\$12.33			
28	1	Protoboard	DigiKey	Delivered	\$11.71	\$11.71			
29	2	Filter Housing	Fresh Water Systems	Delivered	\$8.59	\$17.18			
30	1	O-ring Pack	Home Depot	Delivered	\$16.06	\$16.06			
31	5	Buck Regulator	Mouser	Ordered	\$1.00	\$5.00			
32	1	PLA Filament	B&H Photo & Video	Delivered	\$29.00	\$29.00			
33	1	LCD Display	ADA Fruit	Ordered	\$19.95	\$19.95			
34	1	Liquid Flow Meter	ADA Fruit	Ordered	\$9.95	\$9.95			
35	3	PCB Relays	Mouser	Ordered	\$1.35	\$4.05			
36	1	PVC Pipe Sch. 40, 4"	Home Depot	Reimbursement	\$23.90	\$23.90			
37	1	Vinyl Tubing 3/8" ID	Home Depot	Reimbursement	\$9.60	\$9.60			
38	3	3/8"x3/8" Brass Adapter Bar	Home Depot	Reimbursement	\$3.74	\$11.22	\$452.97 (+shipping and tax)		
39	1	Ultraquiet Pump	Amazon	Ordered	\$16.95	\$16.95	Budget Request	Budget Spent	Budget Left
47	0	An-23p E housing	Polycase	Not Submitted	\$41.30	\$0.00	\$250.00	\$192.93	\$57.07
48	8	Female 3/8"x1/2" Barb Fittin	Home Depot	Ordered	\$3.74	\$29.92			
43	8	Brass 1/2" Coupling	Home Depot	Ordered	\$6.56	\$52.48			
44	1	Quartz Sleeve	AtlanticUV	Ordered	\$50.00	\$50.00			
45	1	Plumber's tape	Home Depot	Ordered	\$1.38	\$1.38			
46	0	MS2 Coliphage	ATCC	Not Submitted	\$120.00	\$0.00			
47	1	Solenoid Valve	ADA Fruit	Ordered	\$32.41	\$32.41			
48	1	Nipple Fitting	Home Depot	Submitted	\$4.57	\$4.57			
49	1	Adhesive	Home Depot	Submitted	\$5.22	\$5.22			
50	1	Triplex Diaphragm pump	Amazon	Not Submitted	\$54.98	\$54.98	2nd Budget Request		
51	1	Electrical Housing	Polycase	Not submitted	\$30.00	\$30.00	\$100.00		

Budget Increase Request

Team: P18461

Team Solar Powered UV Purification

Guide: Chris Leibfried

Contributors: Phil Sammon, & Erik Messier

Reasons For Request

1. Design Changes

a. New Solenoid

- i. Lower psi rating allowing water to flow from atmospheric pressure
- ii. Previous solenoid required additional 3 psi, pump could not overcome pressure requirement
- iii. Solenoid requires new adapter as well (Female to male)

b. New Pump

- i. Test revealed too much back pressure
- ii. Flow could not overcome filter due to small pore size and water turbidity
- iii. Pump needed to be submerged & primed, new pump does not

c. Electrical Housing

- i. Previous budget request was used on other expenses
- ii. Still in need of electrical housing

2. Quartz Sleeve Expedited Shipping

- a. Cut into our previous budget increase and was not accounted for