

FAC 2261 Ammunition Production Plant

RUC: \$202.26 SF

Source: Marshall and Swift
Heavy Manufacturing, Section 15 Page 15
Class B (Excellent)
Added: 3 X 25T Bridge crane, craneways, dry sprinkler system
In V12, Tri-Service and USACE PAX Newsletter values were updated while all
other values were inflated only.

SUC: \$3.50 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 2261 Ammunition Production Plant
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 6,285

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
Repair brick wall - 1st floor	25	1 Bric	465.700	S.F.	17,230.90	20,937.87	2008 Qtr 2	2	1	\$ 20,937.87
Replace glass - 1st floor (1% of glass)	1	1 Carp	3.200	S.F.	28.96	33.98	2008 Qtr 2	55	55	\$ 1,869.12
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	54.000	Ea.	6,207.84	7,354.80	2008 Qtr 2	2	2	\$ 14,709.60
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	54.000	Ea.	23,684.40	27,701.46	2008 Qtr 2	1	0	\$ -
Replace glass - 1st floor (1% of glass)	1	1 Carp	3.240	S.F.	29.32	34.41	2008 Qtr 2	55	55	\$ 1,892.48
Repair 3'-9" x 5'-5" steel frame window - 1st flr.	20	1 Carp	16.000	Ea.	4,208.16	4,915.36	2008 Qtr 2	2	2	\$ 9,830.72
Refinish 3'-9" x 5'-5" st. frame window - 1st flr.	5	1 Pord	16.000	Ea.	1,076.80	1,329.12	2008 Qtr 2	11	11	\$ 14,620.32
Replace 3'-9" x 5'-5" st. frame window - 1st flr.	45	1 Carp	16.000	Ea.	24,841.76	28,582.08	2008 Qtr 2	1	1	\$ 28,582.08
Finish new 3'-9" x 5'-5" st. fr. window - 1st flr.	45	1 Pord	16.000	Ea.	935.52	1,153.44	2008 Qtr 2	1	1	\$ 1,153.44
Repair 12' x 12' steel roll-up door	10	1 Carp	2.000	Ea.	1,665.22	1,929.08	2008 Qtr 2	5	5	\$ 9,645.40
Refinish 12' x 12' steel roll-up door	5	1 Pord	2.000	Ea.	337.66	411.08	2008 Qtr 2	11	11	\$ 4,521.88
Replace 12' x 12' steel roll-up door	35	2 Carp	2.000	Ea.	6,650.54	7,699.10	2008 Qtr 2	1	1	\$ 7,699.10
Repair steel, painted, door	14	1 Carp	2.000	Ea.	1,164.88	1,372.72	2008 Qtr 2	3	3	\$ 4,118.16
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	2.000	Ea.	65.82	80.62	2008 Qtr 2	13	13	\$ 1,048.06
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	2.000	Ea.	1,064.16	1,240.08	2008 Qtr 2	1	1	\$ 1,240.08
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	6.300	M.S.F.	184.84	222.71	2008 Qtr 2	110	110	\$ 24,497.55
