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M60050 / 002295 MISC NONE 0012	11-17-1998 11-03-1998 NONE 01.1	MCAS EL TORO J. JOYCE VARIOUS AGENCIES	FEDERAL FACILITY AGREEMENT (FFA) APPENDIX A SCHEDULE EXTENSION REQUEST FOR DRAFT RECORD OF DECISION, OPERABLE UNIT 2C, LANDFILL SITES 3 AND 5	ADMIN RECORD	FFA FFSRA LF ROD	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01013109
M60050 / 002297 CTO-0155/0341 PLAN N68711-92-D-4670 0023	11-25-1998 11-23-1998 155-2 03.3	BECHTEL NATIONAL, INC. D. TEDALDI VARIOUS AGENCIES	DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNIT 1 SITE 18 AND OPERABLE UNIT 2A SITE 24 {SEE AR #2319 - EPA COMMENTS, #2371 - DTSC COMMENTS, & #2698 - CRWQCB COMMENTS}	ADMIN RECORD	ARAR GW OU TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013109

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M60050 / 002298 MM N6871192D467000 0031	11-25-1998 **11-25-1998** 00155 10.4	BECHTEL NATIONAL D. TEDALDI VARIOUS AGENCIES	RAB MEETING MAILER: AGENDA AND PUBLIC NOTICE FOR 12/2/98 RAB MEETING, RAB MEETING MINUTES, 9/30/98 RAB MEETING MINUTES (RAB MAILING LIST IN CONF. FILE)	ADMIN RECORD CONFIDENTIAL DOC INFO REPOSITORY	MTG MINS PUB. PARTICIPAT PUBNOT RAB ROD SOIL	002 003 005 007 008 011 012 014 016 017 024 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01013109
M60050 / 002300 LTR NONE 0002	12-22-1998 **11-25-1998** NONE 01.1	MCAS EL TORO J. JOYCE VARIOUS AGENCIES	SOME ASPECTS OF THE DRAFT PROPOSED PLAN FOR GROUND WATER REMEDIATION AT OU-1 AND OU-2A (SUBMITTED ON NOVEMBER 24, 1998) TO ASSIST WITH AGENCY REVIEW	ADMIN RECORD	ARAR GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013109

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M60050 / 002303 MM NONE 0100	12-22-1998 **12-02-1998** NONE 10.4	MCAS EL TORO RAB MEMBERS	PUBLIC INFORMATION MATERIALS FOR DECEMBER 2, 1998 RAB MEETING; AGENDA, PUBLIC NOTICE, SEPTEMBER 30, 1998 RAB MEETING MINUTES AND MISCELLANEOUS HANDOUTS	ADMIN RECORD INFO REPOSITORY	GW LF MTG MINS PUBNOT RAB UST	001 002 007 008 011 012 014 016 017 018 024 OU 1 OU 2A OU 2B OU 2C OU 3A OU 3B	SOUTHWEST DIVISION SW01013110
M60050 / 002388 CTO-0155/0411 FACT N68711-92-D-4670 0050	04-13-1999 **01-01-1999** 00155 10.6	SWDIV G. TINKER VARIOUS AGENCIES	FINAL FACT SHEET MARINE CORPS TO PROCEED WITH INTERIM REMEDIAL ACTION DATED JANUARY 1999 (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD INFO REPOSITORY	FACTSHEET IR REMEDIAL ACTIO SVE VOC	024	SOUTHWEST DIVISION SW01013112
M60050 / 002319 LTR NONE 0002	04-06-1999 **01-13-1999** NONE 10.1	EPA SAN FRANCISCO G. KISTNER MCAS EL TORO J. JOYCE	US EPA COMMENTS ON DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION, VOC SOURCE AREA (SEE AR #2297 - PLAN)	ADMIN RECORD	COMMENTS GW PROPOSED PLAN TCE	024 OU 2A	SOUTHWEST DIVISION SW01013110
M60050 / 002373 MISC NONE 0001	04-12-1999 **01-16-1999** NONE 10.6	ORANGE COUNTY RE ORANGE COUNTY RE PUBLIC PUBLIC	PUBLIC NOTICE INTERIM REMEDIAL ACTION AT INSTALLATION RESTORATION SITE 24		PRESS REL. PUB. PARTICIPAT	024	SOUTHWEST DIVISION SW01013111

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M60050 / 002374 MISC NONE 0001	04-12-1999 **01-16-1999** NONE 10.6	LA TIMES LA TIMES PUBLIC PUBLIC	PUBLIC NOTICE INTERIM REMEDIAL ACTION AT INSTALLATION RESTORATION SITE 24		PRESS REL PUB. PARTICIPAT	024	SOUTHWEST DIVISION SW01013111
M60050 / 002370 PLAN NONE 0011	04-12-1999 **01-21-1999** NONE 03.3	DTSC CYPRESS M. MINGAY DTSC CYPRESS T. MAHMOUD	COMMENTS ON PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OU-1, SITE 18 AND OU-2A, SITE 24 {SEE AR #2297 - PLAN}	ADMIN RECORD	COMMENTS GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013111
M60050 / 002371 LTR NONE 0003	04-12-1999 **01-22-1999** NONE 10.1	DTSC - CYPRESS T. MAHMOUD MCAS EL TORO J. JOYCE	COMMENTS ON DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2297 - DRAFT PROPOSED PLAN)	ADMIN RECORD	COMMENTS GW PROPOSED PLAN REMEDIAL ACTIO VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013111
M60050 / 002698 NONE LTR NONE 0001	05-31-2002 **01-22-1999** NONE	CRWQCB - RIVERSIDE P. HANNON MCAS EL TORO J. JOYCE	WATER BOARD HAS NO SIGNIFICANT COMMENTS ON THE DRAFT PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNIT 1 SITE 18 AND OPERABLE UNIT 2A SITE 24 {SEE AR #2297 - PLAN}	ADMIN RECORD BASE	COMMENTS PROPOSED PLAN	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002375 MM NONE 0060	04-12-1999 **01-27-1999** NONE 10.4	MCAS EL TORO J. JOYCE RAB MEMBERS	RESTORATION ADVISORY BOARD MEETING HELD AT IRVINE CITY HALL	ADMIN RECORD	MTG MINS PIM PUBNOT RAB	024 OU 2A	SOUTHWEST DIVISION SW01013111
M60050 / 002401 MISC NONE 0120	05-03-1999 **01-27-1999** NONE 10.4	MCAS EL TORO RAB MEMBERS	PUBLIC INFORMATION MATERIALS FROM JANUARY 27, 1999 RESTORATION ADVISORY BOARD MEETING; INDLUDING PUBLIC NOTICE, AGENDA, HANDOUTS, 12/2/98 RAB MEETING MINUTES	ADMIN RECORD	MTG MINS PIM PUBNOT RAB VOC	008 011 012 024 OU 2A OU 3	SOUTHWEST DIVISION SW01013112

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M60050 / 002720 CERT MAIL NO P115386420 LTR NONE 0002	06-04-2002 03-23-1999 NONE	MCAS EL TORO J. JOYCE US EPA - SAN FRANCISCO G. KISTNER	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 AND 2A REQUIRES REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2701 - EPA RESPONSE)	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002721 CERT MAIL NO. P115386421 LTR NONE 0002	06-04-2002 03-23-1999 NONE	MCAS EL TORO J. JOYCE DTSC - CYPRESS J. SCANDURA	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION (SEE AR #2702 - DTSC RESPONSE)	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002722 CERT MAIL NO. P115386422 LTR NONE 0002	06-04-2002 03-23-1999 NONE	MCAS EL TORO J. JOYCE CRWQCB - RIVERSIDE P. HANNON	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION	ADMIN RECORD BASE	ARAR FFA GW PROPOSED PLAN VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002702 NONE LTR NONE 0002	06-03-2002 03-30-1999 NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	APPROVAL OF REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE - DTSC GRANTS THIRTY DAY EXTENSION PROVIDED NAVY SCHEDULE MEETINGS TO RESOLVE REGULATORY AGENCY COMMENTS (SEE AR #2297 - DRAFT PROPOSED PLAN & #2721 - EXTENSION REQUEST)	ADMIN RECORD BASE	COMMENTS FFA GW PROPOSED PLAN	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

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M60050 / 002406 LTR NONE 0004	05-03-1999 **04-29-1999** NONE 03.6	MCAS EL TORO J. JOYCE VARIOUS AGENCIES	REQUEST FOR CHANGES IN FEDERAL FACILITY AGREEMENT SCHEDULE - THIRTY DAY EXTENSION FOR SUBMITTAL OF THE DRAFT FINAL PROPOSED PLAN FOR OPERABLE UNITS 1 AND 2A GROUNDWATER REMEDIATION (SEE AR #2705 - DTSC RESPONSE)	ADMIN RECORD	FFA GW PROPOSED PLAN	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01013112
M60050 / 002705 NONE LTR NONE 0003	06-03-2002 **05-04-1999** NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	RESPONSE TO REQUEST FOR THIRTY DAY EXTENSION FOR THE SUBMITTAL OF THE DRAFT FINAL PROPOSED PLAN FOR GROUNDWATER REMEDIATION AT OPERABLE UNITS 1 AND 2A - DTSC GRANTS REQUEST (SEE AR #2406 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN REMEDIAL ACTIO	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

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M60050 / 000028 NONE LTR NONE 0003	08-04-1999 06-04-1999 NONE 03.6	DTSC CYPRESS J. SCANDURA MCAS EL TORO J. JOYCE	DTSC AGREEMENT TO 30 DAY EXTENSION OF THE FEDERAL FACILITIES AGREEMENT SCHEDULE FOR SUBMITTAL OF A DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA GW	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011001
M60050 / 000374 NONE LTR NONE 0002	04-17-2000 06-04-1999 NONE	U.S. EPA SAN FRANCISCO G. KISTNER NAVFAC - SOUTHWEST DIVISION J. JOYCE	RESPONSE TO 5/28/99 NAVY REQUEST FOR FEDERAL FACILITY AGREEMENT (FFA) EXTENSION FOR AN ADDITIONAL 30 DAYS TO SUBMIT THE DRAFT FINAL PROPOSED PLAN	ADMIN RECORD	FFA GW PROPOSED PLAN	018 024 OU 1 OU 2A	BECHTEL NATIONAL
M60050 / 002725 CERT MAIL NO. Z 288 008 967 LTR NONE 0005	06-04-2002 06-29-1999 NONE	MCAS EL TORO J. JOYCE US EPA - SAN FRANCISCO G. KISTNER	REQUEST FOR CHANGES TO FEDERAL FACILITIES AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS, SCHEDULE FOR OPERABLE UNIT 1 & 2A REQUIRES A REVISED DELIVERABLE DATE FOR THE DRAFT FINAL PROPOSED PLAN AND THE DRAFT RECORD OF DECISION	ADMIN RECORD BASE	BCT BRAC FFA GW PROPOSED PLAN REMEDIAL ACTIO ROD VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002727 NONE LTR NONE 0001	06-04-2002 07-12-1999 NONE	LOCAL REDEVELOPMENT AUTHORITY C. WIERCIOCH MCAS EL TORO J. JOYCE	QUESTIONS REGARDING REQUEST FOR SEVEN MONTH EXTENSION FOR OPERABLE UNIT 1 & 2A DRAFT FINAL PROPOSED PLAN AND THE DRAFT RECORD OF DECISION (SEE AR #2725 - REQUEST)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 000019 CTO-0155/0544 LTR N68711-92-D-4670 0025	08-03-1999 07-15-1999 00155 10.4	BECHTEL NATIONAL, INC. T. HEIRONIMUS NAVFAC - SOUTHWEST DIVISION	RESTORATION ADIVISORY BOARD MEETING MAILER: AGENDA AND PUBLIC NOTICE FOR 28 JULY 1999 RAB MEETING WITH 26 MAY 1999 MEETING MINUTES (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	FOSL GW MTG MINS PUBNOT RAB	008 011 012 OU 1 OU 2A	SOUTHWEST DIVISION SW01011001

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M60050 / 002729 SWDIV SER 5BME.JJ/0368 LTR NONE 0004	06-04-2002 **07-19-1999** NONE	NAVFAC - SOUTHWEST DIVISION J. JOYCE DTSC - CYPRESS J. SCANDURA	RESPONSE TO LETTER OF 13 JULY 1999 WITH COMPROMISE TO EXTENSION SCHEDULE DIFFERENCES FOR THE SUBMITTAL OF THE DRAFT GROUNDWATER PROPOSED PLAN AND THE DRAFT RECORD OF DECISION (SEE AR #399 - 13 JULY LETTER)	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 000134 NONE MISC NONE 0100	09-09-1999 **07-28-1999** NONE 10.4	EL TORO RAB RAB MEMBERS	PUBLIC INFORMATION MATERIALS FROM 7/28/99 RESTORATION ADVISORY BOARD MEETING WITH 5/26/99 RAB MEETING MINUTES AND VARIOUS HANDOUTS (PORTION OF MAILING LIST AND SIGN-IN-SHEETS ARE CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	MTG MINS RAB	001 002 003 005 008 012 017 024 OU 1 OU 2A OU 3	SOUTHWEST DIVISION SW01011001
M60050 / 000137 CTO-0155/0563 MM N68711-92-D-4670 0018	09-09-1999 **08-04-1999** 00155 10.4	BECHTEL NATIONAL INC T. HEIRONIMUS VARIOUS AGENCIES	RESTORATION ADVISORY BOARD SUBCOMMITTEE MEETING MINUTES AND RAB MEMBER DOCUMENT COMMENTS PRESENTED AT THE 7/28/99 RAB MEETING	ADMIN RECORD	COMMENTS MTG MINS RAB	001 002 003 005 008 012 017 018 024	SOUTHWEST DIVISION SW01011001
M60050 / 000175 SW7075.1 MAP N68711-93-D-1459 0075	09-21-1999 **09-13-1999** DO 65 01.4	OHM REMEDIATION S. BORNHOFT NAVFAC - SOUTHWEST DIVISION B. DEMAREE	REMOVAL AND REMEDIAL ACTIONS - ADDITIONAL COPIES OF SPECIAL MAP PACKAGES FOR RESTORATION ADVISORY BOARD SUB-COMMITTEE	ADMIN RECORD	PIM RAB REMEDIAL ACTIO REMOVAL	024 OU 2A	SOUTHWEST DIVISION SW01011002

