

FAC 1221 Marine Fueling Facility

RUC: \$365.13 GM

Source: Special study for DLA/DESC in 2008/2009
Based upon PACES estimate and calculated per unit as follows.

SUC: \$0.41 GM

Source: Special study for DLA/DESC in 2008/2009

RUC FAC 1221 Marine Fueling Facility

Parametric Cost Engineering System (PACES) Project Detail Report

Project FAC 1221 Marine Fueling Facility

Location: ALEXANDRIA, VIRGINIA

Description:

Comments:

**See page 2 for calculation
detail**

Estimate Date: 02/10/2009

Estimate By: R&K fjk

Agency: Navy

Report Date: 02/25/2009
07:26 AM

Construction Start Date: 04/01/2009

Construction Midpoint: 08/01/2009

Construction End Date: 01/01/2010

Escalation Rate: 7.40% Based on Project Construction Midpoint

Database Version: Jan 2006 Cost Book

PACES Version: 7.0.11

Project Detail Report

02/25/2009

07:26 AM

Facility: 1221 Marine Fueling Facility**Type** Supporting**Model:** Ground Vehicle Fueling Facility

<u>Assembly</u>	<u>Description</u>	<u>Qty</u>	<u>UOM</u>	<u>Mtrl</u>	<u>Labor</u>	<u>Equip</u>	<u>Unit Cost</u>	<u>Total</u>
19097201	Dispenser/Piping, Mogas, Wheeled Vhcle	1	EA	\$16,794.09	\$977.99	\$59.44	\$17,831.52	\$17,832
19097401	Compressor W/Pre Eng Bldg, Whled Vhcle	1	EA	\$19,867.77	\$1,848.26	\$227.08	\$21,943.11	\$21,943

Model Ground Vehicle Fueling Facility **\$39,775**

Model: Installation Pipe Line

<u>Assembly</u>	<u>Description</u>	<u>Qty</u>	<u>UOM</u>	<u>Mtrl</u>	<u>Labor</u>	<u>Equip</u>	<u>Unit Cost</u>	<u>Total</u>
19094006	6" Carbon Steel Pipe, SCH 40 C&W	20	LF	\$31.56	\$28.18	\$1.64	\$61.38	\$1,228
19094117	Earthwork/Conc, 6" Pipe	20	LF	\$3.21	\$12.32	\$4.36	\$19.88	\$398
19094216	Pipe Cathodic Protection	20	LF	\$0.63	\$0.80	\$0.00	\$1.43	\$29
19094301	Isolation Valve	3	EA	\$72,250.49	\$6,240.53	\$0.00	\$78,491.02	\$235,473

Model Installation Pipe Line **\$237,127**

Facility: 1221 Marine Fueling **\$276,902**

\$39,775 x 40.1% (Markup) = \$55,685

\$55,685 / 104.3 GM Average for CC 12210, 122111 Marine Fuel Dispensing Facility = \$533.89

\$237,127 x 40.1% (Markup) = \$331,978

\$331,978 / 1271.5 GM average for CC 12220, 42320 Small Craft Fueling Station/Liquid Propellant Dispensing = \$261.09

Average = (\$533.89 + \$261.09)/2 = \$397.49

Project Detail Report

Facilities Total (Direct Cost): \$276,902

Project Direct Cost: \$276,902

Markups	40.1	%	\$110,964
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Project Marked Up Cost: \$387,866

Contingency	5.0	%	\$19,393
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SIOH	6.0	%	\$24,436
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Project Cost: \$431,695

Design/Indirect Cost:	0.0	%	\$0
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Total Project Cost: \$431,695

Construction Start 04/01/2009

Construction Midpoint: 08/01/2009

Construction End Date: 01/01/2010

Escalation Rate: 7.40% Based on Construction Midpoint

Database Version: Jan 2006 Cost Book

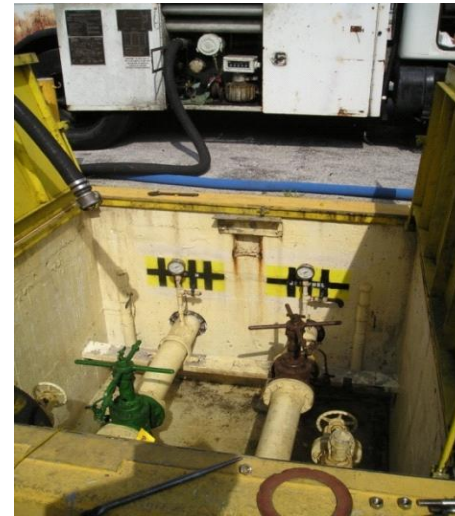
PACES Version: 7.0.11

DESC RCF Revisions						
FAC	FACTITLE	UM	V.11 RCF \$09	PACES Direct Cost	PACES Unit	Unit Cost
1211	Aircraft Fueling Facility	GM	337.84	\$ 5,211,155	2400	\$ 2,171.31
1212	Aircraft Defueling Facility	GM	337.84	\$ 5,211,155	2400	\$ 2,171.31
1221	Marine Fueling Facility	GM	29.07			\$ 267.42
1231	Vehicle Fueling Facility	OL	13,748.50	\$ 249,800	2	\$ 124,900.00
1241	Aircraft Operating Fuel Storage	GA	1.96	\$ 1,992,868	420000	\$ 4.74
1242	Marine Operating Fuel Storage	GA	5.56	\$ 44,246	3000	\$ 14.75
1243	Vehicle Operating Fuel Storage	GA	5.76	\$ 86,668	25000	\$ 3.47
1244	Other Operating Fuel Storage	GA	9.39	\$ 43,968	17439	\$ 2.52
1251	POL Pipeline	LF	148.05	\$ 438,018	1000	\$ 438.02
1261	Liquid Fuel Loading/Unloading Facility	OL	13,748.50	\$ 456,159	4	\$ 114,039.75
1262	POL Pump Station	SF	681.19	\$ 2,022,665	1008	\$ 2,006.61
4111	Bulk Liquid Fuel Storage	BL	53.05			\$ 65.23

FAC 1221 Marine Fueling Facility

			Mean	Median	
Design Life and Representative Size	37	Years	2289.17	121.5	GM

Component	Frequency	Estimated Cost per Occurrence	occurrences in design life	occurrences rounded	Design Life Cost
Outlets					
Inspect valves (manual)	1	\$ 100	37.0	8.0	\$ 800
(from Means FMR, assume 2/pit)					
Replace valve, 6 inch \$1800 each	10	\$ 3,600	3.7	3.0	\$ 10,800
Pipeline					
API 570 Inspection	5	\$ 500	7	7.0	\$ 3,500
Recoating, assume 1 x 20 LF	3	\$ 143	12	12.0	\$ 1,716
(includes CP of pipeline)					
Controls					
Annual Calibration	1	\$ 500	37	37.0	\$ 18,500
General					
Operator Maintenance	1	115.44	25	25	\$ 2,886
1/2 hr per mo WG-7 per Mayport					
			S/T		\$ 35,316
			Per Year		\$ 954
\$FY-08			Per Unit		\$ 0.42
\$FY-09					\$ 0.43
Operator Maintenance as a percentage of total SCF:					8%



SUC FAC 1221