	AWARD/CONTRACT	1. THIS CON- UNDER D				DER	RATING		PAGE OF	PAGES 130
2. CONTRACT (Proc. In	ist. Idem./ NO.	3. EFFECTIVI				4. REQUI	SITION/PURCHASE RE	QUEST/PROJECT NO.	1-1-1	130
DAHA90-02-D-	0012	26 Sep	02			F549	52-8243-000	1		
5. ISSUED BY	CODF	DAHA90		6. ADM	INIST		other than Item 5)	CODE	T	
National Guard Environmental A 1411 Jefferson I Arlington, VA	Bureau Acquisitions Division (NGB- Davis Highway, Suite 8200 22202-3231									 -
7. NAME AND ADDRESS OF	CONTRACTOR (No., street, city, county, State	and ZIP Code)		L			8. DELIVERY			
Earth Tech, Inc. 1420 King Street, Suite 600 Alexandria, VA 22314			•			FOB ORIGIN THER (See below) 9. DISCOUNT FOR PROMPT PAYMENT				
ПСЛ	auria, 771 22514									
							10. SUBMIT INVOIC (4 copies unless oth ADDRESS SHOWN I	erwise specified)	ITEM	
CODE		FACILITY CODE				U. Be-sta	<u> </u>		5	
11. SHIP TO/MARK FOR	CODE					LL BE MADE B		CODE	Ĺ	
Air National Gu Environmental I 3500 Fetchet Av Andrews AFB, 1	Division			Finan 1411	cial I Ieffe	nal Guard Managen rson Day VA 22	l nent Division vis Highway 202-3231	(ANG/FMFA)		
13. AUTHORITY FOR USING	OTHER THAN FULL AND OPEN COMPETITION:			14. ACC	UNTING	AND APPROP	RIATION DATA			
10 USC 2304(c) (r	SC 253(c) (To be			each individu	al Task Order.		
15A. ITEM NO.	15B. SUPPLIES	SERVICES			15C. Q	UANTITY	15D. UNIT	15E. UNIT PRICE	15F. AM	OUNT
	Environmental Engineering Technical and Remediation the Air National Guard.		for		<u>.</u>				Not-To	-Exceed
							15G. TOTAL AN	OUNT OF CONTRACT	\$598.00	
00 050	DECODIDATION	_ 	TABLE OF						See Sect	
(X) SEC.	DESCRIPTION PART I - THE SCHEDULE		PAGE(S)	(X)	SEC	.l		ESCRIPTION INTRACT CLAUSES		PAGE(S)
X A SOLIC	ITATION/CONTRACT FORM		1	X		CONTRA	CT CLAUSES	ONTRACT CLAUSES		
X B SUPPI	LIES OR SERVICES AND PRICES/C RIPTION/SPECS./WORK STATEMEN		21	X	PA J	RT III - LIS	T OF DOCUMEN ATTACHMENTS	TS, EXHIBITS AND O		
	AGING AND MARKING		<u></u>	 		PARTI	V - REPRESENT	ATIONS AND INSTR	UCTIONS Ato	ch 1 1
	CTION AND ACCEPTANCE ERIES OR PERFORMANCE		$\frac{1}{2}$		К		ENTATIONS, CE TATEMENTS OF	RTIFICATIONS AND	Ato	沖275
	RACT ADMINISTRATION DATA		2	 	L			IOTICES TO OFFERO	DRS —	
\rightarrow	IAL CONTRACT REQUIREMENTS		8		M	ļ	ION FACTORS			
	CONTR	ACTING OFFICER WIL		LETE IT	EM 1.	7 OR 18 A	S APPLICABLE			
to sign this document and reagrees to furnish and delive continuation sheets for the be subject to and governed	er all items or perform all the services set forth consideration stated herein. The rights and oblig I by the following documents: (a) this award/co ations, certifications, and specifications, as are	copies to issuing office.) or otherwise identified above pations of the parties to this contract, (b) the solicitation, if	and on any ontract shall any, and (c)	including accepted consists	the add as to th of the to	ie items listed Mowing docum	ges made by you wh above and on any cor ents: (a) the Governm	ARD (Contractor is not region ich additions or changes artitunation sheets. This awarent's solicitation and your off	e set forth in full a	bove, is hereby
19A. NAME AND TITE	LE OF SIGNER (Type or print)			20A. N.	AME (OF CONTRA	ACTING OFFICE	R		<u> </u>
(v)				<u> </u>	<u> </u>	(D)	(0)	77 Tar		
(b) (6)	fire of person authorized to sign!	9-2 5- 0	2_	20f2 BY	b)	(6)	S AMERICA	200	CLOSEP	02
NSN 7540-01-152-8009 PREVIOUS EDITION UNUSAB	BLE	Form desi	26- gned using P		softwa	re.		STANDARD FOR Prescribed by FAR (48 CFF		5)

SUPPLIES OR SERVICES AND PRICE

B.1 MINIMUM AND MAXIMUM CONTRACT LIMITATIONS

- a. The Government's minimum obligation under these contracts is \$50,000 per contract. The minimum amount shall be obligated once by separate task order issued during the Base Period of the contract.
- b. The Government's maximum total obligation for all contracts shall not exceed \$598,000,000 over the ten-year period.

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

BASE PERIOD - DATE OF AWARD THROUGH 30 JUN 03

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

0001

ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

HOURLY RATE

	000101	PROGRAM DIRECTOR
	000102	PROGRAM MANAGER
	000103	PROJECT MANAGER
	000104	SENIOR PROFESSIONAL
	000105	GRAPHICS PROFESSIONAL
	000106	STAFF PROFESSIONAL
	000107	JUNIOR PROFESSIONAL
	000108	ENVIRONMENTAL TECHNICIAN
	000109	TECHNICIAN
	000110	CONSTRUCTION SUPERINTENDENT
	000111	INSPECTOR (CONSTRUCTION)
	000112	ADMINISTRATIVE/CLERICAL
0002		AND OTHER COSTS.
	TO BE SET	FORTH IN EACH INDIVIDUAL TASK ORDER.
0003	TRAVEL.	
	TO BE SET	FORTH IN EACH INDIVIDUAL TASK ORDER. SEE CLAUSE
	H.11.	
0004	FEE.	
		BE APPLIED TO TASK ORDERS PRICED ON A COST PLUS FIXED
		BASIS. A FIXED FEE BETWEEN (b) (4) SHALL BE
		AND SET FORTH IN EACH INDIVIDUAL CPFF TASK ORDER.
	SEE CLAUSE	H.10.

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATECORIES AND RATES

BASE PERIOD - DATE OF AWARD THROUGH 30 JUN 03

(b) (4)			
_	000113	Project Manager	(b) (4)
	000114	Senior Professional	
	000115	Staff Professional	
	000116	Administrative/Clerical	
(b) (4)			
	000117	Project Manager	(b) (4)
	000118	Senior Professional	
	000119	Graphics Professional	
	000120	Staff Professional	
	000121	Junior Professional	
	000122	Environmental Technician	
	000123	Technician	
	000124	Construction Superintendent	
	000125	Inspector (Construction)	
	000126	Administrative/Clerical	
(1)			
(b) (4)	0.000		
	000127	Project Manager	(b) (4)
	000128	Senior Professional	
	000129	Graphics Professional	
	000130	Staff Professional	
	000131	Junior Professional	
	000132	Environmental Technician	
	000133	Technician	
	000134	Construction Superintendent	
	000135	Inspector (Construction)	
	000136	Administrative/Clerical	
		<u> </u>	
(b) (4)			(b) (4)
	000137	Project Manager	(b) (4)
	000138	Senior Professional	
	000139	Graphics Professional	
	000140	Staff Professional	
	000141	Junior Professional	
	000142	Environmental Technician	
	000143	Technician	
	000144	Administrative/Clerical	

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 1 - 01 JUL 03 THROUGH 30 JUN 04

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

1001 ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

	HOURLY RATE
	100101 PROGRAM DIRECTOR
	100102 PROGRAM MANAGER
	100103 PROJECT MANAGER
	100104 SENIOR PROFESSIONAL
	100105 GRAPHICS PROFESSIONAL
	100106 STAFF PROFESSIONAL
	100107 JUNIOR PROFESSIONAL
	100108 ENVIRONMENTAL TECHNICIAN
	100109 TECHNICIAN
	100110 CONSTRUCTION SUPERINTENDENT
	100111 INSPECTOR (CONSTRUCTION)
	100112 ADMINISTRATIVE/CLERICAL
1002	MATERIALS AND OTHER COSTS.
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.
1003	TRAVEL.
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER. SEE CLAUSE H.11.
1004	FEE.
	FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A COST PLUS FIXED
	FEE (CPFF) BASIS. A FIXED FEE BETWEEN (0) (4) SHALL BE
	NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF TASK ORDER.
	SEE CLAUSE H.16.

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 1 - 01 JUL 03 THROUGH 30 JUN 04

(b) (4)			
	100113	Project Manager	(b) (1)
	100114	Senior Professional	(D) (T)
	100115	Staff Professional	
	100116	Administrative/Clerical	
(b) (4)			
(D)	100117	Project Manager	
	100118	Senior Professional	
	100119	Graphics Professional	
	100120	Staff Professional	
	100121	Junior Professional	
	100122	Environmental Technician	
	100123	Technician	
	100124	Construction Superintendent	
	100125	Inspector (Construction)	
	100126	Administrative/Clerical	
(b) (4)			
	100127	Project Manager	(b) (4)
	100128	Senior Professional	(1)
	100129	Graphics Professional	
	100130	Staff Professional	
	100131	Junior Professional	
	100132	Environmental Technician	
	100133	Technician	
	100134	Construction Superintendent	
	100135	Inspector (Construction)	
	100136	Administrative/Clerical	
(b) (4)			
(15) (1)	100137	Project Manager	(b) (4)
	100138	Senior Professional	
	100139	Graphics Professional	
	100140	Staff Professional	
	100141	Junior Protessional	
	100142	Environmental Technician	
	100143	Technician	
	100144	Administrative/Clerical	

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 2 - 01 JUL 04 THROUGH 30 JUN 05

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

2001 ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

		HOURLY	RATE
	200101 PROGRAM DIRECTOR	(h)	(Δ)
	200102 PROGRAM MANAGER		(7)
	200103 PROJECT MANAGER		
	200104 SENIOR PROFESSIONAL		
	200105 GRAPHICS PROFESSIONAL		
	200106 STAFF PROFESSIONAL		
	200107 JUNIOR PROFESSIONAL		
	200108 ENVIRONMENTAL TECHNICIAN		
	200109 TECHNICIAN		
	200110 CONSTRUCTION SUPERINTENDENT		
	200111 INSPECTOR (CONSTRUCTION)		
	200112 ADMINISTRATIVE/CHERICAL		
2002	MATERIALS AND OTHER COSTS.		
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.		
2003	TRAVEL.		
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER. SE	E CLAUSE	Н.11.
2004	FEE.		
	FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A CO.	ST PLUS F	1XED
	FEE (CPFF) BASIS. A FIXED FEE BETWEEN (b) (4)	HALL BE	
	NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF T.	ASK ORDEF	₹.
	SEE CLAUSE H.16.		

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 2 - 01 JUL 04 THROUGH 30 JUN 05

(b) (4)		
	200113	Project Manager (b) (4)
	200114	Senior Professional
	200115	Staff Professional
	200116	Administrative/Clerical
(b) (1)		
(D) (4)	200117	Duning to Management
_	200117	Project Manager (b) (4)
	200119	Senior Professional
	200119	Graphics Professional
	200120	Staff Professional
	200121	Junior Professional
	200122	Environmental Technician
	200123	Technician Companiatorian
	200124	Construction Superintendent
		Inspector (Construction)
	200126	Administrative/Clerical
(b) (1) (A)		
() () ()	200127	Project Manager (b) (4)
	200128	Senior Professional
	200129	Graphics Professional
	200130	Staff Professional
	200131	Junior Professional
	200132	Environmental Technician
	200133	Technician
	200134	Construction Superintendent
	200135	Inspector (Construction)
	200136	Administrative/Clerical
		<u> </u>
(b) (4)		
	200137	Project Manager (b) (4)
	200138	Senior Professional
	200139	Graphics Professional
	200140	Staff Professional
	200141	Junior Professional
	200142	Environmental Technician
	200143	Technician
	200144	Administrative/Clerical

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 3 - 01 JUL 05 THROUGH 30 JUN 06

SEE CLAUSE H.16.

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

3001 ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

	300101 PROGRAM DIRECTOR (6)
	300102 PROGRAM MANAGER
	300103 PROJECT MANAGER
	300104 SENIOR PROFESSIONAL
	300105 GRAPHICS PROFESSIONAL
	300106 STAFF PROFESSIONAL
	300107 JUNIOR PROFESSIONAL
	300108 ENVIRONMENTAL TECHNICIAN
	300109 TECHNICIAN
	300110 CONSTRUCTION SUPERINTENDENT
	300111 INSPECTOR (CONSTRUCTION)
	300112 ADMINISTRATIVE:/CLERICAL
3002	MATERIALS AND OTHER COSTS.
3002	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.
3003	TRAVEL.
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER. SEE CLAUSE H.11.
3004	FEE.
3004	FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A COST PLUS FIXED
	FEE (CPFF) BASIS. A FIXED FEE BETWEEN (b) (4) SHALL BE
	NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF TASK ORDER.
	NEGOTIATED AND BET FORTH IN EACH INDIVIDUAL CERT TASK ORDER.

DAHA90-02-D-0012

HOURLY RATE

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 3 - 01 JUL 05 THROUGH 30 JUN 06

(b) (4)			
	300113	Project Manager	(b) (4)
	300114	Senior Professional	(3) (3)
	300115	Staff Professional	
	300116	Administrative/Clerical	
(b) (4)			
	300117	Project Manager	(b) (4)
	300116	Senior Protessional	
	300119	Graphics Professional	
	300120	Staff Professional	
	300121	Junior Professional	
	300122	Environmental Technician	
	300123	Technician	
	300124	Construction Superintendent	
	300125	Inspector (Construction)	
	300126	Administrative/Clerical	
(h) (1)			
(D) (T)	200102		
	300127	Project Manager	(b) (4)
	300128	Senior Professional	
	300129	Graphics Professional	
	300130	Staff Professional	
	300131	Junior Professional	
	300132	Environmental Technician	
	300133	Technician	
	300134	Construction Superintendent	
	300135	Inspector (Construction)	
	300136	Administrative/Clerical	
(b) (1)			
(D) (4)	300137	Project Manager	(b) (1)
	300137	Senior Professional	(D) (4)
	300130	Graphics Professional	
	300139	Staff Professional	
	300140	Junior Professional	
	300141	Environmental Technician	
	300142	Technician	
		rechnician Administrative/Clerical	
	300144	Administrative/Cierical	

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 4 - 01 JUL 06 THROUGH 30 JUN 07

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

4001 ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

	:	HOURLY RATE
	400101 PROGRAM DIRECTOR	(h) (1)
	400102 PROGRAM MANAGER	(D) (4)
	400103 PROJECT MANAGER	
	400104 SENIOR PROFESSIONAL	
	400105 GRAPHICS PROFESSIONAL	
	400106 STAFF PROFESSIONAL	
	400107 JUNIOR PROFESSIONAL	
	400108 ENVIRONMENTAL TECHNICIAN	
	400109 TECHNICIAN	
	400110 CONSTRUCTION SUPERINTENDENT	
	400111 INSPECTOR (CONSTRUCTION)	
	400112 ADMINISTRATIVE/CLERICAL	
4002	MATERIALS AND OTHER COSTS.	
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.	
4003	TRAVEL.	
	TO DE SET FORTH IN EACH INDIVIDUAL TASK ORDER. SEE C	CLAUSE H.11.
4004	FEE.	
1001	FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A COST	PLUS FIXED
		L BE
	NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF TASK	
	SEE CLAUSE H.16.	. CIDDII.

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND KATES

OPTION PERIOD 4 - 01 JUL 06 THROUGH 30 JUN 07

(b) (4)			
	400113	Project Manager	(4)
	400114	Senior Professional	(')
	400115	Staff Professional	
	400116	Administrative/Clerical	
(b) (4)	100117		<i>(</i>
	400117	Project Manager	(4)
	400118	Senior Professional	
	400119	Graphics Professional	
	400120	Staff Professional	
	400121	Junior Professional	
	400122	Environmental Technician	
	400123	Technician	
	400124	Construction Superintendent	
	400125	Inspector (Construction)	
	400126	Administrative/Clerical	
(b) (4)			
(D)	400127	Project Manager	(1)
	400128	Senior Professional	(7)
	400129	Graphics Professional	
	400130	Staff Professional	
	400131	Junior Professional	
	400132	Environmental Technician	
	400133	Technician	
	400134	Construction Superintendent	
	400135	Inspector (Construction)	
	400136	Administrative/Clerical	
(b) (4)			
	400137	Project Manager (b)	(4)
	400138	Senior Professional	
	400139	Graphics Professional	
	100140	Staff Professional	
	400141	Junior Professional	
	400142	Environmental Technician	
	400143	Technician	
	400144	Administrative/Clerical	

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 5 - 01 JUL 07 THROUGH 30 JUN 08

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

5001

ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

	HOURLY RATE
500101 PROGRAM DIRECTOR	(h) (4)
500102 PROGRAM MANACER	(D) (T)
500103 PROJECT MANAGER	
500104 SENIOR PROFESSIONAL	
500105 GRAPHICS PROFESSIONAL	
500106 STAFF PROFESSIONAL	
500107 JUNIOR PROFESSIONAL	
500108 ENVIRONMENTAL TECHNICIAN	
500109 TECHNICIAN	
500110 CONSTRUCTION SUPERINTENDENT	
500111 INSPECTOR (CONSTRUCTION)	
500112 ADMINISTRATIVE/CLERICAL	
FAAA	
5002 MATERIALS AND OTHER COSTS.	DED
TO BE SET FORTH IN EACH INDIVIDUAL TASK OR	DER.
5003 TRAVEL.	
TO BE SET FORTH IN EACH INDIVIDUAL TASK OR	DER. SEE CLAUSE H.11.
5004 FEE.	
FEE SHALL BE APPLIED TO TASK ORDERS PRICED	ON A COST PLUS FIXED
FEE (CPFF) BASIS. A FIXED FEE BETWEEN (b)	SHALL BE
NEGOTIATED AND SET FORTH IN EACH INDIVIDUA	
SEE CLAUSE H.16.	

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 5 - 01 JUL 07 THROUGH 30 JUN 08

(b) (4)			
	500113	Project Manager	(b) (4)
	500114	Senior Professional	
	500115	Staff Professional	
	500116	Administrative/Clerical	
(h) (1)			
(D) (4)	500117		(1) (4)
		Project Managor	(b) (4)
	500118	Senior Professional	
	500119	Graphics Professional	
	500120	Staff Professional	
	500121	Junior Professional	
	500122	Environmental Technician	
	500123	Technician	
	500124	Construction Superintendent	
	500125	Inspector (Construction)	
	500126	Administrative/Clerical	
(h) (1)			
(D) (4)	500107	D	
	500127	Project Manager	(b) (4)
	500128	Senior Professional	
	500129	Graphics Professional	
	500130	Staff Professional	
	500131	Junior Professional	
	500132	Environmental Technician	
	500133	Technician	
	500134	Construction Superintendent	
	500135	Inspector (Construction)	
	500136	Administrative/Clerical	
(b) (4)			
(D)	500137	Project Manager	(b) (1)
	500138	Senior Professional	(D) (4)
	500130	Graphics Professional	
	500139	Staff Professional	
	500140	Junior Professional	
	500142	Environmental Technician	
	500143	Technician	
	500144	Administrative/Clerical	

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 6 - 01 JUL 08 THROUGH 30 JUN 09

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LARGE CATEGORIES AND RATES SET FORTH IN THIS SECTION.

			HOURLY RATE
	600101	PROCRAM DIRECTOR	(b) (4)
	600102	PROGRAM MANAGER	(\mathbf{D})
	600103	PROJECT MANAGER	
	600104	SENIOR PROFESSIONAL	
	600105	GRAPHICS PROFESSIONAL	
	600106	STAFF PROFESSIONAL	
	600107	JUNIOR PROFESSIONAL	
	600108	ENVIRONMENTAL TECHNICIAN	
	600109	TECHNICIAN	
	600110	CONSTRUCTION SUPERINTENDENT	
	600111	INSPECTOR (CONSTRUCTION)	
	600112	ADM1NISTRATIVE/CLERICAL	
6002	ΜΑΨΕΩΤΔΙ.ς ΑΝ	ID OTHER COSTS.	
0002	·	ORTH IN EACH INDIVIDUAL TASK ORDER.	
6003	TRAVEL.		
0005		ORTH IN EACH INDIVIDUAL TASK ORDER. SEE	CLAUSE H 11
			CERTODE II.II.
6004	FEE.		
0001		APPLIED TO TASK ORDERS PRICED ON A COST	PLUS FIXED
	FEE (CPFF) B		LL BE
	, - ,	ND SET FORTH IN EACH INDIVIDUAL CPFF TAS	
	SEE CLAUSE H		IN ONDER.

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 6 - 01 JUL 08 THROUGH 30 JUN 09

(b) (4)			
	600113	Project Manager	(b) (1)
	600114	Senior Professional	(D) (4)
	600115	Staff Professional	
	600116	Administrative/Clerical	
	_		
(b) (4)			
\	600117	Project Manager	(b) (4)
	600118	Senior Professional	(/ (/
	600119	Graphics Professional	
	600120	Staff Professional	
	600121	Junior Professional	
	600122	Environmental Technician	
	600123	Technician	
	600124	Construction Superintendent	
	600125	Inspector (Construction)	
	600126	Administrative/Clerical	
/l ₂			
(D) (4)		Project Manager	(b) (4)
	600128	Senior Professional	(D) (4)
	600129		
	600129	Graphics Professional Staff Professional	
	600130	Junior Professional	
	600132	Environmental Technician	
	600133	Technician	
	600134	Construction Superintendent	
	600135	Inspector (Construction)	
	600136	Administrative/Clerical	
(b) (4)			
(D)	600137	Project Manager	(h) (1)
	600138	Senior Professional	(D) (4)
	600139	Graphics Professional	
	600140	Staff Professional	
	600141	Junior Professional	
	600142	Environmental Technician	
	600143	Technician	
	600143	Administrative/Clerical	
	000111	riamitint of tact voy of of four	

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 7 - 01 JUL 09 THROUGH 30 JUN 10

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

7001 ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

	700101 PROGRAM DIRECTOR 700102 PROGRAM MANAGER 700103 PROJECT MANAGER 700104 SENIOR PROFESSIONAL 700105 GRAPHICS PROFESSIONAL 700106 STAFF PROFESSIONAL 700107 JUNIOR PROFESSIONAL 700108 ENVIRONMENTAL TECHNICIAN 700109 TECHNICIAN 700110 CONSTRUCTION SUPERINTENDENT 700111 INSPECTOR (CONSTRUCTION) 700112 ADMINISTRATIVE/CLERICAL	o) (4)
7002	MATERIALS AND OTHER COSTS. TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.	
7003	TRAVEL. TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER. SEE CLAUS	SE H.11.
7004	FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A COST PLUS FEE (CPFF) BASIS. A FIXED FEE BETWEEN (b) (4) SHALL BE NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF TASK ORD SEE CLAUSE H.16.	Ξ,

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 7 - 01 JUL 09 THROUGH 30 JUN 10

(b) (4)		
	700113	Project Manager (b) (A)
	700114	Senior Professional
	700115	Staff Professional
	700116	Administrative/Clerical
(1) (4)		
(b) (4)	700117	Project Manager (b) (1)
	700117	Senior Professional
	700119	
	700113	Graphics Professional Staff Professional
	700121	Junior Professional
	700122	Environmental Technician
	700123	Technician
	700123	
	700124	Construction Superintendent
	700125	Inspector (Construction)
	700120	Administrative/Clerical
(b) (4)		
\	700127	Project Manager (6)
	700128	Senior Professional
	700129	Graphics Professional
	700130	Staff Professional
	700131	Junior Professional
	700132	Environmental Technician
	700133	Technician
	700134	Construction Superintendent
	700135	Inspector (Construction)
	700136	Administrative/Clerical
/1 \ / 4\		
(b) (4)		(b) (4)
	700138	Project Manager Senior Professional
	700139	Graphics Professional
	700140	Staff Professional
	700141	Junior Professional
	700142	Environmental Technician
	700143	Technician
	700144	Administrative/Clerical

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 8 - 01 JUL 10 THROUGH 30 JUN 11

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

0001

ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

		HOURLY	RATE
	800101 PROGRAM DIRECTOR	(h)	(4)
	800102 PROGRAM MANAGER		<i>,</i> (¬,
	800103 PROJECT MANAGER		
	800104 SENIOR PROFESSIONAL		
	800105 GRAPHICS PROFESSIONAL		
	800106 STAFF PROFESSIONAL		
	300107 JUNIOR PROFESSIONAL		
	800108 ENVIRONMENTAL TECHNICIAN		
	800109 TECHNICIAN		
	800110 CONSTRUCTION SUPERINTENDENT		
	800111 INSPECTOR (CONSTRUCTION)		
	800112 ADMINISTRATIVE/CLERICAL		
8002	MATERIALS AND OTHER COSTS.		
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.		
8003	TRAVEL.		
0000	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER. SEE	CLAUSE	н.11.
8004	FEE.		
	FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A COS	T PLUS F	IXED
	FEE (CPFF) BASIS. A FIXED FEE BETWEEN(b)(4)	ALL BE	
	NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF TA	SK ORDER	
	SEE CLAUSE H.16.		

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 8 - 01 JUL 10 THROUGH 30 JUN 11

(b) (4)		
	800113	Project Manager (b) (1)
	800114	Senior Professional
	800115	Staff Professional
	800116	Administrative/Clerical
	_	
(b) (4)	800117	
	800117	Project Manager (b) (4)
	800118	Senior Professional
	800119	Graphics Professional
		Staff Professional
	800121	Junior Professional
	800122	Environmental Technician
	800123	Technician
	800124	Construction Superintendent
	800125	Inspector (Construction)
	800126	Administrative/Clerical
(b) (4)		
	800127	Project Manager (h) (4)
	800128	Senior Professional
	800129	Graphics Professional
	800130	Staff Professional
	800131	Junior Professional
	800132	Environmental Technician
	800133	Technician
	800134	Construction Superintendent
	800135	Inspector (Construction)
	800136	Administrative/Clerical
/I- \		
(D) (4)		
	000137	Project Manager (b) (4)
	800138	Senior Professional
	800139	Graphics Professional
	800140	Staff Professional
	800141	Junior Professional
	800142	Environmental Technician
	800143	Technician
	800144	Administrative/Clerical

SUPPLIES OR SERVICES AND PRICE

EARTH TECH, INC.

OPTION PERIOD 9 - 01 JUL 11 THROUGH 30 JUN 12

SEE CLAUSE H.16.

THE CONTRACTOR SHALL PROVIDE ALL PLANT, LABOR, EQUIPMENT, MATERIALS, AND TRANSPORTATION NECESSARY TO PERFORM ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES AT VARIOUS LOCATIONS THROUGHOUT THE UNITED STATES AND ITS TERRITORIES, IN ACCORDANCE WITH THE ATTACHED STATEMENT OF WORK DATED DECEMBER 1999 AND IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

9001 ALL SERVICES SHALL BE ACCOMPLISHED UTILIZING THE LABOR CATEGORIES AND RATES SET FORTH IN THIS SECTION.

		HOURLI KAIL
	900101 PROGRAM DIRECTOR	(b) (1)
	900102 PROGRAM MANAGER	(D) (4)
	900103 PROJECT MANAGER	() ()
	900104 SENIOR PROFESSIONAL	
	900105 GRAPHICS PROFESSIONAL	
	900106 STAFF PROFESSIONAL	
	900107 JUNIOR PROFESSIONAL	
	900108 ENVIRONMENTAL TECHNICIAN	
	900109 TECHNICIAN	
	900110 CONSTRUCTION SUPERINTENDENT	
	900111 INSPECTOR (CONSTRUCTION)	
	900112 ADMINISTRATIVE/CLERICAL	
9002	MATERIALS AND OTHER COSTS.	
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER.	
9003	TRAVEL.	
	TO BE SET FORTH IN EACH INDIVIDUAL TASK ORDER. S	EE CLAUSE H.11.
0004	PDF	
9004	FEE.	

FEE SHALL BE APPLIED TO TASK ORDERS PRICED ON A COST PLUS FIXED

NEGOTIATED AND SET FORTH IN EACH INDIVIDUAL CPFF TASK ORDER.

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FEE (CPFF) BASIS. A FIXED FEE BETWEEN (b) (4)

SHALL BE

HOURLY RATE

SUPPLIES OR SERVICES AND PRICE

SUBCONTRACTOR LABOR CATEGORIES AND RATES

OPTION PERIOD 9 - 01 JUL 11 THROUGH 30 JUN 12

(b) (4)			
	900113	Project Manager	o) (1) (A)
	900114	Senior Professional	
	900115	Staff Professional	
	900116	Administrative/Ulerical	
(b) (6)			
(D)	900117	Project Manager	h) (1)
	900118	Senior Professional	D) (4)
	900119	Graphics Professional	
	900120	Staff Professional	
	900121	Junior Professional	
	900122	Environmental Technician	
	900123	Technician	
	900124	Construction Superintendent	
	900125	Inspector (Construction)	
	900126	Administrative/Ulerical	
(1) (0)		_	
(b) (6)		_	
	900127	Project Manager	(b) (4)
	900128	Senior Professional	
	900129	Graphics Professional	
	900130	Staff Professional	
	900131	Junior Professional	
	900132	Environmental Technician	
	900133	Technician	
	900134	Construction Superintendent	
	900135	Inspector (Construction)	
	900136	Administrative/Clerical	
(b) (4)			
	900137	Project Manager	h) (4)
	900138	Senior Professional	D) (¬)
	900139	Graphics Professional	
	200140	Staff Professional	
	900141	Junior Professional	
	900142	Environmental Technician	
	900143	Technician	
	900144	Administrative/Clerical	

SECTION C DESCRIPTION/SPECIFICATION/STATEMENT OF WORK

SUMMARY

The contractor shall provide support on a task order basis for interdisciplinary environmental investigations and related planning, scientific, and management studies for the Air National Guard's Environmental Program within the United States, its territories and locations overseas. The contractor snall provide support to the Army National Guard and to other Department of Defense (DoD) and non-DoD federal agencies as specified in each individual task order.

The contractor shall conduct Work under this contract with a primary emphasis on assisting the Air National Guard (ANG) in compliance with environmental laws and regulations. The foregoing may be in any or all, but not limited to, the areas of economics, history, historical architecture and construction, air and water quality, hydraulics and hydrology, geology and health and safety.

This contract is intended to provide the ANG with all the professional and technical services required for environmental work. The emphasis of this contract will be to identify new, advanced, conceivable and/or innovative technologies or ideas that will have a great potential of success, superior performance and/or significant cost savings in remediation of multi-media environmental pollution problems at ANG installations.

C.1 SCOPE

a. ENVIRONMENTAL RESTORATION PROGRAM

The Air National Guard has been engaged in the Environmental Restoration Program to identify the locations and contents of past disposal sites and to eliminate hazards in an environmentally responsible manner.

Depending on the scope of work described in any individual task order, the contractor shall conduct appropriate field surveys, site visits, and interviews, and shall prepare required project plans, conduct literature searches, execute suitable studies and prepare reports, perform site monitoring and hazard investigations, site mitigation, interim remedial actions, final remedial actions and laboratory analyses.

Whenever these technologies or ideas are approved by the ANG for the remediation of hazardous waste sites, the contractor shall research and develop, if necessary, prototype bench scale, and/or pilot-scale systems including R&D testing procedures/plans to test various new conceivable, advanced and/or innovative short-term and long-term remediation technologies. These technologies may include, but not necessarily be limited to bioenzematic digestion/degradation of selected persistent hazardous organic substances, in-situ vitrification/fixation, ozone/ultraviolet irradiation possibly using more intensive UV sources, such as UV lasers, sequencing reactors for better process control, ceramic-fiber filters for hazardous waste incinerators, polymer foams for suppressing fugitive emissions of hazardous substances during staging period, non-toxic polymer fixers to retard contaminant migration in soil and/or groundwater media.

Tasks in the area of military installation restoration shall involve preliminary assessments of potential hazardous sites, site investigations, extensive field work, work and project management plans, feasibility studies, risk assessments, remedial investigations, remedial design, and removal and remedial actions.

b. ENVIRONMENTAL QUALITY PROGRAMS

These programs meet the requirements of federal and state environmental laws affecting current operations at Air National Cuard facilities. The ANC has initiated various activities to meet these requirements, including assessments of compliance activities related to meeting the requirements of the Resource Conservation and Recovery Act (RCRA). The contractor shall be required to accomplish environmental assessments and are environmental impact statements on factors such as noise contours from aircraft operations. Other tasks include pollution prevention program studies, solid/hazardous waste management plans, air and water quality studies and analysis, historical and archeological inventories and preservation plans.

SECTION C DESCRIPTION/SPECIFICATION/STATEMENT OF WORK

c. ENVIRONMENTAL PLANNING PROGRAMS

The Air National Guard is required to provide environmental documentation, pursuant to the National Environmental Policy Act (NEPA) and other laws and regulations, for its major federal activities. The contractor shall provide the professional and technical support necessary to accomplish a variety of tasks such as land use management plans, wetlands inventories, and environmental baseline surveys.

d. NATURAL AND CULTURAL RESOURCES PROGRAMS

The Air National Guard is responsible for managing its land, water and cultural resources. The contractor shall provide professional and technical support necessary to accomplish biological surveys and various plans, such as cultural resources management, integrated cultural resources management and bird aircraft strike hazard plans.

e. REQUIRED TECHNICAL EXPERTISE

The tasks shall require a broad range of technical expertise in a variety of disciplines such as industrial hygiene; toxicology, chemistry; hydrology; meteorology; geology, land use planning; community impact management and development; quality assurance; environmental, chemical, civil, mechanical and electrical engineering; air and noise quality; health and safety; sociology; economics; land use; wildlife biology; archeology; and others.

The activities above represent examples of the programs and types of tasks anticipated and are, therefore, not intended to be all-inclusive of the broad array of support that can fall within the general scope of work requirements for this contract.

Specific project tasks in support of this contract shall be determined by the ANG's response to specific project needs and delineated by individual task orders issued under this contract. All tasks shall be performed in compliance with applicable agency guidance.

f. AUTHORITY

All work under this contract shall be carried out in accordance with, but not limited to, the documents, federal, state, and local regulations and the documents cited in the Statement of Work, Appendix A, Document List.