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M60050 / 000203 NONE MM NONE 0125	11-22-1999 09-29-1999 NONE 10.4	MCAS EL TORO RAB RAB MEMBERS	PUBLIC INFORMATION MATERIALS - SEPTEMBER 29, 1999 RESTORATION ADVISORY BOARD MEETING AGENDA, JULY 28, 1999 RAB MEETING MINUTES AND VARIOUS HANDOUTS (PORTION OF SIGN-IN SHEETS ARE CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW MTG MINS RAB	OU 1 OU 2A	SOUTHWEST DIVISION SW01011002
M60050 / 000410 NONE MM NONE 0004	04-19-2000 11-19-1999 NONE	KENNEDY/JENKS CONSULTANTS R. OUELLETTE BECHTEL NATIONAL, INC. B. COLEMAN	RESTORATION ADVISORY BOARD (RAB) TECHNICAL REVIEW SUBCOMMITTEE MEETING MINUTES FROM SEPTEMBER 8, 1999	ADMIN RECORD	FS MTG MINS RAB RI UST	001 003 005 024 BLDG. 296	SOUTHWEST DIVISION SW01011005
M60050 / 000412 NONE MM NONE 0004	04-19-2000 11-19-1999 NONE	KENNEDY/JENKS CONSULTANTS R. OUELLETTE BECHTEL NATIONAL, INC. B. COLEMAN	RESTORATION ADVISORY BOARD (RAB) TECHNICAL REVIEW SUBCOMMITTEE MEETING MINUTES FROM MAY 12, 1999	ADMIN RECORD	MTG MINS RAB	024	SOUTHWEST DIVISION SW01011005
M60050 / 000413 NONE MM NONE 0004	04-19-2000 11-19-1999 NONE	KENNEDY/JENKS CONSULTANTS R. OUELLETTE BECHTEL NATIONAL, INC. B. COLEMAN	RESTORATION ADVISORY BOARD (RAB) TECHNICAL REVIEW SUBCOMMITTEE MEETING MINUTES FROM JUNE 9, 1999	ADMIN RECORD	MTG MINS RAB	024	SOUTHWEST DIVISION SW01011005
M60050 / 000243 CTO-0155/0667 MM N68711-92-D-4670 0030	12-28-1999 12-01-1999 00155 10.4	MCAS EL TORO RAB VARIOUS AGENCIES	AGENDA, NOTICE AND HANDOUTS FOR 12/1/99 RESTORATION ADVISORY BOARD MEETING WITH 9/29/99 RAB MEETING MINUTES (MAILING LIST AND SIGN-IN SHEETS ARE CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW MTG MINS RAB UST	OU 1 OU 2A	SOUTHWEST DIVISION SW02051701

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M60050 / 000350 NONE MM NONE 0200	04-13-2000 12-01-1999 NONE	VARIOUS NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FROM THE DECEMBER 1, 1999 RESTORATION ADVISORY BOARD (RAB) MEETING (PORTIONS OF MAILING LIST ARE CONFIDENTIAL - RAB AGENDA & MEETING MINUTES FROM 9/29/99 CAN BE REFERENCED AT REF. #243)	ADMIN RECORD CONFIDENTIAL	APHO BCP BRAC BTEX DDT EOD FS IRP LUFT MTBE NFA OU PAH PCE PESTICIDES PIM QAPP RAB RI ROD SOIL SVE SVOC SWMU TCE TDS UST UXO VOC	001 002 003 005 007 008 011 012 014 016 017 018 024 APHO 10 APHO 28 APHO 30 APHO 35 APHO 37 APHO 41 APHO 8 APHO 9 BLDG. 296 BLDG. 297 BLDG. 368 BLDG. 47 OU 1 OU 2A OU 2B OU 2C OU 3 OU 3B SWMU 46 UST 278 UST 298A UST 298B	SOUTHWEST DIVISION SW01011005

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								UST 380	
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								UST 473	
								UST 47A	
								UST 47B	
								UST 637	
								UST 651	
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								UST 800	
								UST 891A	
								UST 891B	
								UST 891C	
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M60050 / 000273 NONE LTR NONE 0006	03-15-2000 12-15-1999 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD RAB, COMMITTEE CHAIRMAN G. HURLEY	RESPONSE TO RESTORATION ADVISORY BOARD (RAB) COMMITTEE CHAIRMAN COMMENTS DATED 11/2/99, TO THE BASE REALIGNMENT AND CLOSURE (BRAC) PLAN (REFERENCE AR #377 - COMMENTS BY TECHNICAL REVIEW COMMITTEE & AR #2392 BRAC CLEANUP PLAN)	ADMIN RECORD INFO REPOSITORY	APHO BCP COMMENTS HRA IRP RFA TRC UST	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 024 025	CHOICE MICROGRAPHICS SW01011004
M60050 / 000312 CTO-0200/0032 MM N68711-92-D-4670 0025	04-07-2000 01-21-2000 00200	BECHTEL NATIONAL INC NAVFAC - SOUTHWEST DIVISION R. SELBY	RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA & PUBLIC NOTICE FOR 1/26/00 RAB MTG AND RAB MTG MINUTES & ATTACHMENTS FROM THE 12/1/99 MEETING (INCLUDES MAILING LIST PORTIONS OF WHICH ARE TO BE CONSIDERED CONFIDENTIAL) (REF. #357)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	FFA MTBE RAB REMEDIAL ACTIO RI ROD SVE UST	002 011 017 024 BLDG. 296 OU 1 OU 2A	SOUTHWEST DIVISION SW01013101

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M60050 / 000360 CTO-0200/0054 MM N68711-92-D-4670 0042	04-13-2000 **03-29-2000** 00200	BECHTEL NATIONAL INC NAVFAC - SOUTHWEST DIVISION R. SELBY	RESTORATION ADVISORY BOARD (RAB) MEETING AGENDA OF MARCH 29, 2000 INCLUDES MEETING MINUTES OF 1/26/00, MEETING MINUTES OF 10/27/99, MEETING MINUTES OF 1/12/00, VARIOUS HANDOUTS AND MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL	ADMIN RECORD CONFIDENTIAL	BCP FOST GW MCL MTBE RAB RADIUM RADON ROD TEPH TVPH UST VOC	001 002 003 005 017 BLDG. 242 BLDG. 243 OU 1	SOUTHWEST DIVISION SW01011005
M60050 / 000435 NONE MISC NONE 0001	04-26-2000 **03-29-2000** NONE	BL ASSOCIATES C. BENNETT NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) REPORT/AGENDA ISSUES SINCE 29 JANUARY 2000	ADMIN RECORD	BCP EIS GW LANDFILL RAB ROD	002 017 024	SOUTHWEST DIVISION SW01011006
M60050 / 000310 CTO-0200/0057 & 57-1 PLAN N68711-92-D-4670 0023	04-06-2000 **04-01-2000** 00200	BECHTEL NATIONAL, INC. T. HEIRONIMUS NAVFAC - SOUTHWEST DIVISION	DRAFT PROPOSED PLAN FOR FINAL SOIL AND GROUNDWATER CLEANUP (INCLUDES TRANSMITTAL LETTERS TO US EPA, DTSC, & CRWQCB) {SEE AR #488 - COMMENTS BY DTSC}	ADMIN RECORD INFO REPOSITORY	DCE FS GW OU PCE RI ROD SOIL TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013101

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M60050 / 000488 NONE LTR NONE 0005	07-14-2000 **05-03-2000** NONE	DTSC - CYPRESS, CA. T. CHESNEY NAVFAC - SOUTHWEST DIVISION D. GOULD	COMMENTS BY DTSC ON DRAFT PROPOSED PLAN FOR FINAL SOIL AND GROUNDWATER CLEANUP (SEE AR #310 - DRAFT PROPOSED PLAN)	ADMIN RECORD INFO REPOSITORY	COMMENTS GW RAB ROD SOIL TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01011006
M60050 / 000454 CTO-0200/0075 MM N68711-92-D-4670 0040	06-29-2000 **05-31-2000** 00200	BECHTEL NATIONAL INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA AND PUBLIC NOTICE FOR 5/31/00 MEETING & RAB MEETING MINUTES AND ATTACHMENTS FROM THE 3/29/00 MEETING (INCLUDES MAILING LIST - PORTIONS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	BCP BRAC COMMENTS FFA FS GW HAZ WASTE HRA LF MTBE PAH RAB RCRA ROD SOIL SVE TCE UST WELLS	002 003 005 007 014 016 017 018 024 BLDG. 295 BLDG. 296 BLDG. 297	SOUTHWEST DIVISION SW01011006
M60050 / 000531 NONE MISC NONE 0001	10-04-2000 **05-31-2000** NONE	RAB SUBCOMMITTEE CHAIR C. BENNETT NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) SUBCOMMITTEE REQUEST FOR HERB LEVINE, US EPA, TO ATTEND 5/31/00 RAB MEETING TO ANSWER QUESTIONS DURING THE REGULATORY AGENCY PORTION OF MEETING	ADMIN RECORD	GW LF PERCHLORATE RAB SOIL SOLVENTS WATER	001 002 005 018 024	SOUTHWEST DIVISION SW01013102

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M60050 / 000498 CTO-0200/0095 MISC N68711-92-D-4670 0050	08-03-2000 **07-19-2000** 00200	BECHTEL NATIONAL, INC. T. HEIRONIMUS NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA & PUBLIC NOTICE FOR THE JULY 26, 2000 RAB MEETING. ALSO, INCLUDES RAB MEETING MINUTES & ATTACHMENTS FROM THE 5/31/00 MEETING. (MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	GW LANDFILL MTG MINS PCE RAB RI ROD TCA TCE UST VOC	001 002 003 005 012 016 017 018 024 BLDG. 1789 BLDG. 1803 BLDG. 307 BLDG. 787 OU 1 OU 2A OU 2B OU 3	SOUTHWEST DIVISION SW01013102
M60050 / 000500 NONE LTR NONE 0003	08-07-2000 **07-28-2000** NONE	DTSC - CYPRESS J. SCANDURA NAVFAC - SOUTHWEST DIVISION D. GOULD	DTSC RESPONSE TO NAVY'S REQUEST FOR A THREE WEEK EXTENSION TO THE DRAFT FINAL PROPOSED PLAN AND DRAFT RECORD OF DECISION	ADMIN RECORD BASE INFO REPOSITORY	FFA IRP OU ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013102

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M60050 / 000518 CTO-0200-0104 PLAN N68711-92-D-4670 0032	08-14-2000 **08-01-2000** 00200	BECHTEL NATIONAL INC. NAVFAC - SOUTHWEST DIVISION	PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR THE REGIONAL GROUNDWATER PLUME AND THE VOC SOURCE AREA (SEE AR #645 - EPA COMMENTS, #760 - LRA COMMENTS, & #2736 - DTSC COMMENTS)	ADMIN RECORD INFO REPOSITORY	BCT BRAC FFA FS GW MW OU PCE PUBNOT RA RI ROD SOIL TCE VOC WATER WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01013102
M60050 / 002735 NONE LTR NONE 0002	06-04-2002 **08-01-2000** NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO D. GOULD	RESPONSE TO REQUEST FOR THREE WEEK EXTENSION TO SUBMIT A PRELIMINARY DRAFT FINAL PROPOSED PLAN AND A DRAFT RECORD OF DECISION FOR OU 1 & 2A - EPA GRANTS REQUEST	ADMIN RECORD BASE	FFA GW PROPOSED PLAN ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002736 NONE LTR NONE 0003	06-04-2002 **08-21-2000** NONE	DTSC - CYPRESS T. CHESNEY MCAS EL TORO D. GOULD	COMMENTS ON THE PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR THE REGIONAL GROUNDWATER PLUME AND THE VOC SOURCE AREA (SEE AR #518 - PLAN)	ADMIN RECORD BASE	COMMENTS GW PROPOSED PLAN TCE VOC	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 000645 NONE LTR NONE 0001	02-15-2001 **08-22-2000** NONE	CRWQCB SANTA ANA REGION J. BRODERICK MCAS EL TORO D. GOULD	EPA HAS COMPLETED REVIEW OF PRELIMINARY DRAFT FINAL PROPOSED PLAN AND HAS NO SIGNIFICANT COMMENTS (SEE AR #518 - PROPOSED PLAN)	ADMIN RECORD BASE	COMMENTS PROPOSED PLAN	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01053001

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M60050 / 000760 NONE LTR NONE 0006	03-26-2001 09-11-2000 NONE	LOCAL REDEVELOPMENT AUTHORITY R. RICHARDSON MCAS EL TORO D. GOULD	COMMENTS ON THE PRELIMINARY DRAFT FINAL PROPOSED PLAN FOR FINAL SOIL CLEANUP AND JOINT TREATMENT FACILITY FOR GROUNDWATER (SEE AR #518 - PROPOSED PLAN)	ADMIN RECORD BASE INFO REPOSITORY	AST CLOSURE COMMENTS FUEL GW LUST MONITORING MW REMEDIAL ACTIO RI ROD SOIL TCE UST VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION SW01053002
M60050 / 000603 NONE MISC NONE 0100	12-21-2000 09-27-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS - RESTORATION ADVISORY BOARD (RAB) MEETING DATED 9/27/00 INCLUDES AGENDA AND PUBLIC NOTICE, RAB MEETING MINUTES FROM 7/26/00, RAB SUBCOMMITTEE MEETING MINUTES FROM 6/28/00 AND 05/10/00 (CORRECTED), HANDOUTS, AND LETTERS	ADMIN RECORD	IRP MTG MINS OU PUBNOT RAB	001 002 003 005 007 014 016 017 018 024 OU 1 OU 3	SOUTHWEST DIVISION SW01013103

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M60050 / 000604 NONE MISC NONE 0100	12-26-2000 10-25-2000 NONE	RESTORATION ADVISORY BOARD NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS - PUBLIC MEETING, PROPOSED PLAN - NO FURTHER ACTION DATED 10/25/00 INCLUDES PUBLIC MEETING AGENDA, PUBLIC MEETING OVERVIEW, FORMAL PRESENTATION/PUBLIC COMMENT MEETING, PUBLIC MEETING TRANSCRIPT, MATERIALS, AND HANDOUTS	ADMIN RECORD	BRAC IRP MTG MINS NFA OU RAB UST VOC	007 014 024 OU 3	SOUTHWEST DIVISION SW01013103

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M60050 / 000586 CTO-0164/0197 MISC N68711-92-D-4670 0200	11-27-2000 11-01-2000 00164	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT RECORD OF DECISION FOR THE TANK DROP DRAINAGE AREA NO. 2 AND THE BATTERY ACID DISPOSAL AREA (SEE AR #692 - COMMENTS BY DTSC, AR #694 - COMMENTS BY LRA, AR #1305 - COMMENTS BY CRWQCB, & #1478 - COMPILED RESPONSES)	ADMIN RECORD BASE	AOC ARAR ARSENIC COPC DDD DDE DDT DISPOSAL DQO FFA FS GW HERBICIDE IAS LF LUFT METALS MONITORING MW NFA PAH PCB PCE PESTICIDES PUBNOT RAB ROD SB SOIL SVE SVOC SWMU TCE TPH TRPH	007 014 016 018 024 025 BLDG. 245 OU 3B	SOUTHWEST DIVISION SW01013103

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					VOC WELLS		
M60050 / 000583 CTO-0200/0164 MM N68711-92-D-4670 0045	11-27-2000 **11-29-2000** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - INCLUDES: RAB MEETING AGENDA, AND PUBLIC NOTICE FOR 11/29/00 RAB MEETING & RAB MEETING MINUTES AND ATTACHMENTS FROM THE 9/27/00 MEETING (CONTAINS CONFIDENTIAL MAILING LIST)	ADMIN RECORD BASE CONFIDENTIAL	COMMENTS DCE FS GW METALS MONITORING MTBE MTG MINS MW PCE PUBNOT RAB RI ROD SOIL SVE TCE UST VOC WATER WELLS WORK PLAN	001 003 005 007 014 016 018 024 025 BLDG. 296 BLDG. 297 BLDG. 360 OU 1 OU 2A	SOUTHWEST DIVISION SW01013103
M60050 / 001318 NONE LTR NONE 0003	03-29-2001 **12-15-2000** NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO D. GOULD	DTSC RESPONSE TO REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION - DTSC RELUCTANTLY GRANTS REQUEST (SEE AR #607 - ORIGINAL REQUEST)	ADMIN RECORD BASE	FFA ROD WATER	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401

