

FAC 4414 Controlled Humidity Storage, Depot

RUC: \$115.83 SF

Source: USACE PAX Newsletter 3.2.2 dated 20 Mar 09
CatCode 44130
Deflated to FY-09 using Appendix C of newsletter
In V12, Tri-Service and USACE PAX Newsletter values were updated while all
other values were inflated only.

SUC: \$1.48 SF

Source: Cost Works model in \$FY-08, 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 4414 Controlled Humidity Storage, Depot
CostWorks 2008 Quarter 2

	Design Life= 45	C.S.F.=100 S.F; MSF=1000 S.F	This spreadsheet was exported		Terminal Cutoff is the removal of a single task occurrence if that task occurs within					
	Average S.F= 38,932	Sq=100 S.F; M.L.F=1000 L.F	from R.S. Means CostWorks		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
Point & refinish block wall - 1st floor	25	1 Bric	94.700	C.S.F.	35,180.10	43,192.67	2008 Qtr 2	1	1 \$	43,192.67
Point & refinish block wall - 2nd floor	25	1 Bric	87.700	C.S.F.	38,393.31	47,097.53	2008 Qtr 2	1	1 \$	47,097.53
Replace glass - 1st floor (1% of glass)	1	1 Carp	0.700	S.F.	6.34	7.43	2008 Qtr 2	45	45 \$	334.53
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	1.200	Ea.	137.95	163.44	2008 Qtr 2	2	2 \$	326.88
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	12.000	Ea.	5,263.20	6,155.88	2008 Qtr 2	0	0 \$	-
Repair 12' x 12' steel roll-up door	10	1 Carp	0.700	Ea.	582.83	675.18	2008 Qtr 2	4	4 \$	2,700.71
Refinish 12' x 12' steel roll-up door	12	1 Pord	7.000	Ea.	1,181.81	1,438.78	2008 Qtr 2	3	3 \$	4,316.34
Replace 12' x 12' steel roll-up door	35	2 Carp	7.000	Ea.	23,276.89	26,946.85	2008 Qtr 2	1	1 \$	26,946.85
Repair steel, painted, door	14	1 Carp	0.300	Ea.	174.73	205.91	2008 Qtr 2	3	2 \$	411.82
Refinish 3'-0" x 7'-0" steel, painted, door	12	1 Pord	3.000	Ea.	98.73	120.93	2008 Qtr 2	3	3 \$	362.79
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	3.000	Ea.	1,596.24	1,860.12	2008 Qtr 2	1	0 \$	-
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	38.900	M.S.F.	1,141.33	1,375.12	2008 Qtr 2	90	90 \$	123,760.35
Non-destructive moisture inspection built-up roofing	5	2 Rofc	38.900	M.S.F.	3,531.34	4,271.22	2008 Qtr 2	9	9 \$	38,440.98
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	7.700	Sq.	2,652.80	3,134.21	2008 Qtr 2	45	45 \$	141,039.36
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	5	2 Rofc	15.500	S.F.	52.08	62.00	2008 Qtr 2	9	9 \$	558.00
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	97.300	Sq.	57,838.04	68,993.48	2008 Qtr 2	3	2 \$	137,986.97