Any of the work described above related to ANG activities may occur throughout the United States, its territories and locations overseas. The Contractor shall coordinate with NGB organizations, and local, state and federal agencies. The ANG is the lead contact for technical matters and the Contracting Officer (NGB-AQE) is the responsible party for contractual aspects. The Contractor shall take action relating to this contract exclusively from the Contracting Officer.

C.2 REPORTS AND OTHER DELIVERABLES

- a. Recycled paper shall be used, when economically feasible, at every available opportunity for reports and other deliverables.
 - b. Draft reports and other deliverables shall be double-spaced and two-sided.
- c. The print size for all text and tables shall not exceed 12-point font. Exceptions to the above requirements shall be set forth in each individual task order.

C.3 GOVERNMENT ESTIMATE

Precautions shall be taken and every effort shall be made by the contractor to prevent public disclosure of any information, especially Government Cost Estimates made available to the contractor during the performance of this contract. All cost data contained in the design documents for remedial design actions shall be treated as privileged information and designated as "For Official Use Only" until such time as bids are publicly opened.

SECTION C DESCRIPTION/SPECIFICATION/STATEMENT OF WORK

C.4 MISCELLANEOUS

All work must be accomplished in strict accordance with the contract clauses, the Statement of Work for Environmental Engineering/Professional and Technical Support Services dated December 1999, the task-specific statement of work, and the individual task order, and addenda and modifications thereto.

END OF SECTION C

SECTION E INSPECTION AND ACCEPTANCE

- E.l 52.246-4 INSPECTION OF SERVICES--FIXED-PRICE (AUG 1996) (Reference 46.304)
- E.2 52.246-5 INSPECTION OF SERVICES-COST-REIMBURSEMENT (APR 1984) (Reference 46.305)
- 52.246-13 INSPECTION--DISMANTLING, DEMOLITION, OR REMOVAL OF IMPROVEMENTS E.3 (AUG 1996)
 - (Reference 46.313)
- 52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996) E.4 (Reference 46.312)
- E.5 INSPECTION AND ACCEPTANCE

The performance by the Contractor and the quality of the work delivered, including documentation or written material in support thereof, shall be subject to inspection, review and acceptance by the Contracting Officer or their duly authorized representative, the Contracting Officer's Representative (COR), pursuant to the various clauses entitled, "Inspection of Services". In this respect the decision of the COR relating to performance and quality of deliverables will be considered in the final certification for payment for each deliverable or completed work.

END OF SECTION E

SECTION F DELIVERIES OR PERFORMANCE

- F.l 52.211-11 LIQUIDATED DAMAGES--SUPPLIES, SERVICES, OR RESEARCH AND DEVELOPMENT (SEPT 2000)
 - (Reference 11.503(a))
- 52.211-12 LIQUIDATED DAMAGES -- CONSTRUCTION (SEPT 2000) F.2 (Reference 11.503(b))
- F.3 52.211-12 I LIQUIDATED DAMAGES -- CONSTRUCTION (SEPT 2000) (Reference 11.503(b))
- F.4 LIQUIDATED DAMAGES - TASK ORDER

Reference FAR clauses 52.211-11 and 52.211-12, Liquidated Damages. If deemed necessary by the government, liquidated damages to be assessed the contractor for each day of delay shall be set forth in the individual task order.

- F.5 52.211-13 TIME EXTENSIONS (SEPT 2000) (Reference 11.503(c))
- 52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984) F.6 (Reference 11.703(c))
- F.7 52.242-14 SUSPENSION OF WORK (APR 1984) (Reference 42.1305(a))
- F.8 52.242-15 STOP-WORK ORDER (AUG 1989) (Reference 42.1305(b)
- F.9 52.242-15 STOP-WORK ORDER--ALTERNATE I (APR 1984) (Reference 42.1305(b))
- 52.247-34 F.O.B. DESTINATION (NOV 1991) (Reference 47.303-6(c))
- F.11 LEGAL HOLIDAYS

The Government recognizes the following Legal Holidays established by Federal

New Year's Day - 1 January Martin Luther King Day - Third Monday in January President's Day - Third Monday in February Memorial Day - Last Monday in May Independence Day - 4 July Labor Day - First Monday in September Columbus Day - Second Monday in October Veteran's Day - 11 November Thanksgiving Day - Fourth Thursday in November Christmas Day - 25 December

F.12 PLACE OF PERFORMANCE

Services shall be performed for the Air National Guard at various locations throughout the United States, its territories and locations overseas. The exact location of the project shall be set forth in each individual task order.

F.13 PERIOD OF PERFORMANCE

The period of performance or completion shall be as specified in individual task orders assigned under this contract. All work and services required under this contract shall begin on the date of contract award and continue in effect for a base period of approximately 12 months, unless extended pursuant to FAR 52.217-9, "Option to Extend the Term of the Contract". If all options are exercised, the contract shall not exceed 120 months.

SECTION F DELIVERIES OR PERFORMANCE

F.14 PERFORMANCE AND DELIVERY OF REMEDIAL DESIGN SUBMITTAL DOCUMENTS

- Delivery of Remedial Design submittal documents shall be made as specified in the Statement of Work in accordance with established design schedule. Government authority to review, inspect, accept and approve is vested only in the Contracting Officer.
- Established Design Schedule, Schedule of Government Options, Review of Submittals, Contract Document Development Meeting, Inspection, and Performance and Delivery of Design Submittal Documents will be specified in each individual task order.

F.15 SUBMITTALS

Unless otherwise specified in each individual task order, all Material Submittals, Project Schedules, Progress Reports and other reports, deliverables and submittals, shall be delivered F.O.B Destination to:

Air National Guard ANG/CEV 3500 Fetchet Avenue Andrews AFB, DC 20331-5157

END OF SECTION F

SECTION G CONTRACT ADMINISTRATION DATA

CONTRACT ADMINISTRATION G.1

- In no event shall any understanding or agreement, contract modification, change order, or other matter deviating from the original terms and conditions of this contract between the Contractor and any other person other than the Contracting Officer, be effective or binding upon the Government. All such actions must be formalized by a proper contractual document executed by the Contracting Officer.
- All correspondence pertaining to the contract shall be sent to the following address:

National Guard Bureau Environmental Acquisitions Division (NGB-AQE) 1411 Jefferson Davis Highway, Suite 8200 Arlington, VA 22202-3231

(703) 607-1172 FAX NUMBER: PHONE NUMBER: (703) 607-1172

DSN Prefix: 327

SUBMISSION OF INVOICES G. 2

- Payment shall be made after receipt and acceptance of deliverables as identified in each task order. For construction, payment will be made based on contracting officer approval of the estimated amount and value of work completed.
 - Invoices shall be submitted (original and one copy) to:

National Guard Bureau Environmental Acquisitions Division (NGB-AQE) 1411 Jefferson Davis Hwy, Suite 8200 Arlington, VA 22202-3231

- (c) Each invoice shall contain the items listed in FAR 52.232-25, Prompt Payment, Sub-paragraphs (a)(3)(i) through (ix), including the full contract number and the task order number. The invoice shall clearly indicate the task(s) and/or Contract Line Item(s) being billed or, for construction, the percent of completion for which payment is requested.
- Invoices shall not be submitted and payments shall not be made more frequently than once per month.

REMITTANCE ADDRESS G.3

Reference FAR clause 52.232-33, Payment by Electronic Funds Transfer (CCR). Payments under this contract shall be made by the Government by Electronic Funds Transfer (EFT) method. It is the contractor's responsibility to register with the Central Contractor Registration (CCR) to enable EFT payments.

SECTION G CONTRACT ADMINISTRATION DATA

CONTRACTOR'S CONTRACT ADMINISTRATION G.4

The Contractor's contract administration will be performed by the individual named below at the address indicated. Notification of any change in the designated contact shall be provided to the Contract Administration Office above at least five (5) workdays prior to the effective date of the change.

Name:

Eastern Federal Contracts Title:

1420 King Street, Suite 600 Alexandria, VA 22314 Address:

Telephone: (703) 549-8728 Fax: (703) 549-9134

Email:

END OF SECTION G

H.1 CONTRACT CLAUSES

This contract is very broad in scope, consisting of both professional, technical support and construction services. Against this contract RFPs, IFBs and 2-Step Sealed Bids will be solicited and firm-fixed price and cost reimbursement (CPFF) task orders will be awarded. For this reason, the contract contains all clauses that are necessary and applicable, not only to the basic IDIQ, but also to the various kinds of work contemplated and the types of task orders to be issued. Certain clauses requiring fill-in and project or site specific information will be included in the individual task order when applicable.

H.2 EXERCISE OF OPTIONS

If a need arises for the services beyond the Base Contract Period, the government may elect to extend the term of the contract by exercising its unilateral right to do so. When exercising such right pursuant to clause 52.217-9, Option to Extend the Term of the Contract (Mar 2000)", the Government will exercise the options identified in Section B as follows:

Option	Year	1	01	Jul	03	-	30	Jun	04
Option	Year	2	01	Jul	04	_	30	Jun	05
Option	Year	3	01	Jul	05	_	30	Jun	06
Option	Year	4	01	Jul	06	_	30	Jun	07
Option	Year	5	01	Jul	07	_	30	Jun	80
Option	Year	6	01	Jul	80	_	30	Jun	09
Option	Year	7	01	Jul	09	_	30	Jun	10
Option	Year	8	01	Jul	10	_	30	Jun	11
Option	Year	9	01	Jul	11	_	30	Jun	12

H.3 CONTRACTING OFFICER'S REPRESENTATIVE (COR)

- (a) The COR is authorized to perform the following activities:
 - (1) Interpret the Statement of Work of the contract.
- (2) Direct the performance of contractor effort within the scope of the Statement of Work.
 - (3) Accept deliverable items required by the contract.
 - (4) Control all Government technical interfaces with the

contractor.

- (5) Review and investigate any delays of proposed contract changes and make recommendations to the Contracting Officer regarding corrective action.
- (b) The COR is not a Contracting Officer. The COR is not authorized to modify any of the terms of the contract nor to authorize expenditures beyond the funded amount of the contract. The COR is authorized to perform the functions listed above only insofar as those functions are exercised in a manner consistent with the Statement of Work and terms and conditions of the contract. The limitations listed above also apply to any task orders issued under this contract.
- (c) The name and address of the COR will be set forth in each individual task order.

H.4 OPTIONAL TASKS-OPTIONAL PHASES

The Government may require performance of work identified in the task order schedules as "Optional Task" or Optional Phase". The cost of the optional work shall be negotiated with other work items and may or may not be funded at time of issuance of the task order. The contracting officer may unilaterally direct the contractor to proceed with optional work by notice to the contractor at anytime prior to completion of the task order.

H.5 PLACEMENT OF TASK ORDERS

- (a) Under this Indefinite-Delivery Indefinite-Quantity (IDIQ) contract, task orders may or may not be competed among the IDIQ contract holders. Many of the services and the performance-based scopes of work to be solicited under these contracts are generally not suitable for competition. The exception will be certain restoration and remediation services. NGB experience and historical data reveal these services to be appropriate for sealed bidding and two-step sealed bidding as well as negotiated procurement. In determining whether to compete a task order, the Government will consider the scope, location and estimated cost of the project, the contract holder's experience and past performance with work similar to that being solicited and the potential bid and proposal preparation costs to the contractor.
- (b) The Government does not expect to compete task orders for work at the Massachusetts Military Reservation.

H.6 TASK ORDER PROCEDURES

Under this Indefinite-Delivery Indefinite-Quantity contract, When the Government has a requirement for work to be performed, the Contracting Officer will forward a Request for Proposal (RFP), an Invitation for Bid (Sealed Bid) (IFB), or a Two-Step Sealed Bid to one, more than one, or to all IDIQ awardees. The following task order procedures shall apply:

- (a) The solicitation shall consist of:
 - (1) Request for Proposal/Invitation for Bid.
 - (\underline{a}) description of the work to be performed, or the

services required,

- (\underline{b}) project location(s), or place of performance
- (\underline{c}) required performance schedule, and
- $(\overline{\underline{d}})$ any other information which may be of assistance to

the offeror in preparing the proposal/bid, such as specifications, drawings, reports, etc.

- ($\underline{\underline{e}})$ $\,$ the date, or date and hour, by which the proposal/bid must be received.
 - (2) Two-Step Sealed Bid.
 - (\underline{a}) description of the services required,
 - $(\underline{\overline{b}})$ a statement of intent to use the two-step method,
 - (c) the requirements of the technical proposal,
- $(\underline{\overline{d}})$ the evaluation criteria, to include all factors and any significant subfactors,
- (\underline{e}) $\,$ a statement that the technical proposals shall not include prices or pricing information,
 - (f) the date, or date and hour, by which the proposal

must be received,

- $(\underline{g}) \qquad \text{a statement that in Step 2, only bids determined to} \\ \text{be acceptable, either initially or as a result of discussions, will be considered} \\ \text{for award, and each bid must be based on the bidder's own technical proposal} \\$
- $(\underline{h}) \qquad \text{a statement that offeror's should submit proposals} \\$ that are acceptable without additional explanation or information, and
- (\underline{i}) a statement that the Government may make a final determination regarding a proposal's acceptability solely on the basis of the proposal as submitted.
 - (b) Submission of Proposals and Bids:
- (1) Upon receipt of a solicitation, the Contractor shall prepare and furnish a proposal or bid within fourteen calendar days, unless otherwise specified by the Contracting Officer.
- (a) <u>Proposal</u>: An original and one copy of the proposal shall be submitted. The proposal shall conform to the requirements of the solicitation, and shall include the following when applicable:
- $(\underline{1})$ Direct labor. Labor categories proposed, number of hours per labor category with rationale for the mix and skill levels to be employed,
 - $(\underline{2})$ Other direct costs,

- (3) Travel, including number of trips, destination and length, per diem, and transportation costs for each,
 - $(\underline{4})$ proposed schedule of performance,
- $(\overline{\underline{5}})$ all subcontractor costs, supported by a breakout providing the detail required by $(\underline{1})$ through $(\underline{3})$ above. Subcontractor proposals shall indicate whether the subcontractor is a small business, small disadvantaged business, women-owned business, HUBZone small business or veteranowned small business.
 - (<u>6</u>) technical proposal
- (\underline{b}) <u>Sealed bid</u>: The bid should conform to the requirements of the IFB, and shall include:
 - $(\underline{1})$ Lump sum bid, unit price, phase or task price, etc. as required.
 - (c) Assignment and Award of Task Orders:
- (1) $\underline{\text{RFP}}$: Upon receipt of the proposal, the Contracting Officer will forward a copy of the proposal to the COR. A technical evaluation shall be performed by the COR and cost and/or price analysis shall be performed by the Contracting Officer. If the proposal is not fully acceptable as offered, the Contracting Officer shall initiate and conclude negotiations, as necessary. The offer that represents the best value to the Government, technical, management, past performance and price factors considered, shall receive the award.
- (2) $\underline{\text{IFB}}$: Upon receipt of bids, the Contracting Officer shall make award to the bidder whose bid, conforming to the IFB, is the most advantageous to the Government, considering only price and price-related factors. (3) 2-Step Sealed Bid:
- Step 1: Upon receipt of a Technical Proposal, the Government will convene a technical evaluation board to evaluate each proposal. Proposals will be evaluated for conformity with essential technical requirements and engineering and/or construction approach. Offerors whose proposals are found reasonably susceptible of being made acceptable, will be asked to submit additional clarifying or supplementing information and discussions may also be arranged for this purpose. All proposals found to be technically acceptable shall proceed to Step 2.
- Step 2: Upon receipt of bids, the Contracting Officer shall make award to the bidder whose bid conforms to the bidder's technical proposal and is the most advantageous to the Government, considering only price and price-related factors.
- (4) The Contracting Officer shall authorize the contractor to proceed with the task by issuing a signed Task Order, DD Form 1155. Task orders shall contain the following:
 - (\underline{a}) Task order number
 - (\underline{b}) Title of project
 - (c) Contract number
 - (d) Price Schedule with Task and/or Phase Breakout
 - (\underline{e}) Statement of Work
 - $(\underline{\overline{f}})$ Specifications, Drawings, Attachments
 - $(\underline{\underline{g}})$ Government furnished property and/or assistance
 - $(\underline{\overline{h}})$ Period of performance or completion date
 - (i) Name and telephone number of COR
- (5) Task orders may be issued for a single phase, a combination of phases, and may contain optional tasks, as required by the Government.
- (6) The Contractor is not authorized to commence task performance prior to issuance of the task order unless otherwise authorized by the Contracting Officer.
- (d) In the event issues pertaining to the proposed task (task order) cannot be resolved to the satisfaction of the Contracting Officer, the Contracting Officer reserves the right to withdraw the proposed task. In such event, the Contractor shall be notified, in writing, of the Contracting Officer's decision.

H.7 USE OF CONTRACT BY OTHERS

- (a) Task orders may be issued under this contract by the Air National Guard, and other DOD Contracting Officers acting within the limitations of their warrants.
- (b) Task Orders may be awarded under this contract by other federal agencies, or by the NGB for other federal agencies as interagency acquisitions under the Economy Act.
- (c) All Task Orders, and modifications thereto, awarded against this contract shall be coordinated through and approved by the National Guard Bureau, Procuring Contracting Officer, Environmental Acquisitions Division (NGB-AQE). Approval shall be obtained by the requesting agency Contracting Officer prior to initiation of request for proposal activities.
- $\mbox{(d)}$ $\,$ A User Surcharge will be assessed by the National Guard Bureau for use of this contract as follows:
- (1) Requestor negotiates and awards the Task Order 1% of Task Order Amount.
- (2) National Guard Bureau (NGB-AQE) negotiates and awards the Task Order $5\mbox{\%}$ of Task Order Amount.

H.8 REQUIRED INSURANCE

(a) Pursuant to the contract clause entitled "Insurance - Work on a Government Installation (JAN 1997)", FAR 52.228-5, the Contractor shall procure and maintain during the entire period of his performance under the contract the following minimum insurance:

TYPE AMOUNT

Comprehensive General Liability

Bodily Injury or Death:

Motor Vehicle Liability (for each motor
vehicle) Bodily Injury or Death:

Property Damage:

Worker's Compensation and
Employer's Liability:

\$500,000 per occurrence
\$200,000 per occurrence
\$20,000 per occurrence

- * Workers' Compensation and Employer's Liability: Contractor are required to comply with applicable Federal and State Workers' Compensation and occupational disease statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in states with exclusive or monopolistic funds that do not permit worker's compensation to be written by private carriers.
- (b) The Contractor agrees to insert the substance of this clause, including this paragraph, in all subcontracts hereunder.

H.9 BONDS

Reference FAR Part 28.

- (a) Bid Guarantee. A Bid Guarantee shall not be required for proposals submitted in response to solicitations for individual task orders.
- (b) Performance and Payment Bonds. Within 15 days after issuance of a task order under this contract, the contractor shall furnish to the Government a Performance Bond and a Payment Bond, each with good and sufficient surety or sureties acceptable to the Government; namely a Performance Bond (Standard Form 25) and a Payment Bond (Standard Form 25-A)
- (1) Performance Bond: The penal sum of the performance bond shall equal 100 percent of the contract price.

- (2) Payment Bond: The penal sum of the payment bond shall be -100 percent of the contract price if the contract (a) price is not more than $\frac{1}{5}$ 1 million.
- 40 percent of the contract price if the contract (b) price is more than \$1 million but not more than \$5 million; or \$2.5 million if the contract price is more than \$5 (C)

million.

(C) Additional Bond Security.

- When additional bond coverage is required and will be (1)furnished in whole or in part by the original surety, a Consent of Surety and Increase of Penalty (Standard 1415) shall be executed. If coverage will be furnished in whole or in part by a new surety, supplemental Payment and Performance Bonds will be required.
- (2) Additional bond security is required if (a) any surety upon any bond furnished with the task order becomes unacceptable to the Government, (b) any surety fails to furnish reports on its financial condition as required by the Government, or the task order price is increased so that the penal sum of any bond becomes inadequate in the opinion of the contracting officer.
- Legal Review of Bonds. Properly executed bonds and power of (d) attorney will be forwarded to the National Guard Bureau, Office of Chief Counsel, for legal sufficiency review and approval in accordance with AFARS 28.106-90. All bonds must receive approval, however, notice to proceed will not be withheld pending such approval.

SITE VISIT H.10

The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigation and Conditions Affecting the Work, are included in this contract. Site Visit particulars shall be included in Requests for Proposal for individual task orders. The contractor is urged and expected to inspect the site where the work will be performed.

TRAVEL REQUIREMENTS H.11

- (a) Site selections for travel will be indicated in the Statement of Work and the cost will be set forth in each individual Task Order. Travel costs may be cost-reimbursable, firm-fixed price or a combination of both. If costreimbursable, the estimated amounts shall not be exceeded unless authorized by the Contracting Officer. The costs for unauthorized travel will be neither allowed nor allocated to this contract.
- (b) Per diem and travel rates shall not exceed the amount authorized in the Joint Travel Regulation (JTR). Airfare shall be the prevailing rates for commercial airlines at tourist class. The most reasonable means of ground transportation, i.e., taxi, bus, car rental, when required, shall also be used.

H.12 DISSEMINATION OF INFORMATION

There shall be no dissemination or publication, except within and between the contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract, without prior written approval of the contracting officer.

H.13 LIMITATION ON USE, DUPLICATION, DISCLOSURE OF TECHNICAL DATA

Certain data which may be furnished by the Government to the contractor under this contract have been obtained by the government subject to restrictions upon disclosure. Such data or restricted portions are marked with an appropriate legend. The contractor shall abide by the restrictions appearing on such data in whole or in part without reproducing such.

H.14 RENEGOTIATION OF CONTRACTOR INDIRECT RATES

The Government reserves the right to reopen negotiations for the purpose of renegotiating the contractor's and/or subcontractor's indirect rates. Until a full and complete DCAA audit of the indirect rates is performed by the Defense Contract Audit Agency, the contractor's and/or subcontractor's indirect rates shall be as agreed to during negotiations. If the DCAA audit indicates a variance in the indirect rates from those negotiated, the contracting officer may reopen negotiations.

H.15 OTHER DIRECT COST (ODC) OVERHEAD FACTOR

Agreed to contract pricing includes an ODC Overhead Factor. The ODC Overhead Factor is intended to recover, for the contractor, incurred costs and expenses associated with miscellaneous, routine, expendable Other Direct Costs. This pricing methodology eliminates the pricing of such ODCs in individual cost proposals. Unique, high cost, project-specific Other Direct Costs will be identified and priced in individual cost proposals. A list of included/excluded representative items, although not all-inclusive, is attached. See Attachment 1, Office and Field Items - Included/Excluded - ODC Expendable Rate.

H.16 APPLICATION OF NEGOTIATED DIRECT AND INDIRECT RATES

As agreed upon by the contracting parties, the following application of direct and indirect rates shall apply to the computation of costs for all task orders issued under this contract.

Other Direct Costs and Indirect Costs:

Contractor	Negotiated Service Center Costs	ODC Overhead Included In Direct Labor
(b) (4)	None	(b) (4)
s(b) (4)		
(b) (4)	None	(b) (4)
(b) (4)	None	(b) (4)
(b) (4)	None	(b) (4)
(b) (4)	None	(D) (4)

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SECTION H SPECIAL CONTRACT REQUIREMENTS

Earth Tech, Inc. and team subcontractor Indirect Rates and Profit.

	Rate	ODCs	Travel	Subcontractor Costs	M&S Costs	Other
(b) (4)						
				-		
				_		
(b) (4)						
(b) (4) (b) (4)	0	-	-	-	-	

 ${\tt GRW}$ Engineers, Inc.: No markup on indirect costs.

Fee. Applicable only to CPFF Task orders. Fee within the range shown will be negotiated for each individual CPFF Task Order and applied to total actual costs.

	Contractor			Fee Range		
(b) (4)						

SECTION H SPECIAL CONTRACT REQUIREMENTS

H.17 SMALL BUSINESS SUBCONTRACTING PLAN

Reference FAR 52.219-9, Small Business Subcontracting Plan. Earth Tech, Inc. Small Business Subcontracting Plan dated 28 Nov 00, Revised 5 Sep 02, is incorporated by reference and is made a part of this contract. The approved Small Business Subcontracting Plan complies with the requirements outlined in FAR 19.704 and the National Guard Bureau's Small Business Subcontracting goals. The approved plan contains the following goals for planned subcontracting for each contract period:

a. A minimum of (b)(4) of total planned subcontracting or (b)(4) must be placed with small business conc b. At least (0)(4) or(b)(4) must be placed with small disadvantaged business c. At least must be placed with women-owned business concerns.

END OF SECTION H

May 18, 2012

I.1 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

http://www.acqnet.gov/far http://farsite.hill.af mil http://www.acq.osd mil/dp/dars/dfars.html

(End of clause)

I.2 52.202-1	DEFINITIONS (May 2001) (Reference 2.201)
I.3 52.202-1 I	DEFINITIONS (OCT 1995)ALTERNATE I (MAY 2001) (Reference 2.201)
I.4 52.203-3	GRATUITIES (APR 1984) (Reference 3.202)
I.5 52.203-5	COVENANT AGAINST CONTINGENT FEES (APR 1984) (Reference 3.404)
I.6 52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995) (Reference 3.503-2)
I.7 52.203-7	ANTI-KICKBACK PROCEDURES (JUL 1995) (Reference 3.502-3)
I.8 52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997) (Reference 3.104-9(a))
I.9 52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997) (Reference 3.104-9(b))
I.10 52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)(Reference 3.808 (b))
I.11 52.204-2	SECURITY REQUIREMENTS (AUG 1996) (Reference 4.404(a))
I.12 52.204-2 I	SECURITY REQUIREMENTS (AUG 1996)ALTEFNATE I (APR 1984) (Reference 4.404(b))
I.13 52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER (JUN 1996) (Reference 4.304)
I.14 52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995) (Reference 9.409(b))
I.15 52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEP 1990) (Reference 11.604(b))
I.16 52.214-26	AUDIT AND RECORDSSEALED BIDDING (OCT 1997) (Reference 14.201-7(a))
I.17 52.214-27	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATAMODIFICATIONSSEALED BIDDING (OCT 1997) (Reference 14.201-7(b))

I.18	52.214-28	SUBCONTRACTOR COST OR PRICING DATAMODIFICATIONSSEALED BIDDING (OCT 1997)(Reference 14.201-7(c))
I.19	52.214-29	ORDER OF PRECEDENCESEALED BIDDING (JAN 1986) (Reference 14.201-7(d))
I.20	52.215-2	AUDIT AND RECORDSNEGOTIATION (JUN 1999) (Reference 15.209(b))
I.21	52.215-8	ORDER OF PRECEDENCEUNIFORM CONTRACT FORMAT (OCT 1997) (Reference 15.209(h))
I.22	52.215-10	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (OCT 1997) (Reference $15.408(b)$)
I.23	52.215-12	SUBCONTRACTOR COST OR PRICING DATA (OCT 1997) (Reference 15.408(d))
I.24	52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS (DEC 1998) (Reference 15.408(g))
I.25	52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY (OCT 1997) (Reference 15.408(i))
I.26	52.215-18	REVERSION OR ADJSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS (OCT 1997)(Reference 15.408(j))
I.27	52.215-19	NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997) (Reference $15.408(k)$)
I.28	52.215-21	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATAMODIFICATIONS (OCT 1997) (Reference $15.408(m)$)
I.29	52.216-7	ALLOWABLE COST AND PAYMENT (MAR 2000) (Reference 16.307(a))
I.30	52.216-7 I	ALLOWABLE COST AND PAYMENTALTERNATE I (FEB 1997) (Reference 16.307(a)(2))
I.31	52.216-8	FIXED FEE (MAR 1997) (Reference 16.307(b))
I.32	52.216-9	FIXED FEECONSTRUCTION (MAR 1997) (Reference 16.307(c))
I.33	52.217-2	CANCELLATION UNDER MULTIYEAR CONTRACTS (OCT 1997) (Reference 17.109(a))
I.34	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUL 1996) (Reference 19.508(c))
I.35	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000) (Reference 19.708(a))
I.36	52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN (OCT 2000) (Reference 19.708(b)(1))
I.37	52.219-14	LIMITATIONS ON SUBCONTRACTING (DEC 1996) (Reference 19.508(e))
I.38	52.219-16	LIQUIDATED DAMAGES SUBCONTRACTING PLAN (JAN 1999) (Reference 19.708(b)(2))
I.39	52.219-25	SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAMDISADVANTAGED STATUS AND REPORTING (JAN 1999) (Reference 19.1204(b))

I.40	52.222-2	PAYMENT FOR OVERTIME PREMIUMS (JUL 1990) (Reference 22.103-5(b))
I.41	52.222-3	CONVICT LABOR (AUG 1996) (Reference 22.202)
I.42	52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS ACTOVERTIME COMPENSATION (SEPT 2000) (Reference 22.305)
I.43	52.222-6	DAVIS-BACON ACT (FEB 1995) (Reference 22.407(a))
I.44	52.222-7	WITHHOLDING OF FUNDS (FEB 1988) (Reference 22.407(a))
I.45	52.222-8	PAYROLLS AND BASIC RECORDS (FEB 1988) (Reference 22.407(a))
I.46	52.222-9	APPRENTICES AND TRAINEES (FEB 1988) (Reference 22.407(a))
I.47	52.222-10	COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988) (Reference 22.407(a))
I.48	52.222-11	SUBCONTRACTS (LABOR STANDARDS) (FEB 1988) (Reference 22.407(a))
I.49	52.222-12	CONTRACT TERMINATIONDEBARMENT (FEB 1988) (Reference 22.407(a)(7))
I.50	52.222-13	COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988) (Reference $22.407(a)(8)$)
I.51	52.222-14	DISPUTES CONCERNING LABOR STANDARDS (FEB 1988) (Reference 22.407(a)(9))
I.52	52.222-15	CERTIFICATION OF ELIGIBILITY (FEB 1988) (Reference 22.407(a))
I.53	52.222-16	APPROVAL OF WAGE RATES (FEB 1988) (Reference 22.407(b))
I.54	52.222-21	PROHIBITION OF SEGREGATED FACILITIES (FEB 1999) (Reference 22.810(a)(1))
I.55	52.222-26	EQUAL OPPORTUNITY (FEB 1999) (Reference 22.810(e))
I.56	52.222-27	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999) (Reference 22.810(f))
I.57	52.222-35	AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)(Reference 22.1308)(a)(1))
I.58	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998) (Reference 22.1408(a))
I.59	52.222-37	EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999) (Reference 22.1308(b))
I.60		(Reserved)

I.61	52.223-3	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN
1.01	32.223	1997) (Reference 23.303)
I.62	52.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998) (Reference 23.1005)
I.63	52.223-6	DRUG-FREE WORKPLACE (MAY 2001) (Reference 23.505(b))
I.64	52.223-10	WASTE REDUCTION PROGRAM (AUG 2000) (Reference 23.705)
I.65	52.225-6	TRADE AGREEMENTS CERTIFICATE (FEB 2000) (Reference 25.1101 (c)(2)) 52.225-5
I.66	52.225-10	BUY AMERICAN ACTCONSTRUCTION MATERIALS (FEB 2000) (Reference 25.1101(c)(1))
I.67	52.225-11	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2000) (Reference 25.1102 (c)(1))
I.68	52.226-1	UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000) (Reference 26.104)
1.69	52.227-4	PATENT INDEMNITYCONSTRUCTION CONTRACTS (APR 1984) Reference 27.203-5)
1.70	52.227-4 I	PATENT INDEMNITYCONSTRUCTION CONTRACTS (APR 1984)ALTERNATE I (APR 1984) Reference 27.203-5(a))
I.71	52.227-14	RIGHTS IN DATAGENERAL (JUN 1987) (Reference 27.409(a))
I.72	52.228-2	ADDITIONAL BOND SECURITY (OCT 1997) (Reference 28.106-4(a))
I.73	52.228-5	INSURANCEWORK ON A GOVERNMENT INSTALLATION (JAN 1997) (Reference 28.310)
I.74	52.228-11	PLEDGES OF ASSETS (FEB 1992) (Reference 28.203-6)
I.75	52.228-14	IRREVOCABLE LETTER OF CREDIT (DEC 1999) (Reference 28.204-4)
I.76	52.228-15	Performance and Payment BondsConstruction (JUL 2000) (Reference 28.102-3(a))
I.77	52.229-2	NORTH CAROLINA STATE AND LOCAL SALES AND USE TAX (APR 1984) (Reference 29.401-2)
I.78	52.229-3	FEDERAL, STATE, AND LOCAL TAXES (JAN 1991) (Reference 29.401-3)
I.79	52.229-5	TAXESCONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984) (Reference 29.401-5)
I.80	52.230-2	COST ACCOUNTING STANDARDS (APR 1998) (Reference 30.201-4(a))
I.81	52.230-3	DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES (APR 1998) (Reference 30.201-4(b))
I.82	52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS (NOV 1999) (Reference 30.201-4(d)(1))

I.83	52.232-5	PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997) (Reference 32.111(a)(5)
I.84	52.232-8	DISCOUNTS FOR PROMPT PAYMENT (MAY 1997) (Reference 32.111(c)(1))
I.85	52.232-11	EXTRAS (APR 1984) (Reference 32.111(d)(2))
I.86	52.232-17	INTEREST (JUN 1996) (Reference 32.617(a)&(b)
I.87	52.232-18	AVAILABILITY OF FUNDS (APR 1984) (Reference 32.705-1(a))
I.88	52.232-19	AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR (APR 1984) (Reference 32.705-1(b))
I.89	52.232-20	LIMITATION OF COST (APR 1984) (Reference 32.705-2(a))
I.90	52.232-22 D	LIMITATION OF FUNDS (DEV) (JUN 1992) (Reference 32.705-2(c))
I.91	52.232-23	ASSIGNMENT OF CLAIMS (JAN 1986) (Reference 32.806(a)(1)
I.92	52.232-25	PROMPT PAYMENT (May 2001) (Reference 32.908(c))
I.93	52.232-27	PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (may 2000) (Reference 32.908(b))
I.94	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFERCENTRAL CONTRACTOR REGISTRATION (MAY 1999) (Reference 32.1110(a)(1))
I.95	52.233-1	DISPUTES (DEC 1998) (Reference 33.215)
I.96	52.233-1 I	DISPUTES ACT (DEC 1998) ALTERNATE I (DEC 1991) (Reference 33.215)
I.97	52.233-3	PROTEST AFTER AWARD (AUG 1996) (Reference 33.106(b))
I.98	52.233-3 I	PROTEST AFTER AWARD (AUG 1996) ALTERNATE I (JUN 1985) (Reference 33.106 (b))
I.99	52.236-1	PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984) (Reference 36.501(b))
I.100	52.236-2	DIFFERING SITE CONDITIONS (APR 1984) (Reference 36.502)
I.101	52.236-3	SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984) (Reference 36.503)
I.102	52.236-5	MATERIAL AND WORKMANSHIP (APR 1984) (Reference 36.505)
I.103	52.236-6	SUPERINTENDENCE BY THE CONTRACTOR (APR 1984) (Reference 36.506)
I.104	52.236-7	PERMITS AND RESPONSIBILITIES (NOV 1991) (Reference 36.507)

I.105	52.236-8	OTHER CONTRACTS (APR 1984) (Reference 36.508)
I.106	52.236-9	PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984) (Reference 36.509)
I.107	52.236-10	OPERATIONS AND STORAGE AREAS (APR 1984) (Reference 36.510)
I.108	52.236-11	USE AND POSSESSION PRIOR TO COMPLETION (APR 1984) (Reference 36.511)
I.109	52.236-12	CLEANING UP (APR 1984) (Reference 36.512)
I.110	52.236-13	ACCIDENT PREVENTION (NOV 1991) (Reference 36.513(a))
I.111	52.236-13 I	ACCIDENT PREVENTION (NOV 1991) ALTERNATE I (NOV 1991) Reference 36.513(b))
I.112	52.236-14	AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984) (Reference 36.514)
I.113	52.236-15	SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984) (Reference 36.515)
I.114	52.236-17	LAYOUT OF WORK (APR 1984) (Reference 36.517)
I.115	52.236-18	WORK OVERSIGHT IN COST-REIMBURSEMENT-CONSTRUCTION CONTRACTS (APR 1984)(Reference 36.518)
I.116	52.236-19	ORGANIZATION AND DIRECTION OF THE WORK (APR 1984) (Reference 36.519)
I.117	52.236-21	SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997) (Reference 36.521)
I.118	52.236-23	RESPONSIBILITY OF THE ARCHITECT-ENGINEER CONTRACTOR (APR 1984) (Reference 36.609-2(b))
I.119	52.236-24	WORK OVERSIGHT IN ARCHITECT-ENGINEER CONTRACTS (APR 1984) (Reference 36.609-3)
I.120	52.236-25	REQUIREMENTS FOR REGISTRATION OF DESIGNERS (APR 1984) (Reference 36.609-4)
I.121	52.236-26	PRECONSTRUCTION CONFERENCE (FEB 1995) (Reference 36.522)
I.122	52.237-2	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION (APR 1984)(Reference $37.110(b)$)
I.123	52.242-1	NOTICE OF INTENT TO DISALLOW COSTS (APR 1984) (Reference 42.802)
I.124	52.242-3	PENALTIES FOR UNALLOWABLE COSTS (MAY 2001) (Reference 42.709-6)
1.125	52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997) (Reference 42.703-2(f))
I.126	52.242-13	BANKRUPTCY (JUL 1995) (Reference 42.903)

I.127	52.242-14	SUSPENSION OF WORK (APR 1984) (Reference 42.1305(a))
I.128	52.243-1 I	CHANGESFIXED-PRICE (AUG 1987)ALTERNATE I (APR 1984) (Reference 43.205(a)(2))
I.129	52.243-1 III	CHANGESFIXED-PRICE (AUG 1987)ALTERNATE III (APR 1984) (Reference 43.205(a) and (f))
I.130	52.243-2 I	CHANGESCOST-REIMBURSEMENT (AUG 1987)ALTERNATE I (APR 1984) (Reference 43.205(b)(2))
I.131	52.243-2 III	CHANGESCOST-REIMBURSEMENT (AUG 1987)ALTERNATE III (APR 1984) (Reference 43.205(b)(4))
I.132	52.243-4	CHANGES (AUG 1987) (Reference 43.205(d))
I.133	52.244-4	SUBCONTRACTORS AND OUTSIDE ASSOCIATES AND CONSULTANTS (ARCHITECT-ENGINEER SERVICES) (AUG 1998) (Reference 44.204(b))
I.134	52.244-5	COMPETITION IN SUBCONTRACTING (DEC 1996) (Reference 44.204(c))
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I.177	52.204-1	APPROVAL OF CONTRACT (DEC 1989)

This contract is subject to the written approval of Chief, National Guard Bureau and shall not be binding until so approved.