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M60050 / 002739 SWDIV SER 06CC.DG/1025 LTR NONE 0004	06-04-2002 12-15-2000 NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD CRWQCB - RIVERSIDE J. BRODERICK	REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION (SEE AR #688 - CRWQCB RESPONSE)	ADMIN RECORD BASE	BCT BRAC FFA ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION
M60050 / 002740 NONE LTR NONE 0002	06-04-2002 12-21-2000 NONE	US EPA - SAN FRANCISCO G. KISTNER MCAS EL TORO D. GOULD	RESPONSE TO REQUEST FOR A CHANGE TO THE FEDERAL FACILITY AGREEMENT (FFA) SCHEDULE WITH A 6-MONTH EXTENSION FOR SUBMITTAL OF DRAFT RECORD OF DECISION - EPA GRANTS EXTENSION TO 1 MAY 2001 (SEE AR #607 - REQUEST)	ADMIN RECORD BASE	BCT BRAC FFA GW ROD	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 000627 CTO-0200/0188 MISC N68711-92-D-4670 0045	01-18-2001 **01-18-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER INCLUDING: MEETING AGENDA & PUBLIC NOTICE FOR 1/31/01 MEETING, MINUTES FROM 11/29/00 RAB MEETING, RAB SUBCOMMITTEE MINUTES OF 11/29/00 & 10/25/00 AND MAILING LIST - PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL	ADMIN RECORD BASE CONFIDENTIAL	CLOSURE COMMENTS DCA EE/CA EOD GW LF METALS MONITORING ORDNANCE PUBNOT RAB ROD SOIL SOIL BORING SOLVENTS SVOC TANK TCE TPH TRC UST VOC WELLS	001 002 003 005 007 012 014 016 017 018 024 OU 1 OU 2 OU 3	SOUTHWEST DIVISION SW01013104
M60050 / 000692 NONE LTR NONE 0004	02-22-2001 **01-22-2001** NONE	DTSC - CYPRESS T. CHESNEY MCAS EL TORO D. GOULD	COMMENTS ON THE DRAFT RECORD OF DECISION FOR THE TANK DROP DRAINAGE AREA NO. 2 AND THE BATTERY ACID DISPOSAL AREA (SEE AR #586 - DRAFT ROD)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS DISPOSAL GW MONITORING ROD SOIL TANK VOC WELLS	007 014 018 024 OU 3B	SOUTHWEST DIVISION SW01053001

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M60050 / 000963 NONE MISC NONE 0100	03-29-2001 01-31-2001 NONE	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FROM THE JANUARY 31, 2001 RESTORATION ADVISORY BOARD MEETING INCLUDING: RAB MEETING AGENDA/PUBLIC NOTICE, MEETING MINUTES FROM THE 11/29/00 RAB MEETING, RAB MEETING SCHEDULE, VARIOUS HANDOUTS	ADMIN RECORD BASE CONFIDENTIAL	COMMENTS GW LF MONITORING MTG MINS PIM PUBNOT RAB ROD SOIL TCE UST WELLS	001 002 003 005 007 008 012 014 016 017 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION SW01053002

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M60050 / 000766 CTO-0200/0204 MISC N68711-92-D-4670 0027	03-26-2001 **03-21-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD (RAB) MEETING MAILER - RAB MEETING AGENDA & PUBLIC NOTICE FOR 3/21/01 MEETING, AND MEETING MINUTES & ATTACHMENTS FROM THE 1/31/01 MEETING (INCLUDES MAILING LIST AND SIGN-IN, PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL	COMMENTS EOD GW HRA LF MONITORING MTG MINS ORDNANCE PIM PUBNOT RAB SOIL TCE UXO VOC	001 002 003 005 016 017 018 024 ANOMALY AF APHO 38 APHO 44 APHO 46 BLDG. 1789 BLDG. 1803 BLDG. 242 BLDG. 243 BLDG. 244 BLDG. 295 BLDG. 319 BLDG. 360 BLDG. 787	SOUTHWEST DIVISION SW01053002
M60050 / 001732 NONE MISC NONE 0120	05-10-2001 **03-21-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FROM THE RESTORATION ADVISORY BOARD MEETING OF MARCH 21, 2001 INCLUDES: RAB MEETING AGENDA & PUBLIC NOTICE FOR 3/21/01 MEETING, RAB MEETING MINUTES FROM 1/31/01 AND VARIOUS HANDOUTS	ADMIN RECORD BASE CONFIDENTIAL	COMMENTS EOD LF MAG RD LANDFIL MTG MINS ORDNANCE PIM PUBNOT RAB	001 002 017 018 024 OU 2A OU 2B OU 3	CHOICE MICROGRAPHICS SW01061401

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M60050 / 001525 SWDIV SER 06CC.DG/0472 LTR NONE 0011	05-10-2001 **05-01-2001** NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD CRWQCB, US EPA, DTSC HANNON, MOUTOUX, SCANDURA	REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION (SEE AR #1920 - DTSC RESPONSE; #2149 - CRWQCB RESPONSE; #2150 - ADDITIONAL REQUEST FOR EXTENSION)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC FFA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401
M60050 / 001920 NONE LTR NONE 0002	05-17-2001 **05-08-2001** NONE	DTSC - CYPRESS J. SCANDURA NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION - DTSC GRANTS THE EXTENSION (SEE AR #1525 - ORIGINAL REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA RESPONSE ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401
M60050 / 002149 NONE LTR NONE 0001	05-17-2001 **05-08-2001** NONE	CRWQCB - RIVERSIDE P. HANNON NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION - CRWQCB APPROVES EXTENSION (SEE AR #1525 - ORIGINAL REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA RESPONSE ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401
M60050 / 002150 SWDIV SER 06CC.DG/0520 LTR NONE 0007	05-18-2001 **05-15-2001** NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD US EPA, CRWQCB, DTSC MOUTOUX, HANNON, SCANDURA	ADDITIONAL REQUEST FOR AN EXTENSION TO THE FEDERAL FACILITY AGREEMENT SCHEDULE FOR PRIMARY DOCUMENTS FOR THE DRAFT RECORD OF DECISION (SEE AR #619 - RESPONSE TO THIS LETTER; #525 - ORIGINAL LETTER REQUESTING EXTENSION)	ADMIN RECORD BASE INFO REPOSITORY	BCT FFA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01061401
M60050 / 000619 NONE LTR NONE 0003	06-01-2001 **05-18-2001** NONE	DTSC - CYPRESS J. SCANDURA MCAS EL TORO D. GOULD	RESPONSE TO REQUEST FOR EXTENSION TO FEDERAL FACILITY AGREEMENT FOR A DRAFT RECORD OF DECISION - DTSC GRANTS EXTENSION (SEE AR #2150 - REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA GW ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW01080901

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M60050 / 001739 CTO-0200/0232 MM N68711-92-D-4670 0035	05-17-2001 **05-30-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER - RAB MEETING AGENDA & PUBLIC NOTICE AND RAB MEETING MINUTES AND ATTACHMENTS FROM 3/21/01 MEETING (CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL	EBS EOD GW LF MTG MINS ORDNANCE PIM PUBNOT RAB ROD SOIL STORMWATER UXO VOC	001 002 003 005 017 018 024 BLDG. 307 TANK FARM !	CHOICE MICROGRAPHICS SW01061401
M60050 / 002439 NONE MM N68711-92-D-4670 0050	06-25-2001 **05-30-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FROM THE MAY 30, 2001, RESTORATION ADVISORY BOARD MEETING, INCLUDING MINUTES AND VARIOUS HANDOUTS (PORTION OF SIGN-IN SHEETS ARE CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL	BRAC GW LF MTG MINS PA RAB RD REMEDIAL ACTIO ROD SOIL UST VOC WORK PLAN	001 002 003 005 016 017 018 024 BLDG. 307 OU 1 OU 2A OU 2B OU 2C OU 3	CHOICE MICROGRAPHICS SW01080901

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M60050 / 002415 CTO-200/0228 MM N68711-92-D-4670 0050	05-04-2001 **05-31-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	FINAL - BRAC CLEANUP TEAM 31 MAY 2000 MEETING MINUTES (INCLUDES 3 ATTACHMENTS - RADIONUCLIDE UPDATE BRIEFING DTD 3/31/00; CAL. DHS FLOW CHART FOR RADIONUCLIDE ANALYSES; AND MAGAZINE ROAD LANDIFILL BOUNDARY - RAB MEETING 5/31/00)	ADMIN RECORD INFO REPOSITORY	MTBE MTG MINS RAB TCE	001 011 012 014 16 17 18 2 24 3 5 7 8 OU 1 OU 2A UST 651 GRC UST 651-1 UST 651-2 UST 651-3 UST 651-4	CHOICE MICROGRAPHICS SW01061401

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M60050 / 002565 GS-10F-0227J RPT N68711-00-F-0102 0350	10-30-2001 06-26-2001 NONE	CDM FEDERAL PROGRAMS R. CLIFFORD NAVFAC - SOUTHWEST DIVISION	FINAL GROUNDWATER MONITORING REPORT JUNE 2000 MONITORING ROUND 12 (INCLUDES TRANSMITTAL LETTER TO REGULATORS AND RAB MEMBER WITH ONE CONFIDENTIAL ADDRESS)	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	COPC DCA DCE DQO GW MONITORING MTBE NFA PCE QA QC REMEDIAL ACTIO RFA ROD SVOC TCA TCE VOC WATER	002 003 005 017 018 024 OU 1 OU 2A OU 2B OU 2C	CHOICE MICROGRAPHICS SW02052302

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UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002446 CTO-0200/0252 MISC N68711-92-D-4670 0036	07-12-2001 **07-25-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER INCLUDING: RAB MEETING AGENDA AND PUBLIC NOTICE FOR RAB MEETING, MINUTES AND ATTACHMENTS FROM 5/30/01 MEETING (PORTION OF MAILING LIST AND SIGN-IN SHEETS ARE CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL	BCT CHAR EOD GW LF MTG MINS MW ORDNANCE PIM PUBNOT RAB SOIL TCE UXO VOC WELLS WORK PLAN	001 002 012 017 018 024 BLDG. 307 OU 1 OU 2A OU 2B OU 3 TANK FARM !	CHOICE MICROGRAPHICS SW01080901
M60050 / 002491 NONE MISC NONE 0100	09-04-2001 **07-25-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FROM THE RESTORATION ADVISORY BOARD MEETING INCLUDING: AGENDA AND PUBLIC NOTICE FOR RAB MEETING, MINUTES AND ATTACHMENTS FROM 5/30/01 MEETING, SUBCOMMITTEE HANDOUTS & LETTERS, LETTERS FROM VARIOUS REGULATORY AGENCIES	ADMIN RECORD BASE	COMMENTS LF MTG MINS ORDNANCE PIM PUBNOT RAB	001 002 003 005 016 017 018 024 BLDG. 307 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL SW02052003

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M60050 / 002477 SWDIV SER 06CC.DG/0809 LTR NONE 0004	08-13-2001 **08-03-2001** NONE	NAVFAC - SOUTHWEST DIVISION D. GOULD US EPA, DTSC, & CRWQCB MOUTOUX, SCANDURA, & HANNON	REQUEST FOR EXTENSION TO FEDERAL FACILITIES AGREEMENT OF MILESTONE DELIVERABLE DATE FOR DRAFT RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 (SEE AR #2547 - DTSC RESPONSE & #2549 - EPA RESPONSE)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC FFA FFSRA ROD	018 024 OU 1 OU 2A	CHOICE MICROGRAPHICS SW02052301
M60050 / 002547 NONE LTR NONE 0002	10-17-2001 **08-07-2001** NONE	DTSC - CYPRESS J. SCANDURA NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO REQUEST FOR EXTENSION TO FEDERAL FACILITIES AGREEMENT OF MILESTONE DELIVERABLE DATE FOR DRAFT RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 - DTSC GRANTS REQUEST (SEE AR #2477 - ORIGINAL LETTER)	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006
M60050 / 002549 NONE LTR NONE 0001	10-17-2001 **08-09-2001** NONE	US EPA - SAN FRANCISCO N. MOUTOUX NAVFAC - SOUTHWEST DIVISION D. GOULD	RESPONSE TO EXTENSION REQUEST FOR FEDERAL FACILITIES AGREEMENT FOR RECORD OF DECISION FOR OPERABLE UNITS 1 & 2 - EPA GRANTS EXTENSION (SEE AR #2477 - REQUEST)	ADMIN RECORD BASE INFO REPOSITORY	FFA ROD	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006

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UIC No. / Rec. No. Doc. Control No. Record Type Contr./Guid. No. Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location Box No.
M60050 / 002534 CTO-0200/0278 MISC N68711-92-D-4670 0024	09-19-2001 **09-19-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER; INCLUDES: RAB MEETING AGENDA & PUBLIC NOTICE FOR 9/19/01 MEETING, AND RAB MEETNG MINUTES AND ATTACHMENTS FROM 7/25/01 MEETING (CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL	BCT BRAC CLOSURE EOD GW LF MAG RD LANDFIL MTG MINS ORDNANCE RAB SOIL TCE WELLS	001 002 003 004 005 008 012 017 024 025 ANOMALY AF BLDG. 1789 BLDG. 1803 BLDG. 242 BLDG. 243 BLDG. 244 BLDG. 319 BLDG. 360 BLDG. 787 HANGAR 295 OU 1 OU 2A OU 2B OU 2C OU 3 OU 3B	BECHTEL NATIONAL SW02052006
M60050 / 002563 CTO-0200/0313 PLAN N68711-92-D-4670 0028	10-30-2001 **10-01-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A	ADMIN RECORD BASE	GW MW ROD SVE TCE VOC WELLS	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052006

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M60050 / 002567 CTO-0200/0320 PLAN N68711-92-D-4670 0025	11-07-2001 **11-01-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL) {SEE AR #2753 - PUBLIC MEMBER COMMENTS & #2754 - LOCAL REDEVELOPMENT AUTHORITY COMMENTS}	ADMIN RECORD BASE CONFIDENTIAL	CANCER DCE GW MW PCE ROD SOIL SOLVENTS SVE TCE VOC WELLS	018 024 BLDG. 296 BLDG. 297 OU 1 OU 2A	BECHTEL NATIONAL SW02052006
M60050 / 002597 CTO-0200/0342 MM N68711-92-D-4670 0085	01-16-2002 **11-13-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	TRANSCRIPT OF PROPOSED PLAN PUBLIC MEETING REGARDING GROUNDWATER CLEANUP AT OPERABLE UNITS 1 AND 2A	ADMIN RECORD BASE INFO REPOSITORY	GW MTG MINS NPL PIM REMEDIAL ACTIO RI SOIL SOLVENTS TCE VOC	018 024 BLDG. 296 BLDG. 297 OU 1 OU 2A	BECHTEL NATIONAL SW02052007
M60050 / 002599 CTO-0200/0341 MISC N68711-92-D-4670 0200	01-16-2002 **11-13-2001** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS FOR PUBLIC MEETING REGARDING PROPOSED PLAN - GROUNDWATER CLEANUP AT OPERABLE UNITS 1 AND 2A WITH VARIOUS HANDOUTS (SEE AR #2597 - PUBLIC MEETING TRANSCRIPT)	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC GW IRP PIM RAB TCE VOC WATER	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008