Non-destructive moisture inspection built-up roofing	5	2 Rofc	6.300	M.S.F.	571.91	691.74	2008 Qtr 2	11	11	\$ 7,609.14
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	1.200	Sq.	413.42	488.45	2008 Qtr 2	55	55	\$ 26,864.64
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	1	2 Rofc	2.500	S.F.	8.40	10.00	2008 Qtr 2	55	55	\$ 550.00
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	15.700	Sq.	9,332.55	11,132.56	2008 Qtr 2	3	3	\$ 33,397.67
Place new membrane over existing built-up roofing	20	G5	62.900	Sq.	21,660.87	25,602.82	2008 Qtr 2	2	2	\$ 51,205.63
Total roof replacement built-up roofing	28	G1	62.900	Sq.	35,902.06	42,517.26	2008 Qtr 2	1	1	\$ 42,517.26
Repair steel painted interior door	14	1 Carp	2.000	Ea.	335.50	396.28	2008 Qtr 2	3	3	\$ 1,188.84
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	2.000	Ea.	98.80	121.64	2008 Qtr 2	13	13	\$ 1,581.32
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	2.000	Ea.	1,875.08	2,179.92	2008 Qtr 2	0	0	\$ -
Repair solid core wood door interior	11	1 Carp	4.000	Ea.	671.00	792.56	2008 Qtr 2	5	5	\$ 3,962.80
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	4.000	Ea.	168.88	207.92	2008 Qtr 2	13	13	\$ 2,702.96
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	4.000	Ea.	1,466.80	1,700.48	2008 Qtr 2	1	1	\$ 1,700.48
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	0.900	C.S.F.	910.09	1,092.62	2008 Qtr 2	2	1	\$ 1,092.62
Refinish concrete block wall painted	4	1 Pord	47.100	C.S.F.	4,576.71	5,563.92	2008 Qtr 2	13	13	\$ 72,331.00
Replace 8" concrete block wall painted	75	2 Bric	47.100	C.S.F.	50,764.85	61,050.55	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	24.400	S.F.	38.80	46.60	2008 Qtr 2	2	2	\$ 93.21
Refinish drywall	4	1 Pord	1,219.000	S.F.	731.40	902.06	2008 Qtr 2	13	13	\$ 11,726.78
Replace 5/8" drywall	75	2 Carp	1,219.000	S.F.	2,718.37	3,279.11	2008 Qtr 2	0	0	\$ -
Replace carpet	8	2 Tilf	62.100	S.Y.	2,802.57	3,237.89	2008 Qtr 2	6	6	\$ 19,427.36
Refinish concrete floor finished	25	2 Cefi	54.800	C.S.F.	19,149.31	23,053.81	2008 Qtr 2	2	1	\$ 23,053.81
Replace vinyl floor	18	1 Tilf	27.100	S.Y.	1,294.03	1,579.93	2008 Qtr 2	3	2	\$ 3,159.86
Acoustic tile repairs - (2% of ceilings)	9	1 Carp	0.100	C.S.F.	44.67	53.17	2008 Qtr 2	6	6	\$ 319.00
Replace acoustic tile ceiling, fire-rated	20	1 Carp	8.00	C.S.F.	3,225.20	3,832.00	2008 Qtr 2	2	2	\$ 7,664.00