(End of clause)

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I.178 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)
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The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than completion date cited in the task order. The time stated for completion shall include final cleanup of the premises.

(End of clause)

I.179 52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from:

Base Period	Date of Award - 30 Jun 03
Option Year 1	01 Jul 03 - 30 Jun 04
Option Year 2	01 Jul 04 - 30 Jun 05
Option Year 3	01 Jul 05 - 30 Jun 06
Option Year 4	01 Jul 06 - 30 Jun 07
Option Year 5	01 Jul 07 - 30 Jun 08
Option Year 6	01 Jul 08 - 30 Jun 09
Option Year 7	01 Jul 09 - 30 Jun 10
Option Year 8	01 Jul 10 - 30 Jun 11
Option Year 9	01 Jul 11 - 30 Jun 12

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

I.180 52.216-19 ORDER LIMITATIONS (OCT 1995)

- (a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than \$50,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.
 - (b) Maximum order. The Contractor is not obligated to honor--
- (1) Any order for a single item in excess of \$10 million; 2) Any order for a combination of items in excess of \$25 million; or 3) A series of orders from the same ordering office within 30 (Thirty) days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.
- (c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of anyone requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.
- (d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 30 (Thirty) days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

I.181 52.216-22 INDEFINITE QUANTITY (OCT 1995)

- (a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.
- (b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."
- (c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.
- (d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after:

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30 Jun 03 - Base Period
30 Jun 04 - Option Year 1
30 Jun 05 - Option Year 2
30 Jun 06 - Option Year 3
30 Jun 07 - Option Year 4
30 Jun 08 - Option Year 5
30 Jun 09 - Option Year 6
30 Jun 10 - Option Year 6
30 Jun 11 - Option Year 8
30 Jun 12 - Option Year 9
```

(End of clause)

May 18, 2012

I.182 52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days of expiration of the contract.

(End of Clause)

I.183 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (JUL 2000)

- (a) The Government may extend the term of this contract by written notice to the Contractor within $\underline{15}$ days; provided, that the Government gives the Contractor a preliminary written notice of its intent to extend at least $\underline{60}$ days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option provision.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 120 months.

(End of Clause)

I.184 52.232-1 PAYMENTS (APR 1984) (Reference 32.111(a)(1))

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if --

- (a) The amount due on the deliveries warrants it; or
- (b) The Contractor requests it and the amount due on the deliveries is at least \$1,000 or 50 percent of the total contract price.

(End of Clause)

I.185 52.236-4 PHYSICAL DATA (APR 1984)
(See Clause H.1)

Data and information furnished or referred to below is for the Contractor's information The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

- (a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by_____
 - (b) Weather conditions____
 - (c) Transportation facilities_____
 - (d) _____

(End of clause) (R 7-603.25 1965 JAN)

I.186 52.244-2 I SUBCONTRACTS (AUG 1998)—ALTERNATE I (AUG 1998)
(See Clause H.1)

(a) Definitions. As used in this clause— Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR). Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract. Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract

or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

- (b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.
- (c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.
- (d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—
 - (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
 - (2) Is fixed-price and exceeds--
- (i) or a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
- (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- (e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:
- (f) (1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:
- (i) A description of the supplies or services to be subcontracted.
 - (ii) Identification of the type of subcontract to be used.
 - (iii) Identification of the proposed subcontractor.
 - (iv) The proposed subcontract price.
- $\mbox{(v)}$ The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
- (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
 - (vii) A negotiation memorandum reflecting-
 - (A) The principal elements of the subcontract price

negotiations;

- (B) The most significant considerations controlling establishment of initial or revised prices;
- (C) The reason cost or pricing data were or were not required;
- (D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;
- (E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
- (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
- (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), (d), or (e) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed- fee subcontract, or (ii) fixed-price subcontract that exceeds the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (f) (l) (i) through (f) (l) (iv) of this clause.
- (g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--
 - (1) Of the acceptability of any subcontract terms or conditions;

- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.
- (h) NO subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c) (4) (i).
- (i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.
- (j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.
- (k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

(End of clause)

I.187 52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows: None

(End of clause)
(R 7-105.1(a) 1949 JUL)

- I.188 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)
- (a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.
- (b) The use in this solicitation or contract of any Defense Federal Acquisition Regulations (48 CFR) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

- (a) Definition. "Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.
- (b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

- I.190 252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991
- (a) The Contractor shall display prominently in common work areas within business segments performing work under Department of Defense (DOD) contracts, DOD Hotline Posters prepared by the DOD Office of the Inspector General.
- (b) DOD Hotline Posters may be obtained from the DOD Inspector General, ATTN: Defense Hotline, 400 Army Navy Drive, Washington, DC 22202-2884.
- (c) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(End of clause)

- I.191 252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION (JUL 2000) (Reference 204.7304)
 - Definitions. As used in this clause:
- (1) "Central Contractor Registration (CCR) database" means the priJuly DoD repository for contractor information required for the conduct of business with DoD.
- (2) "Data Universal Number System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.
- (3) "Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.
- (4) "Registered in the CCR database" means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.
- (1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.
- (2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.
- (3) Lack of registration in the CCR database will make an offeror ineligible for award.
- (4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.
- (c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.
- (d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at http://ccr.edi.disa mil.

(End of clause)

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS T.192 SUBCONTRACTING PLAN (DOD CONTRACTS) (APR 1996) (Reference 219.708(b)(1)(A)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

May 18, 2012

(a) Definitions.

"Historically black colleges and universities," as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority institutions," as used in this clause, means institutions meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in Section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

- (b) Except for company or division-wide commercial items subcontracting plans, the term "small disadvantaged business," when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.
- (c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:
- (1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and
 - (2) It meets the requirements of 10 U.S.C. 2323a.
- (d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.
- (e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded- (1) Protege firms which are qualified organizations employing the severely handicapped; and
- (2) Former protege firms that meet the criteria in Section 831(g)(4) of Pub. L. 101-510.
- (f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.
- (g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

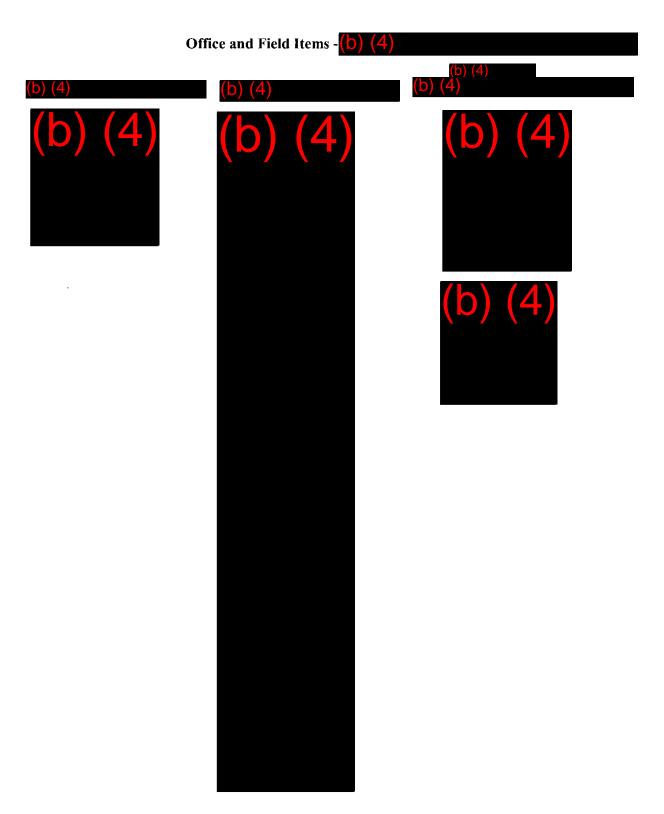
(End of clause)

END OF SECTION I

${\tt SECTION} \ {\tt J} \\ {\tt LISTS} \ {\tt OF} \ {\tt DOCUMENTS}, \ {\tt EXHIBITS}, \ {\tt AND} \ {\tt OTHER} \ {\tt ATTACHMENTS}$

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END OF SECTION J



ATTACHMENT 1

DAHA90-02-D-0012

STATEMENT OF WORK

ENVIRONMENTAL ENGINEERING, PROFESSIONAL AND TECHNICAL SUPPORT AND REMEDIATION SERVICES

FOR

THE AIR NATIONAL GUARD

DAHA90-02-D-0012

DECEMBER 1999

Attachment 2

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PART ONE - ENVIRONMENTAL RESTORATION PROGRAM

- Purpose 1.
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PART ONE - ENVIRONMENTAL RESTORATION PROGRAM

- 1. PURPOSE: Conduct investigations and remediation of possible environmental contamination and generate appropriate documentation for the Air National Guard (ANG) within the United States and territories. All work shall be in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Superfund Amendments and Reauthorization Act (SARA) of 1986, and all other applicable Federal laws, and state and local environmental regulations as identified in Appendix A. Coordination with and input from governmental regulatory agencies shall fulfill requirements set forth in the National Environmental Policy Act (NEPA).
- 2. SCOPE OF SERVICES: Work shall be performed in accordance with (IAW) each individual task order (TO).
- 2.1. CERCLA: Work shall be performed IAW "EPA Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", October 1988, as amended.
- 2.2. RCRA: Public Law 94-550 established a national strategy for managing solid and hazardous wastes. RCRA normally applies to currently active practices involving solid and hazardous waste management. RCRA may be applied by regulatory agencies to required remediation for past improper hazardous waste disposal practices and spills that resulted in a threat to the environment or human health.
- 2.3. Underground Storage Tanks (USTs) and Oil Water Separator (OWS): The contractor may be required to remove abandoned or existing USTs that are no longer needed. USTs shall be decommissioned in accordance with American Petroleum Institute (API) regulations, (e.g., API 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks"). The contractor shall perform closure assessments at the time of removal. It is also the contractor's responsibility to conduct all operations involving USTs in accordance with the rules and regulations of all local, state and federal agencies including local fire officials, the state Fire Marshal and the state and federal Environmental Protection Agencies. The contractor shall be prepared to obtain, or assist in obtaining, all necessary permits to conduct any work required without delaying the project. The contractor shall prepare and submit closure reports.
- 2.4. Risk Based Corrective Action (RBCA): Risk Based Corrective Actions shall follow a streamlined approach in which exposure and risk assessment practices are integrated with traditional components of the corrective action process to insure, that appropriate and cost effective remedies are selected, and that limited resources are properly allocated. ASTM E 1739: "Guide to Risk-Based Corrective Action at Petroleum Release Sites" shall be used as guidance.
- 2.5. Phase II Environmental Baseline Surveys (Phase II EBS): The Contractor shall determine the presence, or absence, of contamination at identified site(s), and the type, extent and degree of any such contamination, then prepare a formal report containing these findings. The process is similar to a CERCLA Site Investigation. The field work/site investigation part of Phase II EBS's shall follow CERCLA site investigation quidance (see 2.1). Otherwise EBS quidance controls.
- 2.6. Firing Ranges and Target Areas: Restoration activities at Firing Ranges and Target Areas shall comply with the requirements of the Final hazardous Waste Military Munitions Rule, (Federal Register, February 12, 1997), and the subsequent regulation. Investigation activities shall follow CERCLA guidance (see 2.1). Typically, the contamination the Contractor shall be responsible for does not include Unexploded Ordinance (UXO) or ammunition.
- 2.7. Crash Site Assessment/Investigation: The contractor shall be required to perform initial investigation, assessment and restoration of aircraft crash sites. The assessment shall include all work necessary to evaluate the impacts to the environment and make recommendations for further investigation or restoration if necessary. Restoration shall include all actions necessary to return the site to its original condition.
- **2.8. Program Management:** The Contractor may be required to provide or update the Cost to Complete (CTC), the Schedule to Complete (STC), or gather program data. The guidelines for preparing this information will be provided by the government at the time the work is requested.

- **2.9. Data Management:** Data management includes collection, validation, conversion, analysis, evaluation, archiving and storage of environmental restoration data.
- 2.9.1. Environmental Restoration Management Information System (ERMIS): The ERMIS provides a comprehensive tool for storing and managing environmental restoration data. ERMIS is being updated periodically and new versions are developed. The contractor shall use the latest version of the system according to current ANG guidance.
- $\textbf{2.9.1.1.} \ \, \text{System Requirements: ERMIS is a PC based system, compatible with major network systems.}$
- **2.9.1.2.** Electronic Data Storage and Reporting Standards: ERMIS is based on and uses the ANG approved electronic data storage and reporting standards which provides compatibility with ANG computer networks, DCP, AFRIMS, RACER, GIS, CAD, Relative Risk, etc. systems used by ANG/CEV, and includes:
 - Hierarchy Window;
 - Map Interface;
 - Menu Bar;
 - Tool Bar;
 - Drag and Drop;
 - Queries; and
 - Reports.
- 2.9.1.3. Revisions to ERMIS: Revisions of ERMIS shall aim at improving the functionality and user-friendliness of the system. In order to achieve this, the contractor shall focus its efforts on specific areas, as follows:
 - Improvement and simplification of data input capabilities;
 - Improvement of database design;
 - Development of an up to date and more flexible data and system hierarchy;
 - Provisions for more windows-like features;
 - Development of more comprehensive security protocols; and
 - Input data using the latest version of the ERMIS system in compliance with ANG requirements.
- 2.9.2. Administrative Record: documents are to be listed in reverse chronological order within each category. Appropriate correspondence (including meeting minutes, comments and responses to comments) is to be included in each ARF category. All correspondence within a category is to be placed in a separate correspondence file for that category. Each volume of a report is to be listed separately. Major document categories are, as follows:
 - Public Participation;
 - Site Identification;
 - Removal Response/Interim Remedial Action;
 - Remedial Investigation/Feasibility Study;
 - Decision document for Further Action;
 - No Further Response Action Planned Decision document;
 - Remedial Design;
 - Remedial Action;
 - Long Term Monitoring;
 - Stakeholder Coordination;
 - Enforcement;
 - Health Assessment;
 - Natural Resource Trustees;
 - Technical Resources/Guidance documents; and
 - Confidential Files.
- **2.9.3.** Document Control Program (DCP): The DCP is a computerized document management tool. As such, it shall provide the following functionalities:
 - Display base records;
 - Find and edit records;
 - Add new records;
 - Enter other data;
 - Perform Searches;
 - Print labels from Base information screen;

- Prepare DTIC form;
- Generate Reports;
- Print Labels from Labels menu;
- Print logbook forms;
- Import/Export functions; and
- Backups.
- **2.9.4.** Document Storage: document storage shall be conducted according to the requirements of the ANG Administrative Record Index and document Control Program. The contractor shall use the latest version of the DCP, according to current ANG guidance.
 - 2.10. General Requirements: See Appendix B
 - 2.11. Technical Requirements: See Appendix C
- 2.12. Potential Contaminants of Concern: Remedial investigative studies have been completed and or are currently ongoing at all sites potentially addressed under this contract. These investigations have thus far identified some of the contaminants (listed below), which will possibly require remediation under the requirements of this contract. This list is subject to change and expands as remedial investigation studies continue.
 - Acetone
 - Trichloroethene (TCE)
 - 1,1,1-Trichloroethane (1,1,1-TCA)
 - Methyl ethyl ketone (MEK)
 - Methyl isobutyl ketone (MIBK)
 - Toluene
 - Chrome
 - Chlorobenzenes
 - Xylene
 - Polynuclear aromatic hydrocarbons (PAHs)
 - Benzene
 - 1,2-Dichloroethane (1,2-DCA)
 - 1,1-Dichloroethene (1,1-DCE)
 - 1,2-Dichloroethene (1,2-DCE)
 - Chloromethane
 - Chlordane
 - 1,3-Dichlorobenzene
 - Ethylbenzene
 - Petroleum Hydrocarbons
 - 4,4'-DDT
 - Polychlorinated biphenyl's (PCBs)
 - Tetrachloroethylene (PCE)
 - Carbon tetrachloride
 - Trihalomethanes
 - Vinyl Chloride1,2-Dichloropropane
 - 2-Hexanone
 - Nitrate
 - Alpha and Beta Emitters

2.13. Environmental Requirements:

- 2.13.1. All Removal Actions, Interim Remedial Actions, and Final Remedial Actions shall be performed in full compliance with applicable federal, state, and local environmental laws, regulations and agreements including, but not limited to, those Documents listed in Appendix A. The contractor shall ensure that all activities performed by his personnel, subcontractors and suppliers are executed as required by these current laws, regulations and agreements. The contractor shall comply with all individual state and local rules, statutes, laws and regulations, as well as being able to acquire all necessary licenses and permits to carry out the work specified in the Task Order. Nothing in this contract shall relieve the contractor of his or her responsibility to work within the current laws, regulations and agreements.
- 2.13.2. Applicable Documents. To the extent required by Sections 120 and 121 of the Comprehensive Environmental Response, Compensation and Liability Act, (CERCLA, 42 U.S.C. 9620 and 9621), all operations under this contract shall be conducted in compliance with certain documents including, but not limited to those listed in Appendix A.

- 2.13.3. Permits. The contractor shall not commence work until all requirements for environmental permits, licenses, and/or certificates required by each TO have been completed, submitted and approved by the applicable local, state or federal agency. For some work the permit's requirements may be completed by the RD contractor, or the ANG/CEVR, this will be identified in the TO. The contractor shall obtain all permits prior to finalizing and submitting the Progress Schedule and the task plan for approval, so as to avoid a delay in progress or disruption of the approved schedule.
- ${\bf 2.13.3.1.}$ Before beginning work on a particular TO the required clearances, such as digging clearances, construction permits or burn permits, shall be obtained by the contractor through Base Civil Engineering and FMO offices prior to drilling or excavating operations (also see 4.1).
- 2.13.3.2. Task Orders requiring temporary or long term access to non-governmental properties shall require formal access agreements between the government and the private/corporate property owner. It will be the government's responsibility to arrange and execute such Rights-of-Entry or easements; however, it will be the contractor's responsibility to identify the need for such easements and the government shall be allowed sufficient lead-time to acquire them. This lead-time shall be included in the TO schedule. Contractors shall not commence work on any such property prior to the complete execution of any such agreements. The contractor shall support the government in developing access agreements by supplying any pertinent information regarding construction plans, specifications, and schedules.
- 2.13.4. Transportation, storage, treatment and/or disposal of hazardous wastes. The contractor shall ensure that his personnel and all subcontractors handle, transport, store, treat and/or dispose of all hazardous wastes as required by the pertinent laws, regulations and agreements. Transport of all hazardous wastes shall be by a transporter registered with the state(s) in which the waste is to be transported. Such shipments shall be to a landfill, treatment facility, or storage facility approved by the state or federal Government for hazardous wastes. In most cases, the Government shall be identified as the generator of all wastes resulting from any operations under this contract and shall be responsible for signing all hazardous waste manifests. In some circumstances, however, the operator of the facility may be responsible for signing manifests. The generator will be identified in the individual TO. The original manifest, signed by the company accepting custody of the waste, shall be sent to the generator within ten (10) days of the removal of the waste from its original location. At the same time, one copy shall be sent to the Contracting Officer and one copy shall be sent to the appropriate ANG/CEVR Project Manager.

2.14. Special Conditions: See Appendix D

- 3. CERCLA: The following are examples of the types of work required:
- **3.1.** Preliminary Assessment (PA): The Contractor shall conduct a PA consisting of personal interviews, literature searches, and site visits to determine those areas of concern (AOCs) suspected of being contaminated and shall prepare a formal report detailing these findings. The PA is intended to determine which AOCs are to be included in the Site Investigation (SI). The Contractor shall meet with personnel from the ANG, base and appropriate regulatory agencies to keep them informed of the activities and progress of the PA.
- $\textbf{3.1.1.} \ \, \text{Interviews with Personnel: The Contractor shall conduct personal interviews with present and past employees of the applicable installation to assist in determining past hazardous waste/hazardous materials (HW/HM) disposal practices and possible spill sites.}$
- **3.1.2.** Literature Search: The Contractor shall conduct a literature search of local conditions, documentation, records, and reports. At a minimum, the Contractor shall conduct a literature search for information on the following topics:
 - Aquifer data;
 - Climatological data;
 - Biota data;
 - Past HW/HM disposal practices;
 - Past HW/HM spills;
 - Past HW/HM practices that could potentially damage the environment;
 - Topographic data;
 - Geologic and hydrogeologic data;
 - Analytical data;
 - Responses to regulatory agencies (e.g., Notices of Violation);

- Mission history;
- State-issued permits for discharge into navigable waterways;
- Base Civil Engineer's office as-builts;
- Underground storage tank (USTs) inventory;
- Master plans, environmental impact statements (EIS) and/or assessments;
- Historical photogrammetry;
- Base hazardous waste management plans; and
- Inventory of shop chemical use and disposal methods.
- **3.2.** Site Investigation (SI): The Contractor shall conduct the SI to determine the presence or absence of contamination at those AOCs identified during the PA, and the type, extent, and degree of any such contamination. The Contractor shall prepare a formal report detailing these findings with recommendations and justification as to whether the AOCs should become sites for further investigation.
- ${\tt 3.2.1.}$ The SI shall include the following activities (for details see Section 11) unless otherwise directed by the CO:
 - Meetings;
 - Work Plan;
 - Fieldwork; and
 - SI Report.
- ${\tt 3.2.2.}$ The SI may also include data requirements for Federal Facilities docket Sites.
- **3.3.** Management Action Plan (MAP): The MAP shall be prepared and submitted by the Contractor for review and approval by the ANG. Unless otherwise specified by the Government, the MAP shall be prepared IAW the "Management Action Plan (MAP) Guidebook" dated May 1992. The MAP shall be updated on a periodic basis. The guidelines for preparing this information shall be provided by the government at the time the work is requested.
- **3.4.** Engineering Evaluation/Cost Analysis (EE/CA): The EE/CA shall provide additional data to address the Applicable or Relevant and Appropriate Requirements (ARARs) and develop a risk assessment that addresses human health and the environment, or provide a Risk Based Corrective Action (RBCA) recommendation. The Contractor shall provide a recommendation for (a) no further action (b) an interim remedial action (IRA), (c) further investigation, or (d) remedial action. The EE/CA shall follow EPA Guidelines.
- ${\tt 3.4.1.}$ The EE/CA shall include the following activities (for details see Section 10) unless otherwise directed by the CO:
 - Meetings;
 - Approval Memorandum;
 - Work Plan;
 - Fieldwork;
 - EE/CA Reports;
 - Action Memorandum; and
 - Public Comment.
 - 3.4.2. The EE/CA may also include:
 - Public Meeting
 - Decision Documents (DD)
 - Community Relations Plan (CRP)
 - Administrative Record
 - Remedial Design (RD)
- **3.5.** Remedial Investigation (RI): The RI shall determine the lateral and vertical extent and magnitude of contamination and fully evaluate the threat to public health, welfare, and the environment. The Contractor shall provide the necessary fieldwork to determine the precise extent and severity of contamination and prepare a formal report detailing these findings. The RI is intended to fully support any decisions to be made during a Feasibility Study (FS).
- **3.5.1.** The RI shall include the following activities (for details see Section 11) unless otherwise directed by the CO:
 - Meetings

- Work Plan
- Fieldwork
- RI Reports (Risk Based Assessment)
- 3.5.2. The RI may also include:
- Community Relations Plan
- Administrative Record
- **3.6.** Feasibility Study (FS): The FS shall examine site characteristics, cleanup goals, and the performance of alternative technologies so that the most effective approach for the cleanup of each site can be identified. The Contractor shall provide an FS Report describing alternatives and providing a recommendation for Remedial Action (RA).
- **3.6.1.** Focused Feasibility Study: The results of the Site Investigation field studies may indicate limited contamination. If this is the case, a site-specific Focused Feasibility Study (FFS) shall be prepared to delineate the specific Remedial Action (RA) most appropriate to clean up the site. This study shall be written in compliance with NEPA requirements
- $\textbf{3.6.1.1.} \quad \text{The FS shall include the following activities (for details see Section 10) unless otherwise directed by the CO:}$
 - Meetings
 - FS Reports
 - Public Comment
 - 3.6.1.2. The FS may also include:
 - Public Meeting
 - Treatability Study
- **3.7.** Decision Document (DD): The Contractor shall provide the necessary documentation to reflect the findings of an investigation or remediation and provide recommendations to the ANG and applicable regulatory agencies.
- ${\tt 3.7.1.}$ DD for further action (DDFA): A DDFA shall be provided, if the investigation concludes that further action is required.
- ${\tt 3.7.2.}$ DD for no further response action planned (NFRAP): A DD shall be provided, if the investigation concludes that no contamination exists at a particular site, or that the contamination is below acceptable limits.
- **3.8.** Remedial Design: The Contractor shall accomplish a Remedial Design or provide a Design Report or Statement of Work (SOW) to establish a plan to follow during subsequent removal or remedial actions. The RD, RD Report, or SOW is to be submitted to the ANG and applicable regulatory agencies and if required, the public, for approval before Remedial Action (RA) can begin.
- $\textbf{3.8.1.} \ \ \, \text{Remedial Design: The Remedial Design will include detailed plans, specifications, and Documentation for the construction and if applicable the OM&M of a complete RA by another Contractor.}$
- **3.8.2.** Design Report: The Design Report shall provide the necessary information, data, and objectives required to assist in the subsequent detailed design of a Remedial Action (RA) by another Contractor. The Design Report shall provide clean-up criteria and if applicable the system Operation, Maintenance and Monitoring (OM&M) parameters for subsequent site closure.
- **3.8.3.** Statement of Work (SOW): The SOW shall provide the necessary information, data, and objectives required to direct the Contractor in a Removal or Remedial Action.
- **3.9.** Removal and Remedial Action (RA): All Removal Actions, Interim Remedial Actions (IRA), and Final Remedial Actions (RAs) shall be performed in full compliance with applicable federal, state, and local environmental laws and regulations The Contractor shall provide all required permits. If the removal or remedial action involves the installation of a system requiring Operation, Maintenance, and Monitoring (OM&M), the contractor shall provide an OM&M Plan (OM&MP). The Contractor shall also provide as part

of the construction contract a Sampling and Analysis Plan (SAP), Project Activities Work Plan, and Environmental Health and Safety Plan.

- **3.9.1.** Removal Actions: Removal Actions consist of expedited responses to rapidly resolve an identified human health or environmental threat through source control or implementation of containment measures. Removal Actions will be either time critical or non-time critical, dependent on the urgency for response. This is defined in 40 CFR Part 300 where it is stated Time Critical Removals will be those in which a planning period of fewer than six (6) months exist prior to initiation of the response and Non-Time Critical Removals will be those where greater than six (6) months planning period exists.
- **3.9.2.** Time Critical Removal Actions may require on-site response activities by the contractor. Under such circumstances, the actions will occur within ten (10) days of Notice to Proceed (NTP) or as directed by the CO. The determination as to whether the response shall be time critical or non-time critical will be made by ANG personnel with consultation from state and federal regulators. As Time Critical Removal Actions are identified they shall retain highest priority over any concurrent non-time critical Removal Actions or Remedial Actions. Contractors shall be required to submit, along with their cost proposal, a detailed description of their proposed technical implementation plan.
 - ${\bf 3.9.3.}$ Non-Time Critical Removal Actions will allow more response time for the contractor to conduct the actions.
- 3.9.4. Time Critical and Non-Time Critical Removal Actions shall require the contractor to prepare a Removal Action Work Plan to include a detailed description of the proposed implementation activities, a time schedule for those actions, and personnel and equipment requirements. Also included as part of the Work Plan, shall be a project Site Health and Safety Plan (SHSP) and Sampling and Analysis Plan (SAP). Each Removal Action Plan shall include a sampling plan together with the rationale for sampling activities; locations, quantity and frequency of sampling and analytical methods; constituents for analysis; and quality control/quality assurance procedures. This Work Plan and other documents will require approval by the CO or designated Contracting Officer Representative (COR), prior to commencement of work. Changes to documents may be necessary as result of regulatory or other comments.
- **3.9.5.** Interim Remedial Actions (IRA): At any point during the investigation process, a site(s) may be identified that needs an IRA. This action shall be consistent with the Final Remedial Action (RA) and shall be done immediately to remove environmental risk.
- $\textbf{3.9.6.} \ \, \text{Remedial Actions (RA): The RA is the selected remedial alternative in the Record of Decision (ROD), Decision Document (DD), or Action Memorandum. The RA is intended as a permanent resolution of health and environmental threats at the identified site. The RA may require installation/construction of a system and long-term Operation, Maintenance, and Monitoring (OM&M).$
- 3.10. Surveillance and Oversight (S&O): The Contractor shall provide the necessary personnel, equipment, and materials required to conduct Contractor S&O of various Removal or RAs. The purpose of the S&O is to insure the Removal or Remediation Contractor complies with the requirements of the RA contract and all applicable laws and regulations.
- ${\bf 3.10.1.}$ The S&O Contractor shall participate in and/or provide the following unless otherwise directed by the CO:
 - Meetings
 - Review submittals, documents, plans, and reports
 - Provide technical assistance
 - Perform field surveillance
 - Provide monthly progress reports
 - Attend final inspection
 - Develop the completion report
 - 3.10.2. The S&O Contractor may provide As-built drawings.
- **3.11.** Operations, Maintenance, and Monitoring (OM&M): Upon the completion of construction or installation of a system as part of a Removal or RA, it shall be the responsibility of the contractor to operate, maintain, & monitor the system as required in the specific TO. Work shall include preparing all necessary reports and documentation

and attending all required meetings. Any problems that are identified and attributable to the system will be repaired by the contractor within a timely manner, or as outlined in the specific TO.

- **3.11.1.** OM&M Plan (OM&MP): The Contractor shall provide an OM&MP identifying the overall capabilities of the remediation system, the purpose and intended operation of each process and the necessary instructions for the proper OM&M of the system. The OM&MP shall also include manufacturers' manuals which identify repair and maintenance instructions for individual equipment items, a routine maintenance schedule and a record keeping system which can be used to assure that necessary maintenance is performed and a maintenance history record for each equipment item is provided.
- $\textbf{3.11.2.} \qquad \text{Follow-on OM\&M: The Contractor may be contracted to provide follow-on OM\&M as identified in the Task Order.}$
- **3.11.3.** Training: If applicable, the contractor shall be responsible for training Government personnel in the OM&M of a particular system/facility. The minimum number of personnel to be trained and the duration of the training will be identified in the project Task Order.
- **3.12.** Long Term Monitoring (LTM): The selected alternative as defined in the FS (or its equivalent) may not require remedial action but instead the establishment of a LTM program to monitor the overall quality of the ground water and or surface water system in the vicinity of a site or sites. In this situation, it will be the contractor's responsibility to meet the requirements of the FS, or equivalent consisting of a LTM Plan. This LTM shall include the installation of any additional wells and conducting the scheduled sampling, analysis and reporting requirements.
- 3.13. Project Closeout (PCO): The contractor shall provide the necessary Documentation and when required the necessary fieldwork or system removal to closeout a site. The work shall include a DD NFRAP, Monitoring Well (MW) closure, and/or system removal IAW all applicable laws and regulations.

4. RCRA

- **4.1.** RCRA Facilities Assessment (RFA): The Contractor shall determine the presence or absence of contamination at the potential site(s), and the type, extent, and degree of any such contamination, and shall prepare a formal report detailing these findings. Generally, these studies are similar to a Site Investigation (SI).
 - **4.1.1.** All the requirements for a SI apply, see paragraph 3.2.
- **4.2.** RCRA Facilities Investigation (RFI): The Contractor shall determine the precise extent and severity of contamination at the sites identified and shall prepare a formal report detailing the findings. Generally, these studies are similar to a Remedial Investigation (RI). The RFI is intended to fully support any decisions to be made during a Corrective Measures Study.
 - **4.2.1.** All the requirements for a RI apply, see paragraph 3.5
- **4.3.** Corrective Measures Study (CMS): The Contractor shall determine the most appropriate method to remediate the contamination at the site(s). A Corrective Measures Study is similar to a Feasibility Study (FS). The results of the RFI shall be used to support all decisions made in the CMS.
 - **4.3.1.** All the requirements for a FS apply, see paragraph 3.6.
- **4.4.** Corrective Action Plan (CAP): The Contractor shall propose a plan to efficiently remediate the contamination at the site(s). A CAP is similar to a Decision Document (DD). The results of the RFI and CMS shall be used to support all decisions made in the CAP.
 - **4.4.1.** All the requirements for a DD apply, see paragraph 3.7.
- 4.5. Corrective Measures Implementation (CMI): The RA, as identified in the CMS, CAP, or similar document; is the selected remedial alternative described in detail in the Proposed Plan, and approved by the regulatory agencies in the Record of Decision (ROD), DD, or Action Memorandum. The Remedial Action is intended as a permanent resolution of health and environmental threats at the identified site, see paragraph 3.9. These actions may require installation/construction of treatment systems and the long-term OM&M of these systems, see paragraph 3.11.

- 4.6. Project Closeout (PCO): See paragraph 3.13.
- 4.7. Progress Reports: The contractor shall submit to the Government monthly progress reports, including a description of accomplishments and problems encountered. Also, the contractor shall submit a timeline chart of activities showing schedules. The initial schedule (established at Kickoff/Scoping Meeting) must be inserted in the first monthly progress report and shall remain as the baseline for which to compare the progress of activities. A current schedule shall be updated as the schedule changes to new requirements or activities slippages.

5. Risk Based Corrective Action (RBCA)

For the determination of scope and deliverables see the applicable RCRA Corrective Action section under 2.2.

For guidance concerning objectives, standards and methodology consult ASTM E 1739 and state requirements.

- 5.1. Initial Site Assessment (ASTM E 1739 RBCA Step 1)
- 5.2. Site Classification and Initial Response (ASTM E 1739 RBCA Step 2)
- 5.3. Tier 1 Exposure/Risk Evaluation (ASTM E 1739 RBCA Step 3 & 4)
- 5.4. Interim Remedial Action
- 5.5. Tier 2 Exposure/Risk Evaluation: Site Specific Goals (ASTM E 1739 RBCA Step 5 & 6).
- 5.6. Tier 3 Exposure/Risk Evaluation: Site Specific Goals (ASTM E 1739 RBCA Step 7 & 8).
 - 5.7. Remedial Action (ASTM E 1739 RBCA Step 9).
 - 5.8. Compliance Monitoring (ASTM E 1739 RBCA Step 10)
 - 5.9. Closure/No Further Action
- 6. Underground Storage Tanks (USTs):
- **6.1. Site Assessment (SA):** The Contractor shall determine the presence or absence of contamination at the site(s), and the type, extent, and degree of any such contamination, and shall prepare a formal report detailing these findings. Generally, these studies are similar to those performed as a Site Investigation (SI).
 - **6.1.1.** All the requirements for a SI apply, see paragraph 3.2.
- **6.2.** Corrective Action Plan (CAP): The Contractor shall determine the most appropriate method to remediate the contamination at the site(s). A CAP is similar to a Feasibility Study (FS). The results of the Remedial Investigation shall be used to support all decisions made in the CAP.
 - **6.2.1.** All the requirements for a FS apply, see paragraph 3.6.
- **6.3.** Corrective Action: The Remedial Action (RA), as identified in the CAP, or similar document; is the selected remedial alternative described in detail in the Proposed Plan, and approved by the regulatory agencies in the Record of Decision (ROD), Decision document (DD) or Action Memorandum. The RA is intended as a permanent resolution of health and environmental threats at the identified site. These actions may require installation/construction of treatment facilities and the long-term operation and maintenance of these facilities.
 - **6.4.** Project Closeout (PCO): See paragraph 3.13.
- 7. Phase II Environmental Baseline Survey (EBS): For determination of scope and deliverables see the applicable EBS guidance under National Environmental Policy Act compliance. In case the ANG is proposing to acquire by lease/license land owned by a city, state, or territory located at the ANG unit environs for the purpose of construction facilities or other use, the ANG requires:

- **7.1.** An EBS of the condition of the real property to be acquired, transferred, leased, sold, or otherwise conveyed under the provisions of AFR 87-1, 87-3 and 87-4, and an Environmental Closeout Survey of property at the termination of an out-lease. The results of such a survey shall:
- **7.1.1.** Document the nature, magnitude, and extent of any environmental contamination of property considered for acquisition, or transfer, lease, sale, or other disposition.
- **7.1.2.** Define potential environmental contamination liabilities associated with the subject real property transaction.
- 7.1.3. Develop sufficient information to assess the health and safety risks, and ensure adequate protection of human health and the environment related to the subject real property transaction.
- 7.1.4. Determine possible effects on property valuation from any contamination discovered.
- **7.1.5.** Provide notice when required under Section 120 (h)(1) of CERCLA 42 U.S.C. 96-20 (h)(1), of type, quantity, and time frame of any storage, release, or disposal of a hazardous substance on the property.
- **7.2.** For determination of scope and deliverables, see the CERCLA SI section. Major phases of the preparation of the Phase II EBS shall consist of the following:
 - Work Plan
 - Site Investigation
 - Field Work
 - Phase II EBS Report

8. Firing Ranges and Target Areas

- 8.1. The Contractor shall determine the presence, or absence of contamination at the site(s), and the type, extent and degree of any such contamination, and shall prepare a formal report containing these findings. The process is similar to a CERCLA Site Investigation (SI).
- **8.2.** For determination of scope and deliverables see the CERCLA SI section. Major phases of a project shall consist of the following:
 - Work Plan
 - SI
 - Field Work
 - Feasibility Study (FS)
 - Remedial Design (RD)
 - Remedial Action (RA)
 - Project Closeout
- **8.3.** The Contractor shall determine the most appropriate method to remediate the contamination at the site(s). The RA is intended as a permanent resolution of existing human health and environmental threats.

9. Crash Site Assessment/Investigation

- **9.1.** Crash site initial investigation and assessment shall be accomplished as described in section 3.2 of this Statement of Work (SOW), Site Investigation (SI).
- **9.2.** Crash site restoration shall be accomplished as described in section 3.9 of this SOW, Remedial Action (RA) and as identified in the individual Task Order.
- **9.3.** Activities to be accomplished under this section include: planning (meetings, work plans, and schedules), field work, reports, and submittals. All activities performed under this section shall meet the specific requirements of Appendix E of this SOW as identified in the Task Order.
- **9.4.** The contractor shall accomplish the crash site investigation according to applicable state and federal law and regulation. To satisfy this requirement, the contractor shall attend a meeting with appropriate state regulatory personnel to identify these laws and regulations. The contractor shall prepare and submit a trip report that

includes minutes of the meeting and highlights specific requirements agreed upon for the investigation.

TABLE 1. SOIL AND SLUDGE SAMPLING SPECIFICATIONS.

PARAMETER	CONTAINER	SAMPLE PRESERVATION	HOLDING TIME
VOLATILE	TWO 40 ml	ICE TO 4 C	ANALYZE In 7 Days
ORGANIC	Glass VOA Vials		< 24 Hours on Site
	NO HEADSPACE		
TOTAL	1,8 oz Glass	ICE TO 4 C	EXTRACT
RECOVERABLE	Wide-Mouth		14 days
PETROLEUM	Bottle		ANALYZE In
HYDROCARBONS			40 Days
ACID/BASE	1,8 oz Amber Glass	ICE TO 4 C	EXTRACT In 38 Days
NEUTRAL	Wide-Mouth Bottle		
EXTRACTABLES			
TOTAL	1,8 oz Glass		38 Days
RECOVERABLE	Wide-Mouth Bottle		
METALS			
RADIOACTIVITY	1,8 oz Glass	Ice to 4 C	None
	Wide-Mouth Bottle		Specified

All Containers must have Teflon-lined lids.

TABLE 2. GROUNDWATER SAMPLING SPECIFICATIONS.

		SAMPLE PRESERVATION	HOLDING
PARAMETER	CONTAINER		TIME
VOLATILE ORGANICS	TWO 4 0 ml. Glass VOA Vials NO HEADSPACE STORE INVERTED	2 drops 1:1 HC1 per vial ICE TO 4 C	ANALYZE In 7 Days
TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	1-Liter Amber Glass Bottle	1: 1 HCl TO pH < 2 ICE TO 4 C	ANALYZE In 28 Days
ACID/BASE/ NEUTRAL EXTRACTABLES	Four 1-Liter Amber Glass Bottles	Ice TO 4 C	EXTRACT In 7 Days ANALYZE In 40 Days
TOTAL RECOVERABLE METALS	1-Liter High Density Polyethylene Bottle	1: 1 HNO TO pH < 2 Ice to 4 C	13 Days (Hg) Others 6 Mos.
ANIONS	2-Liter High Density PE Bottles	One Bottle: Ice to 4 C one Bottle: 1: 1 H2SO4 Ice to 4 C, TO pH < 2 (*)	28 Days
TOTAL DISSOLVED SOLIDS	1-Liter High Density PE Bottle	Ice to 4 C,	7 Days
ALKALINITY	1-Liter High Density PE Bottle	Ice to 40 C	14 Days
RADIOACTIVITY	1-Liter Glass Jar or Two Glass VOA Vials (Tank)	Ice to 40 C	None Specified

^{*}One bottle is preserved for Nitrate/Nitrite and Phosphorous and one bottle is preserved for Chloride, Fluoride and Sulfate. All Containers must have Teflon-lined lids.

PART TWO - ENVIRONMENTAL QUALITY PROGRAMS

- 1. Purpose/Scope
- 2. Environmental Compliance Assessment and Management Program (ECAMP)
- 3. Hazardous Waste Management
- 4. Environmental Management Information System HAZMART Data Entry and Support Assistance
- 5. Pollution Prevention Management
- 6. Integrated Contingency Plan
- 7. Air Quality
- 8. Water

PART TWO - ENVIRONMENTAL QUALITY PROGRAMS

1. Purpose/Scope: Provide support for the Air National Guard (ANG) environmental compliance and pollution prevention programs. Support includes site visits, report generation, data entry, for the ANG within the United States and territories. All work shall be in compliance with the current regulations, policies, instructions, and directives of the ANG, Air Force (AF), Department of Defense (TOD), Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), Department of Transportation (TOT), state and local requirements, and Executive Orders. Work shall include, but not be limited to, requirements of the Resource Conservation and Recovery Act (RCRA), Clean Air Act, Clean Water Act, Safe Drinking Water Act, Pollution Prevention Act, and other environmental, occupational health, and safety laws and regulations.

Compliance Programs

2. Environmental Compliance Assessment and Management Program (ECAMP)

- 2.1. The ANG established the ECAMP as a comprehensive self-evaluation and program management system for achieving, maintaining, and monitoring compliance with environmental, health and safety laws and regulations. The program establishes compliance evaluations of individual ANG installations, and addresses compliance deficiencies through the preparation of management action plans.
- **2.2.** The Contractor shall provide all labor, facilities, equipment, materials, transportation, and supplies necessary to conduct the assessments in accordance with the provisions of the contract. The Contractor shall make maximum use of existing environmental data to the extent practicable. The Contractor shall also have the field capability of using compact disks (CD's) to utilize the most current version of the Environmental Assessment and Management (TEAM) Guide and ANG Supplements. The Contractor shall have the field capability of entering data into an Access Database and utilizing the Windows Office Suite.
- 2.3. The Contractor shall use the documents in Appendix A as information and quidance for the ECAMP assessment:
- ${f 2.4.}$ The Contractor shall establish the use of environmental compliance assessments as a means of ensuring ANG compliance with all applicable environmental regulations.
- **2.5.** The Contractor shall assure the ANG, the Installation Commander's Environmental Protection Committees, Environmental Managers, Bioenvironmental Engineers, Safety Technicians, and Natural Resource Managers that their programs are effectively addressing environmental problems per AFI 32-7045 and the ANG Supplement thereto.
- **2.6.** The Contractor shall secure information that will permit Installation Commanders to anticipate and prevent future environmental and occupational safety and health problems.
- **2.7.** The Contractor shall enhance management by establishing a system for environmental compliance management.
- **2.8.** The Contractor shall provide data for use in identifying, programming, and budgeting environmental requirements and priorities.
- **2.9.** The work shall consist of using compliance assessment protocols as a tool for conducting environmental compliance assessments at the ANG installations. The objectives of the protocols are to:
 - Identify Federal, State, Department of Defense, and U.S. Air Force/ANG environmental regulations and occupational safety and health regulations that impact ANG facilities and activities
 - Summarize these requirements into environmental compliance checklists
 - Provide guidance and establish consistency in the ECAMP evaluation process
- **2.10.** The protocols identify the typical compliance areas that are normally under State and local jurisdictions. For each assessment, individual State and local

regulations must be consulted for specific requirements against which compliance must be evaluated. The ANG ECAMP protocols address fourteen major environmental compliance categories and thirty occupational safety and health compliance categories listed in Appendix A.

- **2.11.** The evaluation protocols listed in Appendix A are designed as an aid in conducting the installation assessments and, as such, should not be considered exhaustive. The Contractor shall have access to, and be familiar with, the primary references and regulatory citations and will use judgment and experience in determining the extent and focus of the assessment.