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M60050 / 002572 NONE RPT NONE 0250	11-26-2001 **11-16-2001** NONE	NAVFAC - SOUTHWEST DIVISION L. HORNECKER NAVFAC - SOUTHWEST DIVISION	SUMMARY REPORT - SITE 07GN1 - WITHIN THE DROP TANK DRAINAGE AREA NUMBER 2, FORMER TOTAL RECOVERABLE PETROLEUM HYDROCARBON RELEASE	ADMIN RECORD BASE INFO REPOSITORY	BCT BRAC GW MTBE ROD SOIL SOIL BORING SOLVENTS TCE TPH TRPH WELLS	007 024 07GN1 BLDG. 310 BLDG. 315 OU 2A OU 3 UNIT 5	BECHTEL NATIONAL SW02052007
M60050 / 002753 NONE LTR NONE 0002	06-06-2002 **11-26-2001** NONE	RW ENVIRONMENTAL CONSULTING R. WILSON MCAS EL TORO D. GOULD	COMMENTS FROM 13 NOVEMBER 2001 PUBLIC MEETING ATTENDEE ON THE PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A (SEE AR #2567 - PROPOSED PLAN)	ADMIN RECORD BASE	GW MW PROPOSED PLAN SOLVENTS VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

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M60050 / 002574 CTO-0200/0327 MISC N68711-92-D-4670 0028	11-26-2001 11-28-2001 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER WHICH INCLUDES: RAB MEETING AGENDA/PUBLIC NOTICE, 19 SEPTEMBER MEETING MINUTES, & 30 MAY SUBCOMMITTEE MEETING MINUTES (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	DCE EOD FFA FOST FS FUEL GW LF MAG RD LANDFIL MTG MINS NFA ORDNANCE PA PUBNOT RAB RD REMEDIAL ACTIO RI ROD SI SOIL TCE UXO VOC	001 002 004 006 007 008 009 010 011 012 013 014 015 016 017 018 020 021 022 024 025 BLDG. 307 OU 1 OU 2A OU 2B OU 3 TANK FARM !	BECHTEL NATIONAL SW02052007

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M60050 / 002598 CTO-0200/0340 MISC N68711-92-D-4670 0300	01-16-2002 11-28-2001 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS WHICH INCLUDES: RAB MEETING AGENDA/PUBLIC NOTICE, 19 SEPTEMBER MEETING MINUTES, & 30 MAY SUBCOMMITTEE MEETING MINUTES, RAB MEETING SCHEDULE, NOVEMBER PROPOSED PLAN FOR GROUNDWATER, VARIOUS HANDOUTS, AGENCY COMMENTS AND LETTERS	ADMIN RECORD BASE INFO REPOSITORY	AST BCP BCT BRAC COMMENTS COPC CRP EOD FOSL FOST GW MTG MINS MW NCP NPL ORDNANCE PAH PCB PCE PESTICIDES PIM PUBNOT RAB ROD SOIL SOLVENTS SVE SVOC SWAT SWMU TCE UST VOC WATER WELLS	002 004 006 008 009 010 011 012 013 016 017 018 020 021 022 024 025 OU 1 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL SW02052007

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M60050 / 002587 SWDIV SER 06CC.DG/1292 XMTL N62742-94-D-0048 0011	12-13-2001 **12-07-2001** 00072	NAVFAC - SOUTHWEST DIVISION D. GOULD DTSC, CRWQCB, & US EPA CHESNEY, HANNON, & MOUTOUX	TRANSMITTAL OF COMPILED RESPONSE TO COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM PHASE II EVALUATION OF RADIONUCLIDES IN GROUNDWATER AT FORMER LANDFILL SITES AND THE EXPLOSIVE ORDNANCE DISPOSAL RANGE {COMMENTS BY DHS, LRA, EPA} (SEE AR #2550 - COMMENTS)	ADMIN RECORD BASE INFO REPOSITORY	COMMENTS COPC EOD GW LF MW ORDNANCE RADIONUCLIDES RESPONSE WELLS	001 002 003 004 005 017 024 OU 2B OU 2C OU 3 OU 3B	BECHTEL NATIONAL SW02052007
M60050 / 002754 NONE LTR NONE 0010	06-06-2002 **12-07-2001** NONE	COUNTY OF ORANGE - LRA G. SIMON MCAS EL TORO D. GOULD	LOCAL REDEVELOPMENT AUTHORITY COMMENTS ON THE PROPOSED PLAN - GROUNDWATER CLEANUP FOR OPERABLE UNITS 1 AND 2A (SEE AR #2567 - PROPOSED PLAN)	ADMIN RECORD BASE	COMMENTS DRINKING WATE GW MW PROPOSED PLAN ROD SOLVENTS TCE VOC WELLS	018 024 OU 1 OU 2A	SOUTHWEST DIVISION

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M60050 / 002596 CTO-0164/0265 MISC N68711-92-D-4670 0350	01-10-2002 01-09-2002 00164	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT RECORD OF DECISION FOR THE REGIONAL VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME AND THE VOLATILE ORGANIC COMPOUND SOURCE AREA	ADMIN RECORD BASE INFO REPOSITORY	ARAR BCT BRAC COC COPC DCA DCE DQO FFA FOST GW HERBICIDE LUFT MOA NCP NPL PCA PCB PCE PESTICIDES PID RAB ROD SARA SEDIMENTS SOLVENTS SVE SVOC SWMU TCA TCE TPH VOA VOC WELLS	018 024 BLDG. 296 BLDG. 297 OU 1 OU 2A	CHOICE MICROGRAPHICS SW02052302

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					WQA		
M60050 / 002603 CTO-0164/0269 MISC N68711-92-D-4670 0025	01-31-2002 **01-25-2002** 00164	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT RESPONSIVENESS SUMMARY FOR THE REGIONAL VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME AND THE VOC SOURCE AREA	ADMIN RECORD BASE INFO REPOSITORY	GW RESPONSE ROD TCE VOC WATER WELLS	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008
M60050 / 002601 CTO-0200/0343 MISC N68711-92-D-4670 0031	01-17-2002 **01-30-2002** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER - RAB MEETING AGENDA AND PUBLIC NOTICE AND MINUTES AND ATTACHMENTS FROM THE 28 NOVEMBER 2001 MEETING (CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	EIS EOD GW LF MW NFA ORDNANCE PCB PIM PUBNOT RAB RD ROD SI TCE VOC WELLS	001 002 003 004 005 007 008 011 012 017 024 025 ANOMALY AF BLDG. 307 OU 2A OU 2B OU 2C OU 3 OU 3B	BECHTEL NATIONAL SW02052008

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M60050 / 002614 CTO-0200/0371 MISC N68711-92-D-4670 0041	04-04-2002 **03-27-2002** 00200	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER - RAB MEETING AGENDA AND PUBLIC NOTICE FOR THE 27 MARCH 2002 MEETING WITH MINUTES AND ATTACHMENTS FROM THE 30 JANUARY 2002 MEETING	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	EM GW LF MAG RD LANDFIL MW PIM PUBNOT RAB RCRA RSE SEDIMENTS SOIL SVOC TPH VOC WELLS	002 003 005 016 017 018 024 ANOMALY AF BLDG. 307 OU 1 OU 2A OU 2B OU 2C OU 3	BECHTEL NATIONAL SW02052008
M60050 / 002631 CTO-0038/0014 MISC N68711-95-D-7526 0125	05-21-2002 **03-27-2002** 00038	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	PUBLIC INFORMATION MATERIALS INCLUDING: RESTORATION ADVISORY BOARD MEETING AGENDA & PUBLIC NOTICE FROM 27 MARCH 2002 MEETING; MINUTES FROM THE 30 JANUARY 2002 RAB MEETING; INFORMATION SHEETS; VARIOUS REGULATORY AGENCY LETTERS, & PRESENTATION MATERIALS	ADMIN RECORD BASE	BCT BRAC FACT SHEET GW PIM PUBNOT RAB SOIL TECH MEMO VOC	001 002 003 005 016 018 024 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION

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M60050 / 002626 CTO-0164/0296 MISC N68711-92-D-4670 0300	05-14-2002 **05-01-2002** 00164	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	DRAFT FINAL RECORD OF DECISION FOR THE REGIONAL VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME AND THE VOLATILE ORGANIC COMPOUND SOURCE AREA	ADMIN RECORD BASE INFO REPOSITORY	ARAR BCT BRAC CHARACTERIZATI DCA DCE DQO FFA FOSET FOST FS GW HERBICIDE METALS MONITORING MW NCP NPL PCA PCB PCE PESTICIDES PRG RAB RCRA RFA RI ROD SARA SDWA SOIL SVE SVOC SWMU TCE	018 024 BLDG. 307 OU 1 OU 2A	BECHTEL NATIONAL SW02052008

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					TPH TSDF VOA VOC WELLS		
M60050 / 002627 CTO-0164/0297 MISC N68711-92-D-4670 0031	05-14-2002 **05-01-2002** 00164	BECHTEL NATIONAL, INC. NAVFAC - SOUTHWEST DIVISION	COMPILED RESPONSE TO COMMENTS ON THE DRAFT RECORD OF DECISION FOR THE REGIONAL VOLATILE ORGANIC COMPOUND GROUNDWATER PLUME AND THE VOLATILE ORGANIC COMPOUND SOURCE AREA {COMMENTS BY US EPA, DTSC, RWQCB & OCWD} (SEE AR #2596 - DRAFT ROD)	ADMIN RECORD BASE INFO REPOSITORY	COC COMMENTS COPC DCA DCE GW HERBICIDE METALS MOA PCB PCE PERCHLORATE PESTICIDES RESPONSE ROD SOIL SVOC TCA TCE VOC WATER WELLS	018 024 OU 1 OU 2A	BECHTEL NATIONAL SW02052008

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M60050 / 002759 CTO-0038/0018 MM N68711-95-D-7526 0031	06-06-2002 05-29-2002 00038	BECHTEL ENVIRONMENTAL, INC. NAVFAC - SOUTHWEST DIVISION	RESTORATION ADVISORY BOARD MEETING MAILER - RAB MEETING AGENDA AND PUBLIC NOTICE WITH MINUTES AND SIGN-IN SHEETS FROM THE 27 MARCH 2002 MEETING (CONTAINS MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL)	ADMIN RECORD BASE CONFIDENTIAL INFO REPOSITORY	BCP CANCER CRP DCA EBS GUID GW LF MONITORING MTG MINS MW PCB PCE PIM PUBNOT RAB ROD RSE SEDIMENTS SOIL SOLVENTS STORMWATER TCE VOC WATER WELLS	001 002 003 005 011 016 017 018 024 025 ANOMALY AF BLDG. 307 OU 1 OU 2A OU 2B OU 2C OU 3	SOUTHWEST DIVISION

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UIC No. / Rec. No.									
Doc. Control No.	Prc. Date	Author Affil.							
Record Type	Record Date	Author							
Contr./Guid. No.	CTO No.	Recipient Affil.							Location
Approx. # Pages	EPA Cat. #	Recipient	————	Subject	————	Classification	Keywords	Sites	Box No.

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No Keywords

Sites=018;024;OU 1;OU 2A

No Classification

ATTACHMENT B

TRANSCRIPT FROM PUBLIC MEETING

MARINE CORPS AIR STATION EL TORO

ORIGINAL

PROPOSED PLAN - PUBLIC MEETING -)
GROUNDWATER CLEANUP FOR)
OPERABLE UNITS 1 AND 2A AT)
MARINE CORPS AIR STATION EL TORO)
)

Date and Time: Tuesday, November 13, 2001
6:00 p.m. - 9:00 p.m.

Presentation/Question Session: 7:00 p.m.

Held at: Irvine Ranch Water District

15600 Sand Canyon

Irvine, California

(Pages 1 through 61)

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PRESENTATIONS WERE MADE BY THE FOLLOWING SPEAKERS:

MR. DEAN GOULD
BRAC Environmental Coordinator, MCAS El Toro
Base Realignment and Closure
Southwest Division, Naval Facilities Engineering Command

MS. CONTENT ARNOLD
Remedial Project Manager
Southwest Division, Naval Facilities Engineering Command

DR. ANDREA TEMESHY
Risk Assessor
Bechtel National

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IRVINE, CALIFORNIA; TUESDAY, NOVEMBER 13, 2001

7:02 p.m.

MR. GOULD: Good evening, and thank you all for coming. My name is Dean Gould. I am the BRAC Environmental Coordinator for Marine Corps Air Station El Toro.

Tonight we have the public meeting for the proposed plan for the groundwater cleanup for sites known as operable unit 1, which would be site 18, which is the off-station groundwater contamination, and operable unit 2A, site 24, somewhat informally known as the, quote, unquote, source area for that contamination.

I do sincerely thank you for being here this evening. I know there are a lot of competing interests. While we did hope the attendance would have been a little higher than what we have, I do see some faces I'm not accustomed to seeing in what we call restoration advisory board meetings, which is a meeting that we have every other month where we give an update on the environmental status of the base.

So I am encouraged to see the new faces, so thank you especially to you folks for coming.

Maybe one reason why folks did not come out in

1 greater numbers tonight is because due to the ad that
2 ran in the paper. If you were to read it top to bottom,
3 it pretty much says it all. So maybe we don't need to
4 go on now.
5 It really is quite comprehensive. And in
6 addition to that, with the information that's set up at
7 the tables here and what we're going to give in the more
8 formal presentation, I think you'll have literally as
9 much information as you care to have on exactly what
10 we're doing, what we're proposing.
11 And we want to hear back from you too. This
12 is not meant to be strictly a one-way type of forum
13 here.
14 Let me go ahead and go over what the format
15 for tonight is. Believe it or not, we're actually
16 one-third of the way through now that we're just getting
17 into the more open-speaking portion.
18 The way this public meeting was set up and the
19 format that we're still working with, but I think is
20 probably the best for all concerned, at least as
21 appealing to the widest spectrum of people, would be to
22 have what we call a poster-board session where we have
23 the various stations set up, and we have respective
24 experts, if you will, for each of those stations.
25 We have regulatory agency representatives. We

1 have people from the Navy staff. We have, in this
2 instance, water district representatives, community
3 relation specialists. Just about anybody that you would
4 need to go, to to get an answer to whatever you might
5 have a question on with regards to these particular
6 situation at El Toro are here tonight.
7 And so for that first hour, it was more of an
8 informal question-and-answer period, going through the
9 various phases of the program up to where we are
10 tonight, which is the proposed plan proposal, if you
11 will, to the community.
12 And this is what we're in right now which is called
13 the public comment period where for 30 days, we sent out
14 this proposed plan, and it is open for public comment.
15 And this meeting is meant to both solicit interest as
16 well as answer questions, get community feedback on the
17 alternative that we, the Navy, in concert with the water
18 districts, in this instance, are proposing.
19 So that was the first part of the meeting the informal
20 poster-board session.
21 Now we're going to go into a little bit more
22 of a prepared presentation, if you will. And I would
23 ask if you please hold off on comments until we're
24 completed with the presentation.
25 We're going to have a variety of speakers this

1 evening going through all the different phases that are
2 on display here tonight. And then at the end, there
3 will be the opportunity for the public to provide formal
4 comments.
5 We have the good fortune of a formal court
6 reporter here. As you can see, very detailed notes are
7 being taken here this evening, and any comments that are
8 provided or questions that are provided will be
9 responded to. It is our job to respond in writing to
10 them, so we want to make sure that we obtain your names,
11 and we'll make sure that you get those responses in
12 writing to any comments that are provided to us this
13 evening.
14 And then the third portion would be after the
15 formal presentation, if you will, if anybody would then
16 like to still come forward and maybe privately go ahead
17 and offer input to the court reporter, it's certainly
18 your opportunity.
19 So you can either provide comments openly at
20 the end of the presentations, or afterwards, once the
21 presentation portion is concluded, feel free, by all
22 means, to go ahead and come up and provide them
23 to the court reporter in that manner.
24 We also have comment cards, if that's your
25 preference. You can go ahead and just fill them out in

that manner. No shortage of opportunity to provide input to us this evening.

