

FAC 1243 Vehicle Operating Fuel Storage

RUC: \$3.19 GA

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

SUC: \$2.07 GA

Source: Special study for DLA/DESC in 2008/2009; same as SUC for FAC 1241 as follows.

RUC FAC 1243 Vehicle Operating Fuel Storage

Parametric Cost Engineering System (PACES) Project/Assembly Detail Cost Report

Project DESC Vehicle Fuel Storage

Location: ARLINGTON, VIRGINIA

Description:

Comments:

Estimate Date: 12/08/2008

Estimate By: R&K fjk

Agency: Army

Report Date: 04/28/2009
01:00 PM

Construction Start Date: 04/01/2009

Construction Midpoint: 05/01/2009

Construction End Date: 07/01/2009

Escalation Rate: 6.85% Based on Project Construction Midpoint

Database Version: Jan 2006 Cost Book

PACES Version: 7.0.11

Project/Assembly Detail

Cost Report
Type Supporting**Facility:** Vehicle Fuel Storage**Model:** Storage Tank

<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>
19092005	Earthwork, Fiberglass Double Wall Und Grd Tank	210	CY	\$1.08 \$227	\$11.18 \$2,348	\$3.98 \$836	\$16.24	\$3,410
19092105	Concrete, Fiberglass Double Wall Und Grd Tank	39	CY	\$121.41 \$4,735	\$63.11 \$2,461	\$24.74 \$965	\$209.25	\$8,161
19092205	Pipes And Fittings, Fiberglass Double Wall Und Grd Tank	90	LF	\$16.27 \$1,464	\$16.36 \$1,472	\$0.00 \$0	\$32.62	\$2,936
19092305	Electrical, Fiberglass Double Wall Und Grd Tank	175	LF	\$10.43 \$1,825	\$7.27 \$1,272	\$1.79 \$313	\$19.49	\$3,411
19092405	Controls, Fiberglass Double Wall Und Grd Tank	1	EA	\$1,048.37 \$1,048	\$639.89 \$640	\$0.00 \$0	\$1,688.26	\$1,688
19092551	Tank, 94600 L (25000 gal) Fibergls Dbl Wall Undgrd	1	EA	\$39,032.80 \$39,033	\$1,736.09 \$1,736	\$1,334.63 \$1,335	\$42,103.52	\$42,104
Model Storage Tank				\$48,332	\$9,929	\$3,448		\$61,710
Facility: Vehicle Fuel Storage				\$48,332	\$9,929	\$3,448		\$61,710

Project Name: DESC Vehicle Operating Fuel Storage

Project/Assembly Detail

04/28/2009
01:00 PM

Cost Report

Facilities Total (Direct Cost):	\$48,332	\$9,929	\$3,448	\$61,710
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Project Direct Cost:	\$61,710
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Markups	40.4 %	\$24,958
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Project Marked Up Cost:	\$86,668
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Contingency	5.0 %	\$4,333
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SIOH	5.7 %	\$5,187
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Project Cost:	\$96,188
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Design/Indirect Cost:	0.0 %	\$0
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Total Project Cost:	\$96,188
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Construction Start 04/01/2009

Construction Midpoint: 05/01/2009

Construction End Date: 07/01/2009

Escalation Rate: 6.85% Based on Construction Midpoint

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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 1241 Operating Fuel Tank

Design Life and Representative Size	31	Years	26467		GA
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Component	Fre- quency	Estimated Cost per Occurrence	occurr- ences in design life	occurr- ences rounded	Design Life Cost
Tank					
API 653 External Inspection	5	\$ 20,000	6.2	6.0	\$ 120,000
Spot Painting/Minor Repairs	10	\$ 50,000	3.1	3.0	\$ 150,000
API 653 Internal Inspection	10	\$ 60,000	3.1	3.0	\$ 180,000
Repairs found during API 653 External Inspection	10	\$ 25,000	3.1	3.0	\$ 75,000
External Coating	15	\$ 115,000	2.1	2.0	\$ 230,000
Clean Tank	5	\$ 25,000	6.2	6.0	\$ 150,000
PM Cathodic Protection System (Impressed voltage)	1	\$ 2,000	31	31.0	\$ 62,000
Piping				0.0	\$ -
API 570 Inspection	3	\$ 15,000	10	10.0	\$ 150,000
				0.0	\$ -
Controls				0.0	\$ -
Annual Calibration	1	\$ 20,000	31	31.0	\$ 620,000
			S/T		\$ 1,737,000
			Per Year		\$ 56,032
Operator Maintenance	1	632	1	1	\$ 632
					\$ 56,664
\$FY-08			Per Unit		\$ 2.14
\$FY-09					\$ 2.18



99%
1%

SUC FAC 1243