- 2.12. Pre-Assessment Information Review and Report. The Contractor shall review installation-specific information provided in response to a pre-assessment information request. This information may include the following as appropriate for each installation:
 - Pre-evaluation questionnaire completed by each installation
 - Historical and ongoing programs and missions
 - Hazardous material inventories and waste stream data
 - Organizational charts and installation maps
 - Environmental compliance policies, procedures, or directives
 - Previous compliance evaluations/reports including results of ${\tt State/EPA}$ inspections
 - Baseline and Annual Industrial Hygiene Surveys
 - Annual Safety Inspections
- **2.13.** Regulatory Review. The Contractor shall assemble and review all State, Federal, and local environmental regulations impacting each installation. These regulations will cover the forty-four major compliance categories.
 - 2.14. Draft Preliminary Report. The Contractor shall provide this report.
- 2.15. Site Visit/Draft Out-brief Preliminary Environmental Findings Report. The Contractor shall perform a site visit, conduct the In Brief and Out Brief, and provide the Preliminary Environmental Findings Report upon completion of the site visit.
- 2.15.1. Each site visit will consist of four major phases and shall be conducted in accordance with ANG direction. The number of persons shall be dependent upon the mission and or the number of tenants or Geographically Separated Units (GSUs) supported by the unit.
- **2.15.2.** In Briefing. The Contractor and ANG Program Manager shall reiterate the purpose, scope, approach, and schedule for the assessment and answer any questions. The In Briefing shall allow for mutual introductions between installation personnel, the Contractor personnel, and the ANG Program Manager.
- **2.15.3.** Records Review. The Contractor shall request all records and documents necessary to support the assessment. Records and documents not received/reviewed prior to the site visit may be reviewed during the installation assessment, depending in part upon where and how environmental compliance documents are organized and managed at the installation.
- **2.15.4.** Installation Assessment. The Contractor shall conduct the installation assessment using the TEAM Guide with ANG Supplement to guide the assessments, and to ensure that all regulatory compliance areas have been evaluated.
- **2.15.5.** Out-Briefing. The Contractor shall out-brief the installation commander on the evaluation findings. The Out-Briefing shall address:
 - Activity review
 - Summary of evaluation procedures
 - Regulatory compliance status (overall compliance or non-compliance for each assessment category)
 - Positive and negative findings
 - Negative findings to be identified as procedural or regulatory, and classified as either significant, major, or minor deficiencies for environmental compliance issues, and willful, serious, repeat or other for OSHA compliance issues
 - Overall compliance vs. non-compliance for each category

Observations and comments

- 1.) Further explanation of findings
- 2.) Potential non-compliance with pending regulations
- 3.) Management issues
- 4.) Recommendations to correct deficiencies
- 5.) Issues requiring further investigation/discussion with State/local regulatory agencies
- 2.15.6. The Contractor shall identify the issues and findings in a draft Preliminary Findings Report to be prepared and distributed as part of the Out-Brief. The Contractor shall give the ANG Project Manager a disk with the Draft Preliminary Report.
- **2.16.** Candidate Environmental Findings Report. The Contractor shall prepare a Candidate Environmental Findings Report that incorporates the installation's comments on the draft preliminary findings, and identifies the deficiencies that have been corrected since submission of the Draft Preliminary Report.
- 2.17. The Contractor shall enter findings into the ANG database, using information from the Candidate Report. This shall include all information codes required by AFI 32-7045. This disk shall be submitted to the ANG Program Manager with the hard copy of the Candidate Report.
- 2.18. Final Environmental Findings Report. The Contractor shall prepare a Final Environmental Findings Report that incorporates the installation's Action Plan to correct unresolved deficiencies and any other comments provided by the ANG on the Draft Report. A copy of the Final Report on disc shall be submitted to ANG and HQ USAF/AFCEE.
- **2.19. Meetings.** The Contractor shall participate in meetings at the Air National Guard Readiness Center with ANG Program Managers involved in the ECAMP process.
 - 2.20. The Contractor shall prepare minutes of meetings.
- **2.21.** The Contractor shall provide monthly status reports. The Report Summary shall include all pertinent information on work accomplished to date, site visit analysis, problems encountered, and anticipated work to be accomplished.

3. Hazardous Waste Management

- **3.1.** The Hazardous Waste Management Plan (HWMP) is a document that provides guidance to personnel who work with hazardous waste, and sets local management procedures for managing hazardous waste. The HWMP shall incorporate all the above requirements regarding the management of hazardous waste as they relate to environmental protection, worker safety, and transportation during operations. This project will clarify and simplify the effort of collecting, storing, and disposing of hazardous waste and the handling of hazardous material. Additionally, it is designed for the purpose of developing the confidence to react swiftly and effectively in the event of a spill.
- ${\bf 3.2.}$ RCRA established a national strategy for managing solid and hazardous waste to include training and operations requirements as well as record keeping requirements and spill release.
- **3.3.** The Contractor shall provide the necessary personnel, equipment and materials required to prepare complete HWMPs for various ANG Bases (ANGBs), associated GSUs and/or Weapon Ranges. The Contractor shall also prepare all necessary reports and documentation, attend all required meetings, and make timely revisions to facilitate completion and approval of each hazardous waste management plan. Each HWMP shall be in accordance with each state's environmental/natural resource department, EPA, OSHA, TOT and State Police and Fire Marshall.
- **3.4. Draft HWMP.** The Contractor shall prepare a draft hazardous waste management plan in accordance with ANG guidance manual, instructions received from the site visit and other relevant sources. The HWMPs shall be in a draft and all necessary information shall be contained within. The Contractor shall coordinate with the appropriate federal, state and local regulatory agencies prior to submittal of the draft. A draft HWMP shall be mailed to the State.

- 3.5. Site Visit. The Contractor shall visit the site to collect necessary materials, record search, site investigation and interview appropriate personnel to prepare the HWMPs.
- 3.6. Final HWMP. Upon receipt of the review comments by ANG, ANGB and the State, the Contractor shall be required to respond and change the HWMPs as appropriate. Once changes have been accomplished, the Final HWMP shall be approved by ANG and forwarded to the
- 3.7. Revisable Software. Upon receiving approval/acceptance of the plan, the Contractor shall provide the ANGBs and ANG computer disks that are compatible with each organization's existing computer software to allow for future revisions.
- 3.8. The Contractor shall perform related training and develop related guidance on direction from the ANG.
- 3.9. The Contractor shall provide the necessary personnel, equipment and materials to respond to spills/releases for various ANGBs, associated GSUs and/or Weapon Ranges. The Contractor shall also prepare the necessary reports and documentation, attend all required meetings, and make timely revisions to facilitate completion and approval for each spill/release closure. Each spill/release closure shall be completed in accordance with federal, state and local regulations.
- 3.10. Monthly Progress Reports. A monthly summary of work progress is required. Summary shall include all pertinent information on work accomplished to date, site visit analysis, problems encountered, and anticipated work to be accomplished.

Environmental Management Information System HAZMART Data Entry and Support Assistance

- 4.1. Hazardous material management is an integral part of the AF pollution prevention program. Hazardous material management or the "hazardous material HAZMART" concept has four elements. (1) A single point of authorization and requisition/request. (2) Distributing and collecting hazardous materials. (3) Tracking system that connects the review/authorization and the distribution/collection process. (4) Documenting and tracking and reporting hazardous waste through the "cradle-to-grave" process.
- 4.2. As directed by AF Instruction 32-7080, "Pollution Prevention Program," AF installations will develop procedures to centrally control the purchase and use of hazardous materials. Central control minimizes hazardous material and ozone depleting chemical use through centralized purchasing, distributing and issuing in the smallest unit, as needed. The minimization of hazardous materials is an AF pollution prevention goal. AF Instruction (AFI) 32-7086, "Hazardous Materials Management," specifies the use of a DESCIM approved automated tracking system. AF-EMIS (Environmental Management Information System) is the Air Force's designated DESCIM-approved tracking system.
- 4.3. The Contractor shall supply all personnel, material, equipment, transportation, etc., required to perform the work described. The Contractor shall conduct management, planning, and training functions during the course of this effort. The Contractor shall plan project activities, schedule activities and milestones, describe the status of resources, report on activity and progress toward accomplishing objectives, and Document the results of project efforts. The Contractor shall supply AF-EMIS experienced personnel.
- 4.4. Data Review. The Contractor shall review the data and Documents for input. The Contractor shall obtain a general understanding of each base's specific HAZMART business practices to facilitate the review and subsequently the quality of the data entered into the AF-EMIS. The Contractor shall attach to the site visit report a Document summarizing the business practices and explaining any requested corrections, changes and additions to the data and Documents.
- 4.5. Data Input. The Contractor shall use the HAZMART server and client computers to input data into AF-EMIS. The Contractor shall enter and/or correct:
 - a. Hazardous materials and their supply-type data into the AF-EMIS
 - b. Shop descriptive data
 - c. CAGE/MSDS data for all IEX coded materials into AF-EMIS

 - d. Correct any incorrect CAGE/MSDS entries in the AF-EMIS
 e. Results of the AF Forms 3952
 f. Hazardous waste data for all base regulated waste streams into the AF-EMIS

of each base

- g. Employee datah. Current HAZMART inventory
- 4.6. Support Assistance. The Contractor shall provide informal support assistance. Informal support shall consist of impromptu desk-side question and answer sessions, AF-EMIS demonstrations, explanation of the AF-EMIS Users or System Administrators Guide, and use of examples from the AF-EMIS Training Class. The support assistance shall be limited to the AF-EMIS application. The areas for which the Contractor may provide support include:
 - Database management and maintenance
 - Keeping shop records
 - Bar-coding
 - Managing inventory
 - Managing waste
 - Writing reports
 - Completing hazardous material authorizations

4.7. Reports

- 4.7.1. Technical and Management Work Plan and Schedule. The Contractor shall prepare a generic technical and management work plan and schedule which describes the approach to accomplishing projects; including a proposed schedule, Contractor personnel, general methodology, deliverables, and any other similar requirements.
- 4.7.2. Site Visit Report. The site visit report shall contain detailed information regarding the data entered, summary of the support assistance given, names and organizations of those assisted, results and/or recommendations as a result of the visit. The Contractor shall attach a business practice Document broadly describing the major process steps used by the AANG to manage hazardous material and waste. The report shall show the link between the process steps and the Documents and information needed for optimal use of the AF-EMIS. The report shall be used to provide relevancy between the AANG business practices and the AF-EMIS.
- 4.8. Technical Exchange Meeting. The Contractor shall be available for teleconference to discuss the management work plans, project schedules, and exchange information and support requirements. The Contractor shall provide minutes of the conference.

4.9. Training

- 4.9.1. User Training. The Contractor shall provide AF-EMIS user training. The training shall be hands on training for the HMP users and shall provide the user with the knowledge to effectively use the system.
- 4.9.2. Hazardous Waste Managers and Environmental Reporting. The Contractor shall provide AF-EMIS Hazardous Waste and Environmental Reporting training. The training shall be hands on training providing the user with the knowledge to effectively use the AF-EMIS database.
- 4.9.3. System Administration Training. The Contractor shall provide AF-EMIS System Administration training. The training shall be hands-on training providing the administrator with the knowledge to effectively use the AF-EMIS database.

Pollution Prevention Management

- 5.1. The ANG has adopted pollution prevention (P2) as the policy for managing environmental requirements. Using proactive strategies arising from P2 policy the ANG can minimize or eliminate potential hazards to human health and the environment at the source of the hazard.
- 5.2. To meet the requirements, the ANG developed Pollution Prevention Management Action Plans (P2MAP) as required by AFI32-7080. The P2MAP is a "living Document" used to assist the base in planning and budgeting for P2 requirements and Documenting successful implementation of the P2 projects. Opportunity Assessments (OA) assesses pollution sources at installations and helps determine opportunities to reduce, recycle, or eliminate waste. P2MAPs are based on the installations OAs.
 - 5.3. Pollution Prevention Management Action Plan

- **5.3.1.** P2MAP Format. The P2MAP format will be provided to the Contractor by the ANG Program Manager and shall be updated as required to meet P2 policy.
- **5.3.2.** Opportunity Assessments. The Contractor shall develop or update a P2MAP by performing OAs at designated ANGBs. The Contractor shall use ECAMP reports to identify compliance requirements and plans (solid waste management, storm water, etc.) to identify waste streams. The HAZMAT tracking system shall also be used to support OAs.
- **5.3.3.** The Contractor shall identify recycling opportunities at ANGBs. The Contractor shall ensure that identified recycling opportunities can be implemented by contracting local sources and providing the sources' names, addresses, telephone numbers, and points of contact in the P2MAP.
- ${\bf 5.3.4.}$ The Contractor shall perform cost benefit and payback analysis for each opportunity identified.
- **5.3.5.** Project Plan. Prior to the start of the P2MAP, the Contractor shall gather all Documentation necessary to develop a Project Plan. The Project Plan shall identify areas where OAs will be conducted based on ECAMP and HAZMAT reports as well as other pertinent information. However, the Contractor shall not be limited to conducting OAs at the identified areas but should use the Project Plan as a starting point. The Project Plan shall also include a project schedule with site visit and deliverable dates. The ANG Program Manager shall approve the Project Plan.
- **5.3.6.** Draft and Final P2MAP. The Contractor shall prepare two iterations of the P2MAP, a Draft and Final. The draft P2MAP shall be for internal review by the ANG Program Manager and ANG Base personnel. The final P2MAP shall incorporate all comments on the draft P2MAP provided by the ANG Program Manager.
- **5.3.7.** Progress Report. The Contractor shall provide a progress report as required by the TO statement of work. The progress report shall include all information pertinent to the completion of the project.
- ${\tt 5.3.8.}$ The Contractor shall provide all personnel, equipment, and transportation to complete the P2MAP.
- **5.4. Pollution Prevention Education and Training**. The Contractor shall be able to provide Off-the-Shelf P2 training to all levels of base personnel as required. The training shall be in accordance with TOD, AF, and ANG policies.
- ${\it 5.5.}$ Pollution Prevention Technology. The Contractor shall keep abreast of the latest P2 technologies and be able to provide the ANG with technology assessments as required.
- **5.6. Pollution Prevention Policy and Guidance.** The Contractor shall have extensive knowledge of all Executive Orders and EPA, TOD, AF, and ANG instructions, policies, and guidance governing pollution prevention at federal installations.
- **5.7.** Emergency planning and Community Right-to-Know Act (EPCRA) Reporting. The Contractor shall be able to assist ANGBs in EPCRA reporting requirements as described in EO 12856.
- **5.8. Additional P2 Activities.** The Contractor shall provide P2 services as required and described in additional to statements of work. These requirements would be required to meet expanding TOD and AF Policy.

6. Integrated Contingency Plan

- **6.1.** The purpose of this project is to assist the ANG in the development of an integrated environmental spill/release contingency plan that will satisfy the requirements of multiple federal emergency response and contingency planning requirements, as well as state and local requirements. This will be accomplished using the Integrated Contingency Plan (or "One-Plan") Guidance developed by the National Response Team (NRT) and published in the Federal Register on June 5, 1996 (61 FR 28641) and AFI 32-4002.
- **6.2.** In support of federal authority review in relation to hazardous materials prevention, mitigation and response, EPA, announced the publication of an agreement to implement an interagency Integrated Contingency Plan (i.e., One-Plan) for release of oil

and hazardous substances. The One-Plan was developed under the auspices of the NRT, with participation by industry and environmental groups, state agencies, EPA, the U.S. Coast Guard (USCG), the OSHA, the Research and Special Programs Administration (RSPA) in the Department of Transportation, and the Minerals Management Service (MMS) in the Department of Interior. The guidance provides facilities with a common sense option for meeting multiple emergency planning requirements under nine different federal regulations. These federal regulations include:

- a. EPA's Oil Pollution Prevention Regulation (SPCC and Facility Response Plan Requirement) 40 CFR Part 112.7(d) and 112.20-.21
- b. MMS's Facility Response Plan Regulation 30 CFR Part 254
- c. RSPA's Pipeline Response Plan Regulation 49 CFR Part 194
- d. USCG's Facility Response Plan Regulation 33 CFR Part 154, Subpart F e. EPA's Risk Management Plan Programs (RMP) Regulation 40 CFR Part 68 and Clean Air Act Section 112r
- f. OSHA's Emergency Action Plan Regulation 29 CFR 1910.38(a) g. OSHA's Process Safety Standard 29 CFR 1910.119
- h. OSHA's HAZWOPER Regulation 29 CFR 1910.120
- i. EPA's Resource Conservation and Recovery Act Contingency Planning Requirements - 40 CFR Part 264, Subpart D, 40 CFR Part 265, Subpart D, and 40 CFR 279.52
- 6.3. The guidance includes a core facility response plan for releases of oil and hazardous substances under existing federal laws. The core plan contains information that emergency responders will need to implement the initial stages of the response. The core plan will be supplemented with annexes that contain information such as a description of the facility's incident command system and data on specific hazards at the facility required to meet specific federal regulatory requirements. Facility plans prepared in accordance with the guidance will satisfy facility emergency response planning requirements of the five agencies listed above and will be the federally preferred method of such planning. The One-Plan approach serves to minimize duplication of effort and unnecessary paperwork burdens.
- **6.4.** Program Management and Work Plan Preparation. The Contractor shall prepare a Work Plan detailing tasks, milestones, staff assignments, schedule, report formats, and deliverables. The Work Plan will be updated monthly with a progress report.
- **6.5.** Site Visit. The Contractor shall conduct a site visit to collect data in support of this project. One of these individuals on the site visit must be a licensed Professional Engineer.
- 6.5.1. The Contractor shall collect information sufficient to develop an ICP that meets the requirements of the One Plan.
- 6.5.2. The Contractor shall inspect all areas of the facility that may have a potential for release of hazardous material or petroleum product to the environment. This will include confirming the inventory of facility ASTs and underground storage tanks (USTs). Each tank system will be inspected by the Contractor to ensure they meet release prevention requirements. Deficiencies shall be noted in the ICP.
- $\pmb{6.5.3.}$ Other information to be collected by the Contractor shall include data on hazardous material storage, its potential for release, the systems in place to prevent or contain a release, and the location, direction and potential receptors that may be affected by such a release. This will include identifying spill or release routes such as storm drainage or sanitary sewer collection systems. The ANGB will provide the Contractor with copies of the facility storm drainage and sanitary sewer collection layout.
- 6.5.4. The Contractor shall inventory all spill containment equipment or supplies that are available at the facility. In addition, the Contractor shall review training records of those individuals who are considered "first responders" to not only report this information in the Plan, but to determine the adequacy of such training. The ICP will outline addition training that will be necessary.
- 6.6. Draft Integrated ICP. The Contractor shall prepare a draft ICP that is consistent with the guidance developed by the NRT. It will fulfill all requirements of applicable federal, state or local hazardous material contingency planning and will follow the prescribed format in the One Plan Guidance. The Document will contain sufficient detail to allow ANG personnel to prevent or respond to a release of a hazardous material, but not overly voluminous that its size makes it unusable. It shall utilize maps and drawings whenever possible to facilitate planning and response.

- **6.6.1.** The Contractor shall also work directly with the spill response Contractor for the site to obtain necessary information to be included in the ICP on items such as spill response equipment and capabilities, and employee training and certifications.
- **6.7.** On-Site Review of Draft Integrated Contingency Plan. The Contractor shall conduct an on-site review of the Draft Integrated Contingency Plan. This meeting will be conducted after the submission of the Draft Plan and after the ANG Program Manager review of the Document.
- ${\it 6.7.1.}$ The Contractor shall assimilate all of the comments into a summary of comments.
- **6.8. Final Integrated Contingency Plan.** Upon receiving the notice to proceed with the final version of the Document, the Contractor shall incorporate all comments given by ANG Program Manager into a final Document. Final Documents will be provided in a three-ring binder suitable to allow for the ANGB to make future updates to the Document. A Professional Engineer shall certify the final Document.
- **6.9. Progress Report.** A monthly summary of work progress is required. Summary shall include all pertinent information on work accomplished to date, problems, and anticipated work to be accomplished.

7. Air Quality

- 7.1. The Clean Air Act (CAA) Amendments of 1990 is the fundamental element of the ANG air quality program. Through promulgation of regulations in the Federal Register, Title 40 of the Code of Federal Regulations (CFR) 50 -99, and the Air Force Instruction 32-7040, compliance with the CAA shall be achieved. The goal of the air quality program is to help achieve attainment status for all criteria pollutants, and reduce ozone depletion and global warming.
- **7.2.** The Contractor shall be required to provide all professional and technical personnel necessary to assist the ANG in performing various technical, planning, and documentation efforts in order to comply with federal and state regulations and policy directives to prepare required deliverables. These items include, but not limited to, emissions inventories for both criteria pollutants and hazardous air pollutants, risk management plans, Title V permitting, conformity analysis/determination, state permitting, pollution prevention assessments and emissions reduction credits. All tasks shall be performed under the direction and approval of the ANG.
 - 7.3. The Contractor shall visit applicable sites to complete the work.
- **7.4.** The Contractor shall provide all technical consultants required for this contract and for any expert witness testimony.
- 7.5. The Contractor shall develop the necessary items as described in federal, state, and local regulations.
- 7.6. Program Plan. The Contractor shall develop a program plan detailing tasks, logical interactions, milestones, staff assignment, schedule, and deliverables. Start-up meeting/s is required.
- 7.7. Draft and Final Plans. The Contractor shall prepare the draft and final plans in accordance with federal, state, and local regulations. The Contractor shall visit the site to interview appropriate personnel, investigate the site, and collect necessary materials and data.
- **7.8. Progress Reports.** A monthly, or as needed, summary of work progress is required. Summary shall include all pertinent information on work accomplished to date, possible problems, and anticipated work to be accomplished.

Water

8.1. The Clean Water Act, Safe Drinking Water Act and the Oil Pollution Act are the fundamental elements of the Air National Guard's water quality program. Through promulgation of regulations in the Federal Register and Title 40 of the Code of Federal Regulations, State Regulations, and AFIs 32-4002 and 32-7041, compliance with industrial

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water, storm water, and drinking water shall be achieved. The goal of the water quality program is for all waters to become fishable, swimmable, and drinkable.

- 8.2. The Contractor shall be required to provide all professional and technical personnel necessary to assist the ANG in performing various technical, planning, and documentation efforts in order to comply with above mentioned regulations and policy directives to prepare required deliverables. These items include, but are not limited to Spill Prevention Control and Countermeasure Plans, Facility Response Plans, Storm Water Pollution Prevention Plans, Drinking Water Assessments, Deicing Best Management Practices, Total Maximum Daily Loads Studies, and Storm Water Management Plans. All tasks shall be performed under the direction and approval of the ANG.
 - 8.3. The Contractor shall visit applicable sites necessary to complete the work.
- **8.4.** All technical consultants required for this contract shall be provided by the Contractor and shall provide any expert witness testimony.
- 8.5. The Contractor shall develop the necessary items as described in federal, state, and local regulations.
- **8.6. Program Plan.** The Contractor shall develop a program plan detailing tasks, logical interactions, milestones, staff assignment, schedule, and deliverables. A Startup meeting to review the plan is required.
- **8.7.** Draft and Final Plans. The Contractor shall prepare the draft and final plans in accordance with federal, state, and local regulations. As part of the draft plan, a site visit is necessary. The Contractor shall visit the site to collect necessary materials, record search, site investigation and interview appropriate personnel.
- **8.8. Progress Reports.** A monthly, or as needed, summary of work progress is required. Summary shall include all pertinent information on work accomplished to date, problems, and anticipated work to be accomplished.

PART THREE - ENVIRONMENTAL PLANNING PROGRAMS

- 1. Purpose/Scope
- 2. Master Plan Development
- 3. Environmental Assessments under the National Environmental Policy Act (NEPA)
- 4. Environmental Impact Statement (EIS)
- 5. Technical Support for the Air Installation Compatible Use Zone (AICUZ) Program
- 6. Environmental Baseline Survey (EBS)
- 7. Managerial Support

PART THREE - ENVIRONMENTAL PLANNING PROGRAMS

1. Purpose/Scope: Conducts studies and provide Documentation to integrate environmental concerns into every phase of the planning process for the Air National Guard (ANG). All work shall be in compliance with Air Force Instructions (AFI), President's Council on Environmental Quality (CEQ) regulations and all other Federal laws, and state and local environmental regulations. Executive Order (EO) 12372 requires coordination of studies and Documentation (Interagency/Intergovernmental Coordination for Environmental Planning) with other Federal, state and local agencies to assure that ANG has included them in the planning process.

2. Master Plan Development

- 2.1. General: The role of the ANG is to provide each ANG unit with adequate facilities to support the unit's mission, programmed mission, and probable future missions. We must plan, design and build each unit's environment with maximum flexibility to insure what we build today is sufficient and adaptable for the future. To do this we must broaden the involvement of all base and ANG organizations in the planning process.
- 2.2. Master Plan: The long-range Master Plan becomes the basis for decisions on the built environment for the installation, and may have an impact on decisions for future missions. It becomes the basic planning tool for the installation and the ANG to insure an orderly development process to the installation, and provide future planners with the Documentation factors and rationale used in developing the plan. It provides local government, airport, and other military planners with the potential impact of our future growth on the surrounding area, and may prevent encroachment by these activities. It also identifies the need, and provides the justification for acquisition of additional real estate future development to control encroachment into areas that could inhibit the ANG's development plan.
- 2.3. Master Plan Development: This work consists of Developing a Long and Short Range Plan for each installation to guide it into the future, to support the construction programs presented to Congress and serve as the basis of daily implementation of all engineering programs at the installation. The plan can identify and/or reinforce the direction and requirements needed to support facility construction. Lack of planning can create a more costly execution of programs, thereby, requiring a larger funding base line.
- **2.4. Plan Process:** A seven-step process to develop a long-range plan, a short-range plan, Computer Aided Design (CADD) product(s) map tabs of existing conditions, photographs and back-up reports is outlined in this Document.
- $\mbox{\bf Step 1:}\,$ The ANG planning representative and ANG programmer for the installation attend a Criteria Review Conference (CRC) with the Contractor at the installation.
- **Step 2:** The Contractor shall survey the installation, prepare an existing base map CADD product, and begin to develop map tabs and take/print photographs.
- Step 3: The Contractor shall meet with the air commander and his staff (including the Base Civil Engineer (BCE)) in conjunction with a Unit Training Assembly (UTA) or "drill" weekend. The primary purpose is to conduct interviews and discuss and determine the direction(s) the installation would like to take for future plan development.
- Step 4: The Contractor shall evaluate this information and prepare a minimum of 3 alternatives for each long range aircraft scenario identified in the CRC. It will be necessary to establish the constraints including the Building Setback Line for construction of all facilities for all aircraft types. Individual aircraft parking plans will be developed for the various types and numbers of aircraft identified at the CRC (showing the limits of each arrangement):
- Note: A generic fighter aircraft parking spot with the width of an A-10 and the length of an F-15 will be used for developing fighter plans. The tail height of the F-15 will be used for meeting transitional surface clearances. KC-135 aircraft will be used for tanker plans. C-130 and C-17 aircraft will be used for transport plans. Other aircraft may include C-5, KC-10, 767 and 747 aircraft. Non-flying installations (no aircraft assigned) will have other facility and site requirements identified that will be the basis for the alternatives. These alternatives will be prepared for the Phase 1, Submittal of Long Range Alternatives Report along with an analysis of existing conditions at the installation.

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- **Step 5:** The ANG installation's personnel will review the Phase 1 submittal report Documents. The Contractor shall be required to make a presentation of the alternatives to personnel at the installation.
- Step 6: The Contractor shall develop the draft book reports as a Phase 2, Submittal of Draft Reports. All information in the reports shall be complete in content, format and include any changes required by the supplied comments given. It shall be considered a mock-up of the final Document to be printed and will be reviewed and approved as such. All CADD products shall be presented in digitized form for electronic review and approval. All map tabs shall be submitted in blueprint form for review and approval. Any photographs required at this phase will be turned over to the appropriated agencies in completed form. The Single Sheet Summary Poster will be submitted in full-size format for review and approval. Color choices for the final printing of all reports and the Single Sheet Summary are to be marked on a few of the different types of exhibits (hand-colored or color Xerox) to reflect the position and a shade of each color). Panetone color sheet is to be submitted with each hand-applied color representing a panetone sample.
- **Step 7:** The Contractor shall make all requested changes to the final Documents and proceed to have the final reports printed, CADD digitized products finalized, and tabs finalized. This is known as Phase 3, Submittal of Final Products.
- **2.5. Plan Revisions:** The Contractor shall provide seven final end product groups. The content and size of each are identified as follows:
- **2.5.1.** The Full Report, at 8 1/2" x 11" (width by height), contains nine chapters and is the most complete Documentation of the Master Plan work effort.
- **2.5.2.** The Executive Summary Report, at $8\ 1/2$ " x 11" (width by height), is a reprint of the first chapter from the full report and contains selected parts of other chapters. As stated by its title, this Document is for persons desiring a quick summary as opposed to the full report.
- **2.5.3.** The Executive Summary Single Sheet Poster, at $33" \times 25 \text{ 1/2"}$ (width by height), is a large two-sided color print of limited information (condensed from the Executive Summary Report). It is intended to be wall mounted at eye level in offices, break rooms, at drinking fountains, or other locations where it presents a convenient opportunity for individuals to gain quick oversight of the entire plan. The information presented should be minimal, graphic in nature with *limited text in large print*.
 - 2.5.4. Aerial Photography is the fourth end product and will include:
- a. Vertical photos, in color, and black and white, with film negatives (size depends on negative type used), contact prints (9" \times 9") and photo enlargements (size proportional to scale required).
- b. Oblique photos in color, and black and white, with film negatives (size depends on negative type used) and contact prints $(9" \times 9")$.
- c. Raster image photo in black and white for use inside $\mbox{\sc Auto}$ CADD through a CADD-overlay program.
 - 2.5.5. Map and Plan Tabs shall consist of the following:
- a. Existing condition maps at 100', 200' and/or 400' scale on 30" x 42" sheet size.
- b. Future development plans at 100', 200' and/or 400' scale on 30" x 42" sheet size.
- 2.5.6. Computer Digitized Maps and Plans shall be generated for all the map and plan tabs, and will be provided on $1.4~\mathrm{MB}$ floppy discs in a backup format to be specified.
- **2.5.7.** Desktop Publisher Program Files shall be provided for the word processing portion of the reports, to include all charts and graphs used. The Contractor shall provide all photos and renderings used in the report and a digitized master of each report.
- 3. Environmental Assessments under the National Environmental Policy Act (NEPA)

- 3.1. General: The ANG requires investigations and analysis of environmental issues and effects that could result from development and implementation of proposed actions at various ANG installations in order to understand the environmental consequences of these proposed actions. After the careful review and analysis of the environmental consequences, a determination can be made that these actions may warrant preparation of an Environmental Impact Statement (EIS) or may qualify for a Finding of No Significant Impact (FONSI). The data gathered and the reports generated shall fulfill the requirements for the National Environmental Policy Act, the Council on Environmental Quality Regulations, other applicable Federal laws, and applicable State environmental regulations.
- **3.2.** Assessment Types: Generally, there are three types of Environmental Assessments that are completed by the ANG. These EAs are 1) construction/demolition 2) conversion of aircraft and/or 3) support of training activities on various military training routes and military operations areas.
- **3.3. Evaluation Criteria:** The Contractor shall be required to perform EAs, which are classified up to "secret." The Contractor shall collect and evaluate data to define baseline environmental conditions related to such factors as air/noise quality, pesticide use and control, socioeconomic, safety, air and land traffic, land use, coastal zone management, biological, cultural, earth, and natural resources resulting from the Air Force/Air National Guard operations. In addition, the effects of aircraft operations on existing or proposed low level flying routes, military operating areas, and special use airspace shall be addressed. The three types of EAs that the Contractor shall support include:
 - Construction and demolition
 - Aircraft conversion
 - Training activities on various military training routes and military operations areas
- **3.4. Provisions:** The Contractor shall provide all necessary labor facilities, equipment, materials, transportation, and supplies necessary to perform services described herein. The Contractor shall make sure of all existing rules, regulations, and directives in the performance of this effort.
- **3.5.** Impact Analysis: The Contractor shall analyze the environmental impact of proposed aircraft conversion and flying operations and any building alterations to support the proposed operations. The planned modifications shall consist of support facilities to include modifications to existing buildings. Noise contours for current and future aircraft operations may be required for this study, including all commercial and military activity.
- **3.5.1.** Secondary impacts such as possible effects of flying over adjacent towns, use of existing low level flying routes, ground traffic patterns and pollutant emissions, fugitive dust, treatment of sewage, storm water run-off, waste generation, possible fuel spills and socioeconomic impact shall also be assessed.
- **3.6. Program Plan**. The Contractor shall prepare a Program Plan that details tasks, logical interactions, staff assignments, schedule, and deliverables to be produced. The Contractor shall provide the installation point of contact (POC) a letter listing Documents needed from base organizations.
- **3.7.** Description of Proposed Action and Alternatives (TOPAA). Preparation of a Draft and Final TOPAA describing the action and all reasonable or viable alternatives shall be prepared. The Final TOPAA shall be prepared once comments from the ANG are forwarded.
- **3.8.** Coordination (IICEP). The Contractor shall coordinate with Federal, State, county, and local offices maintaining noise, air quality, ecological, and general environmental data to obtain copies of the Documentation relating to the ANG site environment. The Contractor shall also coordinate with base organizations to gather data, assess construction impact and determine measures to minimize construction impacts. The ANG Program Manager will assist in the identification of these organizations. At a minimum, requirements of Executive Order 12372 shall be required.

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3.9. Site Visits. The Contractor shall perform an initial on-site visit to include an interview with the base personnel who have knowledge of ANG operations. The Contractor shall:

Perform a search of available literature of various Government sources for the purpose of obtaining relevant information on site operations and their environmental impacts.

Review and analyze the Government furnished environmental Documentation such as:

- Installation History available from each installation
- Latest Organizational Chart available from each installation
- Overall maps of installation and surrounding communities available from each installation

Obtain, review and analyze relevant Government Documentation to include:

- Maps showing water lines, surface drainage, sewers and electrical distribution system, and natural gas distribution system if available
- Aerial and ground photographs if available
- Potable water well logs if available
- Land Use Management Plan if available
- Zoning maps of surrounding communities if available
- Airport Noise Studies if available
- Master Plan if available
- **3.10.** Data Analysis The Contractor shall analyze all pertinent data using appropriate state-of-the-art techniques and an interdisciplinary team of experts in the environmental disciplines. The analyses shall include whatever assessment is necessary and, wherever possible, shall include existing analyses if they are properly validated and verified. Where data gaps exist, a reasonably expected worst-case analysis shall be performed, and identified as such in the text.
- **3.11. Preparation of Environmental Assessment:** The Contractor shall prepare and submit an Environmental Assessment, to include a draft, check copy, and final.
- **3.11.1**. Where applicable, the Contractor shall analyze the environmental impact of flying operations. Noise contours for aircraft operations shall be required for military aircraft activity. Noise contours shall be prepared using the average daynight outdoor sound level (LDN) methodology and shall be overprinted on USGS 1"=2000' maps and reduced for presentation in the environmental Documents. Other methodologies may be used if approval is obtained in advance from the National Guard Bureau. These methodologies may be the use of ROUTEMAP, MRNMAP or ASAN.
 - 3.11.2. Noise contour requirements for the Environmental Assessment.

Noise exposure estimates must be expressed in terms of day/night average sound levels.

Baseline contour will include all current civilian, military, and transient aircraft activity to be prepared using current data.

Second contour will depict the proposed aircraft on the baseline contour.

The NOISEMAP methodology or INM (Integrated Noise Model) methodology must be used and shall include:

Evaluation of ground engine test data and engine run ups

Actual flight tracks, actual departure and arrival profiles, and actual power settings to the maximum extent practical

Sound Exposure Levels (SEL) and conclusions shall also be provided for the nearest noise sensitive receptors for existing conditions as well as the proposal

SEL for the based aircraft and proposed aircraft will also be provided

Use of ROUTEMAP as appropriate will be included to delineate noise emissions/levels on the baseline (current) and future military training routes (MTRs).

- **3.12. Monthly Progress Reports:** A monthly summary of work progress shall be required. Summary shall include all pertinent information on work accomplished to date, problems and anticipated work to be accomplished.
- **3.13. Security Requirements:** The Contractor shall have Defense Intelligence Services (DIS) approved automated information systems (AIS) processing capability, classified Document reproduction capability, and Document storage capability for Document with up to SECRET classifications.

4. Environmental Impact Statement (EIS)

- **4.1. General:** The ANG is required under the NEPA to prepare EIS where actions are not met with other environmental review Documents, Section 106 of the Historic Preservation Act, Section 107 of the Threatened and Endangered Species Act, the Clean Air Act, various other federal and state rules and regulations and various TOD regulations and policies to provide environmental Documentation for its major referral activities. The ANG requires Contractors support to meet these multi-faceted requirements and to establish the use of compliance assessments (e.g., ECAMP audits, RCRA surveys, etc.) as a means of ensuring compliance with all applicable environmental regulations.
- **4.2.** Requirements: The Contractor shall be required to provide all professional and technical personnel necessary to perform various technical, planning and Documentation efforts in order to comply with the previously stated rules, regulations and policy directives, and to prepare complete environmental management plans (e.g., spill response plans, hazardous waste management plans, etc.). Data information gathering, formulation and analysis of various ANG quality, land use, natural resources, biological resources, safety, management of aircraft operations, noise emissions, cultural resources, earth resources, etc. shall be required.
- **4.2.1.** All technical consultants required for this contract shall be provided by the Contractor and shall be required to provide expert witness testimony. Expert witness testimony is not part of this contract, but shall be negotiated separately in the event such testimony is necessary.
- **4.3. Purpose:** The Contractor shall provide all necessary labor, facilities, equipment, materials, transportation and supplies necessary to perform services described herein. The Contractor shall make use of all existing rules, regulations, and directives in the performance of this effort.
- **4.4. Defining Baseline Conditions:** The Contractor shall visit applicable sites and all state, federal and local agencies necessary to complete the work required.
- **4.5. Analysis:** The purpose of this effort is to investigate and analyze environmental issues and effects to accomplish an Environmental Impact Statements (EISs), if required as a result of the investigations. In preparing the EISs, coordination with and input from governmental regulatory agencies shall fulfill requirements set forth in the National Environmental Policy Act (NEPA), the Council on Environmental Quality Regulations, and all other applicable Federal laws, and state and local environmental regulations.
- **4.5.1.** The work shall consist of collecting, reviewing, and evaluation data to define baseline environmental conditions related to such factors as air and soil quality, pesticide use and control, socioeconomic, air and land traffic, land use, coastal zone management, and natural resources for the range, and operational locations, addressing the effects of aircraft and ground operations on the baseline environment.
- **4.5.2.** Where applicable, the Contractor shall analyze the environmental impact of base flying and ground operations. Noise contours for aircraft operations shall be required for EIS, including military aircraft activity. Nose contours shall be prepared using the average day-night outdoor sound level (LDN) methodology and shall be overprinted on USGS 1" = 2000' maps and reduced for presentation in the environmental Documents. Other methodologies may be used if approval is obtained in advance from the National Guard Bureau.

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 ${f 4.5.2.1.}$ Noise contour requirements for the Environmental Impact Statement.

Noise exposure estimates shall be expressed in terms of day/night average sound levels.

Baseline contour shall include the most current data on all civilian, military, and transient aircraft activity.

Second contour shall depict future aircraft activity on the baseline contour.

NOISEMAP or ROUTEMAP methodology shall be used, whichever is most appropriate to the particular application. If the NOISEMAP methodology is chosen, it shall include:

Actual flight tracks, actual departure and arrival profiles, and actual power settings, to the maximum extent practical.

