

FAC 2242 Tank/Automotive Production Facility

RUC: \$134.76 SF

Source: Composite of other FACs/CATCODES
In V12, Tri-Service and USACE PAX Newsletter values were updated while all other values were inflated only.

SUC: \$1.89 SF

Source: Cost Works model, inflated to FY-09 using Green Book Table 5-6 (O&M less DHP)
In V12, values were inflated only.

Model follows:

Chart: A chart showing relative annual sustainment requirements follows:

FAC 2242-Tank/Automotive Production Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 71,355

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P Design Life	Release Occurrences	Occurrences in Cutoff	Adjusted	Terminal
Repair brick wall - 1st floor	25	1 Bric	15,690.000	S.F.	580,530.00	705,422.40	2008 Qtr 2	2	1	\$ 705,422.40
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	182.000	Ea.	20,922.72	24,788.40	2008 Qtr 2	2	2	\$ 49,576.80
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	182.000	Ea.	79,825.20	93,364.18	2008 Qtr 2	1	0	\$ -
Replace glass - 1st floor (1% of glass)	1	1 Carp	10.920	S.F.	98.83	115.97	2008 Qtr 2	55	55	\$ 6,378.37
Repair steel, painted, door	14	1 Carp	8.000	Ea.	4,659.52	5,490.88	2008 Qtr 2	3	3	\$ 16,472.64
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	8.000	Ea.	263.28	322.48	2008 Qtr 2	13	13	\$ 4,192.24
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	8.000	Ea.	4,256.64	4,960.32	2008 Qtr 2	1	1	\$ 4,960.32
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	71.355	M.S.F.	2,093.56	2,522.40	2008 Qtr 2	110	110	\$ 277,463.92
Non-destructive moisture inspection built-up roofing	5	2 Rofc	71.355	M.S.F.	6,477.61	7,834.78	2008 Qtr 2	11	11	\$ 86,182.57
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	14.270	Sq.	4,916.30	5,808.46	2008 Qtr 2	55	55	\$ 319,465.34
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	1	2 Rofc	28.540	S.F.	95.89	114.16	2008 Qtr 2	55	55	\$ 6,278.80
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	178.400	Sq.	106,046.31	126,499.87	2008 Qtr 2	3	3	\$ 379,499.62
Total roof replacement built-up roofing	28	G1	713.550	Sq.	407,280.07	482,324.12	2008 Qtr 2	1	1	\$ 482,324.12
Repair steel painted interior door	14	1 Carp	8.000	Ea.	1,342.00	1,585.12	2008 Qtr 2	3	3	\$ 4,755.36
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	8.000	Ea.	395.20	486.56	2008 Qtr 2	13	13	\$ 6,325.28
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	8.000	Ea.	7,500.32	8,719.68	2008 Qtr 2	0	0	\$ -
Repair solid core wood door interior	11	1 Carp	15.000	Ea.	2,516.25	2,972.10	2008 Qtr 2	5	5	\$ 14,860.50
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	15.000	Ea.	633.30	779.70	2008 Qtr 2	13	13	\$ 10,136.10
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	15.000	Ea.	5,500.50	6,376.80	2008 Qtr 2	1	1	\$ 6,376.80
Refinish concrete block wall painted	4	1 Pord	158.660	C.S.F.	15,416.99	18,742.51	2008 Qtr 2	13	13	\$ 243,652.58
Replace 8" concrete block wall painted	75	2 Bric	158.660	C.S.F.	171,005.33	205,653.51	2008 Qtr 2	0	0	\$ -
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	3.173	C.S.F.	3,208.57	3,852.09	2008 Qtr 2	2	1	\$ 3,852.09
Refinish drywall	4	1 Pord	4,109.000	S.F.	2,465.40	3,040.66	2008 Qtr 2	13	13	\$ 39,528.58
Replace 5/8" drywall	75	2 Carp	4,109.000	S.F.	9,163.07	11,053.21	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	82.180	S.F.	130.67	156.96	2008 Qtr 2	2	2	\$ 313.93
Replace carpet	8	2 Tilf	704.800	S.Y.	31,807.62	36,748.27	2008 Qtr 2	6	6	\$ 220,489.63
Refinish concrete floor finished	25	2 Cefi	622.370	C.S.F.	217,480.97	261,824.84	2008 Qtr 2	2	1	\$ 261,824.84
Replace vinyl floor	18	1 Tilf	308.300	S.Y.	14,721.33	17,973.89	2008 Qtr 2	3	2	\$ 35,947.78
Replace acoustic tile ceiling, fire-rated	20	1 Carp	91.180	C.S.F.	36,759.22	43,675.22	2008 Qtr 2	2	2	\$ 87,350.44
Refinish sheetrock ceiling	20	1 Pord	47.570	C.S.F.	5,978.12	7,387.15	2008 Qtr 2	2	2	\$ 14,774.29
Replace sheetrock ceiling	40	2 Carp	47.570	C.S.F.	17,045.76	20,812.35	2008 Qtr 2	1	1	\$ 20,812.35
Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.951	C.S.F.	332.14	405.38	2008 Qtr 2	2	2	\$ 810.77
Check / minor repairs drinking fountain	1	1 Plum	8.000	Ea.	300.64	378.72	2008 Qtr 2	55	55	\$ 20,829.60
Repair internal leaks drinking fountain	4	1 Plum	8.000	Ea.	281.12	347.44	2008 Qtr 2	13	13	\$ 4,516.72
Correct water pressure drinking fountain	2	1 Plum	8.000	Ea.	257.68	324.00	2008 Qtr 2	27	27	\$ 8,748.00
Replace refrigerant drinking fountain	2	1 Plum	8.000	Ea.	126.72	150.88	2008 Qtr 2	27	27	\$ 4,073.76
Repair drain leak drinking fountain	4	1 Plum	8.000	Ea.	181.04	216.24	2008 Qtr 2	13	13	\$ 2,811.12
Replace fountain drinking fountain	10	2 Plum	8.000	Ea.	8,046.72	9,548.56	2008 Qtr 2	5	5	\$ 47,742.80