So we'll go ahead if -- I think we covered it all, to go ahead and kick it off.

The purpose, I think we touched on that. We want to present to you, the public, in a formal sense, what the proposed plan is for these particular sites in our overall CERCLA program.

Before we go too much farther, for those that would -- I think just about anybody would benefit from it, but for those -- especially the new members here tonight, I would suggest three documents that you should definitely have.

Hopefully everybody has a copy of the proposed plan itself. That would be this document here. It's very good because it really does say it all. In addition, it has a glossary of all of the terms in the back. That's one key document you should have.

Another would be an outline, really a copy of all the slides we're going to be giving this evening. I think we have those on a table. If anybody needs that, we can take a brief recess, and you can grab one of those to follow along and maybe take notes as we go through the presentation.

And a third would be I see a color handout of

1 the actual groundwater plume, over there. That would be
2 nice just to take with you later on for reference
3 purposes.
4 So definitely, if nothing else, I suggest that
5 you take those three documents. But in addition to
6 that, there is a whole table full of documents out there
7 out front, plus at the various stations here. So
8 please, by all means, help yourself. Plenty of
9 information to go around.
10 Specifically, as we talked about a little bit,
11 we're going to propose to you the remedial action for
12 the volatile organic compounds that have found their way
13 into the regional aquifer off-station at MCAS El Toro
14 into the regional groundwater, as it mentions there.
15 We want community input. This is not just
16 because it's a mandated requirement. We truly come up
17 with a better product by getting community input.
18 That's what we want and need this evening.
19 And then at the bottom there, opportunity for
20 the community to learn about, and you can see the
21 various bullet points. The contamination itself, how it
22 got there, how it's going to be cleaned up, how long
23 it's going it take, all those types of things.
24 Just to kind of summarize, tonight really is
25 to focus on the CERCLA remedy for these two particular

1 sites. But we can't really go too much further without
2 at least acknowledging that how we got here was by way
3 of a settlement agreement that was just recently signed
4 by the Department of Justice on behalf of the Navy, in
5 addition to signatures by the local water districts, in
6 this instance, Orange County Water District and Irvine
7 Ranch Water District.
8 And certain people in the audience this
9 evening may have a little bit bigger smiles on their
10 face than others because that has been a very, very long
11 time coming, and a great deal of effort has been put
12 into it. And I'll give a little time line here in a
13 minute to show you a portion of how long it's taken.
14 So we're very, very excited about that. It's
15 a significant milestone in the program, and especially
16 for the ultimate cleanup of the base and the affected
17 off-station groundwater.
18 The settlement agreement that I mentioned is a
19 very, very complex agreement, and it did take quite a
20 bit of time to ultimately reach agreement on it.
21 And "agreement" really is the key word. It
22 was agreed upon by the local water districts and the
23 Department of Justice on behalf of the Navy, as I
24 mentioned, to identify what we feel is the implementable
25 remedy for this particular situation that we have, being

1 the contaminated groundwater.

2 So it's something that we have over years and

3 extensive effort come to agreement on now, and we feel

4 it's a very good product for the community, as well as

5 for the agencies involved. So let's go ahead and get

6 into the time line a little bit.

7 Okay. The first block there, the Federal

8 Facilities Agreement was signed, it mentions, in

9 February of 1990. Or I'm sorry. It was placed on the

10 National Priorities list in February 1990.

11 The Federal Facilities Agreement is something

12 I have in my hand. And what this means is this

13 off-station groundwater was identified, and it was of a

14 significant enough extent that the base was placed on

15 something called a National Priorities list.

16 And once that is done, in this instance, the

17 Navy was obligated to enter into something called a Federal

18 Facilities Agreement, which was signed by a

19 representative of the Navy, as well as what are now the

20 Regional Water Quality Control Board, represented by

21 Patricia Hannon this evening, Department of Toxic

22 Substances Control with Triss Chesney here this evening,

23 and U.S. EPA with Nicole Moutoux here this evening.

24 So those are the four parties that signed this

25 agreement, and it's a legally binding document that says

1 the Navy is committed in a very structured sense to
2 obtain a cleanup or complete follow-through through the
3 CERCLA process of those sites that are identified in
4 need of formal remediation.
5 And there's various schedules that needed to be
6 adhered to with direct oversight by the three agencies I
7 just mentioned. So for the first step, we're placed on
8 the list, and then we enter into an agreement.
9 Okay. Now, once the agreement's been reached
10 and we have a schedule to adhere to, the first step of
11 that schedule would be the RI phase of remedial
12 investigation. And you can see, looking at your
13 handouts, what happens during that phase.
14 As the name implies, it's an investigation.
15 We're trying to identify how much, where, when, how,
16 those types of things. Very detailed investigation as
17 to the source and the extent. And that was completed
18 between the two different sites right around the
19 1996-1997 time frame.
20 The next step would be the feasibility study.
21 And from the feasibility study stage, now we're looking
22 at ways to remedy those problems that were identified in
23 the RI phase. So we're looking at alternatives, and
24 we're looking for the preferred alternative, which is
25 what we're here presenting you tonight. And that two --

1 those -- those alternatives were published in the
2 feasibility study also right around the '96-'97 time
3 frame.
4 And then the publishing of proposed plan and
5 the holding of the public comment period 2001. What
6 happened? That's five years. What happened between then?
7 Well, what happened was very lengthy
8 discussion and negotiation between the parties that I've
9 mentioned just a little bit ago. Very complex, both
10 technically, physically, all those types of things, but
11 we have now reached agreement.
12 So it took a little bit longer than what we
13 would have hoped. The key thing is that we all are here
14 this evening with a signed agreement so we are now able
15 to move forward or continue on forward with our CERCLA
16 process, that being the public comment period of the
17 proposed plan phase.
18 Once this phase has been closed out, we've
19 solicited and responded to public comments, if, in fact,
20 after that input we do have public acceptance, and that
21 is one of the criteria that we need to consider, we can
22 move forward then with the publication of a ROD with
23 hopefully this still being the preferred alternative.
24 That would be the next step in the normal CERCLA
25 process.

1 And then with the agreement that we do have,
2 we would continue to be move forward with the water
3 districts, in this instance, with the remedial design of
4 the remedy, and then move forward with the actual
5 treatment of the groundwater itself over the
6 long-term.
7 So that is the process-- I won't say a nutshell
8 because that was kind of a big nutshell, wasn't it? But
9 that is the process and how we've gotten to where we are today.
10 All right. Now, the reason why I asked to be
11 sure that you have one of those color handouts that are
12 over on the table there, because looking at this one,
13 it's not quite as crisp, and plus, just to get it on
14 this elongated sheet, it's a little distorted, and that
15 handout is a little bit crisper. So if you like, feel
16 free to pick this up.
17 But this does give a pretty good feel for
18 the extent of the on- and off-station groundwater
19 contamination that did take place that we are now
20 responsible for providing a remedy for and ultimately
21 making sure that it is cleaned up.
22 Tonight I'll be serving essentially as a
23 facilitator for the discussion this evening. We do, as
24 I mentioned, have a variety of speakers, each presenting
25 a different portion of where we're at in the process.

I'll turn it over now to Ms. Content Arnold. She is the lead remedial project manager for El Toro. She's with the Navy staff, working out of San Diego. She's going to go ahead and start off with some of the more technical aspects of some of this, getting into the site descriptions and getting into the remedial investigation.

MS. ARNOLD: Thanks, Dean.

As Dean said, I'd like to start off by giving you a brief description of the two sites. Site 18 is the regional groundwater plume, and it includes the area of groundwater contamination in the principal aquifer extending off-station from the source area. The Source area is Site 24. The plume extends approximately three miles west near Culver Avenue in Irvine.

Now, the principal aquifer varies from approximately 200 to 450 feet below ground surface. The primary chemical of concern is trichloroethene, or TCE as I'll be referring to it this evening.

Site 24 is a VOC source area, and that encompasses approximately 200 acres in the southwest quadrant of the base. It also includes two large hangars, buildings 296 and 297. Now, this is where aircraft repair and maintenance took place on the base.

The footprint of site 24 includes the shallow groundwater unit contamination, as well as the soil contaminated within the area.

This evening we're not going to be focusing on the soil because that was addressed in an interim ROD back in 1997. We plan on having a final ROD for the soil cleanup in the year 2002. So, like I said, tonight we'll be focusing on the shallow groundwater contamination for site 24.

Additionally, the shallow groundwater unit varies from approximately 80 to 110 feet below ground surface. And once again, the primary contaminant of concern is TCE.

Now, I know this is difficult to see, so I hope you have your handouts with you. But basically, this is an aerial of site 24, and I'll be flipping back to that map to put it in perspective for you.

But these are the two hangars over here, which was the source of the contamination where the industrial activities took place on the base. And the contamination flowed off base in a westerly direction like this.

To put it into perspective: here is Site 24, shallow groundwater contamination here, and then we have just some landmarks that I'd like to point out:

1 I-5 right here, the 405 over here, and then Culver Drive
2 over here. And you can see that the principal
3 contamination area extends off base approximately 3
4 miles, like I said.
5 As Dean mentioned, as part of the CERCLA
6 process, we completed a remedial investigation, or as we
7 commonly refer to it, an RI.
8 So what is an RI? Well, the objective of the
9 RI is to evaluate the presence, nature, and extent of
10 contamination. It includes three components primarily,
11 an initial investigation, an extensive field
12 investigation, and also a base-line risk assessment.
13 So what are the components of the initial
14 investigation? Well, this included document review,
15 aerial photo reviews, personal interviews, and an
16 initial soil gas investigation.
17 The extensive field investigation included
18 first developing a workplan. And this workplan was
19 reviewed by the BRAC Cleanup Team, and that includes
20 U.S. EPA, DTSC, as well as the Regional Water
21 Quality Control Board and the Navy.
22 And before going out into the field, we gained
23 concurrence from that regulatory group prior to
24 commencing field work. And once out in the field, we
25 did extensive soil, groundwater, and soil gas sampling.

1 From this data that we gathered, we put it all
2 into a risk assessment, which Dr. Temeshy will be
3 touching on a little bit later on this evening.
4 This RI was conducted between 1992 and 1997,
5 and the conclusions basically confirmed the
6 following:
7 First of all, that VOCs in soil and
8 groundwater originated at site 24, the source area. The
9 highest concentrations of TCE were found beneath
10 building 296, that is, one of the hangars that we
11 previously looked at, and concentrations were 4,850
12 parts per billion.
13 TCE was also the predominant chemical of
14 concern, as we discussed, in both soil and groundwater
15 TCE is an industrial solvent that was used primarily
16 for cleaning, degreasing, and paint stripping.
17 Historically, it was common practice to use that.
18 VOCs have migrated from the soil at site 24 to
19 the shallow groundwater unit and then finally to the
20 principal aquifer. And also, as we've discussed, the
21 VOC plume extended three miles west of the station in
22 the principal aquifer near Culver Drive.
23 Within station boundaries, the TCE is limited
24 to the shallow groundwater unit, not the principal Groundwater
25 unit, and That's the shallower unit from 80 to 110 feet below

1 ground surface. Outside the station boundary,
2 we have contamination in both the shallow and
3 the principal aquifer. And in the shallow groundwater
4 unit, water quality is better than the federal and state
5 water quality standard of 5 parts per billion for TCE.
6 In the principal groundwater unit, the concen-
7 trations range generally from barely detectable up to 50
8 parts per billion.
9 Finally, TCE concentrations gradually decrease
10 as you move away from the source area.
11 Now, this next figure here depicts the
12 migration of VOCs released from the surface. Over here,
13 if you can imagine, this is where the hangars are here.
14 We have a release of TCE to the soil, and you can see it
15 migrating to the shallow aquifer approximately 80 to
16 110 feet below ground surface.
17 As it travels downgradient, it eventually
18 migrates to the regional groundwater plume, which is
19 deeper,
20 approximately 200 feet below ground surface.
21 MR. GOULD: Thank you, Content.
22 Okay. As I outlined just previously, the next
23 step in the process would be the feasibility study
24 portion where we look at alternatives.
25 But in order to help us determine those

1 alternatives, we need to know, with all the information
2 that we just gathered from the remedial investigation,
3 what threat is actually posed to human health and the
4 environment.
5 So Dr. Andrea Temeshy is going to go ahead and
6 speak to us tonight on that particular subject. She is
7 an employee with Bechtel National, and she is
8 outstanding in her field.
9 DR. TEMESHY: Well, thank you.
10 Before I go through what the results are on
11 the risk assessment, I want to briefly introduce the
12 concept of the risk assessment.
13 Basically, what the risk assessment
14 does is estimate what the potential hazard
15 to an individual exposed to the chemicals at a site are.
16 That is, are we going to have a potential for some
17 adverse health effect?
18 And when we talk about an adverse health
19 effect, we're talking about could this person develop
20 cancer, or chemicals also can elicit another type of
21 effect like non-cancer effects, which could range
22 anywhere from liver or kidney or systemic toxicity-type
23 effects.
24 So when we talk about the risks, what we're
25 doing is we are translating chemical concentrations into

1 an estimate of hazard to human health.

2 So on that, we'll move on to why do we do a

3 risk assessment. As was stated before by Dean, it is an

4 integral part of the remedial investigation concept. So

5 as a first step, we have to be able to do it in

6 order to be in compliance with guidelines.

7 And again, it's to determine if we have

8 a problem as far as human health based on exposure to

9 the chemicals at a site?

10 How are the results of this assessment

11 used?, If we have a risk, then that will determine

12 if cleanup is going to be necessary or not at the site.

13 How the risk assessment is done. I'm going to

14 go through, the steps that I do in order to

15 quantify risks so that we know all the components that

16 are utilized.

17 And that is -- the first thing is we have the

18 chemical contaminants, and those are at a certain

19 concentration. For example, we have TCE. We've got

20 concentrations of TCE, and we're going to be using that

21 in the risk assessment.

22 The next thing is we are going to determine

23 who's exposed. What is -- what are the potential

24 receptors at a site? And looking into the future, could

25 we have a residential receptor at the site? That would

1 be a very conservative scenario.

2 And how would exposure take place? What kind

3 of pathways? Is this person going to be drinking the

4 groundwater? And is he going to be using it as a

5 drinking water source? It's going to be also used for

6 bathing, so you have dermal contact.

7 And then you would also have the inhalation

8 because volatile organic chemicals will basically be

9 So then we have the chemicals and the

10 person exposed to them under different pathways.

11 All of this information is integrated into a

12 mathematical model. And within that mathematical model,

13 we also look at how toxic is this chemical. The

14 result of Integration would be the risk number.

15 When we talk about the risk number,

16 we have two different end points. We would have the

17 cancer end point, and we also have the non-cancer-type

18 effect. And when we calculate the risk, we're going to

19 address both end points.

20 Now, one thing to consider is when we're putting

21 all of this information together, we are going to be very

22 conservative in our assumptions. And I'm going to go

23 through an example as to what I mean by "conservative"

24 in the next slide.