Place new membrane over existing built-up roofing	20	G5	389.300	Sq.	134,063.24	158,460.67	2008 Qtr 2	2	2 \$	316,921.34
Repair steel painted interior door	14	1 Carp	0.700	Ea.	117.43	138.70	2008 Qtr 2	3	2 \$	277.40
Refinish 3'-0" x 7'-0" steel painted interior door	12	1 Pord	7.000	Ea.	345.80	425.74	2008 Qtr 2	3	3 \$	1,277.22
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	7.000	Ea.	6,562.78	7,629.72	2008 Qtr 2	0	0 \$	-
Repair solid core wood door interior	11	1 Carp	1.400	Ea.	234.85	277.40	2008 Qtr 2	4	3 \$	832.19
Refinish 3'-0" x 7'-0" solid core wood door interior	12	1 Pord	14.000	Ea.	591.08	727.72	2008 Qtr 2	3	3 \$	2,183.16
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	14.000	Ea.	5,133.80	5,951.68	2008 Qtr 2	1	1 \$	5,951.68
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	4.300	C.S.F.	4,348.20	5,220.29	2008 Qtr 2	1	1 \$	5,220.29
Refinish concrete block wall painted	12	1 Pord	21.800	C.S.F.	2,118.31	2,575.23	2008 Qtr 2	3	3 \$	7,725.70
Replace 8" concrete block wall painted	75	2 Bric	218.700	C.S.F.	235,717.05	283,476.75	2008 Qtr 2	0	0 \$	-
Repair 5/8" drywall - (2% of walls)	20	1 Carp	89.300	S.F.	141.99	170.56	2008 Qtr 2	2	2 \$	341.13
Replace 5/8" drywall	75	2 Carp	4,465.000	S.F.	9,956.95	12,010.85	2008 Qtr 2	0	0 \$	-
Replace carpet	12	2 Tilf	346.100	S.Y.	15,619.49	18,045.65	2008 Qtr 2	3	3 \$	54,136.96
Refinish concrete floor finished	25	2 Cefi	343.000	C.S.F.	119,857.92	144,296.67	2008 Qtr 2	1	1 \$	144,296.67
Replace vinyl floor	18	1 Tilf	162.200	S.Y.	7,745.05	9,456.26	2008 Qtr 2	2	2 \$	18,912.52
Acoustic tile repairs - (2% of ceilings)	9	1 Carp	6.200	C.S.F.	2,769.42	3,296.35	2008 Qtr 2	5	5 \$	16,481.77
Replace acoustic tile ceiling, fire-rated	20	1 Carp	31.100	C.S.F.	12,537.97	14,896.90	2008 Qtr 2	2	2 \$	29,793.80
Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.200	C.S.F.	69.85	85.25	2008 Qtr 2	2	2 \$	170.51
Refinish sheetrock ceiling	20	1 Pord	14.600	C.S.F.	1,834.78	2,267.23	2008 Qtr 2	2	2 \$	4,534.47
Replace sheetrock ceiling	40	2 Carp	14.600	C.S.F.	5,231.62	6,387.65	2008 Qtr 2	1	1 \$	6,387.65
Check / minor repairs drinking fountain	1	1 Plum	4.000	Ea.	150.32	189.36	2008 Qtr 2	45	45 \$	8,521.20
Repair internal leaks drinking fountain	4	1 Plum	4.000	Ea.	140.56	173.72	2008 Qtr 2	11	11 \$	1,910.92
Correct water pressure drinking fountain	2	1 Plum	4.000	Ea.	128.84	162.00	2008 Qtr 2	22	22 \$	3,564.00