FAC 2261 – Ammunition Production Plant
CostWorks 2008 Quarter 2

Design Life= 55
Average S.F= 6,285

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

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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
Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.100	C.S.F.	34.93	42.63	2008 Qtr 2	2	2	\$ 85.25
Replace sheetrock ceiling	40	2 Carp	4.200	C.S.F.	1,504.99	1,837.54	2008 Qtr 2	1	1	\$ 1,837.54
Check / minor repairs drinking fountain	1	1 Plum	2.000	Ea.	75.16	94.68	2008 Qtr 2	55	55	\$ 5,207.40
Repair internal leaks drinking fountain	4	1 Plum	2.000	Ea.	70.28	86.86	2008 Qtr 2	13	13	\$ 1,129.18
Correct water pressure drinking fountain	2	1 Plum	2.000	Ea.	64.42	81.00	2008 Qtr 2	27	27	\$ 2,187.00
Replace refrigerant drinking fountain	2	1 Plum	2.000	Ea.	31.68	37.72	2008 Qtr 2	27	27	\$ 1,018.44
Repair drain leak drinking fountain	4	1 Plum	2.000	Ea.	45.26	54.06	2008 Qtr 2	13	13	\$ 702.78
Replace fountain drinking fountain	10	2 Plum	2.000	Ea.	2,011.68	2,387.14	2008 Qtr 2	5	5	\$ 11,935.70
Inspect and clean spray heads, emergency eye wash	3	1 Plum	1.000	Ea.	37.80	47.44	2008 Qtr 2	18	18	\$ 853.92
Replace eye wash station, emergency eye wash	25	2 Plum	1.000	Ea.	573.92	695.88	2008 Qtr 2	2	1	\$ 695.88
Inspect and clean shower head emergency shower station	3	1 Plum	1.000	Ea.	37.80	47.44	2008 Qtr 2	18	18	\$ 853.92
Replace shower emergency shower station	25	2 Plum	1.000	Ea.	726.39	873.58	2008 Qtr 2	2	1	\$ 873.58
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	12.000	Ea.	288.12	339.96	2008 Qtr 2	7	7	\$ 2,379.72
Replace washer in faucet lavatory, vitreous china	2	1 Plum	12.000	Ea.	118.20	147.48	2008 Qtr 2	27	27	\$ 3,981.96
Replace faucets lavatory, vitreous china	10	1 Plum	12.000	Ea.	1,481.88	1,788.72	2008 Qtr 2	5	5	\$ 8,943.60
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	12.000	Ea.	324.48	402.84	2008 Qtr 2	27	27	\$ 10,876.68
Replace lavatory, vitreous china	35	2 Plum	12.000	Ea.	6,362.28	7,628.40	2008 Qtr 2	1	1	\$ 7,628.40
Replace faucet washer sink, iron enamel	2	1 Plum	1.000	Ea.	9.79	12.19	2008 Qtr 2	27	27	\$ 329.13
Clean trap sink, iron enamel	3	1 Plum	1.000	Ea.	6.60	8.25	2008 Qtr 2	18	18	\$ 148.50
Replace faucets sink, iron enamel	10	1 Plum	1.000	Ea.	123.49	149.06	2008 Qtr 2	5	5	\$ 745.30
Unstop sink sink, iron enamel	2	1 Plum	1.000	Ea.	32.21	40.50	2008 Qtr 2	27	27	\$ 1,093.50
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	1.000	Ea.	552.72	657.69	2008 Qtr 2	1	1	\$ 657.69
Replace flush valve diaphragm tankless water closet	10	1 Plum	6.000	Ea.	424.44	498.36	2008 Qtr 2	5	5	\$ 2,491.80
Rebuild flush valve tankless water closet	20	1 Plum	6.000	Ea.	791.88	960.06	2008 Qtr 2	2	2	\$ 1,920.12
Replace tankless water closet	35	2 Plum	6.000	Ea.	3,288.00	3,890.16	2008 Qtr 2	1	1	\$ 3,890.16
Replace tankless flush valve	25	1 Plum	6.000	Ea.	1,257.00	1,472.22	2008 Qtr 2	2	1	\$ 1,472.22
Replace wax ring gasket tankless water closet	5	1 Plum	6.000	Ea.	657.42	823.20	2008 Qtr 2	11	11	\$ 9,055.20
Replace flush valve diaphragm urinal	7	1 Plum	3.000	Ea.	212.22	249.18	2008 Qtr 2	7	7	\$ 1,744.26
Rebuild flush valve urinal	20	1 Plum	3.000	Ea.	395.94	480.03	2008 Qtr 2	2	2	\$ 960.06
Unplug line urinal	5	1 Plum	3.000	Ea.	336.42	419.73	2008 Qtr 2	11	11	\$ 4,617.03
Replace wall-hung urinal	35	2 Plum	3.000	Ea.	2,524.89	3,019.71	2008 Qtr 2	1	1	\$ 3,019.71
Repair circulator pump, 1/12 - 3/4 H.P.	5	1 Stpi	1.000	Ea.	70.99	84.25	2008 Qtr 2	11	11	\$ 926.75
Replace circulator pump, 1/12 - 3/4 H.P.	15	Q1	1.000	Ea.	2,484.44	2,870.47	2008 Qtr 2	3	3	\$ 8,611.41
Replace pipe and fittings, copper 3/4"	20	2 Plum	32.000	L.F.	\$567.04	\$687.36				
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	\$652.96	\$785.76				
Repair damaged pipe insulation, fiberglass 2"	5	Q14	2.000	Ea.	36.92	45.06	2008 Qtr 2	11	11	\$ 495.66
Repair damaged pipe insulation, fiberglass 4"	5	Q14	4.000	Ea.	101.84	125.00	2008 Qtr 2	11	11	\$ 1,375.00
Replace pipe insulation, fiberglass 2"	5	Q14	0.010	M.L.F.	74.26	90.69	2008 Qtr 2	11	11	\$ 997.60
Replace pipe insulation, fiberglass 3/4"	5	Q14	0.010	M.L.F.	62.89	76.61	2008 Qtr 2	11	11	\$ 842.74