25 We are not going to at any time underestimate the risk.

1 We're always going to be erring in the overestimation of
2 it. That is, that way we are always protective of human
3 health. Therefore, the actual risk is always
4 going to be lower than the one that we are actually
5 estimating.
6 Now, this is just a quick overhead as to
7 showing that we've got several things that must occur in
8 order to quantify the risk.
9 That is, (a), we have to have chemical
10 contaminants, (b), we have to have a way to release the
11 chemicals from the media to an area where humans are
12 going to be exposed. If we have a residential receptor,
13 then -- that person is going to be exposed to that
14 groundwater via use of that groundwater as a drinking
15 water source.
16 We need to have a person that is exposed to
17 chemical contaminants. If you don't have a person
18 exposed to, then you don't -- you cannot quantify the risk.
19 And finally, you've got different exposure pathways for
20 these contaminants; that is, by eating it, by drinking it,
21 or by touching it. Now, we've said earlier that the risk
22 estimates are very conservative and overestimate
23 in the risk for protection of human health.
24 When we talk about residential exposure,
25 these are some of the assumptions that I want to present

1 to you that show you how conservative these estimates
2 are.
3 We are assuming that a resident is basically
4 at a site exposed to groundwater, in this instance, for
5 a period of 30 years. And that means this person never
6 moves. It's there for 30 years, from birth to 30
7 years.
8 Also, basically, 24 hours a day for 350
9 days a year. Again, that means that this person does
10 not leave the house except for 15 days over that year.
11 So that's a very conservative assumption because this
12 person does not work, does not leave the house, and that
13 is very, very conservative.
14 Again, following this conservative
15 scenario, as far as drinking water, two liters of water
16 a day are consumed. All of these values, all of these
17 assumptions, are established by EPA, and we basically
18 implement them in our risk assessment.
19 So when we talk about the resultant risk numbers,
20 keep in mind that these are numbers that are based on
21 conservative assumptions.
22 Now, we've quantified risks, but what do they
23 mean as far as are they acceptable? Are they unacceptable?
24 We've got established criteria by which to
25 compare how acceptable or unacceptable these risk numbers

1 are. For cancer risks, we've got a criteria
2 established by EPA, which means that if it's less than
3 one in a million, that is, one times 10 to the minus 6
4 1x10-6 for cancer risk, then the risks are considered
5 acceptable.
6 If they are within one in 10,000 to one in a
7 million or 10 to the minus 4 to 10 to the minus 6,
8 again, this is for the cancer risk, then it is within
9 the risk-management range, and they're in the generally
10 allowable risk range.
11 Now, what that means is that, at this point,
12 the stakeholders and the regulatory agencies, will get
13 together and will integrate with the results with other
14 factors.
15 For example, are the concentrations at the
16 site greater than drinking water standards?
17 All of these factors will be taken into consideration to
18 determine if remedial action has to be implemented at
19 the site.
20 If risks are greater than one in 10,000 or
21 greater than 10 to the minus 4, then that is considered
22 unacceptable. And at that point, cleanup is warranted.
23 Now, for the non-cancer risks,
24 there is a threshold of one. And if risks
25 are less than one, again, that is considered allowable.

1 If they're greater than one, then there is a potential
2 for adverse health effects to develop.
3 And at that point, then, again, considerations
4 as to what the contaminant levels are like with respect
5 to MCLs, in this instance, would be considered as
6 far as the cleanup.
7 Now, I'm going to
8 briefly show you what the risk results are
9 under baseline conditions, that is, prior to any
10 remedial action. These results are for an individual,
11 that would be, in this case, a resident exposed to the
12 groundwater at both Site 18 and Site 24.
13 Site 18 is the principal aquifer, and Site 24
14 is the shallow groundwater unit. And again, we've got
15 two different end points. We have the cancer risk, and
16 we have the non-cancer portion of it.
17 For the cancer risks, under residential
18 conditions, the principal aquifer results are within the
19 10 to the minus 6 and 10 to the minus 4 risk range. And
20 if you flip back to the previous slide, so they are in
21 this area right here. That means that they're generally
22 allowable. And at that point, you would integrate other
23 criteria into whether cleanup is required or not.
24 Now, for the shallow groundwater, the risks
25 are greater than 10 to the minus 4, and the 10 to the

1 minus 4 is the unacceptable risk range. Again, these
2 are residential risk results, which means that you've
3 got somebody exposed to the groundwater via drinking it,
4 dermal contact, while showering, for example, and then
5 through the inhalation portion of it while this
6 groundwater is being used as a potable water source.
7 Finally, the non-cancer health effects, since
8 we also have to address them. These results are greater
9 than one. So there is a likelihood of potential adverse
10 health effects for both the principal aquifer and the
11 shallow groundwater unit.
12 Now, that we have this information, then
13 the next step is what does it mean?
14 For human health risks that are in excess of 10 to the
15 minus 4, those are not acceptable, which means that they
16 warrant some sort of remedial action.
17 At the shallow groundwater unit, then,
18 since the risks are in excess of 10 to the minus 4,
19 again, these are residential risks, then a remedial action
20 will be implemented.
21 Now, at the principal aquifer, the risks are in the
22 10 to the minus 4 (10-4), 10 to the minus 6 (10-6) risk range.
23 So that is within the risk-management range.
24 However, the VOC concentrations exceed the
25 federal and state water quality standards, and then that

1 leads towards remedial action.

2 So at both the shallow groundwater unit and the

3 principal aquifer, you have remedial action based on the

4 risk and also based on the exceedence of the VOCs for the

5 MCLs.

6 MR. GOULD: Thank you very much, Doctor. Good.

7 Good information.

8 Now, next step in the program I mentioned

9 previously is the feasibility study. That will be --

10 that and an introduction into the preferred remedy will

11 be briefed to you by Mr. Andy Piszkin, the former lead

12 remedial project manager for El Toro, but prior to Content

13 Arnold.

14 He was involved for some time through all the

15 investigation stages for a number of years, so he has a

16 great deal of technical knowledge and background on it.

17 So I think he's probably perfectly suited to give this

18 particular portion of the brief.

19 One clarification I want to point out. I

20 mentioned the signators on the settlement agreement.

21 There was one more representative on behalf of the Navy.

22 Department of Justice had negotiated for the Navy, but

23 we actually had a Navy signator on it. So there were

24 four signators.

25 So Andy, if you would, please.

1 MR. PISZKIN: Good evening. My name is Andy
2 Piszkin. And like Dean says, I've been around quite a
3 while. I started as a remedial project manager in '91,
4 on El Toro. I feel like this is kind of homecoming night
5 for me.
6 I've been involved in a lot of the groundwater
7 studies as well as some of the negotiations for the
8 agreement that has been signed by the Department of Justice
9 and the water districts, as well as the Navy.
10 We use the EPA guidance on doing a remedial
11 investigation/feasibility study. This is what it is,
12 guidance, but it's got some real good stuff in it. And
13 that's where the objective of a feasibility study comes
14 in. It's different than what I have. You've seen
15 remedial investigation. That's "what's out there." A
16 risk assessment is "what does that mean?" and
17 "What does that matter?"
18 And if it matters, then some action has to be
19 taken, the feasibility study is, "what can you do about
20 it." And the preferred alternative that we're proposing
21 tonight for public comment here is what we think is the
22 best thing to be done because of the risk and because of
23 what we found.
24 So the feasibility study is trying to combine
25 a lot of the -- what's the objective of our remedial

1 action. RAOs Remedial Action Objectives is what I call them.
2 And first, you have to define the problem, what kind of response
3 actions you need, what kind of tools are out there in the
4 environment and industry that will help you solve those.
5 Do you have to get the groundwater out?
6 What do you do when you have it? How can you
7 treat it? Do you have to get it out? Can you treat it
8 down in the groundwater where it is 200 feet, 400 feet
9 below the ground surface?
10 How do you treat it? Do you heat it up? Do
11 you take it off to a landfill? What do you do with it?
12 So you look at all those possible
13 technologies, and you try to then piece them together in
14 some kind of a treatment train.
15 Okay. Well, maybe I'll pump it out first.
16 Then I have it, and I have to treat it somehow. And
17 I've got A, B, C, D, E way to treat it, and then I have
18 to do something -- then it has to go somewhere else.
19 You know, what do you do with it?
20 So you -- you look at all those technologies,
21 what are those process options, and you put them
22 together. You do some initial screening, which we have
23 done, and some things just don't fit for the scenario
24 that -- of what we have found and what we have to do
25 with it. So those get kind of screened out being

1 noneffective.

2 Then you conduct detailed analysis. And

3 under -- it was ironic. Under the -- the last one,

4 under the guidance, it says "Further define alternatives

5 as necessary."

6 Well, we spent a lot of time further defining

7 alternatives as necessary. Because one of the things

8 that has to happen, you can have the greatest

9 technology, but if it can't be implemented, it doesn't

10 go anywhere.

11 So one of the things and the only thing this

12 settlement agreement that has been signed by a bunch of

13 parties is that it makes the alternatives that are being

14 proposed as a joint project with the water districts as

15 implementable.

16 It will not be implemented unless the Record

17 of Decision selects Alternative 8A and 10B prime. If

18 that Record of Decision doesn't get to that point, that

19 agreement doesn't go any farther. It doesn't happen

20 even though it's all signed, it allowed us to be here

21 tonight to say we have a proposed plan that is actually

22 doable.

23 So the first thing is what's our objectives?

24 One thing that's not on this slide is prevent exposure

25 from nontreated water. That was actually our

1 third objective. We want to contain it.
2 Don't let it go any farther, or at least minimize
3 the migration of any contaminated groundwater above
4 drinking water standards.
5 The second one is to reduce, you know, the
6 concentrations to below drinking water standards. And
7 the third, like I say, it's not on there, but it's to
8 prevent anybody from coming into contact with something
9 that's concentrated above the drinking water standard.
10 And, therefore, like the risk triangle, you
11 need somebody to be exposed, you need a toxin or a
12 concentration, and you need a pathway. If you can block
13 the pathway, you block the risk.
14 On page 9 of the proposed plan, it gives
15 you -- it's actually table 2, it's a good list of some
16 of the alternatives that we considered early on like
17 hydraulic containment.
18 You can put wells in, extraction wells. You
19 can put in reinjection wells. You can put water into the
20 ground so the groundwater doesn't flow any farther. You
21 can install a slurry wall, but this technology. was
22 screened out early because it has to be installed too deep.
23 In such a large area, it would just be just impractical
24 and not cost-effective. So that's one of the alternatives
25 that this just doesn't fit with what we have to work with

here.

You have some of the removals. You can -- well, you can, you know -- extraction from groundwater wells. Vacuum-enhanced groundwater is kind of doable. That is,-- put a vacuum on the extraction well.

You have some of the treatment that you can do in place, and you have some of the treatment process that you can do once you bring the groundwater up.

So this is what we had at our disposal, and we went through some of these things, some of these technologies in the feasibility study. And with the scenario of how large and dilute the principal aquifer plume is and the area and the concentration and the flow of the shallow groundwater unit, we have a variety of alternatives.

And we'll go to that next slide.

I must say I remember discussing a lot of the discharge. What do you do with the water once it's treated? Do you put it in the washes? Do you put it in Agua Chinon or Bee Canyon Wash?

Do you just put it out in the middle of the runway surface impoundment?

Do you reinject it? Do you use it for irrigation or domestic use?

There's a lot of scenarios. There's probably

1 like, you know, 12 scenarios that we dreamed up of let's
2 really think outside of the box. What can we do with
3 the water after we treat it? And that was -- that was a
4 main issue on what's implementable.
5 So here we have -- I believe this is page 14
6 in the proposed plan, and it really goes through the
7 alternatives that kind of met the -- you know, passed
8 the ha-ha test, the ones that are kind of doable, and
9 they all go to kind of pump and treat.
10 Because of the environment, because there is
11 an Irvine Desalter Project that in the late 1980s, during
12 that decade it was on the books as a water supply project,
13 and I know Richard Bell and Steve Conklin both, or one of
14 them, will talk more about that after I sit down, but
15 looking through the alternatives, like alternative 8 --
16 or I'm sorry -- 2A, that is a Navy stand-alone.
17 We looked at the Navy doing their own large
18 groundwater pump-and-treat project without the Desalter,
19 without the local water districts. If that -- if Irvine
20 desalter project didn't happen, the Navy had to have
21 some alternatives that they could do on their own, and
22 that's what 2A is.
23 6A is a combination of using a joint project
24 with the local water districts. 7A -- A and B are
25 alternatives that incorporated monitored natural

1 attenuation and some of those results.

2 Well, let's go on to the next slide.

3 We took all those, and there are the nine

4 criteria of EPA. The first two are critical. They're

5 called threshold criteria. It's the protection of human

6 health and the environment, and it has to meet the

7 applicable laws. Those are the first two.

8 The next five, they're the balancing criteria.

9 That's the meat of how to -- it's the majority of

10 criteria to help select a proposed alternative.

11 The last two are modifying criteria. If there

12 is -- you know, we -- we want state acceptance. We want

13 public acceptance. And those actually come after this

14 meeting today and the close of the public comment period

15 where we take the response -- take the comments and in

16 the Record of Decision provide a responsiveness summary

17 to all the comments related to the proposed plan that

18 the Navy's putting out.

19 So next slide.

20 This is page 19 of the proposed plan, as I

21 term it, the meatball chart. And I'd have to look at

22 the other page, page 18. It's nice that they're right

23 together because page 18 goes through those nine

24 criteria very specifically. You know, it has italicized

25 font, which discusses what is looked at under that

criteria.

For instance, "Short-term effectiveness. Assesses how well human health and the environment will be protected from impacts due to construction implementation of a remedy. Also considers time to reach cleanup goals."

I must admit on the previous slides, two back, the alternative that we think is the best has one of the longest time frames when it comes to cleaning up the principal aquifer. It has 95-plus years. That's one reason we have this little plus here is it's a little bit of a misnomer. You have to look at the alternative that we're proposing as a combination of alternative 8A as well as 10B prime.

If you look at 10B, and prime is just a little bit of a reduction in the flow, and we look at the modeling -- the groundwater modeling, it didn't have a significant impact to the results.

10B cleans up the shallow groundwater in roughly 20 years. That's a big thing because that's the source of that large dilute regional plume. That's a big priority for the Navy to get rid of the source as soon as possible.

And so it's the combination of both 8A and 10B prime is what we're acting on for overall short-term

1 analysis. And like our little asterisks or our little
2 plus sign says, there's a lot of optimization that's
3 going to happen when we get into the design.
4 And the groundwater modeling is -- really, the
5 main focus is comparative analysis. How does it compare
6 to the other alternatives?
7 There is lots of opportunities to optimize
8 well placement. And when you're running this thing for
9 many, many years, as it will be used as an irrigation
10 supply source, it's not going away, and it will be very
11 beneficial.
12 So we look at this meatball chart. We don't
13 have weighted averages. We don't have numbers. But you
14 can see where it's a full closed-in circle, a good performance.
15 (Note to Readers: Recommend referring to the
16 Comparative Analysis of Remedial Alternatives in the
17 Proposed Plan or the public meeting presentation handout.)
18 You can see the preferred alternative has
19 three -- actually, we have Navy state acceptance in
20 there, which is nice -- nice as a full circle, best
21 performance.
22 The big one, I have to say, is
23 implementability. You see these other three
24 alternatives. They are joint Navy/water district
25 projects. But they just -- they did not make the cut,

1 and they did not meet the settlement agreement.

2 So the settlement agreement on the 8A, 10B

3 prime is key to having something doable. So that's one

4 of the main reasons we prefer it.

5 Cost-effective, it's got long-term

6 effectiveness. It's great to be hooked up with a CERCLA

7 remedy with a long-term local water district because

8 they're here. They know how to run these things. You

9 know, it's their business and they're experts and it's

10 great to team up with them.

11 So here's some of the kudos or some of the

12 things that are the real benefit of our preferred

13 proposed remedy.

14 Optimal solution. Given all the factors, all

15 the technical factors, all the nuances that we've had

16 with the local water districts, with the regulatory

17 agencies over quite a many number years, we think it's

18 the best -- it really is the best solution.