FAC 4414 Controlled Humidity Storage, Depot
CostWorks 2008 Quarter 2

Design Life= 45
Average S.F= 39,932

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
Replace refrigerant drinking fountain	2	1 Plum	4.000	Ea.	63.36	75.44	2008 Qtr 2	22	22	\$ 1,659.68
Repair drain leak drinking fountain	4	1 Plum	4.000	Ea.	90.52	108.12	2008 Qtr 2	11	11	\$ 1,189.32
Replace fountain drinking fountain	10	2 Plum	4.000	Ea.	4,023.36	4,774.28	2008 Qtr 2	4	4	\$ 19,097.12
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	8.000	Ea.	192.08	226.64	2008 Qtr 2	6	6	\$ 1,359.84
Replace washer in faucet lavatory, vitreous china	2	1 Plum	8.000	Ea.	78.80	98.32	2008 Qtr 2	22	22	\$ 2,163.04
Replace faucets lavatory, vitreous china	10	1 Plum	8.000	Ea.	987.92	1,192.48	2008 Qtr 2	4	4	\$ 4,769.92
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	8.000	Ea.	216.32	268.56	2008 Qtr 2	22	22	\$ 5,908.32
Replace lavatory, vitreous china	35	2 Plum	8.000	Ea.	4,241.52	5,085.60	2008 Qtr 2	1	1	\$ 5,085.60
Replace faucet washer sink, iron enamel	2	1 Plum	2.000	Ea.	19.58	24.38	2008 Qtr 2	22	22	\$ 536.36
Clean trap sink, iron enamel	3	1 Plum	2.000	Ea.	13.20	16.50	2008 Qtr 2	15	15	\$ 247.50
Replace faucets sink, iron enamel	10	1 Plum	2.000	Ea.	246.98	298.12	2008 Qtr 2	4	4	\$ 1,192.48
Unstop sink sink, iron enamel	2	1 Plum	2.000	Ea.	64.42	81.00	2008 Qtr 2	22	22	\$ 1,782.00
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	2.000	Ea.	1,105.44	1,315.38	2008 Qtr 2	1	1	\$ 1,315.38
Replace flush valve diaphragm tankless water closet	10	1 Plum	8.000	Ea.	565.92	664.48	2008 Qtr 2	4	4	\$ 2,657.92
Rebuild flush valve tankless water closet	20	1 Plum	8.000	Ea.	1,055.84	1,280.08	2008 Qtr 2	2	2	\$ 2,560.16
Unplug clogged line tankless water closet	5	1 Plum	8.000	Ea.	1,346.08	1,681.44	2008 Qtr 2	9	9	\$ 15,132.96
Replace tankless water closet	35	2 Plum	8.000	Ea.	4,384.00	5,186.88	2008 Qtr 2	1	1	\$ 5,186.88
Replace tankless flush valve	25	1 Plum	8.000	Ea.	1,676.00	1,962.96	2008 Qtr 2	1	1	\$ 1,962.96
Replace wax ring gasket tankless water closet	5	1 Plum	8.000	Ea.	876.56	1,097.60	2008 Qtr 2	9	9	\$ 9,878.40
Replace flush valve diaphragm urinal	7	1 Plum	5.000	Ea.	353.70	415.30	2008 Qtr 2	6	6	\$ 2,491.80
Rebuild flush valve urinal	20	1 Plum	5.000	Ea.	659.90	800.05	2008 Qtr 2	2	2	\$ 1,600.10
Unplug line urinal	5	1 Plum	5.000	Ea.	560.70	699.55	2008 Qtr 2	9	9	\$ 6,295.95
Replace wall-hung urinal	35	2 Plum	5.000	Ea.	4,208.15	5,032.85	2008 Qtr 2	1	1	\$ 5,032.85
Repair circulator pump, 1/12 - 3/4 H.P.	5	1 Stpi	2.000	Ea.	141.98	168.50	2008 Qtr 2	9	9	\$ 1,516.50
Replace circulator pump, 1/12 - 3/4 H.P.	15	Q1	2.000	Ea.	4,968.88	5,740.94	2008 Qtr 2	3	2	\$ 11,481.88
Repair damaged pipe insulation, fiberglass 3/4"	5	Q14	4.000	Ea.	62.88	76.72	2008 Qtr 2	9	9	\$ 690.48
Repair damaged pipe insulation, fiberglass 2"	5	Q14	2.000	Ea.	36.92	45.06	2008 Qtr 2	9	9	\$ 405.54
Replace pipe insulation, fiberglass 3/4"	5	Q14	0.030	M.L.F.	188.67	229.84	2008 Qtr 2	9	9	\$ 2,068.55
Replace pipe insulation, fiberglass 2"	5	Q14	0.010	M.L.F.	74.26	90.69	2008 Qtr 2	9	9	\$ 816.22
Replace pipe and fittings, copper 3/4"	20	2 Plum	32.000	L.F.	567.04	687.36	2008 Qtr 2	2	2	\$ 1,374.72
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	652.96	785.76	2008 Qtr 2	1	1	\$ 785.76
Drain and flush water heater, electric, 120 gallon	7	1 Plum	2.000	Ea.	452.86	566.08	2008 Qtr 2	6	6	\$ 3,396.48
Check operation water heater, electric, 120 gallon	3	1 Plum	2.000	Ea.	3.96	4.96	2008 Qtr 2	15	15	\$ 74.40
Replace water heater, electric, 120 gallon	15	2 Plum	2.000	Ea.	18,384.90	21,087.58	2008 Qtr 2	3	2	\$ 42,175.16
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	2.000	Ea.	231.88	288.28	2008 Qtr 2	4	4	\$ 1,153.12
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	800.000	L.F.	47,360.00	58,552.00	2008 Qtr 2	1	1	\$ 58,552.00
General maintenance & repair drain: roof, scupper, area	1	1 Plum	11.000	Ea.	311.85	392.37	2008 Qtr 2	45	45	\$ 17,656.65
Replace drain: roof, scupper, area	40	1 Plum	11.000	Ea.	4,381.74	5,149.54	2008 Qtr 2	1	1	\$ 5,149.54