FAC 2261 – Ammunition Production Plant
CostWorks 2008 Quarter 2

CostWorks 2008 Quarter 2						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.				
Design Life= 55		C.S.F=100 S.F; MSF=1000 S.F		This spreadsheet was exported						
Average S.F= 6,285		Sq=100 S.F; M.L.F=1000 L.F		from R.S. Means CostWorks						
Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Drain and flush water heater, electric, 120 gallon	7	1 Plum	1.000	Ea.	226.43	283.04	2008 Qtr 2	7	7 \$	1,981.28
Check operation water heater, electric, 120 gallon	3	1 Plum	1.000	Ea.	1.98	2.48	2008 Qtr 2	18	18 \$	44.64
Replace water heater, electric, 120 gallon	15	2 Plum	1.000	Ea.	9,192.45	10,543.79	2008 Qtr 2	3	3 \$	31,631.37
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	5	5 \$	1,441.40
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	200.000	L.F.	11,840.00	14,638.00	2008 Qtr 2	1	1 \$	14,638.00
General maintenance & repair drain: roof, scupper, area	1	1 Plum	2.000	Ea.	56.70	71.34	2008 Qtr 2	55	55 \$	3,923.70
Replace drain: roof, scupper, area	40	1 Plum	2.000	Ea.	796.68	936.28	2008 Qtr 2	1	1 \$	936.28
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	Q20	1.000	Ea.	2,619.48	3,050.64	2008 Qtr 2	2	2 \$	6,101.28
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	1.000	Ea.	34,098.40	39,677.60	2008 Qtr 2	3	3 \$	119,032.80
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
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	55	55 \$	1,808.95
Replace sprinkler head	20	1 Plum	37.000	Ea.	2,356.16	2,903.02	2008 Qtr 2	2	2 \$	5,806.04
Maintenance and inspection lighting panel, indoor	3	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	18	18 \$	641.34
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	6	6 \$	213.78
Maintenance and inspection safety switch, 3 pole, heavy duty	1	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	55	55 \$	1,959.65
Replace safety switch, heavy duty	25	2 Elec	1.000	Ea.	580.48	680.71	2008 Qtr 2	2	1 \$	680.71
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	168.000	Ea.	16,729.44	20,173.44	2008 Qtr 2	5	5 \$	100,867.20
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	168.000	Ea.	4,273.92	5,238.24	2008 Qtr 2	5	5 \$	26,191.20
Maintenance and repair receptacles and plugs	20	1 Elec	90.000	Ea.	2,798.10	3,485.70	2008 Qtr 2	2	2 \$	6,971.40
Replace receptacle/plug receptacles and plugs	20	1 Elec	90.000	Ea.	4,748.40	5,797.80	2008 Qtr 2	2	2 \$	11,595.60
Maintenance and repair wiring devices, switches	10	1 Elec	22.000	Ea.	683.98	852.06	2008 Qtr 2	5	5 \$	4,260.30
Replace switch wiring devices, switches	15	1 Elec	22.000	Ea.	1,126.62	1,371.70	2008 Qtr 2	3	3 \$	4,115.10
Check and repair manual pull station	10	1 Elec	2.000	Ea.	138.42	169.74	2008 Qtr 2	5	5 \$	848.70
Replace manual pull station	15	1 Elec	2.000	Ea.	251.48	303.78	2008 Qtr 2	3	3 \$	911.34
Repair smoke detector	10	1 Elec	22.000	Ea.	840.18	1,034.00	2008 Qtr 2	5	5 \$	5,170.00
Check operation smoke detector	1	1 Elec	22.000	Ea.	250.80	314.60	2008 Qtr 2	55	55 \$	17,303.00
Replace smoke detector	15	1 Elec	22.000	Ea.	4,170.10	4,993.78	2008 Qtr 2	3	3 \$	14,981.34
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	2	1 \$	785.76
Replace fire alarm bell, 6"	20	1 Elec	6.000	Ea.	853.68	1,029.06	2008 Qtr 2	2	2 \$	2,058.12
					\$408,350.08	\$484,810.86				
									MR Subtotal	\$ 1,153,270.40

FAC 2261 – Ammunition Production Plant
CostWorks 2008 Quarter 2

Design Life= 55		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 10%				
Average S.F= 6,285		Sq=100 S.F; M.L.F=1000 L.F		from R.S. Means CostWorks		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	\$ 20,968.55
									PM Per Year	\$1,725.20
									Subtotal	\$ 22,693.75
									Total Per Unit	\$ 3.61

CostWorks 2009 Quarter 1 - FAC 2261 Ammunition Production Plant

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
6.000	D3045 160 1950	VAV Boxes, annualized	367.86	456.00	200	FMR	2008 Qtr 2
1.000	E1095 122 1950	Crane, electric bridge, up to 5 ton, annualized	152.92	186.81	200	FMR	2008 Qtr 2
2.000	B2035 225 1950	Door, emergency egress, swinging, annualized	99.02	115.02	200	FMR	2008 Qtr 2
6.000	C1025 110 1950	Fire doors, swinging, annualized	149.34	179.16	200	FMR	2008 Qtr 2
3.000	D2015 100 1950	Urinals, annualized	38.79	48.45	200	FMR	2008 Qtr 2
6.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	77.58	96.90	200	FMR	2008 Qtr 2
12.000	D2015 100 4950	Lavatories, annualized	296.16	360.96	200	FMR	2008 Qtr 2
2.000	D2015 800 1950	Drink fountain, annualized	99.00	118.72	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
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	56.96	67.71	200	FMR	2008 Qtr 2
			\$1,415.50	\$1,725.20			

FAC 2261 Sustainment by Year - Terminal Cutoff Applied