FAC 2242-Tank/Automotive Production Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 71,355

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House Design Life	Total Incl. O&P Occurrences	Release Cutoff	Occurrences in	Adjusted	Terminal
Inspect and clean spray heads, emergency eye wash	3	1 Plum	2.000	Ea.	75.60	94.88	2008 Qtr 2	18	18	\$ 1,707.84
Replace eye wash station, emergency eye wash	25	2 Plum	2.000	Ea.	1,147.84	1,391.76	2008 Qtr 2	2	1	\$ 1,391.76
Inspect and clean shower head emergency shower station	3	1 Plum	2.000	Ea.	75.60	94.88	2008 Qtr 2	18	18	\$ 1,707.84
Replace shower emergency shower station	25	2 Plum	2.000	Ea.	1,452.78	1,747.16	2008 Qtr 2	2	1	\$ 1,747.16
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	39.000	Ea.	936.39	1,104.87	2008 Qtr 2	7	7	\$ 7,734.09
Replace washer in faucet lavatory, vitreous china	2	1 Plum	39.000	Ea.	384.15	479.31	2008 Qtr 2	27	27	\$ 12,941.37
Replace faucets lavatory, vitreous china	10	1 Plum	39.000	Ea.	4,816.11	5,813.34	2008 Qtr 2	5	5	\$ 29,066.70
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	39.000	Ea.	1,054.56	1,309.23	2008 Qtr 2	27	27	\$ 35,349.21
Replace lavatory, vitreous china	35	2 Plum	39.000	Ea.	20,677.41	24,792.30	2008 Qtr 2	1	1	\$ 24,792.30
Replace faucet washer sink, iron enamel	2	1 Plum	4.000	Ea.	39.16	48.76	2008 Qtr 2	27	27	\$ 1,316.52
Clean trap sink, iron enamel	3	1 Plum	4.000	Ea.	26.40	33.00	2008 Qtr 2	18	18	\$ 594.00
Replace faucets sink, iron enamel	10	1 Plum	4.000	Ea.	493.96	596.24	2008 Qtr 2	5	5	\$ 2,981.20
Unstop sink sink, iron enamel	2	1 Plum	4.000	Ea.	128.84	162.00	2008 Qtr 2	27	27	\$ 4,374.00
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	4.000	Ea.	2,210.88	2,630.76	2008 Qtr 2	1	1	\$ 2,630.76
Replace flush valve diaphragm tankless water closet	10	1 Plum	21.000	Ea.	1,485.54	1,744.26	2008 Qtr 2	5	5	\$ 8,721.30
Rebuild flush valve tankless water closet	20	1 Plum	21.000	Ea.	2,771.58	3,360.21	2008 Qtr 2	2	2	\$ 6,720.42
Unplug clogged line tankless water closet	5	1 Plum	21.000	Ea.	3,533.46	4,413.78	2008 Qtr 2	11	11	\$ 48,551.58
Replace tankless water closet	35	2 Plum	21.000	Ea.	11,508.00	13,615.56	2008 Qtr 2	1	1	\$ 13,615.56