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Average S.F= 39,932		Sq=100 S.F; M.L.F=1000 L.F		from R.S. Means CostWorks		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
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	Q20	2.000	Ea.	5,238.96	6,101.28	2008 Qtr 2	2	2	\$ 12,202.56
Repair single zone rooftop unit, 60 ton	10	Q6	1.000	Ea.	39,670.17	46,952.35	2008 Qtr 2	4	4	\$ 187,809.40
Replace single zone rooftop unit, 60 ton	15	Q7	1.000	Ea.	70,810.00	82,892.60	2008 Qtr 2	3	2	\$ 165,785.20
Repair fan coil unit, 1 ton	10	1 Stpi	4.000	Ea.	1,476.88	1,764.08	2008 Qtr 2	4	4	\$ 7,056.32
Replace fan coil unit, 1 ton	15	Q5	4.000	Ea.	4,393.20	5,182.24	2008 Qtr 2	3	2	\$ 10,364.48
Maintenance and repair standard suspended heater	2	1 Elec	3.000	Ea.	277.77	326.01	2008 Qtr 2	22	22	\$ 7,172.22
Maintenance and inspection standard suspended heater	0.5	1 Elec	3.000	Ea.	187.38	234.24	2008 Qtr 2	90	90	\$ 21,081.60
Replace heater standard suspended heater	15	1 Elec	3.000	Ea.	2,176.20	2,549.01	2008 Qtr 2	3	2	\$ 5,098.02
Minor repairs to fire alarm control panel	5	1 Elec	1.000	Ea.	107.84	130.97	2008 Qtr 2	9	9	\$ 1,178.73
Maintenance and inspection fire alarm control panel	0.5	1 Elec	1.000	Ea.	30.54	38.17	2008 Qtr 2	90	90	\$ 3,435.30
Replace fire alarm control panel	15	1 Elec	1.000	Ea.	2,615.62	3,107.84	2008 Qtr 2	3	2	\$ 6,215.68
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	45	45	\$ 1,480.05
Replace sprinkler head	20	1 Plum	409.000	Ea.	26,045.12	32,090.14	2008 Qtr 2	2	2	\$ 64,180.28
Replace fire alarm bell, 6"	20	1 Elec	6.000	Ea.	853.68	1,029.06	2008 Qtr 2	2	2	\$ 2,058.12
Maintenance and inspection lighting panel, indoor	3	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	15	15	\$ 534.45
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	1 Elec	2.000	Ea.	57.00	71.26	2008 Qtr 2	5	5	\$ 356.30
Maintenance and inspection safety switch, 3 pole, heavy duty	1	1 Elec	2.000	Ea.	57.00	71.26	2008 Qtr 2	45	45	\$ 3,206.70
Replace safety switch, heavy duty	25	2 Elec	2.000	Ea.	1,160.96	1,361.42	2008 Qtr 2	1	1	\$ 1,361.42
Maintenance and repair motor starter, up to 600 V	5	1 Elec	3.000	Ea.	512.25	622.50	2008 Qtr 2	9	9	\$ 5,602.50
Maintenance and inspection motor starter, up to 600 V	0.5	1 Elec	3.000	Ea.	114.51	143.55	2008 Qtr 2	90	90	\$ 12,919.50
Replace starter motor starter, up to 600 V	18	1 Elec	3.000	Ea.	1,584.54	1,891.23	2008 Qtr 2	2	2	\$ 3,782.46
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	584.000	Ea.	58,154.72	70,126.72	2008 Qtr 2	4	4	\$ 280,506.88
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	584.000	Ea.	14,856.96	18,209.12	2008 Qtr 2	4	4	\$ 72,836.48
Replace fixture fluorescent lighting fixture, 80 W	20	1 Elec	0.000	Ea.	0.00	0.00	2008 Qtr 2	2	2	\$ -
Maintenance and repair receptacles and plugs	20	1 Elec	174.000	Ea.	5,409.66	6,739.02	2008 Qtr 2	2	2	\$ 13,478.04
Replace receptacle/plug receptacles and plugs	20	1 Elec	174.000	Ea.	9,180.24	11,209.08	2008 Qtr 2	2	2	\$ 22,418.16
Maintenance and repair wiring devices, switches	10	1 Elec	44.000	Ea.	1,367.96	1,704.12	2008 Qtr 2	4	4	\$ 6,816.48
Replace switch wiring devices, switches	15	1 Elec	44.000	Ea.	2,253.24	2,743.40	2008 Qtr 2	3	2	\$ 5,486.80
Check and repair manual pull station	10	1 Elec	10.000	Ea.	692.10	848.70	2008 Qtr 2	4	4	\$ 3,394.80
Replace manual pull station	15	1 Elec	10.000	Ea.	1,257.40	1,518.90	2008 Qtr 2	3	2	\$ 3,037.80
Repair smoke detector	10	1 Elec	78.000	Ea.	2,978.82	3,666.00	2008 Qtr 2	4	4	\$ 14,664.00
Check operation smoke detector	1	1 Elec	78.000	Ea.	889.20	1,115.40	2008 Qtr 2	45	45	\$ 50,193.00
Replace smoke detector	15	1 Elec	78.000	Ea.	14,784.90	17,705.22	2008 Qtr 2	3	2	\$ 35,410.44
					\$1,110,663.10	\$1,330,534.08				
									MR Subtotal	\$ 2,474,535.79
									MR Per Year	\$ 54,989.68
									PM Per Year	\$ 4,544.68