Single events levels (SEL) and conclusions for the nearest noise sensitive receptors for existing conditions and future projections.

SEL for present and future aircraft.

- **4.6. Security Requirements:** The Contractor shall have Defense Intelligence Service (DIS) approved automated information systems (AIS) processing capability, classified Document reproduction capability, and Document storage capability for Document with up to SECRET classifications.
- 4.7. Coordination: The Contractor shall coordinate with Federal, state, regional, and local offices maintaining noise, air quality, water quality, ecological, and general environmental data to obtain copies of Documentation relating to the environment of the applicable base(s). The Contractor shall also coordinate with base/range organizations to gather data to assess and determine appropriate mitigation response. The National Guard Bureau will identify these organizations to the Contractor. At a minimum, the Contractor shall coordinate in accordance with AFR 19-9, or AFI 32-7062 (Intergovernmental Interagency Coordination for Environmental Activities) when finalized.
- **4.8.** Site Visits: The Contractor shall perform an initial on-site visit. Interviews with base personnel who have knowledge of aircraft operations will be conducted. As furnished by the ANG, a Draft TOPAA shall be reviewed by the Contractor and incorporated into the EIS.
 - The Contractor shall make site visits when required and approved by the Contracting Officer. Trips one for data collection and one for review of the draft environmental assessment shall be required.
 - The Contractor shall perform a search of available literature including various Government sources for the purpose of obtaining relevant information on current and proposed operations and their environmental impact.
 - Review and analyze ANG and Base furnished Documentation with respect to its impact on the environment, to include:
 - Previous Environmental Assessments
 - Installation/Range History
 - Maps of the Range and surrounding communities
 - Organizational charts
 - Obtain from the Base, review and analyze Documentation with respect to its environmental impact, as a minimum:
 - Maps showing water lines, surface drainage, storm drainage, sanitary sewers, electrical distribution system, and natural gas distribution system $\,$
 - Reports prepared by Base or other agencies relating to airfield environmental impact
 - Aerial and ground photographs
 - Potable water well logs
 - Land Use Management Plan

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- Zoning maps of surrounding communities
- Land Use Plans of surrounding communities
- **4.9.** Data Analysis. The Contractor shall analyze all pertinent data using appropriate state-of-the-art techniques and an analysis shall include whatever assessment is necessary and, whenever possible, shall include existing analyses if they are properly validated and verified. Where data gaps exist, a reasonably expected worst-case analysis shall be performed, and identified as such in the text.
- 4.10. Environmental Impact Statement/Record of Decision (ROD). The Contractor shall prepare Environmental Impact Statements based on the TOPAA that integrates the ANG project into a defensible format in compliance with NEPA. The Contractor shall provide the required technical and administrative support required to produce a draft of the EIS. Upon completion of ANG review of the draft EIS, the Contractor shall produce a formal draft EIS intended for public review, and support the circulation and review of this Document. Following the successful public review period, the Contractor shall produce the ANG Environmental Impact Statement.

4.11. Report Submittals.

- 4.11.1. Program Plan. The Contractor shall prepare a Program Plan.
- **4.11.2.** Description of Proposed Action and Alternatives. After review of a government provided Draft TOPAA, The Contractor shall review of a government provided TOPAA, formulate a Final and incorporate into the draft EIS. TOPAA shall be used to prepare IICEP packages for distribution to affected parties.
- **4.11.3. Meeting Support.** The Contractor shall provide Professional and logistical (to include a count reporter/stenographer) support for Scoping hearings. A scoping summary trip report outlining the results of these meetings will be required.
- **4.11.4. Scoping Summary.** Testimony presented at the scoping meetings will be placed into a verbatim report for use by the ANG.
- **4.11.4.1.** The Contractor shall prepare responses to inquired, questions and concerns as a result of the scoping meetings. Responses will be in letter format in form suitable for mailing.
- 4.11.5. Draft EIS. Based upon approval of the check copy by ANG, the Contractor shall prepare a Draft EIS for distribution.
- **4.11.6.** Coordination/Review Special Studies for PDEIS. The Contractor shall review and include into the draft EIS as appropriate special studies/reports on identified issues by the public, other agencies, or ANG. Review comments on these reports will be provided to the ANG prior to such incorporation.
- **4.11.7. Draft Hearing Support.** Support for a second series of meetings (draft hearings) will be required. A summary of these meetings will be required.
- 4.11.8. Draft Hearing Summary. Testimony presented at the draft hearings will be placed in a verbatim report for use by the ANG.
- ${f 4.11.9.}$ **PFEIS.** The Contractor shall prepare a PFEIS for ANG review and comment.
- 4.11.10. PFEIS Check Copy. The Contractor shall incorporate comments and corrections from the PFEIS for ANG review.
- ${\bf 4.11.11.}$ FEIS. The Contractor shall, based upon approval of the check copy by ANG, prepares FEIS for distribution.
- **4.11.12.** Administrative Record. The Contractor shall be required to prepare and maintain an administrative record for the EIS. Upon completion of the EIS (signing of the Record of Decision), this record shall be given to the ANG.
 - ${\bf 4.11.13.}~{\bf Progress~Report.}~{\bf The~Contractor~shall~prepare~and~forward~monthly~progress~reports.}$

- 5. Technical Support for the Air Installation Compatible Use Zone (AICUZ) Program
- 5.1. General: The objective of this contract is to provide high level, technical support of the AICUZ and Environmental Impact Analysis Process (EIAP). The scope of this contract includes collecting and assembling baseline data (through interviews with base personnel), developing baseline noise database, generating noise files and noise contours using BASEOPS and NOISEMAP, Geographic Information Systems (GIS) overlays and US Census Bureau Public Law 93-171 and USGS TIGER/Line census file data. The Contractor shall analyze various alternatives based on different planning/mission scenarios to determine noise, land use, and population impacts. The scope of this work also includes preparation of photo-ready copy of the appropriate AICUZ study reports and additional final copies of each AICUZ study as specified to include written analysis and noise contour maps with associated existing land use, future land use and zoning overlays. Maps will be scaled as necessary to produce readable and usable maps not to exceed 11" x 17" when plotted or printed with color. Maps shall be oriented with north to the top of the page unless otherwise directed. Maps shall be professionally reproduced using a minimum of two colors to distinguish the contours from lines on the background maps. The Contractor may be required to prepare an AICUZ implementation and maintenance plan and a "Citizens Brochure", summarizing the AICUZ program. The scope for each study may vary from base to base. Some bases may only require the AICUZ narrative report, implementation plan, and Citizens Brochure, incorporating available AICUZ data to develop noise/land use overlay maps. In other cases, a base may have recently released a new AICUZ study. In those cases, the Contractor would prepare an AICUZ amendment containing Contractor produced AICUZ maps with land use and zoning overlays along with a thorough land use analysis.
- **5.2.** Requirements: The Contractor shall be required to provide all professional and technical personnel necessary to perform various technical, planning and Documentation efforts in order to comply with the previously stated rules, regulations and policy directives, and to prepare complete environmental management plans (e.g., spill response plans, hazardous waste management plans, etc.). Data information gathering, formulation and analysis of various ANG quality, land use, natural resources, biological resources, safety, management of aircraft operations, noise emissions, cultural resources, earth resources etc.) shall be required.
- **5.3. Provisions:** The Contractor shall provide all necessary labor, facilities, equipment, materials, transportation and supplies necessary to perform services described herein. The Contractor shall make use of all existing rules, regulations, and directives in the performance of this effort.
- **5.4.** Site Visits: The Contractor shall visit applicable sites and all state, federal and local agencies necessary to complete the work required.
- **5.5.** Documentation Preparation: It will require the preparation of AICUZ studies with supporting Documentation and other aircraft noise-related support efforts at Air Force installations with flying missions/active runways. AICUZ studies may consist of one or more of the following steps as specified for each base:

Collect the necessary information to assemble a complete noise data file.

Validate data provided during the data collection process. Information provided by the government shall be validated and updated to insure currency as it relates to the existing operational activity. Make final adjustments required as a result of unanticipated but significant changes in mission, operations (to include flight tracks and flight profiles), aircraft or other data including all Environmental Impact Analysis Process actions.

Develop flight tracks, noise contours, Accident Potential Zones (APZs), AICUZ (combined noise contour and APZ) maps along with three additional maps with existing land use, future land use and zoning boundary outlines overlaid on AICUZ maps as required but not to exceed a 11" x 17" format. Maps shall be oriented with north to the top of the page unless otherwise directed. Maps shall be professionally reproduced using a minimum of two colors to distinguish the contours from lines on the background maps.

Develop AICUZ study narratives, including the above maps and related analysis including land use, population, and zoning analysis. The narrative AICUZ report will also include an implementation and maintenance plan as well as a citizen's brochure. Generic formats shall be provided and followed by the Contractor.

As requested, the Contractor shall provide AICUZ public release assistance to the study base. This assistance will consist of one or more of the following items: AICUZ public

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release meeting preparation including briefing base senior leadership and development of visual aids; provide presentations at AICUZ public release meetings; providing question and answer support at the AICUZ public release meetings; and/or provide 250 copies of the Citizen's Brochures for distribution during the public meetings. These items are to facilitate public release of accurate AICUZ Documents.

Provide other AICUZ support as requested including but not limited to preparing and/or revising AICUZ guidance materials; and conducting research and training for improving the overall AICUZ program.

5.6. Baseline Procedures: Baseline products will be developed using data acquired from the government resources and/or through Contractor-conducted interviews supplemented by other means. The data will include aircraft flight tracks, flight profiles, power settings, aircraft sorties, appropriate charts and information concerning particular operations and maintenance practices. There will be several baseline products developed, depending upon the status of AICUZ planning at the base. These products include:

An AICUZ Amendment consisting of a Document containing Contractor-produced or government furnished noise contours, accident potential zone, land use analysis and supporting maps to supplement an existing study;

An AICUZ Narrative Study consisting of data validation and updating, comprehensive noise analysis, and a land use analysis with maps and narrative;

A full AICUZ study, which consists of data collection of current operational and maintenance data and validation, comprehensive noise analysis, and a land use analysis with maps and narrative;

Provide a report and land use analysis with maps using government provided noise analysis.

- **5.7.** Determining Courses of Action: These Documents may also be used by Air Force decision makers in determining the course of action for its resources and the need for (1) preparation of further environmental Documents as required by the NEPA of 1969 or (2) modifications and alternatives analysis of the base AICUZ implementation and maintenance plans.
- 5.8. Support: The Contractor shall provide all necessary personnel, facilities equipment and materials required to complete the tasks identified in this Statement of Work. The Contractor shall be required to have available in its offices, computer systems with associated software, hardware and expertise capable of running a wide variety of government furnished noise computer models to include the most current version of BASEOPS and NOISEMAP. In addition, the Contractor must be capable of utilizing a full range of analysis tools within these programs such as converting government furnished NOISEMAP 5.2 files to the most current version of NOISEMAP, running the US. Corps of Engineers Geographical Information System (GIS) Geographical Resources Analysis Support System (GRASS), and the Census and USGS TIGER databases. The Contractor must also provide input/output of the model results, production of contour overlays, noise sensitive area land use analysis at appropriate scales on related maps, and prepare photo ready final copies of related AICUZ reports. The Contractor shall provide detailed statistical analysis of population and noise sensitive land use exposure between DNL 65 dB and DNL 80 + dB for the AICUZ Study, between CNEL 60 dB and CNEL 80 + dB for California AICUZ Study, and between DNL/CNEL 60 dB and DNL 85 dB for the AICUZ database. The Contractor shall have the demonstrated ability to integrate the noise model output data with the Census and USGS TIGER database, a variety of GIS programs, and with Computer Aided Drafting (CADD) drawing (AutoCADD DWG and Microstation DGN) files.
- 5.9. Travel Requirements: In completing this effort, Contractor personnel will be required to travel.
- **5.10. AICUZ Narrative:** Different tasks may be required either as independent actions or as to any base having a flying mission or active runway/multiple actions. These are:
- **5.10.1. AICUZ Narrative:** The Contractor shall provide accurate AICUZ data validation, updating the data files, and narrative and mapping support to the AICUZ study process for each base where usable AICUZ data and maps are already available. The Contractor shall overlay available AICUZ data (combined noise contours and accident potential zones) with existing and future land use and zoning data on three separate AICUZ maps. Maps will be accompanied by written land use compatibility analysis using a

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government provided AICUZ study narrative outline. The AICUZ Narrative will be a complete, reproducible copy-ready for reproduction and public release as appropriate.

5.10.2 AICUZ Study. The Contractor shall accomplish the following:

Assemble Data. The Contractor shall conduct on-site visits at study bases to gather and assemble baseline data for all aircraft activity. This data will include, but not to be limited to, 1.) the activities, realignments, closures or proposed airspace actions; 2.) the most recent base socioeconomic data; 3.) a two-year history of noise complaints/locations; 4.) state regulatory guidance for airports and aviation activity; 5.) where appropriate, local Federal Aviation Administration FAR Part 150 noise compatibility plans; 6.) flight tracks, flight operations and flight profiles; 7.) a range of appropriate Flight Information Publication (FLIP) charts and base maps on which to depict noise contours and related aviation activity and 8.) existing airport zoning regulations (if available) and future land use plan maps for the adjacent communities.

Data Reduction. The Contractor shall prepare a baseline BASEOPS/NOISEMAP file for the bases specified. This baseline data will be used to create new noise contours and contour maps. The data reduction will consist of the following steps: 1.) Verify assembled data (with signed Documentation as called for in paragraph 4.1.2.3) 2.) Prepare background map(s) and, 3.) Run NOISEMAP and GIS or CADD applications for baseline case.

Noise Analysis. The Contractor shall provide a comprehensive analysis of the noise impact data. The Contractor shall use NOISEMAP and GRASS or other GIS programs using digital data bases and baseline variations to identify noise impacts to variations in mission profile, sortie rates, time of operations, and base alternatives. The Contractor shall validate all existing noise data by conducting interviews or surveys with pilots, schedulers, base operations, air traffic control, radar approach control, aircraft maintenance, transient alert, and other pertinent personnel. Guidance in the most current version of AICUZ Handbook shall be followed.

The data will be updated and corrected as needed to show current aircraft operations, flight tracks, flight profiles, and aircraft maintenance procedures. Detailed, accurate, and legible notes will be prepared of all interviews and surveys conducted. A list identifying all participants in the data validation process will be prepared, including the name, organization, and telephone number of those interviewed. Written Documentation must record how daily operations were calculated. An analysis should be conducted comparing the daily operations to tower count, radar approach count, and other pertinent data to ensure the feasibility of the daily operations. Any and all areas of discrepancy should be justified and documented. All data will be entered onto data collection worksheets as detailed in the AICUZ Handbook. The completed data worksheets will be certified (signed) as accurate by the installation personnel providing the specific data to the Contractor. Certification of flight tracks will include overlaying the tracks onto a background map at a scale of 1:50000 (or similar size). The latest version of BASEOPS and NOISEMAP software shall be used to develop the noise contours.

Documentation provided by the Contractor shall include copies of the BASEOPS input files and the NOISEMAP *.bps and *.grd files used to generate the noise contours. If two or more *.grd files are combined to produce the noise contours, Documentation should be provided to detail the methodology used in combining the files. Copies of all Documentation including BASEOPS and NOISEMAP files, handwritten notes, sketches, and data sheets will be provided to USAF/ANG for review and approval.

Preparation of AICUZ Update Package. The Contractor shall provide noise technical support to the AICUZ update process for each base as required. Support will include the generation of noise contours and accident potential zones from collected data, generation of a vicinity map, flight track map, and AICUZ (combined noise contours and accident potential zones) maps with existing and future land use overlays and zoning overlay maps. Written land use compatibility analysis will accompany maps. A generic AICUZ report and citizen brochure will be used for developing the AICUZ narrative package. The AICUZ Update Package will be a complete, camera-ready report for reproduction and distribution as appropriate. The Contractor shall also provide CADD (DWG/DGN/DXF) files of the noise contours, accident zones, and existing zoning, and future land use for each base to enable them to reproduce maps at various sizes.

5.10.3. AICUZ Public Release Support. The Contractor shall assist the base in the scheduling and location of the public release meeting and in the notification of appropriate base leadership (e.g., Base Commander, Public Affairs, Judge Advocate, Base Civil Engineer, and others). The Contractor shall provide AICUZ information as necessary to facilitate an active involvement of the base leadership in the base AICUZ program. The Contractor shall assist the base public affairs office in the development

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of public notice(s) as well as provide support for the primary briefing. The Contractor may be required to provide the primary public presentation at the public release meeting, and as required, one pre-release meeting to local officials. The Contractor shall assist base personnel with answers for questions raised at the public meetings. Briefing materials used by the Contractor shall be provided to the base for future use. The public release support is required to facilitate adjustments in the AICUZ program, necessitated by unanticipated but significant mission changes, aircraft operations, numbers and time of aircraft sorties and/or other data.

- **5.10.4. Updating Baseline Noise Files.** The Contractor shall annotate and update a government provided and Contractor collected noise file to the current version of BASEOPS and NOISEMAP, and provide the Contracting Officer with an updated baseline on computer disk.
- **5.10.5.** AICUZ/Land Use Methodology Analysis. The Contractor shall evaluate the implications of recent advances in noise analytical procedures, land use planning and implementation procedures and planning and analysis process and practices that relate to the AICUZ methodology. The Contractor shall make recommendations for changes to procedures, process, methodology, implementation, guidance handbooks, and applicable regulations, and prepare guidance packages and provide related training and support for the Air Force implementation of approved changes.
- **5.10.6. AICUZ Amendments.** The Contractor shall assemble appropriate land use and zoning data to supplement an existing government furnished AICUZ Document. The Contractor shall validate all government furnished aircraft operational data (flight tracks, flight profiles, and operations) that will be used to develop noise contours. Validation shall be accomplished. The Contractor shall generate new noise contours including APZs, a land use and zoning narrative, current and future land use maps, and zoning maps for the adjacent communities. The product will be a "page insert capable" amendment including land use analysis. The land use report will include three maps: 1.) Existing land use overlaid on AICUZ noise contours and accident potential zones (APZs); 2.) Future land use overlaid as in 1.); and 3.) Existing zoning overlaid as in 1.) Contracting Officer.
- **5.10.7.** Related AICUZ Support. The Contractor shall review, revise and/or otherwise prepare AICUZ handbooks, tutorials and related materials as required to support the AICUZ program and related Air Force training objectives. Expert testimony is not a part of this contract, but may be negotiated under a separate requirement.
- **5.10.8. Special Noise Analyses.** The Contractor shall conduct special noise analysis for specific locations. The Contractor may be required to conduct on-site interviews to assemble noise level changes resulting from changes in runway or flight track use, mission profiles, sortie rates, time of operations, maintenance practices, and basing alternatives.
- **5.10.9. Meeting and Visits**. On-site visits shall be performed as required/directed. The Contractor shall provide meeting support to include scheduling, hosting, administrative support and technical assistance.

6. Environmental Baseline Survey (EBS)

- **6.1. General:** The primary objective of the EBS is to determine the nature, magnitude and extent of any environmental contamination of property considered for acquisition or transfer, lease, sale or any other disposition. Sufficient information must be developed to assess the health and safety risks to ensure adequate protection of human health and the environment. The determination of possible effects on property value from any contamination discovered must be addressed in the EBS.
- **6.2. Requirements:** Additionally, these surveys must define potential environmental contamination liabilities associated with the subject properties and establish environmental due diligence under the Innocent Land Owners Defense clause of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). To qualify for the Innocent Land Owners Defense, the party to the real estate transaction must provide proof of due diligence. Conducting a proper EBS is one means of showing due diligence.
- **6.3. EBS:** If required, the EBS must provide the basis for notice of type, quantity, and time frame of any storage, release, or disposal of a hazardous substance on the property under Section 120(h)(1) of CERCLA.

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6.4. Phase I EBS: A Phase I EBS is required by AFI 32-7066 to Document the condition of real property to be acquired, transferred, leased, sold, or otherwise conveyed under the provisions of AFI 32-9001, AFI 32-9003, and AFI 32-9004. Additional guidelines beyond AFIs are provided by the American Society for Testing and Materials (ASTM) standards: Phase I Environmental Site Assessment Process, ASTM Designation 1527-94, and Standard Practice for Environmental Site Assessments: Transaction Screen Process, ADTM Designation 1528-94. The results of such a survey shall:

Document the nature, magnitude, and extent of any environmental contamination related to property that is considered for acquisition or transfer, lease, sale, or other disposition.

Define potential environmental contamination liabilities associated with the subject real property transaction.

Develop sufficient information to assess health and safety risks and ensure adequate protection of human health and the environment related to the subject real property transaction.

Determine possible effects on property valuation from any contamination discovered.

The Contractor shall provide notice when required under Section 120(h) 1. of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) [42 U.S.C. 96-20(h) 1.] of type, quantity, and time frame of any storage, release, or disposal of a hazardous substance on the property.

6.5. Phase I EBS Requests: The request for a Phase I EBS will determine the potential for present and past site contamination, including the type and quantity, if any, of hazardous substances; period of time over which storage, release into the environment or structures, or disposal of such hazardous substances took place; and the extent to which such information is available for the subject real property transaction. At a minimum, this includes a comprehensive record search, interview of persons knowledgeable about the property and site inspection. Therefore, the following actions must be taken:

Review all existing or completed surveys or inspection reports regarding asbestos, PCBs, underground storage tanks, and piping systems, solid waste management units, ECAMP surveys, and environmental engineer shop surveys

Review all Installation Restoration Program studies, or other Documentation produced in accordance with procedures under CERCLA or the Solid Waste Disposal Act

Review any applicable regulatory agency reports, notices of violation, or noncompliance, or other similar records

Review current and/or discontinued permits pertaining to regulated environmental activity

Review all title, deed, other real property records, or other available Documents, to ascertain prior uses of the real property, which may have involved hazardous substances or otherwise contaminated the property

Conduct visual inspections to determine or confirm the presence of an environmentally hazardous condition (unusual odors, stained soils, stressed vegetation, leachate seeps, land features related to human activity, etc.), or wetlands

6.6. EBS Conclusion: At the conclusion of the Phase EBS, a survey report will be prepared. The report will contain a statement of finding as to the environmental condition of the property and a certification of the survey results.

7. Managerial Support

7.1. General: The ANG has, utilizing Total Quality Management (TQM), team management and multi-discipline approaches, evolved the airspace, range and associated environmental planning/management into a regional system. The ANG has divided the United States into six (6) regions, each of which require managerial and technical support exceeding ANG unit resources. To ensure these important regions and their committees have adequate support, technical issue support and maintenance of existing plans and programs are required.

- **7.2. Committees:** The ANG has formulated six (6) regional committees, one national committee, one range council, one interagency committee and associated plans and programs (ex. Ranges 2005, Blue Air) to support airspace/range requirements and their dependence on environmental plans, programs and issues. Managerial and technical support to facilitate, technically advise/document, prepare issue reports, update existing plans and other like activities are required
- **7.3.** Requirements: The Contractor shall be required to provide all professional and technical personnel necessary to perform various technical, planning, and Documentation efforts in order to comply with this Statement of Work, and prepare complete environmental and related management plans.
- **7.3.1.** All technical consultants required for this contract shall be provided by the Contractor and shall be required to provide expert witness testimony. Expert witness testimony is not part of this contract, but shall be negotiated separately in the event such testimony is necessary.
- **7.4.** Site Visits: The Contractor shall visit applicable sites and all state, federal and local agencies necessary to complete the work required.
- **7.5**. Regional Airspace/Range Council Meetings. The Contractor shall provide technical support for meetings Management Council meetings and combined region Executive Council meetings. Support shall include assistance in agenda development, meeting facilitation, briefing preparation and presentation, process refinement, and recording of meeting notes.
- **7.6.** National Airspace/Range Council Meetings. The Contractor shall provide technical support for meetings National Airspace/Range Executive Council meetings and Range Council meetings. Support shall include assistance in agenda development, meeting facilitation, briefing preparation and presentation, process refinement, and recording of meeting notes.
- 7.7. Interagency Group Meetings. The Contractor shall provide technical support for meetings on a wide range of issues requiring the blending of operational requirements and environmental Documentation, identifying the needs and requirements for both the TOD and other interested and affected federal agencies. Support shall include participation on technical discussions with such discussions Documented in technical discussion paper for ANG use in adjusting long term plans and short term programs.
- 7.8. Regional Airspace/Range Roadmap Development. The Contractor shall provide the technical expertise and advice required to support development of a Regional Airspace/Range Roadmap for each FAA Region. Such advice will address the composition of the planning cell, the planning process, development of milestones, and the facilitation of meetings of the regional planning cell. The Contractor shall also support Documentation of the planning process and results, to include a draft of the Regional Roadmap.

7.9. Functional Area Strategic Planning

- **7.9.1.** The Contractor shall provide the technical expertise and advice needed to develop a strategic plan for the individual functional area. The Contractor shall advise the Management Team of planning cell composition, the planning process, realistic timelines, and goals.
- **7.10. General Support to the ANG**. The Contractor shall participate meetings of the Integrated Product Team, providing technical advice in the form of verbal presentations or short technical reports.
- 7.11. Integrated Product Team (IPT) Meetings. The Contractor shall provide technical support for meetings of the full IPT. Support shall include facilitation of meeting, meeting minute notes, and technical input into the agenda. Also, technical review of any materials to be brought forward to the IPT shall be required. These include airspace/range proposals, TOPAA's, Mission Needs Statement or other like products.
- **7.12. Monthly Progress Reports:** The Contractor shall submit progress reports, including a description of accomplishments and problems encountered. Also, the Contractor shall submit a timeline chart of activities showing anticipated schedules.

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PART FOUR - NATURAL AND CULTURAL RESOURCES PROGRAMS

- 1. Purpose/Scope
- 2. Biological Survey
- 3. Bird Aircraft Strike Hazard (BASH) Plan
- 4. Integrated Natural Resource Management Plan (INRMP)
- 5. Pest Management Training
- 6. Cultural Resource Management Plan
- 7. Wetland Inventory, Survey, Function and Values, and Mapping
- 8. Integrated Land Use Management Plan (ILUMP)

PART FOUR - ENVIRONMENTAL NATURAL AND CULTURAL RESOURCES PROGRAMS

1. Purpose/Scope: The Air National Guard (ANG) is responsible for managing its land, water and cultural resources throughout the United States and its possessions. In order to provide for effective management of land, water and cultural resources, plans must be developed. Such plans identify the various resources, outline and assign responsibilities, provide for training where necessary, identify concerns and establish standard operating procedures for the integrated management of all these resources. The goals of these management plans are to either avoid or minimize adverse impacts from project activities to sensitive natural or significant cultural resources and to provide stewardship for these resources.

Natural/Cultural Resources Programs

Biological Survey

- **2.1. General:** The ANG has requirements under the Endangered Species Act, Department of Defense (TOD) regulations, Air Force Instructions (AFI), etc. to provide stewardship of their biological resources.
- 2.2. Requirements: The ANG requires a complete and comprehensive biological survey of various ANG installations. The work shall require a complete field survey of the land under ANG control for purposes of ascertaining what biological resources the land contains. This shall include flora, fauna and wetlands. The results of this data collection shall be presented in report format. Specifically, information shall be provided on the types of species present, extent of species presence if determinable, types and amount of habitat, soils and wetlands.

3. Bird Aircraft Strike Hazard (BASH) Plan

- **3.1. General:** The ANG is required by Air Force Instruction 91-202 to have a BASH Plan at each Air National Guard installation where aircraft operations are conducted.
- **3.2. Requirements:** The Contractor shall be required to provide all professional and technical personnel necessary to perform various technical, planning, and Documentation efforts in order to comply with the federal, state, and local regulations, and policy directives, and to prepare complete BASH Plans.
- **3.3. Provisions:** The Contractor shall provide all necessary labor, facilities, equipment, materials, transportation, and supplies necessary to perform services described herein. The Contractor shall make use of all existing rules, regulations, and directives in the performance of this effort.
- **3.3.1.** All technical consultants required for this contract shall be provided by the Contractor and shall be required to provide expert witness testimony. Expert witness testimony is not part of this contract, but shall be negotiated separately in the event such testimony is necessary.
- **3.4**. **Site Visits:** The Contractor shall visit applicable sites and all local, state, and federal agencies necessary to complete the work required.
- **3.5. Program:** The work shall consist of gathering, collecting, investigating, and preparing all materials necessary to produce a BASH Plan that complies shall all regulatory and policy guidance.
- **3.5.1. Program Plan.** The Contractor shall develop a Program Plan detailing tasks, logical interactions, milestones, staff assignments, schedule, and deliverables.
- **3.5.2. Site Visits**. The Contractor shall conduct an on-site visit for data collection, record search, site investigations, and to interview appropriate base personnel.
- **3.5.3. BASH Plan.** The Contractor shall prepare the BASH Plan in accordance with USAF Model BASH Plan and instructions received from the site visit. A draft final, draft final and plan shall be required.

3.5.4. Progress Reports. A monthly summary of work progress is required. Summary shall include all pertinent information on work accomplished to date, problems, and anticipated work to be accomplished.

4. Integrated Natural Resource Management Plan (INRMP)

- **4.1. General:** In order to provide for effective ecosystem management as an integral part of the Base Comprehensive Plan (BCP), all installations containing sufficient habitat are directed to develop an INRMP. The INRMP is a natural resources management plan based on ecosystem management showing the interrelationships of the individual component plans as well as mission and land use activities affecting the basic land management plans (Air Force Instruction 32-7064, Integrated Natural Resources Management). This plan outlines and assigns responsibilities, identifies concerns, and establishes standard operating procedures for the management of natural resources on an installation. The plan will be integrated and coordinated with the Base Master Plan and other base and community plans as applicable.
- **4.2. Requirements:** The topics addressed in the INRMP include threatened and endangered species, wetlands and watershed protection; fish and wildlife, grounds, forestry, outdoor recreation and public access, agricultural outleasing, cultural resources, safety concerns (Bird Aircraft Strike Hazard) and coastal issues management; and the use of geographic information systems.
- **4.3. Goals:** The goals of the INRMP are to provide the framework to manage our ecosystems, provide the basis for funding on natural resource projects and lessen or avoid adverse effects from project activities to the overall ecosystem and its sensitive resources; increase interaction with federal, state, and local agencies including the state forestry office, state game and natural resources department, United States Fish and Wildlife Service, and the Soil Conservation Service; and ensure compliance with environmental legislation, regulations, and guidelines including but not limited to those listed in Appendix A.
- **4.4.** Develop Database: In accordance with the ANG installation's accepted technical methods, the Contractor shall develop a database of existing information necessary for preparation of the INRMP such as:

Previous individual or combined natural resources plans for any of the relative components on the INRMP and relative studies, surveys, activities, maps, and yearly budgeting goals for natural resources management (Possible source: base environmental office).

Other state or local regulations and relative agreements not provided by this SOW (possible sources: county ordinances, state regulations, state wildlife offices, Natural Heritage Program, or base environmental office).

Existing aerial photographs and topographic maps (possible sources: base environmental office, base civil engineering).

- **4.5.** Analyze/Evaluate Database: The Contractor shall analyze and evaluate existing database for detail and confidence levels of data presented as it pertains to preparation of the INRMP.
- **4.6. Identify Data Gaps:** The Contractor shall identify data gaps in the existing information that is required for the preparation of the INRMP. Identify any special studies necessary to fill the data gaps at the appropriate level to support the INRMP development (e.g., wetlands inventories, threatened and endangered species distributions)
- **4.7. Methodology Development:** The Contractor shall develop a methodology for preparing the INRMP. It shall include methods agreed upon during the data collection trip or as otherwise approved. The Contractor shall identify those areas that are supported by previously existing plans and steps required to fulfill all required sections of the INRMP as stated in AFI 32-7064.
- **4.8.** Summarize the INRMP: The Contractor shall prepare a summary of the INRMP at a programmatic level that presents a brief overview, outlines major points, and identifies directions for future tasks and implementation.

NOTE: This portion of the INRMP should provide the reader with a reasonable understanding of the objectives, concerns, and standard operating requirements associated

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with current and future planning and development activities that may affect the installation's natural resources.

- 4.9. Prepare an Installation Location and Background Description: The Contractor shall briefly describe the installation's location and size with area map(s), installation history emphasizing former land uses and management practices, current military mission and units including major tenant units, general biological overview, surrounding land use and community descriptions, surrounding natural resources management activities that effect installation resources (could be within 5 miles or more of the base), and the natural resources management organization at the ANG base. (Possible sources of information include Documentation such as the Base Comprehensive Plan, program summaries, and base histories; conduct interviews with knowledgeable base personnel to obtain the most up-to-date information.)
- **4.10.** Identify Mission Elements Affecting Natural Resources: The Contractor shall identify and describe the current elements, concentrating on protracted areas that have the greatest impact on ecosystems functioning. Including but not limited to:
 - Number of permitted air and water pollution point sources.
 - Air Installation Compatible Use Zone (AICUZ) or other noise levels associated with airfield operations, low-level training routes, or ranges.
 - Hazardous waste.
 - Ground water contamination and Installation Restoration Program sites.
 - Potential effects of known future mission changes, include current ${\tt MILCON}\ 5\mbox{-year}$ plan.
 - Other operational and environmental constraints that affect natural resources management on the installation (e.g., restricted areas, explosive clear zones, archaeological sties, and future development).
- **4.11.** Describe General Physical Environment: The Contractor shall describe the installation's general physical environment that includes climate, improved lands, semi-improved lands, unimproved lands, topography, geology and soils, watersheds, wetlands, drainage patterns, and impoundment. Descriptions should include but not be limited to average temperature, average precipitation, general distribution of improved, semi-improved, and unimproved lands, elevations and slope, soil types and general geology, watersheds, wetlands, watersheds, and water quality.
- **4.12.** Describe General Biotic Environment: The Contractor shall describe the installation's general biotic environment, including historic vegetation, current native and introduced vegetation, and related fauna on the base. Descriptions should include but not be limited to natural ecosystems, known or potential threatened or endangered or highly sensitive plant and animal species; predominate varieties of turf grasses, ground covers, tree and shrub species; and seasonal migrants.
- **4.13.** Identify Management Issues and Concerns: The Contractor shall analyze resource status and utilization in the context of multiple use and overall ecosystem functioning to develop multiple use opportunities as well as potential conflicts within each resource identified in AFI 32-7064 as management areas. Identify management issues and concerns including operational and environmental constraints that could affect natural resources management on the installation such as locations of restricted areas or clear zones, archaeological sites, and future development. Create appropriate constraints maps.
- **4.14. Develop Management Goals and Objectives:** The Contractor shall evaluate natural resource issues and concerns, and develop overarching goals and objectives. Determine the strategy for a two and five year natural resources program.
- **NOTE:** A wetlands goal might be to complete jurisdictional delineation of all wetlands. Another goal under wetlands might be to restore degraded wetlands. Implementation objectives can be developed to achieve these goals.
- 4.15. Identify, Classify, and Map Installation Natural Resources Management Units. The Contractor shall identify, classify, and map natural resources management units to include grounds categories, land use categories as sub-units of each grounds category, and land management units as sub-units of each land use category as identified and described in AFI 32-7064. These categories include but not limited to threatened and

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endangered species populations and habitat, wetlands, watershed, fish and wildlife populations and habitat, grounds management areas, forestry management areas, outdoor recreation and public access areas, agricultural outleasing areas, coastal zone areas, and the use of geographic information systems to capture these resource areas.

NOTE: The division and size of natural resources management units may vary with the installation resource base and degree of detail needed to develop specific management activities. In some cases, it may be necessary to define only a few land management units with most planning occurring at the land use category level. Regardless of division size, develop a numbering system to identify each level, and use this system in developing a base map for the integrated natural resources plan.

- **4.16. Site Visits:** The Contractor shall visit the ANG installation, as well as all Federal, state, and local agencies necessary to acquire the information to complete a coherent, comprehensive, management plan. The Contractor shall be required to work with a task force of individuals from the various agencies and groups having interests in the ANG installations and the management of its resources. The task force shall be made up of people invited to participate by the ANG and the installation.
- **4.17. Project Prioritization:** Recommendations (projects) for management of the different resource systems considered, mentioned above, shall be prioritized by year for each of the five year planning cycle. The plan shall reflect work already completed, or initiated, under other plan/s, and be a logical extension of the installation's current situation. The plan shall stress management techniques and goals/objectives that support the concept of ecosystem management and biodiversity conservation.
- **4.18.** Cost Estimates: The Contractor shall provide cost estimates for the implementation of each recommendation during the five year planning cycle.
- 4.19. Devise Operational Component Plans: The Contractor shall devise short-term and long-term operational component plans and associated budgets required to implement the integrated natural resources plan. Operational component plans should consider data gaps identified during plan development. The Contractor shall develop schedules and estimated costs for projects to be accomplished within the following two fiscal years. The Contractor shall develop schedules and relative costs consistent with the resource base and approved management approach for projects identified in the long-range operational plan (a five-year period or greater). Operational component plans should address topics as called out in AFI 32-7064. These topics include but are not limited to threatened and endangered species, wetlands, watershed protection, floodplain/floodway regulations, fish and wildlife management and budgets, grounds maintenance, commercial forestry, outdoor recreation, agricultural outleasing, and geographic information systems (AFI 32-7064).
- **4.20.** Devise Operation Component Plans Appendices. The Contractor shall devise the applicable appendix of associated information for each operational component plan. Appendices should be formatted for easy updates and include information, as appropriate, as identified in AFI 32-7064.
- **4.21. Progress Reports.** The Contractor shall be responsible for submitting progress reports. Reports shall contain timelines, showing schedules for activities, completion dates, as well as problems encountered, and discussions of task force coordination and communication efforts.

5. Pest Management Training

- **5.1. General:** The ANG shall be trained in the principles of integrated pest management as applied to ANG pest management program.
- **5.2. Support:** The Contractor shall provide support in the update, development, and reproduction of training materials for Pest Management using input from subject matter experts and ANG speakers and speakers from other sources as directed by ANG. Pest Management topics include but are not limited to:
 - a. Fungicide, Insecticide, and Rodenticide Act.
 - b. Department of Defense and National Guard Bureau Policy.
 - c. Memorandums of Agreement, Forms 646 and 1532.
 - d. Safety and Health
 - e. Quarantine, Disease Vector Ecology Profiles, Contingency, Technical Information Memorandum 24.
 - f. Technical Information Memoranda 15 and 17.

- g. IPMIS, Pesticide Management Data Base
- h. Integrated Pest Managementi. Personal Protection
- j. School Training Courses
- k. Bird Aircraft Strike Hazardl. Aerial Spray Team
- m. Herbicides
- n. Certification Department of Defense Policy General Pest Management
- 5.3. Training: It is anticipated that students shall attend this course at an ANG base once a year.
- **5.4** Speakers for the Pest Management Course. The Contractor shall contact each speaker and formalize the invitation to participate in the Pest Management Course. Each speaker shall normally secure their own transportation, lodging, meals, and incidentals related to the Pest Management Course. When requested by a speaker, the Contractor shall reimburse that speaker for actual expenses incurred. Each speaker must provide a receipt for each reimbursable expense in excess of twenty-five dollars (\$25.00). Reimbursable expenses include the cost of lodging, meals, taxis, airfare, train fare, bus fare, rental vehicles, tips, and mileage for privately owned conveyance (POC). POC mileage shall be reimbursed at the rate of the approved Joint Travel Regulations.
- 5.4.1. The Contractor shall obtain materials that each speaker may want included in the course manual.
- 5.5. Training Requirements: The Contractor shall provide one representative at the course location from noon on the day preceding the course through the end of the course. The representative at the course location shall provide necessary labor to set up the classroom, assist speakers during presentations when necessary, and to meet and transport speakers to/from the airport when requested. At the course completion, the contract representative shall remove all course materials from classroom and forward them to ANG.
- **5.6. Review of Materials:** The Contractor shall provide a copy of the course content (i.e., slides, manuals, handouts, etc.) The Government shall make the approval of the final product and the Contractor shall have the final product complete for the course.

6. Cultural Resource Management Plan

- 6.1. General: In order to provide for effective management of cultural resources as an integral part of the Base Comprehensive Plan (BCP), all applicable installations are directed to develop a CRMP. This plan outlines and assigns responsibilities, identifies concerns, and establishes standard operating procedures for the management of culturally and/or archaeologically significant resources on an installation. The CRMP assists managers in the planning, development, and implementation of a program tailored to the requirements of specific facilities and land holdings.
- 6.2. Requirements: In order to provide for effective management of cultural resources as an integral part of the Base Comprehensive Plan, all applicable installations are directed to develop a CRMP. This plan outlines and assigns responsibilities, identifies concerns, and established standard operating procedures for the management of culturally and/or archaeologically significant resources on an installation. The CRMP assists managers in the planning, development, and implementation of a program tailored to the requirements of specific facilities and land holdings. The goals of the CRMP are to lessen or avoid adverse effects from project activities to significant cultural resource or historic properties; increase interaction with federal, state, and local agencies, and Native American groups; and ensure compliance with environmental legislation, regulations, and guidelines including those listed in Appendix
- 6.3. Provisions: Under the provisions of this SOW, the Contractor shall conduct the necessary background research and develop the CRMP for ANG bases. Work to be performed is described in this section, and has been categorized according to the proposed outline for the final deliverable of the CRMP.

NOTE: The requirement to develop and maintain a CRMP is found in AFI 32-7065, where detailed citations are provided pertaining to the preparation of the CRMP.

6.4. Executive Summary: Contractors shall prepare an Executive Summary for the CRMP, which presents a brief overview, outlines major points, and identifies directions for future development and implementation.

NOTE: This portion of the CRMP should provide the reader with a reasonable understanding of the objectives, concerns, and standard operating requirements associated with current and future planning and development of activities that may impact known or unanticipated cultural resources and historic properties.

6.5. General Information

6.5.1. Mission Statement. The Contractor shall briefly describe the installation mission. Sources of information may include Documentation such as the BCP, program summaries, and base histories. The Contractor shall be required to conduct interviews with knowledgeable base personnel to obtain the most up-to-date information.

6.5.2. Historical Perspective

- **6.5.2.1.** Describe the developmental and operational history of the installation. Include a discussion of any existing or planned programs for the management of cultural resources and historic properties at the installation.
- ${\it 6.5.2.2.}$ Compile a bibliographic listing of all cultural resources studies that have been conducted at the base and the resulting technical reports that have been produced.
- 6.5.2.3. Organizational Listing and Roles. Prepare a list of all of the primary base organizations; describe briefly the purpose and major activities associated with each group that impacts the base cultural resources program.

6.5.3. Goals and Objectives

- ${\it 6.5.3.1.}$ Outline the goals and planning objectives of existing and proposed installation activities.
- ${\bf 6.5.3.2.}$ Describe specific management objectives and milestones that could be related to the CRMP.
- NOTE: Examples of pertinent objectives referred to under this task could include compliance with cultural resources legislation or the appropriate management of known cultural resources on the installation. Include information concerning projected schedules or timelines for completion of the objectives, if available.

6.5.4. Program Responsibilities

- **6.5.4.1.** Review sections pertaining to the responsibilities for managing the cultural resources program according to the guidelines presented in Air Force Program Directive (AFPD) 32-70. Outline the program responsibilities specific to the Base.
- **6.5.4.2.** Identify the specific organization and/or individual(s) at the Base responsible for coordination and communication regarding cultural resources management activities with both on- and off-base entities.
- ${\bf 6.5.4.3.}$ Describe possible penalties and potential project impacts that could arise as a result of noncompliance with cultural resource laws, regulations, and procedures.
- ${\bf 6.5.4.4.}$ Coordinate and integrate the CRMP with the Installation INRMP, if applicable.
- **6.6. Cultural Resources Inventory:** The purpose of this section of the CRMP is to provide a complete inventory of all known cultural resources (including prehistoric, traditional, historic, military, and Cold War properties) that are present on the base.

6.6.1. Prehistoric Resources

6.6.1.1. Prehistoric Framework

Develop a complete, updated prehistory of the area in which the Base is located.

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Describe currently accepted chronologies and classifications for the region and include pertinent research questions that the State Historic Preservation Officer (SHPO) has developed for the area.

Identify any potential Native American concerns and ethnographic resources.

Literature Review

Compile a listing of available reference materials relating to the prehistory of the region. Identify which of the cited references were used to develop the prehistory for the region and installation, and include in the CRMP.

Review and develop a summary of archaeological surveys conducted on the base. Include titles, authors, dates conducted, area covered, and results.

6.6.1.2. Resource Inventory

Summarize the existing archaeological database in tabular and textual formats. Include a map with sites corresponding to the tabular format.

Consult with SHPO and the Base Historic Preservation Officer (BHPO) (where applicable), local information centers, universities, etc., to determine the extent of recordation, location, and number of sites on the installation. Use the data to verify the accuracy of the summary prepared in the previous subtask.

Include within the inventory the results of any determinations of eligibility for the National Register for any sites located on the installation. In addition, provide the justification for these decisions, and list the technical reports and Documents that contain them. Preface this section of the CRMP with a brief statement outlining planned installation preservation procedures and penalties for unauthorized disturbances.

If no installation-wide reconnaissance survey has been conducted, describe efforts planned and/or completed to accomplish the task. Information to be included in this section of the CRMP is the fiscal year of accomplishment, project number, cost, and a detailed description of the scope and methods.

6.6.1.3. Areas of Concern

Identify areas on the base that have not yet been surveyed and that may contain unidentified cultural resources (archaeological and historic).

Assess and describe any deficiencies with the existing archaeological database and inventory. Identify corrective actions to overcome the deficiencies.

Develop a comprehensive schedule and timeline for surveying areas that contain, or have the potential to contain, scientifically valuable or significant cultural resources.

6.6.2. Historic Resources

6.6.2.1. Historic Overview

Describe prevalent architectural styles and building techniques in use at the time of development for inclusion within the historic overview.

Consult with SHPO to determine whether or not a background history has already been compiled. Include summary of any historic contexts developed within the historic overview.

If available, include a discussion of significant activities such as road/railroad construction, mining, military activities, training camps, etc., and their impacts on the area within the historic overview.

6.6.2.2. Literature Review

Compile a list (bibliography) of all of the available reference materials relating to the history of the region, in general, and the installation, in particular. Identify sources used in the development of the historical overview. Note repositories where bibliographic references may be found.

Review and develop a summary of historic surveys, archaeological investigations, or related studies conducted on a Base. Include titles, authors, dates conducted, area

and/or sites covered, and results. Note any Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) studies or historic building inventories or evaluations conducted. Identify any State Historic Landmarks or other recognized historical sites in the region.

6.6.2.3. Resource Inventory. Summarize the inventory of historic resources on the base. Present the information in the same format and include the same types of information, where applicable, as that used for other related inventories.

6.6.2.4. Areas of Concern

Identify areas on the base that have not yet been surveyed or inventoried and that may contain unidentified or unrecorded historic resources.

Assess and describe any deficiencies with the existing historic resources database and inventory. Identify corrective actions to overcome the deficiencies.

Develop a comprehensive schedule and timeline to conduct surveys and/or inventories at sites or within areas that contain, or have the potential to contain, scientifically valuable or significant historic resources.

6.6.3. Mapping

6.6.3.1. Review any existing cultural resources maps maintained for the installations to evaluate their conformance to requirements. Create and/or supplement existing maps to fulfill requirements of AFPD 32-70. Use a scale of 1"=400' and 1'=1,000'.

6.6.3.2. Develop brief procedures to ensure the maps are reviewed and updated, minimally on an annual basis.

6.6.3.3. Develop procedures for distribution of cultural resources maps to authorized personnel only on a need-to-know basis.

6.6.4. Compliance Procedures

6.6.4.1. Issues

 ${\it 6.6.4.1.1.}$ Create a list of unique cultural resources issues that could affect the installation using results of cultural resources inventory previously established.

 $\textbf{6.6.4.1.2.} \quad \textbf{Cite recognized Native American concerns} \\ \text{based on information obtained during previous efforts.}$

6.6.4.1.3. Develop list of primary base programs that could be impacted by activities conducted under the cultural resources management program. Describe in general terms potential impacts associated with cultural resources concerns and activities that could affect the progress of these programs.

NOTE: Typical base programs that may be affected by cultural resources management concerns and activities include, but are not limited to, the Installation Restoration Program (IRP), threatened and endangered species management, and training operations.

 $\textbf{6.6.4.1.4.} \quad \text{Determine the type of permits (e.g., digging permits for any ground disturbing activity) that may be required during the conduct of base activities. Develop procedures designed to facilitate compliance with stipulations contained in these permit(s).}$

6.6.4.1.5. Summarize the Base mission goals, using data obtained in support of the development of the mission statement. Describe conflicts that could arise between the conduct of cultural resources management activities and the accomplishment of these mission goals.

6.6.4.1.6. Develop procedures to lessen or eliminate conflicts identified to comply with applicable legislation, and avoid mission impairment.

6.6.4.1.7. Identify ARPA violations and any applicable penalties that have occurred on the installations. Identify scenarios that could lead to future ARPA violations.

6.6.4.2. Preservation and Mitigation Strategies

6.6.4.2.1. Archaeological Resources

Identify any cultural resources that might be threatened by base operations, proposed construction activities, or acts of nature through the performance of the following tasks:

Review the resource inventory and develop a list of site locations that are present on the installation.

Develop a potential project list through a review of the BCP, interviews with knowledgeable base personnel, and other project programming Documentation.

Generate a list of threatened sites from a comparison between the existing site list and the potential project list. Where possible, add any project scheduling data that may apply to the threatened site list.

Develop a plan for the treatment of threatened and/or unanticipated cultural resources that may be present during a project.

Identify procedures for disposition of artifacts and approved museum and gallery facilities.

6.6.4.2.2. Historic Resources

Identify any historic resources that might be threatened by base operations, proposed construction activities, or acts of nature.

Develop a plan for the treatment of threatened and/or unanticipated historic resources that may be discovered during a project.

Identify proposed maintenance, upgrade, or renovation projects.

Discuss the application of the Secretary of the Interior's Standards for Historic Preservation Projects.

Fully describe any unique historic resource maintenance requirements and set up standard maintenance procedures to satisfy those requirements of the plan.

6.6.4.2.3. Other Cultural Resources

Identify other types of cultural resources that might be threatened by base operations, proposed construction activities, or acts of nature.

NOTE: In this context, other cultural resources could include cultural landscapes, sacred sites, etc. Consultation with SHPO and other interested parties can facilitate the identification of such resources.

Develop a plan for the treatment of threatened and/or unanticipated other cultural resources that may be discovered during a project.

6.6.4.3. Consultation Procedures. The purpose of this portion of the CRMP is to provide easily understood guidelines for the completion of consultation required pursuant to Section 106 of the NHPA and Chapter 5 of AFI 32-7065, Cultural Resources Management.

6.6.4.3.1. Section 106 Review Process

Prepare simple and direct guidelines for the initiation and implementation of consultation required under the Section 106 review process.

NOTE: When preparing the above-referenced guidelines, the contractor shall use, but not be limited to the Documents identified in Appendix A.

Ensure that consultation with all parties is addressed (i.e., SHPO, the Council, Native American groups and individuals, and other interested parties).

7. Wetland Inventory, Survey, Function and Values, and Mapping

- 7.1. General: As part of effective ecosystems management on installations containing natural resources, the ANG is directed under Executive Order (EO) 11990 to provide leadership and take action to avoid or minimize the destruction, loss or degradation of wetlands. Under the Order, it is also directed to preserve and enhance the natural and beneficial values of wetlands while it carries out its responsibility with regard to managing lands and facilities, and for funding or managing activities that could affect wetlands.
- 7.2. Management: As part of effective ecosystems management on installations containing natural resources, the ANG is directed under Executive Order 11990 to provide leadership and take action to minimize the destruction, loss, or degradation of wetlands. Under the EO, it is also directed to preserve and enhance the natural and beneficial values of wetlands while it carries out its responsibility with regard to acquiring, managing and disposing of federal lands and facilities, and for funding or managing activities that could affect wetlands.
- 7.3. Survey Requirements: The ANG is directed to survey all acreage under their control to identify potential wetlands, and develop and maintain current inventories of wetlands in order to plan for long-term protection or mitigation. The ANG is directed to simplify periodic updating by digitizing wetland locations and by classifying wetlands using the methods defined in <u>Classification of Wetlands and Deepwater Habitats of the United States</u> (Cowardin, et al, 1979).
- **7.4. Compliance:** The Air National Guard also complies with the National Environmental Policy Act requiring assessment of impacts to wetlands as part of the analysis process. Project-specific areas are assessed for potential wetland impacts through the identification of potential wetland areas within the project site.
- **7.5. Current Legislation:** The Contractor shall apply the federal and state legislation, and Air Force regulations and guidelines, affecting wetland surveys on Air Force installations identified in Appendix A. Applicable state legislation also applies for each individual Task Order.
- 7.6. Provisions: Under the provisions of the SOW for each individual Task Order, the Contractor shall produce a Wetland Survey, written report and Maps consistent with standard professional practices. This product shall utilize the methodology described in the 1987 Corps of Engineers Wetlands Delineation Manual to quantify the wetland acreage present, and provide an inventory with location maps of all wetlands determined to be present on the installation. The Contractor shall digitize wetland location information, based on Global Positioning System (GPS) control points and tied to existing U.S.G.S. permanent monuments if possible, on the installation. In addition, the Contractor may be required to provide meeting minutes of various meetings.
- 7.7. Site Visits: The Contractor shall visit the installation, conduct interviews and a literature search to collect previously identified wetlands and associated concerns, jurisdiction criteria, state and local regulations for conducting activities in or near wetlands and floodplains, existing aerial photography and existing digital files.
- **7.8.** Documentation: The Contractor shall, if required, provide a functions and values assessment of existing jurisdictional areas. The Documentation shall include enough information to comply with requirements.
- **7.9.** Site Related Data: The government may provide, if available and appropriate for the specific Task Order, U.S. Dept. of the Interior Wetland Delineation as well as site related data.

8. Integrated Land Use Management Plan (ILUMP)

8.1. General: The ANG is responsible for managing its land, water, and cultural resources throughout the United States and its possessions. The ILUMP is a natural and cultural resources plan based on the concept of ecosystem management and shows the interrelationships of the individual resources as well as mission activities and adjacent land use activities. This plan outlines and assigns responsibilities, identifies concerns, and establishes standard operation procedures for the management of natural and cultural resources on an installation for a period of 5 years.

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- **8.2. Topics:** The topics addressed in the ILUMP can include threatened and endangered species, wetlands, and watershed protection, fish and wildlife, grounds, forestry, outdoor recreation and public access, agricultural/forestry outleasing, hunting, cultural and archaeological resources, and safety issues (bird aircraft strike hazards, deer, etc.).
- 8.3. Requirements: The ANG requires the identification, collection, analysis and evaluation of basic data on natural and cultural resources on ANG installations. The work shall take place only on those areas for which the ANG has responsibilities. The results of this data collection will be presented in a report format. Specifically, the ILUMP shall provide the framework for the management of natural and cultural resource activities at ANG installations. Additionally, it shall provide a background of the installation and its natural and cultural environment/history; describe the general long range strategy of management, development, protection, use of the installation's resources, provide the basis for funding natural/cultural resource projects, guide the development of complementary plans from other sources, e.g. state, county, city and private; and communicated the management goals and objectives of the base to all interested parties.
- **8.4. Provisions:** The contractor shall provide all necessary labor, facilities, equipment, materials, transportation and supplies necessary to perform the services described herein. The contractor shall make use of all existing rules, regulations, and directives in the performance of this effort. It is required that the appropriate professional personnel be utilized, e.g. biologists, foresters, agronomists, range management, etc.
- **8.5.** Management Oversight: The contractor shall perform site visits and coordinate with all Federal, State, and local agencies necessary to acquire the information to complete a coherent, comprehensive, management plan. The contractor shall be required to work with a task force of individuals from the various agencies and groups having interests in the installation and the management of its resources. The task force shall be made up of people invited to participate by the ANG and the installation.
- **8.6.** Support: All technical consultants required for this contract shall be provided by the contractor and shall be required to provide expert witness testimony, if required. Expert witness testimony is not part of this contract, but shall be negotiated separately in the event such testimony becomes necessary.
- **8.7.** Database: The contractor shall amend and refine the existing databases for the installation consisting of soils, climate, history, geology, vegetation, fish and wildlife, endangered plant and animal species, water resources, archaeological and cultural resources, recreation, and biodiversity. Existing available data shall be used to the maximum extent possible, with all information being brought up to date as required.
- **8.8.** Coordination: The contractor shall coordinate with Federal, State, and local offices maintaining the appropriate data to obtain input for the ILUMP. These offices can include, but are not limited to: the Natural Resources Conservation Service, the Corps of Engineers, US Fish and Wildlife Service, the State Department of Environmental Affairs, the State Historic Preservation Officer (SHPO), US Department of Agriculture, Animal Damage Control Office, and the appropriate local townships, and private organizations having interest in the installation.
- **8.9. Site Visits:** The contractor shall conduct a field survey of the installation and Document the natural and cultural features of the base. This site visit shall include necessary interviews with appropriate base personnel, to include but not be limited to, the base civil engineer, air and ground safety officers, environmental manager, base commander, and others.
- **8.9.1.** Prior to the site visit, the contractor shall perform a search of available literature of various governmental sources for the purpose of obtaining relevant information on the natural and cultural resources. The contractor shall review and analyze any government-furnished information pertaining to:
 - Previous draft ILUMP
 - Installation history
 - Previous and/or ongoing natural/cultural resource efforts
 - Military missions
 - Base master plan

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- Plans/efforts pertaining to the Installation Restoration Program (IRP)
- Maps of the installation
- **8.9.2.** The pre-site visit review shall also include an analysis of any existing relevant private, city county, State and Federal information, e.g. zoning maps, conservation plans, noxious weed plans, water plans, etc. The site visit will be coordinated with a meeting of the task force of professional natural/cultural resource people. This task force will provide assistance to the contractor in establishing goals and objectives for the ILUMP.
- **8.10.** Data Analysis. The contractor shall analyze all data collected, using state of the art knowledge and an interdisciplinary team of experts in the appropriate natural and cultural resource areas. The contractor shall select those natural and cultural resource systems to be addressed in the ILUMP. The contractor shall formulate planning assumptions, constraints, and provide an overview of those systems. The emphasis in this analysis is on an ecosystem management approach.

8.11. Developing the ILUMP

- **8.11.1.** The contractor shall develop the ILUMP detailing logical interactions, milestones, and schedules for management of installation resources. The ILUMP shall include soil and water, fish and wildlife, forestry, recreation activities, cultural and archaeological, etc. The contractor shall outline a set of goals and objectives for each system considered, with these goals and objectives supporting, and in concert with, the military mission of the base. These goals and objectives shall provide the direction for the installation's natural and cultural resource management activities for the next five years.
- **8.11.2.** Recommendations (projects) for management of the different resource systems considered, mentioned above, will be prioritized by year for each of the five year planning cycle. The plan will reflect work already completed, or initiated, under other plan/s, and be a logical extension of the installation's current situation. The plan will stress management techniques and goals/objectives that support the concept of ecosystem management and biodiversity conservation.
- 8.11.3. The contractor shall provide cost estimates for the implementation of each recommendation during the five-year planning cycle.
- **8.12. Progress Reports.** The contractor shall be responsible for submitting progress reports. Reports shall contain timelines, showing schedules for activities, completion dates, as well as problems encountered, and discussions of task force coordination and communication efforts.

APPENDIX A - DOCUMENT LIST

The contractor shall use the following regulations/Documents as applicable. This information should not be considered exhaustive. The Contractor shall have to have access to, and be familiar with, the primary references and regulations and use judgement and experience in determining the extent and focus of the Document's use. The contractor shall be responsible for applying the most current regulations and guidance when accomplishing the individual TO.

Part One - Environmental Restoration Program

Applicable Documents: CERCLA

Project Remedial Design

Engineering Evaluation/Cost Analysis (EE/CA)

Record of Decision (ROD)

National Contingency Plan as outlined in 40 Code of Federal Regulations (CFR) Part 300 National Environmental Policy Act

Clean Water Act

Endangered Species Act

Toxic Substances Control Act

Resources Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Act

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by Superfund Amendments and Reauthorization Act (SARA)

State of Ohio Administrative Orders on Consent with WPAFB (TO specific)

US EPA RCRA Groundwater Monitoring Technical Enforcement Guidance Document

(TEGD) (OSWER 9950.1)

US EPA Superfund Remedial Design and Remedial Action Guidance (OSWER Directive 9355.0-4A)

US EPA Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites (OSWER Dir. 9283.1-2)

US EPA Environmental Review Requirements for Removal Actions (OSWER 9318.0-05)

US EPA Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (OSWER Dir. 9355-01)

Any pertinent Occupational Safety and Health Administration (29 FR Part 1910) and Department of Transportation requirements

Any Interagency-Agreement among the Air National Guard, US EPA and the applicable state that may be placed into effect prior to the completion of this contract (TO specific) 29 CFR 1926 Construction Standards

49 CFR Transportation Requirements

Part Two - Environmental Compliance Programs

ECAMP Documents

- a. TEAM Guide
- b. ANG Supplement to the TEAM Guide
- c. AF Instruction 48-119, Environmental Pollution Monitoring
- d. $\,$ TOD Instruction 4120.14, Policies for Improvements Needed to Abate Water Pollution Emanating from TOD Facilities
- e. DEQPM 80-5, TOD Hazardous Materials Policy
- f. DEQPM 80-8, RCRA Hazardous Waste Management Regulations
- g. AF Instruction 32-7042, Solid and Hazardous Waste Management
- h. TOD 4145.19-R-1, Chapter 5, Section 4, Hazardous Commodities
- i. NFPA, Fire Protection Guide of Hazardous Materials
- j. ANG 127-12, Air National Guard Occupational Safety and Health Program
- k. AFI 32-7045, Environmental Compliance Assessment and Management Program (ECAMP)
- 1. ANG Supplement to AFI 32-7045
- m. Appropriate Federal, State, and Local regulations

ECAMP Protocols

a. Environmental Compliance Categories

Air Emissions Cultural Resources Management Hazardous Materials Management Hazardous Waste Management Waste Water Quality

Natural Resources Management

Solid Waste Management Other Environmental Issues

b. Environmental Impacts

Environmental Noise
Installation Restoration Program
Pollution Prevention
Program Management
Pesticides
POL Management
Solid Waste Management
Storage Tanks Management
Toxic Substances Management
Polychlorinated Biphenyl's (PCB)
Asbestos
Radon
Lead-Based Paint

c. Environmental Occupational Health Categories

Baseline Surveys Annual Surveys Industrial Ventilation Confined Space Entry Hearing Conservation Respiratory Protection Ionizing Radiation Non-Ionizing Radiation Hazard Communication Lead Cadmium Ashestos Airborne Contaminants Blood borne Pathogens Benzene Personal Protective Equipment (PPE) Miscellaneous

d. Occupational Safety Categories

Walking-Working Surfaces
Means of Egress
Powered Platforms, Manlifts & Vehicle-Mounted Work Platforms
Hazardous Material
PPE
General Environmental Controls
Fire Protection
Materials Handling and Storage
Machinery and Machine
Guarding
Hand and Portable Powered and Other Hand-Held Equipment
Welding, Cutting and Brazing
Safety-Related Work Practices
Miscellaneous

Part 4 - Natural and Cultural Resources Programs

INRMP

a. Federal Legislation

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Anadromous Fish Act (16 U.S. Code [U.S.C.] 757a-758d, Public Law [P.L.] 89-304 as amended)
Animal Damage Control Act (7 U.S.C. 426-426b; 47 Statute 1468)
Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668d; 54 Statute 250)
Coastal Barrier Resources Act (16 U.S.C. 3501 et seq.)
Coastal Zone Management Act (16 U.S.C. 1451 et seq.)
Endangered Species Act (16 U.S.C. 1531 et seq., P.L. 93-205)
Estuary Protection Act (16 U.S.C. 1221-1226; 82 Statute 625)
Executive Order 11514, Protection and Enhancement of Environmental Quality
Executive Order 11870, Animal Damage Control on Federal Lands
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Executive Order 11987, Exotic Organisms
Executive Order 11988, Floodplains Management
Executive Order 11989, Off-Road Vehicles Use on Public Lands
Executive Order 11990, Protection of Wetlands
Farmland Protection Act (7 U.S.C. 4201 et seq.)
Federal Insecticide, Fungicide, and Rodenticide Act as amended (7 U.S.C. 136 et seq.)
Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701)
Federal Noxious Weed Act of 1974 (7 U.S.C. 2809 et seq.)
Federal Water Pollution Control Act (Clean Water Act) (P.L. 95-217 as amended)
Fish and Wildlife Conservation Act (P.L. 96-366, 16 U.S.C. 2901 et seq.)
Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.)
Forest and Rangeland Renewable Resources Planning Act of 1974 (P.L. 93-378,16 U.S.C. 1601
Sales of Forest Products on Federal Lands (Title 10 U.S.C. 2665)
Hunting and Fishing on Federal Lands (10 U.S.C. 2671, P.L. 86-337)
Lacey Act of 1900 (16 U.S.C. 701, 702; 31 Statute 187, 32 Statute 285)
Legacy Resource Protection Program Act of 1992
Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407 as amended, P.L. 92-533)
Mineral Exploration and Leasing (43 U.S.C. 155 and following sections)
Multiple Use Sustained Yield Act of 1960 (16 U.S.C. 528 et seq.)
National Environmental Policy Act (42 U.S.C. 4321-4347, P.L. 91-190)
National Forest Management Act of 1976 (P.L. 94-588, 16 U.S.C. 1600 et seq.)
National Trails Systems Act (16 U.S.C. 1241-1249)
Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.)
Sikes Act (16 U.S.C. 670 et seq.) "Conservation Programs on Military Reservations"
Soil and Water Conservation Act (P.L. 95-193, 16 U.S.C. 2001)
Taylor Grazing Act (P.L. 73-482, 43 U.S.C. 315 et seq.)
Wild Free-Roaming Horses and Burros Act (16 U.S.C. 1331-1340; 85 Statute 649)
Wilderness Act of 1964 (16 U.S.C. 1131-1136; 78 Statute 890; P.L. 88-577)
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b. Code of Federal Regulations (CFR)

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7 CFR 658, Farmland Protection Policy Act (10 U.S.C. 2667)
30 CFR 297, Wild and Scenic Rivers Act (16 U.S.C. 1274 et seq.)
50 CFR 17, Endangered and Threatened Wildlife and Plants
50 CFR 20, Migratory Bird Conservation Act (P.L. 89-699, 16 U.S.C. 715)
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c. Federal Guidelines

Cooperative Agreement between TOD and Natural Conservancy for assistance in natural resources inventory
Interagency Agreement between the U. S. Air Force and the U. S. Fish and Wildlife Service on wildlife, waterfowl, and wetlands assistance
Interagency Agreement between the U. S. Air Force and the U. S. Fish and Wildlife Service on mapping and delineating wetlands
MOA for Federal Neotropical Migratory Bird Conservation Program and addendum among the USFWS, Forest Service, BLM, National Park Service, Agency for International Development, EPA, Department of the Navy, and Department of the Air Force.
MOU for Watchable Wildlife Programs

d. Department of Defense Regulation and Guidance

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Air Force Instruction (AFI) 32-7064, Integrated Natural Resources Management, 8 March 1994
AFI 91-202, Mishap Prevention Program (Bird-Aircraft Strike Hazard)
Air Force Policy Directive (AFPD) 32-70, Environmental Quality
AFI 32-1053, Pest Management
AFI 32-9003, Granting Temporary Use of Real Property
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CRMP

a. Federal Legislation

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The National Historic Preservation Act (NHPA)
The Native American Graves Protection and Repatriation Act (NAGPRA)
The Archaeological Resource Protection Act (ARPA)
The American Indian Religious Freedom Act (AIRFA)
Legacy Resource Protection Program Act of 1992
Executive Order 11593, Protection and Enhancement of the Cultural Environment.
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b. Code of Federal Regulations (CFR)

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32 CFR Part 229, Protection of Archaeological Resources
36 CFR Part 60, National Register of Historic Places (National Register)
36 CFR Part 63, Determination of Eligibility for Inclusion on the National Register of
Historic Places
36 CFR Part 65 National Historic Landmarks Program
36 CFR Part 78, Waiver of Federal Agency Responsibilities under Section 110 of the NHPA
36 CFR Part 800, Protection of Historic Properties
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c. Federal Guidelines

Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation
National Register Bulletins (multiple)
Advisory Council on Historic Preservation (Council), Memo 3 July 1991, Relationship between Section 106 of the NHPA and the NAGPRA

d. Department of Defense Regulation and Guidance

Air Force Instruction (AFI) 32-7065, Cultural Resources Management, 13 June 1994 HQ USAF/CE Interim Guidance for Cold War Resources, 29 June 1993 Interim AF Policy on Historic Preservation of Cold War Resources at Closure bases, 14 February 1993 SAF/CEV Guidelines for Consultations with Native Americans, 16 May 1991 AFI 32-7065 requires that the CRMP be updated annually and integrated into the BCP with ANG approval at 5-year intervals.

CRMP - Section 106 Review Process

a. 36 CFR 800, Protection of Historic Properties

36 CFR 60, National Register of Historic Places
Secretary of the Interior's Standards and Guidelines for Archaeology and Historic
Preservation
National Register Bulletin No. 15, How to Apply the National Register Criteria for
Evaluation
National Register Bulletin No. 16A, How to Complete the National Register Registration
Form
AFI 32-7065, Cultural Resources Management
Interim Guidance: Treatment of Cold War Historic Properties for U.S. Air Force
Installations (29 June 93)

Wetland Inventory, Survey, Function and Values, and Mapping

a. Federal Legislation

Federal Water Pollution Control Act (commonly referred to as the Clean Water Act) of 1977 (33 U. S. Code [U.S.C.] 1344)
Estuary Protection Act (16 U.S.C. 1221-1226)
Executive Order 11988, Floodplains Management
Executive Order 11990, Protection of Wetlands
Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.).

b. Code of Federal Regulations (CFR)

33 CFR Part 320-330, U. S. Army Corps of Engineers Wetlands Regulations 40 CFR 230, U. S. Environmental Protection Agency (EPA) Section 404(b)(1) Guidelines.

c. Federal Guidelines

Amended Memorandum of Agreement (MOA) concerning the determination of the geographic jurisdiction of the Section 404 Program (56 Fed. Reg. 4995)
MOA between U. S. Department of the Army (Robert W. Page, Assistant Secretary of the Army, Civil Works) and the U. S. EPA (Rebecca W. Hanmer, Acting Assistant Administrator for Water, U.S. EPA) concerning federal enforcement for the Section 404 Program of the Clean Water Act - Jan. 19, 1989.

d. TOD Regulation and Guidance

AFI 32-7064, Integrated Natural Resources Management TOD Directive 4700.4, Natural Resources Management Program (as implemented by AFI 32-7064).

APPENDIX B - General Requirements:

- 1. The contractor shall provide all labor, facilities, equipment, materials, transportation, and supplies necessary to conduct the investigations, analyses, evaluations, and designs IAW the terms of the contract.
- 2. The Contractor shall make maximum use of existing data, and shall build on existing studies and reports to the extent practicable.
- ${f 3.}$ The Contractor shall visit the applicable site(s) and all applicable installation offices, and State and local regulatory agencies in order to collect the data required too complete the investigations, analyses, and evaluations.
- **4.** Emergency Response by the Contractor: The ANG anticipates that there may be contaminated or potentially contaminated sites discovered that would require immediate response.
- 5. The Contractor shall be prepared to mobilize and initiate appropriate actions upon receiving an oral Notice to Proceed (NTP) by the Contracting Officer (CO). The Contractor shall mobilize and visit the site(s) in question within five (5) working days of receiving the oral NTP. Due to the time critical nature of these anticipated emergency actions, a written NTP from the CO will be unavailable prior to required action by the contractor. The CO will issue the written NTP as soon as possible after the oral NTP.
- **6.** All technical consultants required shall be provided by the Contractor and shall be qualified to provide expert witness testimony. Expert testimony is not included in this contract but will be negotiated separately in the event such testimony is required.
- 7. Deliverables: The Contractor shall be required to meet suspense dates established and approved by ANG for each deliverable item. Exact quantities shall be indicated in the statement of work for each individual Task Order.
- 8. All sheets and covers of all draft reports shall be overprinted with the word "DRAFT".
- 9. The original copies of the Final Documents shall become the property of the ANG.
- 10. Transmittal letter for each deliverable shall be forwarded to AQE or the CO.
- 11. All reports shall contain Executive Summaries, Table of Contents, List of figures, and List of Acronyms and Abbreviations. All figures shall be marked with the Base name and location, North arrows pointing up the page, scales, and legends.

APPENDIX C - TECHNICAL REQUIREMENTS

- 1. The contractor shall be required to have the capability and experience to perform, or provide, a wide range of services relating to hazardous waste sites including, but not limited to the following:
- 1.1. Maintenance of an ongoing Health and Safety Program, and preparation and implementation of Site Health and Safety Plans (SHSP) as required by applicable laws, regulations and agreements.
 - 1.2. Topographic and geophysical surveys.
 - 1.3. Soil and rock borings and sampling, testing, and analysis.
- ${f 1.4.}$ Drilling, installation and development of groundwater monitoring and recovery wells.
 - 1.5. Hydrogeologic testing and data analysis.
- 1.6. Sampling and sample handling techniques for chemical analysis of various media.
 - 1.7. Work area and perimeter air monitoring/sampling.
- 1.8. Chemical analysis (both on-site and off-site for various media) for a variety of compounds.
- 1.9. Installation or construction of all support facilities (i.e., site project construction office, decontamination facilities, roads and utilities).
- 2. Traditional and innovative methods for source control and Remedial Action, such as the following:
- **2.1.** On-site source control/contaminant (e.g., groundwater pumping/interception via extraction wells, injection wells, or subsurface drains; impermeable caps; slurry wall; grouting; sheet pilings excavation).
- 2.2. Onsite treatment (e.g., water treatment, fuel recovery, chemical neutralization/reduction/stabilization, precipitation, air stripping, carbon filtration, oxidation, oil/water separation, ion exchange, biodegradation/bioreclamation (e.g., activated sludge or land treatment/composting), thermal destruction (incineration)).
- ${\bf 2.3.}$ Transportation and treatment and/or disposal at RCRA permitted off-site facilities.
- **2.4.** In-place treatment (i.e., vitrification, solidification, soil washing, air enhanced air technologies, subsurface bioreclamation basins, levees, etc.).
- **2.5.** Surface water controls (i.e., grading, revegetation, dikes, channels, sedimentation basins, levees, etc.).
- **2.6.** Air pollution controls (i.e., gas collection/control systems, dust suppressant, wind screens, etc.).
- 3. Spill Response/Remediation. Response situations will include but are not limited to the following:
- **3.1.** Polychlorinated biphenyl's (PCBs). All PCB spill cleanups and remediations shall be conducted in accordance with all applicable laws, regulations and agreements.
- 4. Hazardous Waste Removal Action. The contractor may be required to implement a removal action. Removal action activities may include but are not limited to: 1) design of the selected action, 2) preparation of a response evaluation/cost analysis, 3) work plan preparation, 4) on-site assembly and supervision, 5) final report preparation, and 6) operations and maintenance.
- **5.** Hazardous Material Contaminant/Spill Cleanup. The contractor shall be required to provide services should release of hazardous materials occur. The contractor shall safely contain, collect, neutralize and recover the hazardous materials/waste using

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acceptable, approved methods. Regardless of the location where the contractor is TOing work for the government, any releases that occur must be Documented whether they are because of negligence or an act of God. In the event of a release during business hours, the appropriate ANG/CEVR Project manager shall be notified immediately. If the release were to occur after normal business hours, the appropriate Project Manager shall be notified within 24 hours of the release. The contractor shall provide labor, safety (personal protective equipment levels A-D) and other equipment to complete the service in a timely and safe manner. The contractor may also be required to contact and work with state and or federal regulatory agencies. Remediation services may also be required as a result of the release affecting soil, groundwater and or surficial waters.

- 6. Drilling Services and Monitoring Well Installation. The contractor may be required to provide drilling operation in order to obtain soil and or groundwater samples as part of a site assessment. The contractor shall provide all labor, equipment and transportation necessary to obtain samples including: drilling equipment capable of penetrating and sampling contracted depths, all decontamination equipment and the sampling equipment for the method to be specified in the TO. The contractor shall supply all labor, equipment, and transportation necessary to set monitoring wells to depths specified in the TO. All monitoring wells shall be constructed in accordance with the requirements of the current ANG Site Investigation Protocol, and other applicable laws, regulations and agreements.
- 7. Participation in community education, public involvement, or public affairs activities, including, but not limited to, support of Restoration Advisory Board (RAB) meetings as specified in individual TO's.

APPENDIX D - SPECIAL CONDITIONS:

- 1. Base Engineering Work Clearance Request: Prior to commencing construction work or whenever the ground surface is to be disturbed deeper than three inches (3") or when erecting structures or operating equipment near overhead lines, the contractor performing work shall be responsible for obtaining approval from the COR and utility company. The contractor shall have an approved digging permit in their possession at all times while digging.
- 2. Base Regulations: The contractor shall conform to all base regulations and directives. Base regulations that apply to the contractor's activities, such as security, safety, traffic, fire, and personnel clearances, will be identified specifically at the preperformance conference. The contractor shall be responsible for providing and placing barricades, providing traffic control, safety guards, lighting and safety devices during all construction activities.
- **3. Accident Prevention:** The contractor shall comply with all Occupational Safety & Health Act standards.
- **4. Confined Spaces:** Contractors who enter confined spaces during construction operations shall do so in strict accordance with OSHA requirements. The contractor shall identify confined space work at the pre-construction meeting and how workers will be protected. The contractor shall provide any and all necessary testing, sampling, ventilation, equipment and supervision services to enter confined spaces.
- **5. Occupational, Safety and Health Act:** Contractors shall comply with OSHA 1926, Construction Standards and the portions of OSHA 1910 standards that are applicable to construction. The Army Corps of Engineers Manual EM 385-1-1, will be used in the absence of guidance in OSHA standards.

6. Fire Protection:

- **6.1.** Housekeeping: The contractor shall at all times maintain good housekeeping practices to reduce the risk of fire damage and/or personal injury. All scrap materials, rubbish and refuse shall be removed daily from in and around the building and shall not be permitted to be strewn on adjacent property.