19 It does resolve or satisfy our CERCLA

20 requirements under the Navy and under our Federal

21 Facilities Agreement. And the cleanup team, the BRAC

22 cleanup team, they support it. They've been very

23 diligent, very patient with the Navy and the local water

24 districts on getting this settlement agreement that

25 allows our preferred alternative to be implementable.

So next.

In the proposed plan, you do have some schematics. They all start looking the same after a while. But truly, this is different. And I do -- like Dean said, I would definitely support getting the handout version of the map that we see over here.

It says "Irvine Desalter Project," where in the kind of red -- I'm not sure if that's mauve or I don't know what color -- our proposed alternative is.

The light blue line is not what the Navy's proposing. That is the water district's drinking water, potable water system, that's outside of our VOC-contaminated plume.

So with that, I'm going to give it back to Dean.

MR. GOULD: Thank you, Andy. Terrific.

Well, the evening certainly wouldn't be balanced unless we had presentations by the water

1
2
3 districts that we're partnered with. And in just a
4 moment, we'll have Mr. Steve Conklin from the Orange
5 County Water District as well as Mr. Richard Bell from
6 the Irvine Ranch Water District come up and give their
7 perspective on the remedies being proposed and the
8 historical perspective of what has transpired to date
9 and offer a little more insight as far as the nuances to
10 the implementation of the remedy we've been talking
11 about so far.
12 If you would, Steve.
13 MR. CONKLIN: Thank you, Dean.
14 And good evening. My name is Steve Conklin
15 with the Orange County Water District, and I'm very
16 pleased to be here.
17 Andy said he started working on the project in
18 1991. I actually started working on it in 1989 when I
19 started with the water district over 12 years ago.
20 Roy Herndon, our district hydrogeologist with
21 the district, you started before I did.
22 MR. HERNDON: 1988.
23 MR. CONKLIN: 1988. So we have a long history
24 with this project.
25 So Roy, myself, and the water district board

1 of directors are very pleased we've reached this point.
2 We're very supportive of the project and very anxious to
3 move forward with this very implementable and very
4 technologically sound project that will meet the needs
5 of ourselves, our partners, and the various regulatory
6 agencies.
7 The water district is the groundwater
8 guardian. We were created in 1933 by special action of
9 the state legislature to protect and preserve the Orange
10 County groundwater basin.
11 It's a very valuable resource. It's the water
12 that's under our feet right here. It's the water that
13 provides the needs of over 2 million people, that
14 stretches from Los Alamitos all the way down to Irvine,
15 from Anaheim and Fullerton.
16 That whole area there is -- about 70 percent
17 of the water that those 2 million people use comes from
18 the ground. This water has to be protected. It's an
19 invaluable resource, and this project does protect this
20 very important resource for us.
21 The water district is an independent
22 monitoring authority. Our purpose is the groundwater
23 basin. And with that, whatever -- whatever it takes,
24 that's our purpose -- and our existence is to
25 protect the groundwater basin.

1 The project, by treating the contaminants here
2 at the site, it prevents the contaminants from moving
3 farther downstream and potentially contaminating other
4 groundwater. This water has its natural movement,
5 more or less, from east to the west. It would be moving
6 from the Irvine area actually on through Santa Ana and
7 some of these other areas. And these areas are
8 underlain by groundwater. If this contaminant continued to
9 move it would contaminate that water as well.
10 So it's very important to pull the water out
11 here, treat it, and then be able to use it.
12 This project is very valuable in that it's
13 taking water, which is otherwise not usable, treating
14 it, and making it into a very valuable resource. It's
15 making us more water independent and not dependent so
16 much on Metropolitan Water District and from water from
17 out of the area. So it's making use of water right here
18 and making the water available for us and for our
19 children and for our children's children.
20 So with that, I'd like to turn it over to
21 Richard Bell, my partner in the project, from Irvine
22 Ranch Water District.
23 MR. BELL: Thank you, Steve.
24 It's a pleasure to be here tonight. I concur
25 with the comments Steve made.

1 Both water districts' boards of directors back
2 in June, after many years of effort, support the project.
3 are very, Our districts are very enthusiastically behind
4 the project, and we have been working very diligently on
5 this project for many years.
6 I started with the district -- since we're
7 giving a little history of each of our involvement with
8 this project, I started here four years ago and got very
9 involved with the project at that time. About half
10 my time is devoted in one way or another to this
11 project in negotiation and project
12 development.
13 A little side note, 20 years ago,
14 I was the regional manager for a Regional Water Quality
15 Management Program for Southern California back in the
16 late '70s when VOCs were first discovered in
17 groundwater. At that time, we knew
18 nothing about VOCs in the Irvine Area since this area was
19 agricultural.
20 (Interruption by reporter.)
21 MR. BELL:
22
23 One of the things that I'd like to talk about
24 is our perspective on the project and how we got here.
25

1 The first slide is titled "Two Projects
2 in One." That's an important point to understand. The
3 project is both a nonpotable system, which is a CERCLA
4 remedy that Andy addressed, and we also have a potable
5 system.
6 And I'll show you them in a minute on the maps.
7 The nonpotable system basically takes water
8 from the VOC Contamination plume, which is extracted, treated,
9 and then would be used in a recycled nondrinking-water system
10 primarily for landscape irrigation, and other nonpotable
11 uses.
12 It is part of the CERCLA remedy.
13 The potable system are wells which are located
14 safely beyond the plume, outside the plume, and outside
15 upgradient of the influence of pumping from the plume.
16 This water will be treated to remove salts and
17 nitrates, for use in our drinking water system.
18 And we need to note that the potable project,
19 is separate and
20 not part of the CERCLA remedy.
21 Next slide.
22 It was very important early on in the process to
23 get our public involved. A few years ago, we
24 actually conducted some very extensive focus groups with
25 our customers and community leaders.

1 And what we found from that process was
2 that our community and the leaders in the community
3 very much supported the cleanup of the project, but
4 they preferred that the treated water from the plume
5 be used forlandscape irrigation. And that's how the
6 project was basically configured. We developed the
7 project into two components at that time.
8 One thing we do like to make clear is
9 that the groundwater cleanup project and the
10 groundwater supply project do not affect the ultimate
11 use of MCAS El Toro. It really has no bearing on that
12 decision at all.
13 The plume that Andy showed in his picture
14 basically is the same as we show here in color.
15 This is the source area site 24 or the origin of
16 the VOCs. They spread basically in the shallow unit and
17 then dropped down into the principal, deeper aquifers
18 and have been detected out as far as Culver and Drive.
19 But we have designed a system that has two
20 wells here in the major -- or the hottest spot of the
21 plume for extraction.
22 We also maintain a well here at the toe of the
23 plume to help provide containment of the plume so it doesn't
24 get beyond this point. We want to protect this area
25 downgradient of the plume. That's what Steve talked to earlier.

1 The water would be pumped from these wells,
2 conveye by a pipeline to a central treatment plant here where
3 the water will be cleaned and then from that point will
4 be put into our nonpotable irrigation system.
5 We also have, which is separate from the --
6 the CERCLA remedy, is our potable system, which would be
7 outside the plume, would be some wells located along the
8 Southside of the Interstate 5 Freeway.
9 That water, as I mentioned earlier in this
10 Part of the basin has higher salts from past agricultural
11 activities and natural sources.
12 This water will be pumped from these wells to
13 the same treatment plant location, but into a separate
14 facility, where it will be desalted and disinfected
15 it and pumped it in the potable system.
16 Not part of CERCLA remedy.
17 The treatment system that will be used for the
18 nonpotable project will include primarily two types of
19 treatment processes. One is reverse osmosis, which will
20 desalt the water to levels where we can use it for irrigation
21 supply, and the second would be a packed aeration tower
22 for air stripping to remove the volatile organic
23 contaminants.
24 Those -- processes are both the best
25 available technology. They're proven technology and

1 been used in many different locations, and they're very
2 reliable processes.
3 The air that will be stripped out, which will
4 contain the VOCs will be further treated through a granular
5 activated carbon unit, to absorb all the VOCs in the air.
6 The treated air -- will be free of contaminants so there will
7 be zero discharges from this facility to the environment.
8 And after this water is treated, it will be
9 disinfected and put into our system.
10 This is the same chart that's on the
11 proposed plan on page 16, I believe, that Andy
12 showed.
13 As basically he said, the water from the
14 shallow groundwater unit on base at site 24, contains
15 the high concentrations of contaminants.
16 The shallow groundwater unit will be pumped by
17 the Navy and conveyed to a pipeline, where we'll come over
18 in a pipeline. We'll take custody of that water. That water
19 will be treated by reverse osmosis and also go through
20 the air stripper, the off-gases will go through carbon
21 treatment, and the purified water will be disinfected and
22 put it into our irrigation system.
23 The deeper, is off base, water which has
24 lower concentrations of contaminants, will be partially
25 desalted And all that water will also be air stripped,

1 and the vapor treated, and then the water will be
2 disinfected and put into our system.
3 So that basically gives you a picture of how
4 the flow streams are treated in the process.
5 One of the things that's very important is to explain
6 how we ensure both public health and environment
7 are protected And one of the key points is the extraction
8 wells in the principal aquifer prevent the plume from
9 being pulled towards the drinking water
10 wells.
11 We went through excessive groundwater modeling
12 studies to prove that point and to ensure ourselves
13 that that would be the case.
14 And as I mentioned earlier, all the water,
15 100 percent air stripped will be.
16 Then all the highly contaminated water will also
17 receive reverse osmosis.
18 Again, there will be no air emissions from the
19 project, and the wastewater brines from the treatment stages
20 or steps will be disposed to a brine-line system. We'll
21 convert a pipeline into a brine line that goes to the
22 regional wastewater collection system so it doesn't
23
24
25

1 go into our reclamation system. Here, we reclaim our
2 water. It is important we need to keep excess salts out of
3 our reclaimed water sources and keep the water as pure as we can.
4 So the brine goes through a regional system.
5 Ensuring protection for the drinking water project is
6 done through several methods.
7 One, we will install an enhanced groundwater
8 monitoring program and network in the project area so
9 we can know in advance what's happening. Groundwater will be
10 monitored and tested throughout the project life and
11 in the plant on a continuous basis so we know exactly
12 how the plant is operating at all times.
13 As I mentioned, reverse osmosis is
14 a proven technology. It's used to purify bottled water.
15 It's widely known, and it's a safe process.
16 And another thing we make clear is that we
17 actually remove the salts and minerals for the drinking
18 water side to better than what's required for drinking
19 water standards. That's our goal, and that's what we plan
20 to do.
21 The last slide.
22 In summary, the project benefits, from the perspective
23 of a water supplier, can be summarized by four main points.
24 One, it cleans and protects the groundwater basin that's been
25 damaged over the years and is currently unusable for municipal uses.

1 Second, it basically provides a new,
2 locally controlled drought-resistant
3 high-quality groundwater supply for both our potable and
4 our nonpotable systems. So we're getting the water
5 supply that we need, and it developes unused local supplies
6 and provides drought-protection benefits. By having our supply
7 here, it reduces our reliance on imported water.
8 The third point is there will be no impact on
9 our -- on our ratepayers. Funding by the Navy the
10 nonpotable system and from the Metropolitan Water District on
11 the potable system will make the project feasible side.
12 This will keep our costs in line or less than what we
13 would pay for imported water.
14 And fourth, the project is environmentally
15 beneficial, as I mentioned earlier.
16 And that's basically all I have on -- from the
17 Irvine Ranch Water District water perspective on the
18 project.
19 MR. GOULD: Thank you very much, Steve and
20 Richard. I appreciate it.
21 Before I provide closing remarks on this
22 particular portion, I want to afford the regulatory
23 representatives here tonight the opportunity to give
24 their agency's perspective on the preferred alternative
25 and the proposed plans that are being presented to you

1 tonight.

2 So I'll start off asking Ms. Nicole Moutoux,

3 representing U.S. EPA, who is also the lead -- lead

4 regulatory agency of what is known as the BRAC Cleanup

5 Team, the BCT for El Toro, if you would like to make

6 some comments.

7 MS. MOUTOUX: Yes.

8 My name is Nicole Moutoux. I work for the

9 Environmental Protection Agency.

10 Basically, EPA is in support of the Navy's

11 proposal for cleaning up the groundwater at sites 18 and

12 24 because it will be, once in place, protective of

13 human health in the environment, as well as restore the

14 beneficial uses of the groundwater.

15 And I've been on the team not as long as

16 everyone else, but we believe that it's time for this

17 cleanup to happen.

18 MR. GOULD: Thank you, Nicole.

19 Ms. Triss Chesney with DTSC.

20 MS. CHESNEY: My name is Triss Chesney, and I'm

21 with the California Environmental Protection Agency,

22 Department of Toxic Substances Control, also known at

23 DTSC.

24 DTSC concurs with the proposed remedy because

25 it addresses groundwater contamination by reducing the

1 VOC concentrations to meet water quality standards,
2 controlling VOC migration, and preventing domestic use
3 of contaminated groundwater until cleanup goals are
4 achieved.
5 The proposed remedy is protective of human
6 health and the environment and meets state regulatory
7 requirements.
8 MR. GOULD: And the third regulatory agency
9 representative would be Ms. Patricia Hannon of the
10 Regional Water Quality Control Board.
11 MS. HANNON: My name is Patricia Hannon. I'm also
12 with California EPA, Regional Water Quality Control
13 Board, Santa Ana region. And we concur with the
14 proposed remedy.
15 We've been waiting a long time for this to
16 happen, and we're very thrilled that it's going to
17 work. It hopefully will work and restore beneficial
18 uses to this.
19 MR. GOULD: Thank you.
20 There's a couple of closing comments
21 before we open it up for comments.
22 Next step, public comment
23 period.
24 Okay. Well, certainly we're kicking that off
25 here tonight. But the formal comment period, if you're

1 looking at page 2 in the proposed plan that's available,
2 you see that it talks about the public meeting being
3 tonight, November 13th. But there is a 30-day public
4 comment period ranging November 7th to December 7th.
5 That's an ominous day. During that period, we are
6 gladly receiving public comments on this preferred
7 alternative.
8 So I know there's a lot of information being
9 put out tonight. Maybe you need to go home and review
10 some of the documents or come up with some questions,
11 develop some questions for us, or perhaps share what
12 you've learned tonight with some people that you know,
13 coworkers, people in the community, anybody that you
14 would like to get their input on and bounce it off
15 them. By all means, you can then submit the comments to
16 me. I would be more than happy to receive those
17 comments.
18 As I mentioned, anybody who responds to us
19 with comments we'll gladly respond in writing formally
20 giving you a detailed response to the questions that you
21 may have. So I do encourage you to please take
22 advantage of that. And anyone you know that would be
23 interested in providing comment also, solicit them to do
24 the same.
25 Once the comment period is ended, and assuming

that the proposed alternative that we've talked to you about this evening is, in fact, the preferred alternative that is ultimately selected, we'll go ahead and put that into a Record of Decision and publish that.

And once that is signed after review of the regulatory agencies and our partners, we'll go ahead and finalize that document, and then it becomes final. Then this remedy is the one that we'll go ahead and move forward with, and the remedial design will then take place.

This is a little bit of a unique instance in that remedial design will actually be produced by the water districts. And then once a design is complete, we'll move forward with the actual action, meaning the treatment of the contaminated groundwater.

So that is essentially it as far as the formal presentation goes.

So as I mentioned, I think you're going to get the idea that we want comments. Here's at least the second opportunity, aside from the informal session. Here's a second part for you to go ahead right now, go ahead and speak up, and we do have a microphone available for anybody who would like to provide comments.