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CostWorks 2008 Quarter 2

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Average S.F= 39,932		Sq=100 S.F; M.L.F=1000 L.F		from R.S. Means CostWorks		10% of the end of the design life and if the frequency of the task exceeds 20% of the				
						design llife. 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	Occurences In Design Life	Adjusted Occurences	Terminal Cutoff
									Subtotal	\$ 59,534.36
									Total Per Unit	\$ 1.53

CostWorks 2009 Quarter 1 - FAC 4414 Controlled Humidity Storage, Depot

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
2.000	D3095 210 1950	Steam humidification system, annualized	376.14	458.56	200	FMR	2008 Qtr 2
1.000	D5035 810 1950	Security, intrusion alarm system, annualized	265.36	326.54	200	FMR	2008 Qtr 2
3.000	B2035 225 1950	Door, emergency egress, swinging, annualized	148.53	172.53	200	FMR	2008 Qtr 2
7.000	B2035 400 1950	Door, overhead, manual, up to 24' high x 25' wide,	943.18	1,137.85	200	FMR	2008 Qtr 2
21.000	C1025 110 1950	Fire doors, swinging, annualized	522.69	627.06	200	FMR	2008 Qtr 2
4.000	D2015 800 1950	Drink fountain, annualized	198.00	237.44	200	FMR	2008 Qtr 2
5.000	D2015 100 1950	Urinals, annualized	64.65	80.75	200	FMR	2008 Qtr 2
8.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	103.44	129.20	200	FMR	2008 Qtr 2
8.000	D2015 100 4950	Lavatories, annualized	197.44	240.64	200	FMR	2008 Qtr 2
4.000	D3045 120 1950	Fan coil unit, annualized	862.84	1,066.40	200	FMR	2008 Qtr 2
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	56.96	67.71	200	FMR	2008 Qtr 2
			\$3,739.23	\$4,544.68			

FAC 4414 Sustainment by Year - Terminal Cutoff Applied