- **6.2.** Storage of Flammables: Suitable secure storage space shall be provided by the contractor, outside the immediate building area for the storing of flammables/combustibles of any type. No storage will be permitted inside the building. The storage space shall be properly identified in accordance with applicable federal, National and local regulations as outlined by the base Fire Department. Flammable or combustible liquids being used inside the building will be kept to a minimum and removed from the building during unused periods.
- **6.3. Fire extinguishers:** Two operational fire extinguishers shall be required at each area or location where hazardous operations are being performed. These include, but are not limited to, welding, cutting, brazing, burning, soldering or melting. Operations that produce flying or dripping slag, metal or embers shall have sufficient non-combustible materials on site to protect against fire damage or personal injury due to the operation. This may include fire resistant blankets, as required, by the base Fire Department. When supplemental temporary heating devices are used, a fire watch will be present to cover all periods when such devices are in operation.
- **6.4. Extinguisher Requirements:** Both portable fire extinguishers shall meet or exceed a rating of 4A-40BC, as listed by Underwriters Laboratory, Factory Mutual or any National Acceptable Testing Laboratory. Extinguishers not meeting this requirement are not acceptable.
- **6.5.** Coordination of Work Operations: The contractor shall coordinate all work operations with the Contracting Officer prior to starting any work under this contract. The contractor shall have a superintendent who speaks, reads, writes and understands the English language to act for the contractor and to be available on the job site throughout each workday.
- **6.6. Notification:** The contractor shall notify the Contracting Officer or COR in writing, when planning to be absent from the project site for more than two workdays. Prior to returning to the project, the contractor shall notify the Contracting Officer or COR.

- 7. Contractor's Employee Parking: The contractor's employees shall park only in areas assigned by the Contracting Officers Representative.
- 8. Speed Limit: The contractor shall obey the base speed limits. Speeding tickets and fines are issued for violations and shall be the contractor's responsibility.
- 9. Contractor's Employee Restriction: Contractor employees shall be restricted to areas of the base within the scope of this work; plus, direct routes to and from the site as may be approved at the pre-construction conference with regard to work scheduling and material handling. The contractor's employees will have in their possession at all times a valid picture ID and their base identification pass.
- 10. Work Hours: Work for all operations, other than that specified in the TO, shall be performed during the normal workweek, Monday through Friday, 0700 to 1700. Work shall not be scheduled for any federal holiday. Deviations from the normal workweek will not be granted except under unusual circumstances. Requests for permission to work on Saturdays, Sundays, and/or federal holidays shall be submitted to the Contracting Officer for approval in writing, a minimum of five days in advance of the proposed scheduled change.
- 11. Severe Weather Warning Requirements: When notified by the Contracting Officer that a severe weather warning has been issued for the area in which construction is being performed, the contractor shall immediately take action to tie down, or otherwise secure, structures, materials, and equipment on the job site that could become missiles as a result of strong surface winds, thunderstorms, or other weather-related conditions. This requirement is applicable twenty-four (24) hours a day, seven (7) days a week.
- 12. Environmental Protection: The contractor shall provide and maintain environmental protection during the life of the contract as defined herein. Environmental protection shall be provided to correct conditions that might endanger the environment during normal construction operations. Definitions are as follows:
- 12.1. Sediment: Soil and other debris that has eroded and has been transported by runoff water or wind.
- 12.2. Solid Waste: Rubbish, debris, garbage, and other discarded solid materials, except hazardous waste as defined in paragraph entitled "Hazardous Waste," resulting from industrial, commercial, and agricultural operations and from community activities.
- ${\bf 12.3.} \quad {\bf Rubbish:} \quad {\bf Combustible} \ \, {\bf and} \ \, {\bf non-combustible} \ \, {\bf waste} \ \, {\bf such} \ \, {\bf as} \ \, {\bf paper,} \ \, {\bf boxes,} \\ {\bf glass, crockery, metal, lumber, cans, and bones.}$
- 12.4. **Debris:** Combustible and non-combustible wastes such as ashes and waste materials resulting from construction or maintenance and repair work, leaves, and tree trimmings.
- 12.5. Chemical Wastes: This includes salts, acids, alkalizes, herbicides, pesticides, and organic chemicals.

13. Sanitary Wastes:

- 13.1. Sewage: Wastes characterized as domestic sanitary sewage.
- 13.2. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.
- 13.3. Hazardous Waste: Hazardous substances as defined in 40 CFR 261 or as defined by applicable state and local regulations.
- ${f 13.4.}$ Oily Waste: Petroleum products including all fuels and lubricants and bituminous materials.
- 13.5. Rubble: Fill materials generated from non-reinforced concrete masonry, asphalt construction and natural earth resulting from excavation.
- 13.6. Landscaping Waste: Trees, limbs, brush, stumps and other vegetation generated from the clearing and grubbing of natural areas.

- 13.7. Temporary Construction: Upon completion and acceptance of the construction, the contractor shall remove all signs of temporary construction facilities such as work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, debris and other vestiges of construction. All areas shall be restored to pre-contract construction conditions, including grading, sodding and other restorations.
 - 13.8. Burn Off: Burn-off of ground cover will not be permitted.
- 14. Reduction of Exposure of Unprotected Soils: Earthwork brought to final grade shall immediately be finished as indicated and specified. Side slopes and back slopes shall be protected immediately upon completion of rough grading. Earthwork shall be planned and conducted in such a manner as to minimize the duration of exposure of unprotected soils. Unprotected exposure shall not exceed 7 days.
- 15. Temporary Protection of Soils: Methods as required shall be used to effectively prevent erosion and control of sedimentation and shall be as required by the approved state control plan. Items shall include, but not be limited to, the following:
- 16. Mechanical Retardation and Control of Runoff: The rate of runoff from all construction sites shall be mechanically retarded and controlled. Provision of silt fencing, straw bales and other methods shall be required for any and all areas in which excavation or other type of soil disturbance is performed. Temporary diversion ditches may be constructed to retard and divert runoff to protected drainage courses.
- 17. Vegetation and Mulch: Protection shall be provided on side and back slopes when rough grading is complete or when sufficient soil is exposed to require protection to prevent erosion. Protection shall be afforded by accelerated growth of permanent vegetation, temporary vegetation, mulching and netting. Slopes too steep for stabilization by other means shall be stabilized by hydroseeding, mulch anchored in place, covering with anchored netting, sodding, or such combination of these and other methods as may be necessary for effective erosion control. Control shall be provided no more than 7 days after disturbance of the area.
- 18. Control and Disposal of Solid Wastes: Wastes shall be placed in closed metal containers, which are emptied on a regular schedule. Handling and disposal shall be conducted in a manner to prevent contamination of the site and other areas. All containers 5 gallons and larger brought onto base shall have the prime contractor's name and telephone number conspicuously marked thereon.
- 19. Disposal of Rubbish and Debris: The contractor shall transport wastes off government property and disposal shall be in a manner that complies with federal, state and local requirements. The contractor shall provide the Contracting Officer with a copy of the state and/or local permit, or license, which reflects such agency's disposal authorization. The permit, or license, and the location of the disposal area, shall be provided to the Contracting Officer prior to transporting materials off government property.
- **20. Garbage:** Garbage shall be disposed, by the contractor, off base. Garbage shall be kept in sealed metal containers until disposal is effected. The preparation, cooking, or disposal of food on the project site is strictly prohibited.
- **21. Sewage, Odor and Pest Control:** Chemical toilets or comparably effective units shall be used. Wastes shall be periodically collected and removed from the base. Measures shall be taken to control pests and to mask, or eliminate, undesirable odors.
- 22. Chemical Waste: Chemical wastes shall be stored in corrosion resistant containers and shall be disposed at least monthly, unless directed otherwise. Disposal of chemical wastes shall be in accordance with federal, state and local requirements. Fueling and lubricating of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants and oils, to be discarded, shall be disposed in accordance with approved procedures meeting federal, state and local regulations. The Contracting Officer shall be notified immediately of oil and hazardous material spills which may be large enough to violate federal, state and local regulations.
- 23. Rubble and Landscaping Waste: Rubble and landscaping waste shall be disposed as herein before specified for "Disposal of Rubbish and Debris".
- **24. Dust Control:** Dust shall be minimized on and around the work site at all times; including, non-work hours, weekends and federal legal holidays. Soil, at the site and other areas disturbed by contractor's operations, shall be sprinkled or treated with dust

suppressers as necessary to control dust. Dry power brooming will not be permitted. Vacuuming, wet mopping, wet sweeping, or wet power brooming shall be done instead. Air blowing will be permitted only for removing non-particulate debris as from reinforcing bars. Sandblasting will not be permitted unless the dust therefrom is confined. Only wet cutting of concrete blocks, concrete and asphalt will be permitted. Unnecessary shaking of bags will not be permitted where concrete mortar and plaster milling are done.

- **25. Noise:** The maximum use of "low noise emission products", as certified by the Environmental Protection Agency, shall be made when available. Blasting or explosives will not be permitted.
- 26. Erosion and Sediment Control Plans: Submit state approved control plans to the C.O. state approved erosion and sediment control plans shall be provided for all construction which involves the clearing of land, grading or other earth disturbances which affect over 5,000 square feet of area or over 100 cubic yards of earth, whichever is the lesser. The contractor shall be responsible for all actions necessary to prepare and submit the erosion and sediment control plan to the proper state authorities and to obtain the proper state approvals. In addition to responsibility for the preparation, submission and approval of the plans, the contractor shall bear sole responsibility for all actions required of him by the plans and the state, concerning all elements associated with the control plans. This responsibility shall be throughout the life of the project and continue until released from responsibility the Contracting Officer. Contractors shall take note that state authorities frequently require continued compliance with erosion and sediment control plans well beyond the actual completion of other construction work. In addition to the state requirements, the contractor shall provide continuous maintenance to the silt fence and other sediment control barriers to ensure a neat appearance. This shall require, as a minimum, for the contractor to remove built-up mud and debris on the exterior surface of silt fences, ensure fences are stretched taunt, ensure silt fences are installed straight and true.
- **27. Preliminary and Final Inspections:** The contractor shall coordinate with the Contracting Officer and shall request scheduling of the final and pre-final inspections, in writing a minimum of five days in advance of requirement.
- 28. Truck Hauling on Base: The contractor shall be responsible for covering open-bodied vehicles transporting sand, gravel, fill materials, dirt, construction debris, rubble, or other material, which may become airborne and create air pollution on base. Alternate means, approved by the Contracting Officer, may be employed to achieve the same results as would coverings. The contractor shall immediately remove all dirt, rubble or debris carried onto existing base pavements by contractor operations.
- 29. Staging Area: The haul route will be identified on the contract drawings. The Contracting Officer at the pre-construction conference will assign the staging area. The contractor shall accomplish daily construction work site and staging area clean up. This clean up shall include the placing of construction material and equipment in a neat and orderly arrangement. Rubbish, debris, rubble and garbage shall be disposed of daily off base and shall not be permitted to accumulate. If the contractor has any dumpsters in the staging area, they shall be clearly marked with a sign "for private use only, not for use of base personnel". Dumpsters shall be emptied when contents mound to height of sides. At the end of the workday, the contractor shall inspect the site to ensure that all paper, cardboard, and similar materials are removed to provide a litter free appearance. Upon completion of all work outlined in the contract drawings and specifications, the contractor shall remove from the base, his construction materials and his equipment.
- **30. Staging Area Security:** The contractor's assigned staging area shall be secured and shall be completely enclosed by the contractor with a minimum 6-foot high temporary fence. The fence shall have a minimum of two six-foot wide access gates on opposing sides of the site. The temporary staging area fence shall provide a neat and professional exterior appearance. The contractor shall maintain all contractor material and construction items as well as construction dumpsters within the confines of the staging area. The contractor shall be required to maintain the appearance and order of the assigned staging area, both within and without, during the entire duration of the construction contract. Security and maintenance of the staging area and contents thereof is the contractor's sole responsibility. The contractor shall restore the staging area to its original condition at the end of all construction.
- **31. Vandalism:** The contractor shall be responsible for safeguarding the construction site and the staging area, and all construction equipment and materials against vandalism and theft.

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- **32.** Marking of Equipment, Trailers and Temporary Offices: The contractor shall ensure that equipment and trucks used on the job are conspicuously marked with both name and telephone number of owner or leaser. All contractor temporary offices and trailers shall have signs affixed to the exterior, which state the name of the contracting firm, and a name and number of the responsible contracting firm official. The letter size of the firm name shall be a minimum of 8" high with all lettering professionally and neatly prepared.
- 33. Availability and Use of Utility Services: Water and electricity may be available for use by the contractor from the government's existing system outlets and supplies to perform the work under this contract. The contractor must request the use of utilities in their proposal. The location(s) of the temporary connection points will be designated by the Contracting Officer or COR prior to permitting connections. Materials, labor and other items required to provide the hook up necessary to use the existing government utility should be the contractor's responsibility. Electric energy shall not be used for resistance heating except within the contractor's office trailer or unless specifically allowed in the technical sections. The contractor will not be permitted to use government telephone service.
- 34. Interruption of Utilities: The contractor shall not interrupt existing utilities without obtaining written permission from the Contracting Officer a minimum of seven workdays in advance. The outage request shall be made, in writing, at least ten workdays in advance of the outage and it shall state the date and duration of the proposed outage. The contractor shall adjust work schedules to keep outages to a minimum. The contractor shall make final connections to existing utility services, furnish material, perform excavation, backfill, tamping, finish surface repairs and other labor incidental to making the utility connections. Outages shall not be performed until all required materials and appurtenances are on the construction site. Construction work associated with an outage shall be accomplished in a workmanlike manner, in accordance with the technical provisions referenced and specified in other sections.
- **35. Protection and Moving of Property:** The contractor shall be responsible for protection of all existing government features, furnishings and for moving the furnishings in the area of work as necessary to accomplish required work elements and replacing same in their original position. Protection shall include covers, tarps, plastic sheets, barriers and other protection devices.
- **36. Landscape Protection:** Provide protection for all existing landscape features such as trees, shrubs, bushes, plantings and sod in and around the area of construction. No existing trees, shrubs, bushes, or other items shall be affected in any way, by contractor actions, unless required by specifications. Prior to any demolition or construction in proximity to any existing landscape feature, the feature shall be protected by fencing, barricades, temporary removal and/or other approved devices. When construction requires that heavy machinery work in close proximity to existing mature trees, the trees shall be protected with a strong 2"x4" frame with 3/4" plywood sheeting barricade or enclosure. No movement or operation of heavy equipment within a tree shadow area or drip line shall be permitted. Any features, which require pruning or trimming in order to place new construction materials or to allow clearance for new materials or equipment, shall be pruned or trimmed in a workmanlike manner. All damaged items shall be replaced in kind with new, by the contractor.
- 37. Security Areas: When work to be accomplished under this contract is in a secure area the contractor will not be granted unlimited access. The contractor shall contact the Contracting Officer a minimum of five workdays prior to commencement of work to arrange for security escorts and/or security passes and to become acquainted with security requirements. The contractor shall not deviate from any and all indicated security requirements. The contractor shall allow for a 30-minute delay each time a security area is entered to allow for identification and escort. If employees arrive or depart from the security area at different times each will encounter this delay.
- **38. Daily Clean Up:** The contractor shall accomplish daily construction site and staging area clean up. This clean up shall include the placing of construction material and equipment in a neat and orderly arrangement on the site. Equipment and materials must not block access to existing facilities. Rubbish, debris, rubble, and garbage shall be disposed of daily. At the end of the workday, the contractor shall inspect the site and area to ensure that all paper, cardboard, demolition products and similar materials are removed to provide a litter-free appearance. On-base access routes used by construction equipment and/or delivery vehicles shall be maintained free from clay or mud balls, clods, and mud.

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- **39. Phasing of Excavation for Utilities:** Excavation shall not begin until materials and equipment for that specific portion of the job are on site and the Contracting Officer has granted approval for excavation. Requests for utility outages shall be in writing and shall be made a minimum of 10 days prior to the outage date. Backfill of all excavations shall be accomplished only after inspection of the underground construction by the Contracting Officers Representative and after approval by the Contracting Officers Representative to begin excavation backfill is given. Coordinate request for utility installation and inspections with the Contracting Officer Representative two days in advance. The contractor shall remove backfill performed prior to Contracting Officers Representative inspection of the installation. Backfill shall be accomplished as soon as possible after installation of the utility.
- **40. Site Restoration:** Rough grading of utility cuts shall be accomplished immediately after backfill-excavated trenches. Soil and sediment control measures shall also be provided immediately. Final grading, including the placing of new topsoil, as required, shall be accomplished as soon as possible. Required landscaping, sodding, or seeding, mulching and spreading of straw cover shall be accomplished at the earliest possible time after backfill, but in no circumstance more than 7 days after excavation is performed.
- 41. Trenching and Excavating: Excavation and related work shall be completed in scheduled phases between blocks or manholes for installations requiring testing. Work shall be barricaded in accordance with Corps of Engineer Manual EM 385-1-1 and AFOSH Std 127-66. For excavations in which testing is not required, the trenches shall be backfilled at the end of the day except of the last 15 feet. Backfill must be accomplished daily; established structures and plantings must be avoided. Excavation shall not begin until material and equipment for the specified portion of the job is available on the site. Trenches or excavations which cut roads, parking lots, driveways and delivery routes shall be fully coordinated between the contractor, COR and Base Fire, Rescue and Security Police prior to excavation. The contractor shall provide non-skid surface, steel road plates until the vehicle routes are permanently repaired. Excavations and the repair, which will traverse completely across vehicle routes, shall be scheduled in stages, which will allow crossing of vehicles until road plates, and/or permanent repairs are in place.
- **42. Hazardous Areas:** Open excavations, which pose a danger to site personnel or others, shall be properly fenced to prevent accident entry. Side slopes of excavations shall be shored or left at a safe angle of repose (IAW 29 CFR 1926) dependent upon soil consistency and moisture content).
- **43. Barricades:** Barricades are required in accordance with the quoted safety regulations. Each job site will be clearly identified by signs, and protected by barriers suitably marked by reflective materials, and illumination for easy sighting after dark. Where steel plates are used over open trenches, they shall be secured to prevent vehicle damage. Unusual or specific requirements for signs or lighting are as required or specified in the specifications. When special requirements are indicated in the specific TO, they will take precedence over applicable Special Condition paragraphs.
- **44. Government Furnished Equipment:** Government furnished equipment (if any) will be identified in each Task Order. It shall be the contractor's responsibility to load the property at the storage site, ship it to the project site, and off-load it there.
- **45. Catalytic Converters:** No vehicle equipped with a catalytic converter shall be permitted to operate within 50 feet of any aircraft, on or near the taxiways or runways, around fuel spills, in POL areas, in munitions areas or in other potentially hazardous areas when identified and/or placard.
- **46. Tools and Equipment:** All hand tools and equipment used by the contractor must be suitable for use in the area required. Explosion proof equipment, special low noise equipment and other special equipment shall be provided as specified. Additionally, if the specific work area so dictates, the equipment used shall be Class 1, Division 1, suitable for Hazardous (Classified) locations.
- **47. Airfield:** Work to be accomplished by this contract is on an active airfield. When authorized to cross-operational runways and taxiways, the crossing locations will be designated and the contractor will be required to station flagmen at each point or crossing to control movement of contractors equipment at such crossing. Aircraft shall always be given right-of-way.

Maintenance of Access Routes and Airfield Pavement Areas: The contractor shall, at his own expense, be required to properly maintain all construction roads, existing improved roads and airfield pavement areas used during the construction period. It shall be the further responsibility of the contractor to continuously maintain and keep the taxiways

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and aprons completely free of clay balls, stones or other similar material which could possible damage high pressure tires or aircraft engines. Sufficient personnel and equipment shall be maintained by the contractor in a state of readiness to promptly remove all such spillage. The contractor's attention is directed to the fact that taxiways and aprons shall be broom cleaned and any small stones, clay lumps or debris passed over by mechanical sweepers or graders shall be removed by manual sweeping. The requirements for maintaining and cleaning these areas will be rigidly enforced and shall be accomplished by the contractor to the complete satisfaction of the Contracting Officer.

- **48. Airfield Pavement Access:** The contractor shall be shown point(s) of access to the airfield area and the work area(s) at the time of the pre-construction conference. Under no circumstances will the contractor, use other accesses to the airfield areas or work areas.
- **49. Emergencies:** In case of an emergency, the Contracting Officer, Base Fire Chief and Base Operations Officer, or their representative, shall have the authority to order the contractor to terminate work and clear the area of personnel and equipment. The contractor shall comply, to such an order, with all possible speed.
- **50. Radio Transceiver:** The contractor will provide and maintain a radio transceiver with an AM frequency designated by the CO or his designated representative so as to maintain radio contact with Base Operations at all times while working on the airfield.
- **51. Barricades:** The areas that are under construction shall be barricaded using temporary portable airport marking lights, which will remain until the areas are released for use by aircraft.

APPENDIX E - ACTIVITIES

1. Activities

1.1. Planning

- 1.1.1. Meetings: The Contractor may be required to attend and participate as a technical expert in meetings, with state regulators, ANG representative(s), and base officials to determine the scope of work, review reports, present the results, recommendations and respond to comments. The Contractor shall submit, for ANG approval, the minutes of each meeting held for the contracted task.
- 1.1.2. Public Meetings: The Contractor may be required to arrange and attend public meetings. Provide a public stenographer, and a translator for the hearing impaired to be present; provide refreshments for an agreed to number of people, prepare a Responsiveness Summary IAW EPA and ANG requirements. The Responsiveness Summary shall be included in the final Document. The contractor shall be prepared to answer questions by citizens. A short presentation shall be required; government personnel will do presentation.
- ${\tt 1.1.3.}$ Briefings: The Contractor shall be required to conduct briefings as identified in each specific Task Order.

1.1.4. Work Plan

- 1.1.4.1. Project Management Plan (PMP): The Contractor shall submit a PMP for completing the investigation for review and approval by the ANG. The PMP shall include the following:
- a. Coordination of Contractor activities on the base and development of site evaluation priorities.
- b. Recommended overall approach for surface and subsurface investigation including site specific and basewide hydrogeologic studies.
- $\hbox{c. Recommendations at decision points for development of Decision Documents or Focused Feasibility Studies/Remedial Measures.}$
 - d. Recommended Data Quality Objectives (DQO) for each

site.

- e. A summary of the coordinated guidelines governing pertinent environmental contaminants and their concentrations in the soil and groundwater.
 - f. Identification of permit requirements.
 - g. Project schedules, with appropriate project milestones.
 - h. A description of how derived waste will be managed and

disposed of.

i. A description of project organization, including project staffing and responsibilities and project schedules, i.e., record maintenance, internal quality control, etc.

1.1.4.2. Quality Assurance/Quality Control (QA/QC) Plan:

- 1.1.4.2.1. Field Screening: The Quality Assurance Project Plan (QAPP) shall summarize a procedure to screen split spoon samples with an OVA or HNu to help minimize the loss of volatiles. Samples with the highest indicated levels of volatile organic content (measured in headspace) may be sent to the laboratory for chemical analysis
- 1.1.4.2.2. Sample Handling: Field samples and Quality Control samples are to be placed in sample containers, preserved, and shall meet holding times as listed in Table 1. Sample packaging, shipping, and chain-of-custody shall explicitly follow the guidelines as listed in the latest version of the EPA Sample Handling Protocol. Samples taken for this project shall be considered low level/environmental samples for packaging and shipping purposes, unless otherwise

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specified. The Contractor should be prepared to handle different types of sampling if required by state regulations.

1.1.4.2.3. Sample Containers and Coolers: The Contractor shall furnish all material and equipment necessary to obtain all the required samples. This includes the sample bottles, preservatives, ice bags, and coolers, for the regular samples and the Government Quality Assurance (QA) samples. The coolers used for shipping the QA samples shall be returned to the destination indicated by the Contractor.

1.1.4.2.4. Preservatives and Holding Times: A summary of sample containers, preservatives, and laboratory holding times for soil samples is listed in Table 1. No samples shall be held on site for more than 24 hours

1.1.4.2.5. QA/QC Samples:

a. The Contractor shall submit to the CO or designated COR the names and addresses of the QA/QC Labs. Samples submitted to the laboratory shall consist of splits and field blanks as specified in the latest version of the EPA Sample Handling Protocol. This guidance is to be followed explicitly. The Contractor shall supply sample containers and coolers for these samples. The Contractor may use his own "chain-of-custody" and "Request for Analysis" forms when submitting those samples.

b. Quality Control samples shall be gathered and analyzed. For soil samples, one (1) duplicate and at least one (1) field blank shall be taken in the field for every ten (10) field samples. Field blanks for soils shall consist of background soil samples and/or sampler rinsates.

1.1.4.2.6. Method Detection Limit: Detection limits for analyses specified herein shall be according to applicable EPA or Standard Methods unless otherwise stated.

1.1.4.2.7. Calibration: Procedures/Frequency: Calibration of the analytical instrumentation to be used for this project shall be outlined in the QAPP and IAW the manufacturer's recommendations. Calibration requirements and the frequency associated with them shall be summarized.

 $\textbf{1.1.4.2.8.} \qquad \textbf{Laboratory Validation:} \ \ \textbf{The Government} \\ \textbf{reserves the right to approve the laboratory.}$

1.1.4.2.9. Matrix spikes: Matrix spike sample analysis shall be on one (1) in twenty (20) for all soil and water parameters. Methods requiring a greater rate of spike analysis shall be followed explicitly. Matrix spikes for soil samples can be made to extracts. The Contractor shall perform data validation for this project. A plan for this activity shall be proposed in the required QAPP.

1.1.4.3. Sampling and Analysis Plan (SAP): All SAPs developed for field investigation shall be prepared in accordance with the following sections, applicable EPA regulations, and state/local requirements. The SAP shall include the following plans: Field Sampling Plan, Quality Assurance Project Plan (QAPP), and Health and Safety Plan.

1.1.4.3.1. Soil Sampling: The materials encountered shall be classified using the Unified Soils Classification System and described according to ASTM D2488-69 "Description of Soils (Visual-Manual Procedure)"

1.1.4.3.1.1. General: Sampling shall be performed using a California-style split spoon with brass or other type sleeves, shelby tube or equivalent type sampler, and standard sampling techniques. Soil grab samples for volatile hydrocarbon or semi-volatile analyses shall be obtained by selecting the and properly sealing it on both ends and preparing it for transport to the laboratory. The portion of the split spoon sample that represents slough shall not be subsampled. All surface soil samples shall be taken using EPA approved methodology as outlined in SW-846. The volume of sample recovered shall be great enough to provide the necessary sample volume for the required chemical analysis. All sampling devices and decontamination procedures shall be performed in a manner consistent with the most recent EPA guidelines. Compositing of soil samples shall be performed in a stainless steel bowl using stainless steel stirring devices that have been decontaminated prior to each compositing procedure. This decontamination procedure shall be the same as that specified for sampling equipment. Sampling equipment, methods and decontamination procedures shall be clearly indicated by the Contractor in the QAPP.

1.1.4.3.2. Water Sampling: After development, the wells shall stabilize a minimum of two (2) days prior to sampling. For all wells, determine depth to water using an electric tape before purging.

1.1.4.3.2.1. Analytical Plan: Two rounds (unless specified otherwise) of samples shall be taken with a minimum interval of at least three to four weeks between samples. These samples shall be submitted for site-specific chemical analysis.

1.1.4.3.3. Laboratory Support Services:

1.1.4.3.3.1. Field laboratory capabilities and stationary lab shall be used either in combination or individually depending on the circumstances of the cleanup project. The contractor's proposal shall include details describing chemical measuring capabilities related to supporting the cleanup of various types of chemical cleanup projects. Procedures for such analytical operations shall be consistent, to the extent practicable, with the Quality Assurance Project Plan (QAPP) or equivalent.

1.1.4.3.3.2. Field testing capabilities shall include, at a minimum, the standards, equipment, and knowledge to use photo-ionizing detectors, flame ionizing instruments, combustible gas indicators, oxygen meters, ionizing radiation detectors, and pH and conductivity meters. Other field testing devices shall be readily available for use for project specific needs.

1.1.4.3.3.3. Arrangements to use an in-house or subcontracted field lab along with access to trained chemist, standards, procedural testing references, instruments, and other furniture and apparatus shall be described in the proposal. At a minimum, access to a field lab with the capability of gas chromatography, mass spectroscopy, atomic absorption spectrophotometry, and gravimetric and volumetric analysis is required. Various support equipment for the above instrumentation as well as sample preparation and storage shall be needed.

 $\textbf{1.1.4.3.3.4.} \quad \text{The capabilities of the in-house or subcontracted stationary lab(s) shall include the whole range of environmental analysis of air, water, soil and materials using standard methods. Any lab must be capable of meeting the requirements for U.S. EPA protocol, or as specified in the TO. The lab(s) shall meet state analytical requirements and must demonstrate the ability to analyze for contaminants of concern at remedial levels chosen.$

1.1.4.3.3.5. Analysis capabilities shall include at a minimum volatiles, semi-volatiles, acid compounds, base/neutral compounds, pesticides, metals, cyanide, and the conventional pollutants as shown on Tables II, III, and part of IV on pages 106 and 107 of the Code of Federal Regulations, Title 40, Parts 100 to 149 (1 July 86). Tests to determine if a material is hazardous waste according to the regulations or agreements shall also be within the lab's capabilities.

1.1.4.3.3.6. Analytical methods used shall be in compliance with Environmental Protection Agency (EPA) standard methods, or NIOSH Analytical Methods, unless technically impractical. Methods shall include, but not limited to, those described in "Methods for Chemical Analysis for Waters and Wastes," EPA 6-4-79-020; and "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, " EPA 600/4-82-057. Methods described in the EPA Contract Laboratory Program Statement of Work for organic and inorganic compounds and U.S. EPA Guidance SW-846 methods will be acceptable. Variations, subject to the TO Project Manager's and possibly regulator's approval, may be acceptable.

1.1.4.3.3.7. Laboratory Approval and Audits: The government may, at its option, conduct inspections or require analysis of performance audit samples at any laboratory providing services under this contact at any time during the contract.

1.1.4.4. Health and Safety Plan (HSP):

1.1.4.4.1. HSP: The contractor shall have an ongoing Health and Safety Program meeting the requirements of all applicable OSHA standards.

1.1.4.4.2. Site Health and Safety Plan (SHSP): The contractor shall prepare, implement, and enforce a SHSP for each Remedial Action (RA), Interim Remedial Action (IRA), and Removal Action whenever work is to be performed in

contaminated or potentially contaminant areas. Each SHSP shall be in full compliance with the health and safety specifications of the particular TO. The contractor shall ensure that their subcontractors, suppliers and support personnel follow all health and safety provisions. The contractor shall be capable of conducting any of the task requirements under level B personal protection (as defined by OSHA Standards). As a minimum, the SHSP shall contain the following elements:

1.1.4.4.2.1. Site description and contaminant

characterization

 $\textbf{1.1.4.4.2.2.} \quad \text{Safety and Health hazard(s) assessment and risk analysis for each site task and operation}$

1.1.4.4.3. Accident prevention (TO specific)

1.1.4.4.4. Safety and health staff organization and

responsibilities

1.1.4.4.5. Site specific training (TO specific)

1.1.4.4.6. Site specific medical surveillance parameters (i.e., any special tests for site contaminants not included in the ongoing medical surveillance program covered in the Corporate Safety and Health Program)

1.1.4.4.7. Personal Protective Equipment (PPE) to be used and establishment of action levels for upgrades/downgrades of PPE

-- heat/cold stress

-- noise

1.1.4.4.9. Safety and health work precautions and procedures

1.1.4.4.10. Site control measures

1.1.4.4.11. Personnel hygiene and decontamination facilities and

procedures

1.1.4.4.12. Equipment decontamination facilities and procedures

1.1.4.4.13. On-site first aid and emergency equipment

1.1.4.4.14. Contingency Plan to include emergency response

procedures on-site and off-site

1.1.4.4.15. Logs, reports and record keeping.

1.1.4.4.16. The contractor's SHSP shall comply with and reflect the following applicable regulations and publications, including, but not limited to:

 $\textbf{1.1.4.4.16.1.} \quad \text{OSHA Standards 29 CFR 1910 (especially 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response")}$

1.1.4.4.16.2. 29 CFR 1926, "Construction Standards"

1.1.4.4.16.3. All applicable 49 CFR "Transportation

Requirements"

1.1.4.4.16.4. All applicable AFR and AFOSH Regulations

1.1.4.4.16.5. NIOSH/OSHA/USCG/EPA Document, "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," October 1985, DHHS #85.115

1.1.4.4.16.6. CERCLA Sections 104(f) and 111(c)(6)

1.1.4.4.16.7. RCRA 40 CFR 261-265

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 $\textbf{1.1.4.4.16.8.} \quad \textbf{All relevant federal, state and local regulations and agreements.}$

1.1.4.4.16.9. Acceptance of the contractor's SHSP is required before start of most (as specified in the TO) field activities. No changes in the approved plan shall be implemented without written concurrence of the CO or designated COR. The government reserves the right to require the contractor to make changes in the SHSP and operations as necessary to ensure the health and safety of all persons on or near the site.

 $\textbf{1.1.4.4.16.10.} \ \ \text{Responsibility: The overall responsibility} for the development, implementation, and continued enforcement of the contractor's HSP and SHSP's shall lie with the contractor.$

- Assurance Project Plan: The Quality Assurance Project Plan: The Quality Assurance Project Plan shall meet all requirements established in the RD QAPP submitted as a supporting Document. The contractor shall furnish qualified personnel, appropriate facilities, instruments and testing devices necessary for the performance of the quality control function. The controls shall be adequate to cover all construction's sequence, and shall be correlated by the contractor's quality control personnel. The QAPP shall be submitted in accordance with the approved project schedule.
- 1.1.5. Schedules: A project management system must be used to present a timeline chart of activities showing schedules. The initial schedule must be included and shall remain as the baseline for which to compare the progress of activities. A current schedule shall be updated as the schedule changes due to new requirements or activity slippages. The most current timeline shall be submitted every month. In addition to the timeline chart of activities, the contractor shall submit a schedule of deliverables indicating dates due. The contractor shall provide the initial progress schedule for ANG review and approval at the pre-construction or kickoff meeting.
- 1.1.5.1. Network Analysis: The network analysis (e.g., Microsoft Project for Windows, TO specific) shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period of the TO. The network analysis shall show both serial and parallel sub-tasks leading to a deliverable product. Show early and late start and completion date and float. These charts form the basis for managing or monitoring the individual TOs. The contractor shall provide the initial network analysis for ANG review and approval at the pre-construction or kickoff meeting.
- 1.2. Field Work: Fieldwork shall be done in accordance with the latest ANG Investigation Protocol.

1.3. Reports for Part 1 - Environmental Restoration Program

<u>Note</u>: For Part Two - Environmental Compliance Programs, Part Three - Environmental Planning Programs, and Part Four - Natural and Cultural Resources Programs, see Paragraph 1.4, Reports (For Part 2, 3, and 4).

1.3.1. General

- 1.3.1.1. The contractor shall prepare reports as identified in the specific Task Order. Report types for Part One Environmental Restoration Program include progress reports, investigation reports, decision Documents, monitoring reports, site closure reports, and management action plans and the subparagraphs below apply.
- ${\tt 1.3.1.2.}$ Reports shall be submitted in draft, draft final, and final unless specifically stated otherwise in the Task Order.
- 1.3.1.3. The contractor shall respond in writing to all ANG and regulator comments on the draft and draft final version of reports. Following approval of the responses by the ANG, the contractor shall incorporate the comments into the respective reports.
- $\textbf{1.3.1.4.} \ \ \text{The contractor shall use the most current applicable} \\ \text{guidance Documents to prepare all reports.} \ \ \ \text{Sources of guidance Documents include, but} \\ \text{are not limited to, ANG, US EPA, the state, etc.} \\$
- 1.3.2. Progress Reports The contractor shall submit progress reports as required in the specific TO. At a minimum, progress reports shall contain a current schedule, a description of work accomplished during the previous reporting period,

problems encountered and their resolution, work planned for the next reporting period, and a discussion of schedule issues.

1.3.3. Investigation Reports:

- 1.3.3.1. The contractor shall prepare investigation reports that fully describe the current investigation and its findings in a logical manner and in context with previous and future activities at the site/facility.
- 1.3.3.2. At a minimum, each investigation report shall contain an executive summary, site/facility background information, description of field activities and procedures, results, and an evaluation of the results, conclusions, and recommendations.
- 1.3.3.3. Investigation reports anticipated under this section include, but are not limited to: Preliminary Assessment, Site Investigation, Crash Site Assessment, Remedial Investigation, Engineering Evaluation/Cost Analysis, RCRA Facility Investigation, etc.
- 1.3.4. Feasibility Study Report The contractor shall prepare feasibility study reports as outlined in section 3.6 of this SOW, Feasibility Study (FS). Feasibility study reports anticipated under this section include CERCLA FS, EE/CA, RCRA Corrective Measures Study, etc.
- 1.3.5. Decision Documents (DD) The contractor shall prepare DDs to record the process used to evaluate and decide upon future actions, or to not take an action, at sites. DDs anticipated under this section include Air Force DD, Record of Decision (ROD), Approval Memorandum, Action Memorandum, etc.
- 1.3.5.1. The DD shall be prepared IAW the most recent ANG and AF guidance. As a minimum the DD shall contain a description of the installation, a description of the site and background, analysis of at least three alternatives, rationale for selection of the preferred alternative, a discussion of public participation in the selection of the preferred alternative, and a conclusion.
- 1.3.5.2. DDs shall be prepared to Document decisions for no further response action planned (NFRAP). These DDs shall contain or be similar to the DD described in section 10.3.7.1 except for the comparison of alternatives.
- 1.3.5.4. The approval memorandum and action memorandum shall be prepared according to the most recent US EPA Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA.
- 1.3.6. Monitoring Reports The contractor shall prepare reports and document the results of monitoring. The reports shall Document the monitoring activities, results, and present an analysis of the results. Where applicable, a discussion of treatment system operational status during the reporting period shall be included. The contractor shall include a discussion of trends in the data and a comparison of the data to applicable regulatory action levels as well as any unique requirements of the specific Task Order.
- 1.3.7. Site Closure Report The contractor shall prepare site closure reports to satisfy state regulations and satisfy criteria that have been established for an action to be considered complete. Site closure reports shall discuss actions taken at the site and shall also include results of confirmatory sampling.
- 1.3.8. Management Action Plan (MAP) The contractor shall prepare and/or update the MAP for ANG facilities. The MAP summarizes the status of the bases environmental program and presents a comprehensive strategy for implementing response actions necessary to protect human health and the environment. The MAP shall be prepared in accordance with the "Management Action Plan Guidebook" dated May 1992.
- 1.4. Reports for Part Two Environmental Compliance Programs, Part Three Environmental Planning Programs, and Part Four Natural and Cultural Resources Programs

1.4.1. General

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- $\textbf{1.4.1.1.} \ \ \text{The contractor shall prepare reports as identified in the specific Task Order.}$
- 1.4.1.2. The contractor shall respond in writing to all ANG and installation personnel comments on reports. Following approval of the responses by the ANG, the Contractor shall incorporate the comments into respective reports.
- ${\tt 1.4.1.3.}$ The contractor shall use the most current applicable guidance Documents to prepare all reports. Sources of guidance Documents include, but are not limited to, those listed in Appendix A.
- ${f 1.4.1.4}$. Progress Reports: The contractor shall submit progress reports as required in the specific Task Order.
- ${\tt 1.5.}$ Training: The contractor shall provide training as identified in the specific Task Order.
- 1.6. Site Visits: The contractor shall conduct site visits as identified in each specific Task Order.