Replace tankless flush valve	25	1 Plum	21.000	Ea.	4,399.50	5,152.77	2008 Qtr 2	2	1	\$ 5,152.77
Replace wax ring gasket tankless water closet	5	1 Plum	21.000	Ea.	2,300.97	2,881.20	2008 Qtr 2	11	11	\$ 31,693.20
Replace flush valve diaphragm urinal	7	1 Plum	9.000	Ea.	636.66	747.54	2008 Qtr 2	7	7	\$ 5,232.78
Rebuild flush valve urinal	20	1 Plum	9.000	Ea.	1,187.82	1,440.09	2008 Qtr 2	2	2	\$ 2,880.18
Unplug line urinal	5	1 Plum	9.000	Ea.	1,009.26	1,259.19	2008 Qtr 2	11	11	\$ 13,851.09
Replace wall-hung urinal	35	2 Plum	9.000	Ea.	7,574.67	9,059.13	2008 Qtr 2	1	1	\$ 9,059.13
Inspect / check pump / motor operation, lub. circulation pump, 1/12 HP	0.5	1 Plum	1.000	Ea.	6.19	7.72	2008 Qtr 2	110	110	\$ 849.20
Replace pump / motor assembly circulation pump, 1/12 HP	10	2 Plum	1.000	Ea.	736.33	863.29	2008 Qtr 2	5	5	\$ 4,316.45
Resolder joint pipe & fittings, copper	10	1 Plum	2.000	Ea.	65.70	80.90	2008 Qtr 2	5	5	\$ 404.50
Replace pipe and fittings, copper 3/4"	20	2 Plum	16.000	L.F.	283.52	343.68	2008 Qtr 2	2	2	\$ 687.36
Replace pipe and fittings, copper 2"	25	2 Plum	8.000	L.F.	326.48	392.88	2008 Qtr 2	2	1	\$ 392.88
Remove old insulation & replace with new, pipe 3/4", wall 1"	15	1 Plum	16.000	L.F.	112.16	136.64	2008 Qtr 2	3	3	\$ 409.92
Overhaul water heater, gas / oil, 70 gallon	5	1 Plum	1.000	Ea.	126.58	158.02	2008 Qtr 2	11	11	\$ 1,738.22
Clean & service water heater, gas / oil, 70 gallon	1	1 Plum	1.000	Ea.	151.28	188.37	2008 Qtr 2	55	55	\$ 10,360.35
Replace water heater, gas / oil, 70 gallon	12	2 Plum	1.000	Ea.	2,468.08	2,857.11	2008 Qtr 2	4	4	\$ 11,428.44
Unclog main drain pipe & fittings, cast iron	10	1 Plum	1.000	Ea.	35.62	44.41	2008 Qtr 2	5	5	\$ 222.05
Replace pipe & fittings, cast iron	40	2 Plum	16.000	L.F.	670.40	811.20	2008 Qtr 2	1	1	\$ 811.20
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	37.09	45.87	2008 Qtr 2	2	2	\$ 91.74
Repair joint pipe and fittings, PVC	10	1 Plum	1.000	Ea.	115.94	144.14	2008 Qtr 2	5	5	\$ 720.70
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	8.000	L.F.	473.60	585.52	2008 Qtr 2	1	1	\$ 585.52

FAC 2242-Tank/Automotive Production Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 71,355

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
General maintenance & repair drain: roof, scupper, area	1	1 Plum	22.000	Ea.	623.70	784.74	2008 Qtr 2	55	55	\$ 43,160.70
Replace drain: roof, scupper, area	40	1 Plum	22.000	Ea.	8,763.48	10,299.08	2008 Qtr 2	1	1	\$ 10,299.08
Install new 4" gasket, 1 per M.L.F. natural gas, steel/iron	30	1 Stpi	1.000	Ea.	157.52	195.63	2008 Qtr 2	1	1	\$ 195.63
Replace 10' of buried 4" diam steel pipe/M.L.F. natural gas	12	B35	1.000	Ea.	796.82	957.19	2008 Qtr 2	4	4	\$ 3,828.76
Replace roof mounted exhaust fan, 20,300 CFM exhaust fan	20	Q20	1.000	Ea.	7,780.84	9,075.66	2008 Qtr 2	2	2	\$ 18,151.32
Repair single zone rooftop unit, 25 ton	10	Q6	1.000	Ea.	25,821.09	29,922.89	2008 Qtr 2	5	5	\$ 149,614.45
Replace single zone rooftop unit, 25 ton	15	Q7	2.000	Ea.	68,196.80	79,355.20	2008 Qtr 2	3	3	\$ 238,065.60
Repair single zone rooftop unit, 60 ton	10	Q6	2.000	Ea.	79,340.34	93,904.70	2008 Qtr 2	5	5	\$ 469,523.50
Replace single zone rooftop unit, 60 ton	15	Q7	4.000	Ea.	283,240.00	331,570.40	2008 Qtr 2	3	3	\$ 994,711.20
Repair fan coil unit, 1 ton	10	1 Stpi	2.000	Ea.	738.44	882.04	2008 Qtr 2	5	5	\$ 4,410.20
Replace fan coil unit, 1 ton	15	Q5	2.000	Ea.	2,196.60	2,591.12	2008 Qtr 2	3	3	\$ 7,773.36
Minor repairs to fire alarm control panel	5	1 Elec	1.000	Ea.	107.84	130.97	2008 Qtr 2	11	11	\$ 1,440.67
Maintenance and inspection fire alarm control panel	0.5	1 Elec	1.000	Ea.	30.54	38.17	2008 Qtr 2	110	110	\$ 4,198.70
Replace fire alarm control panel	15	1 Elec	1.000	Ea.	2,615.62	3,107.84	2008 Qtr 2	3	3	\$ 9,323.52
Replace sprinkler head	20	1 Plum	417.000	Ea.	26,554.56	32,717.82	2008 Qtr 2	2	2	\$ 65,435.64
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	55	55	\$ 1,808.95
Rebuild double check 3" backflow preventer sprinkler system	1	1 Plum	1.000	Ea.	598.06	715.83	2008 Qtr 2	55	55	\$ 39,370.65
Replace fire alarm bell, 6"	20	1 Elec	20.000	Ea.	2,845.60	3,430.20	2008 Qtr 2	2	2	\$ 6,860.40
Maintenance and inspection lighting panel, indoor	3	1 Elec	4.000	Ea.	114.00	142.52	2008 Qtr 2	18	18	\$ 2,565.36
Maintenance and repair safety switch gen., 2 pole	8	1 Elec	13.000	Ea.	370.50	463.19	2008 Qtr 2	6	6	\$ 2,779.14
Maintenance and inspection safety switch, 2 pole	1	1 Elec	13.000	Ea.	370.50	463.19	2008 Qtr 2	55	55	\$ 25,475.45
Replace safety switch 240 V, 2 pole	25	2 Elec	13.000	Ea.	4,601.74	5,477.94	2008 Qtr 2	2	1	\$ 5,477.94
Maintenance and repair motor starter, up to 600 V	5	1 Elec	4.000	Ea.	683.00	830.00	2008 Qtr 2	11	11	\$ 9,130.00
Maintenance and inspection motor starter, up to 600 V	0.5	1 Elec	4.000	Ea.	152.68	191.40	2008 Qtr 2	110	110	\$ 21,054.00
Replace starter motor starter, up to 600 V	18	1 Elec	4.000	Ea.	2,112.72	2,521.64	2008 Qtr 2	3	2	\$ 5,043.28
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	951.000	Ea.	94,700.58	114,196.08	2008 Qtr 2	5	5	\$ 570,980.40
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	951.000	Ea.	24,193.44	29,652.18	2008 Qtr 2	5	5	\$ 148,260.90
Maintenance and repair receptacles and plugs	20	1 Elec	302.000	Ea.	9,389.18	11,696.46	2008 Qtr 2	2	2	\$ 23,392.92
Replace receptacle/plug receptacles and plugs	20	1 Elec	302.000	Ea.	15,933.52	19,454.84	2008 Qtr 2	2	2	\$ 38,909.68
Maintenance and repair wiring devices, switches	10	1 Elec	76.000	Ea.	2,362.84	2,943.48	2008 Qtr 2	5	5	\$ 14,717.40
Replace switch wiring devices, switches	15	1 Elec	76.000	Ea.	3,891.96	4,738.60	2008 Qtr 2	3	3	\$ 14,215.80
Check and repair manual pull station	10	1 Elec	4.000	Ea.	276.84	339.48	2008 Qtr 2	5	5	\$ 1,697.40
Replace manual pull station	15	1 Elec	4.000	Ea.	502.96	607.56	2008 Qtr 2	3	3	\$ 1,822.68
Repair smoke detector	10	1 Elec	254.000	Ea.	9,700.26	11,938.00	2008 Qtr 2	5	5	\$ 59,690.00
Check operation smoke detector	1	1 Elec	254.000	Ea.	2,895.60	3,632.20	2008 Qtr 2	55	55	\$ 199,771.00
Replace smoke detector	15	1 Elec	254.000	Ea.	48,145.70	57,655.46	2008 Qtr 2	3	3	\$ 172,966.38
					\$2,576,431.13	\$3,080,068.81				
									MR Subtotal	\$ 7,091,703.79

FAC 2242-Tank/Automotive Production Facility
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 71,355

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs
within 10% of the end of the design life and if the frequency of the task exceeds
20% of the design life. This prevents scheduling major work near the end of the
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
									MR Per Year	\$ 128,940.07
									PM Per Year	\$ 11,086.62
									Subtotal	\$ 140,026.69
									Total Per Unit	\$ 1.96

CostWorks 2009 Quarter 1 - FAC 2242-Tank/Automotive Production Facility

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
5.000	B2035 410 1950	Door, overhead, electric, roll up, to 24' high x 25' w	1,200.80	1,450.60	200	FMR	2008 Qtr 2
23.000	B2035 225 1950	Door, emergency egress, swinging, annualized	1,138.73	1,322.73	200	FMR	2008 Qtr 2
8.000	C1025 110 1950	Fire doors, swinging, annualized	199.12	238.88	200	FMR	2008 Qtr 2
9.000	D2015 100 1950	Urinals, annualized	116.37	145.35	200	FMR	2008 Qtr 2
21.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	271.53	339.15	200	FMR	2008 Qtr 2
39.000	D2015 100 4950	Lavatories, annualized	962.52	1,173.12	200	FMR	2008 Qtr 2
8.000	D2015 800 1950	Drink fountain, annualized	396.00	474.88	200	FMR	2008 Qtr 2
1.000	D2025 260 1950	Water heater, gas, to 120 gal., annualized	156.50	189.02	200	FMR	2008 Qtr 2
2.000	D3045 120 1950	Fan coil unit, annualized	431.42	533.20	200	FMR	2008 Qtr 2
12.000	D3045 160 1950	VAV Boxes, annualized	735.72	912.00	200	FMR	2008 Qtr 2
1.000	D3045 210 3950	Fan, axial, over 10,000 CFM, annualized	77.87	95.47	200	FMR	2008 Qtr 2
2.000	D3055 210 1950	Package unit, air cooled, 3 thru 24 ton, annualized	415.42	502.06	200	FMR	2008 Qtr 2
4.000	D3055 210 2950	Package unit, air cooled, 25 thru 50 ton, annualized	1,139.76	1,364.40	200	FMR	2008 Qtr 2
1.000	D4015 100 1950	Backflow prevention device, up to 4", annualized	18.89	23.42	200	FMR	2008 Qtr 2
1.000	D4015 150 1950	Extinguishing system, wet pipe, annualized	806.79	983.35	200	FMR	2008 Qtr 2
4.000	D5015 260 1950	Panelboard, 225 A and above, annualized	227.84	270.84	200	FMR	2008 Qtr 2
1.000	D5015 280 1950	Motor control center, over 400 A, annualized	53.91	64.15	200	FMR	2008 Qtr 2
2.000	E1095 122 3950	Crane, electric bridge, over 15 tons, annualized	819.08	1,004.00	200	FMR	2008 Qtr 2
			\$9,168.27	\$11,086.62			

FAC 2242 Sustainment by Year - Terminal Cutoff Applied