Now, there's a couple different ways we can do this. You can go ahead and give them right now, if that's your preference, or you can come up afterwards and give them directly to the court reporter here. Or, as I mentioned, you can submit them in writing tonight, or you can just go home and think about it and submit them in writing. That way, there's a lot of different options.

We'll open it now. We can't provide responses right now unless it's an administrative issue. But if it's technical or things of that nature, we'll respond in writing to those.

So is there anybody who would like to provide a comment right now in this particular format?

MR. MILLER: I had a couple of questions.

MR. GOULD: Please state your name and spell it out so our court reporter can get that, please.

MR. MILLER: Okay. My name is Mark Miller, and I live in Mission Viejo. I got the notice in the paper and came to the meeting tonight.

MR. GOULD: Terrific.

MR. MILLER: And I was just looking at the proposed plan groundwater cleanup folder. And I notice on the bottom of page 16 where it says "Preferred Remedy Conceptual Design Alternatives 8A and 10B," on the

1 bottom, it says "During low periods" -- or "During
2 periods of low recycled water demand, only shallow
3 groundwater will be treated and either injected into an
4 IDP injection well or stored in the IDP reservoir."
5 And I was wondering if the greatest
6 contamination is in the -- the deep aquifers, why they
7 wouldn't take the more contaminated water and treat it
8 instead of the water out of the shallow well.
9 MR. GOULD: Okay. Thank you.
10 MR. MILLER: And one other question I had --
11 MR. GOULD: Please.
12 MR. MILLER: -- the plume is mapped out. And
13 they -- they state there will be three deep extraction
14 wells and then one shallow groundwater unit on-station,
15 I guess, on the Marine base.
16 And I was curious with the scrubber that is
17 being designed to be in place, will there be any design
18 parameter if the plume should expand where other wells
19 could be added on and the scrubber would work to a
20 larger capacity or will be designed if -- on that
21 contingency?
22 MR. GOULD: Very good. Thank you.
23 MR. MILLER: Thank you.
24 MR. GOULD: All right. Anyone else?
25 MR. STORIE: My name is Blake Storie. I'm a

1 resident of Laguna Niguel, and I'm sure my wife is as
2 well in favor of any type of cleanup effort.
3 Just looking at table 3 on page 14 -- you have
4 to understand we're very new to this this evening -- the
5 estimated remedial time in shallow groundwater is the
6 quickest of the options you have there, which is good
7 news, I would think.
8 But the reverse on the estimated remediation
9 time of the principal aquifer, much -- is the longest of
10 all the options. I'm just curious as to why that would
11 be, why you would select that.
12 MR. GOULD: That's a fair question. Thank you.
13 MRS. BOOT-STORIE: I had a couple questions.
14 My name is Carol Boot-Storie. I'm a resident.
15 I want to make a statement.
16 MR. GOULD: If you could just spell your last
17 name, please.
18 MRS. BOOT-STORIE: B-o-o-t, dash, S-t-o-r-i-e.
19 First of all, I just want to say thank you
20 all for being here. Sometimes you don't realize how
21 much people appreciate your efforts given the turnout
22 here. But thank you all for all your hard work, many,
23 many years of hard work put together here.
24 A couple of questions. On the 93 years, I
25 know that there was a mention of greater than 4800 parts

1 per billion at one point. But in some of these cases,
2 you mentioned greater than 500 parts per billion.
3 Is there a time estimated that would say in 20
4 years, you would have the source down to 250 parts per
5 billion or down to 10 parts per billion? Is there a
6 time line, and how does that time line play out so that
7 90 -- 90 percent is salt in 20 years, and the remainder
8 goes down from there? So that question.
9 And is there a location where the cost
10 associated with each of these alternatives is
11 presented? And so we can sort of look at that and see
12 if that's -- okay. That's probably in there already.
13 And then just a general question. Is there
14 something that precipitated -- I know five years is a
15 long time for the negotiations.
16 Is there something that precipitated a final
17 date for that, whether it be political or whether it be
18 a regulatory agency that made that determination? Could
19 that have happened sooner? I know there are some smiles
20 going on there. Is there something that said, "Here's
21 the date, and here's why there's the date"? I'm
22 interested in knowing that.
23 And I think that would probably do it for the
24 moment. Thank you.
25 MR. GOULD: Great. Thanks.

Any others?

Okay. Well, certainly not the last opportunity to provide public comments. As I mentioned, please do speak to those perhaps in your neighborhood, those you work with, and encourage them to provide comments as well.

If that is it, then we'll go ahead and close out this portion. We will still stick around for a little bit just in case something else comes up in this meeting, you have some other informal questions, or you care to fill out one of the written forms here or you just want to pick up some additional information.

But short of doing all that, on behalf of all the speakers this evening, I definitely want to thank those community members that did come here this evening, especially the new faces.

It really is refreshing to see the new interested folks coming out and spending their evening here. Wish we would have had more. But short of that, at least you folks chose to be involved. And we really do appreciate that likewise.

So thank you very much for that. And let's go ahead and close that out. Thank you.

(Whereupon, the presentation/question session was concluded at 8:27 p.m.)

REPORTER'S CERTIFICATE

THE UNDERSIGNED SHORTHAND REPORTER DOES HEREBY DECLARE:

THAT THE FOREGOING WAS TAKEN BEFORE ME AT THE TIME AND PLACE THEREIN SET FORTH AND WAS RECORDED STENOGRAPHICALLY BY ME AND WAS THEREAFTER TRANSCRIBED.

IN WITNESS WHEREOF, I HAVE SUBSCRIBED MY NAME THIS 31st DAY OF December, 2001.

Janet M. Taylor, CSR #9463

ATTACHMENT C

WELL PERMITTING REGULATIONS, FORM, AND INFORMATION

ARTICLE 2. CONSTRUCTION AND ABANDONMENT OF WATER WELLS

Sec. 4-5-14. Purpose.

It is the purpose of this article to control the construction and reconstruction of wells to the end that the groundwater of this County will not be impaired in quality and that water obtained from such wells will be suitable for the purpose for which used and will not jeopardize the health, safety or welfare of the people of this County, and to provide for the destruction of abandoned wells or wells found to be public nuisances to the end that such wells will not impair the quality of groundwater or otherwise jeopardize the health, safety or welfare of the people of this County. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-15. Definitions.

As used in this article, the following words shall have the meanings provided in this section:

Abandoned and *abondonment.* The terms "abandoned" or "abandonment" shall apply to a well which has not been used for a period of one year, unless the owner declares in writing, to the Well Standards Advisory Board, his intention to use the well again for supplying water or other associated purpose (such as an observation well or injection well) and receives approval of such declaration from the Board. All such declarations shall be renewed annually and at such time be resubmitted to the Board for approval. Test holes and exploratory holes shall be considered abandoned twenty-four (24) hours after construction work has been completed, unless otherwise approved by the Health Officer.

Agricultural well. A water well used to supply water for irrigation or other agricultural purposes, including so-called stock wells.

Cathodic protection well. Any artificial excavation in excess of fifty (50) feet constructed by any method for the purpose of installing equipment or facilities for the protection, electrically, of metallic equipment in contact with the ground, commonly referred to as a cathodic protection well or a deep anode.

Community water supply well. A water well used to supply water for domestic purposes in systems subject to chapter 7 of part I of division 5 of the California Health and Safety Code.

Construct, reconstruct (construction, reconstruction). To dig, drive, bore, drill or deepen a well, or to reperforate, remove, replace or extend a well casing.

Destruction. The proper filling and sealing of a well that is no longer useful so as to assure that the groundwater is protected and to eliminate a potential physical hazard.

Electrical grounding well. Any artificial excavation in excess of fifty (50) feet constructed by any method for the purpose of establishing an electrical ground.

Health Officer. The Orange County Health Officer or his designee.

Individual domestic well. A water well used to supply water for domestic needs of an individual residence or commercial establishment.

Industrial well. A water well used to supply an industry on an individual basis.

Observation well. A well used for monitoring or sampling the conditions of a water-bearing aquifer, such as water pressure, depth, movement or quality.

Permit. A written permit issued by the Health Officer permitting the construction, reconstruction, destruction or abandonment of a well.

Person. Any person, firm, corporation or governmental agency.

Public nuisance. The term "public nuisance," when applied to a well, shall mean any well which threatens to impair the quality of groundwater or otherwise jeopardize the health or safety of the public.

Saltwater (hydraulic) barrier well. A well used for extracting water from or injecting water into the underground as a means of preventing the intrusion of saltwater into a fresh water-bearing aquifer.

Test or exploratory hole. An excavation used for determining the nature of underground geological or hydrological conditions, whether by seismic investigation, direct observation or any other means.

Well. Any artificial excavation constructed by any method for the purpose of extracting water from or injecting water into the underground, for providing cathodic protection or electrical grounding of equipment, for making tests or observations of underground conditions, or for any other similar purpose. Wells shall include, but shall not be limited to, community water supply wells, individual domestic wells, industrial wells, agricultural wells, cathodic protection wells, electrical grounding wells, test and exploratory holes, observation wells and saltwater (hydraulic) barrier wells, as defined herein, and other wells whose regulation is necessary to fulfill the purpose of this article as determined by the Well Standards Advisory Board. Wells shall not include:

(a) Oil and gas wells, geothermal wells or other wells constructed under the jurisdiction of the State Department of Conservation, except those wells converted to use as water wells;

(b) Wells used for the purpose of dewatering excavations during construction, or stabilizing hillsides or earth embankments; or

(c) Other wells whose regulation is not necessary to fulfill the purpose of this article as determined by the Well Standards Advisory Board. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-16. Well Standards Advisory Board.

A board consisting of five (5) members shall be appointed by the Board of Supervisors. One of the members appointed shall be a person employed in a supervisory capacity by a water purveyor in the County of Orange whose system relies to a significant extent upon groundwater; one shall be a registered civil engineer under the laws of the State of California who is experienced in sanitary engineering and who is qualified in the field of water supply; one shall be a person licensed in accordance with the provisions of the Contractors License Law, chapter 9, division 3 of the Business and Professions Code of the State of California; one shall be a person who is qualified in the field of water quality; and one shall be a registered geologist under the laws of the State of California who is qualified in the field of groundwater hydrology. One of the aforementioned persons shall be a representative of the Orange County Water District and one shall represent the Orange County Water Pollution Department.

Members shall serve for a three-year term and until the qualification of a successor, except that the first members shall serve staggered terms, as determined by the drawing of lots, in the following manner: One member shall serve for a one-year term of office; two (2) members shall serve for a three-year term of office. All terms shall end on the first Monday in January of the year in which such term is to expire. All members shall serve at the discretion of the Board of Supervisors; and any member or members of the Board, Committee or Commission may have his membership terminated by a majority vote of the Board of Supervisors. A vacancy thereby created shall be filled in the same manner as the original appointment.

Traveling and other expenses incurred by each Board member in the performance of his official duties shall be reimbursed at a rate of ten dollars ($10.00) per meeting. (Ord. No. 2607, § 1, 7-18-72; Ord. No. 3038, § 3, 2-14-78)

Sec. 4-5-17. Acts prohibited; permit required.

No person shall, within the unincorporated area of the County of Orange, construct or reconstruct any well unless such construction or reconstruction is carried out pursuant to and in conformance with a written permit issued for that purpose by the Health Officer as provided in this article.

Nor shall any such person abandon a well unless it has been destroyed pursuant to and in conformance with a written permit issued by the Health Officer.

Nor shall any such person violate the terms of any order issued by the Well Standards Advisory Board or the Health Officer, issued pursuant to this article. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-18. Permits.

Applications for permits shall be made to the Health Officer containing such information as he shall require.

Each application shall be accompanied by a fee which shall be established by the Board of Supervisors on the basis of the cost incurred in enforcing the provisions of this article. Fifty (50) per cent of the fee shall be returned to the applicant should the permit be denied or if the permit is canceled within sixty (60) days after issuance and no work has been done. A permit shall remain in effect for one year from date of issuance.

Permits may be issued subject to any condition or requirement found by the Health Officer to be necessary to accomplish the purposes of this article.

A permit may be canceled or the conditions amended by the Health Officer if he determines that to proceed with the work would result in a public nuisance or the permit holder has violated the terms of the permit or this article. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-19. Completion of work.

The permittee shall notify the Health Officer in writing upon completion of the work and no work shall be deemed to have been completed until such written notification has been received. A final inspection of the work shall be made by the Health Officer and no permittee shall be deemed to have complied with this article or his permit until such inspection has been performed. (Ord. No. 2607, § 1, 7-18-72)

Secs. 4-5-20—4-5-24. Reserved.

Sec. 4-5-25. Notice; cancellation or denial of permit.

In the event a permit is denied or canceled, the applicant or permit holder shall be given written notice by the Health Officer, which notice shall specify the reasons for his action and shall notify the applicant or permit holder of his right to request a hearing before the Well Standards Advisory Board within ten (10) days. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-26. Notice; public nuisance.

In the event the Health Officer determines that a well constitutes a public nuisance, he shall mail a written notice to the landowner and the permit holder, if other than the landowner. A copy of the notice shall be posted on the affected property. The notice shall state the specific facts giving rise to such nuisance; the corrective measures deemed necessary; and time, date and place at which a hearing shall be held by the Well Standards Advisory Board relating thereto, which date shall be not less than ten (10) nor more than thirty (30) days after the date such notice is mailed. The notice shall state that in the event the Board determines that a public nuisance exists a special assessment shall be imposed upon the land for any costs of abatement. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-27. Immediate abatement.

If the Health Officer finds that immediate action is necessary to prevent impairment of the groundwater or a threat to the health or safety of the public, he may abate the nuisance without giving notice. Within twenty-four (24) hours after initiating such abatement, the Health Officer shall give notice of a hearing before the Well Standards Advisory Board in the manner prescribed in section 4-5-26. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-28. Board hearing.

At the time fixed for the hearing, the Well Standards Advisory Board shall hear and consider all relevant testimony and evidence offered by the landowner, and by any other interested person. In the event the Board finds that a public nuisance exists, it shall direct the Health Officer to take any necessary action to protect the groundwater or the health and safety of the public, unless the situation is corrected by the landowner on or before a date to be specified by the Board. The costs of such corrective work by the Health Officer shall become a special assessment upon the land pursuant to section 4-5-29.

If the Board finds that a permit was improperly denied or canceled, it shall order the Health Officer to issue or reinstate such permit. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-29. Abatement costs a special assessment.

Upon a finding by the Well Standards Advisory Board that a well constitutes a public nuisance, all cost of abatement carried out under the terms of this article shall constitute a charge and special assessment upon the parcel of land involved. If such costs are not paid

within sixty (60) days, they shall then be declared a special assessment against that parcel as provided in Government Code, section 25845. Such special assessment shall be collected at the same time and in the same manner as ordinary County taxes are collected and shall be subject to the same penalties and the same procedures and sale in case of delinquency as provided for ordinary County taxes. The County shall retain the additional and independent right to recover its costs by way of civil action against the owner and person in possession or control, jointly or severally. (Ord. No. 2607, § 1, 7-18-72)

Sec. 4-5-30. Standards.

Standards for the construction, reconstruction, destruction, or abandonment of wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74, Chapter II and future amendments thereto. Standards for the construction, reconstruction, destruction or abandonment of cathodic protection wells and electrical grounding wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74-1, and future amendments thereto. Well standards may be modified by the Health Officer, with the advice and concurrence of the Well Standards Advisory Board, where required to cope with the local geological and groundwater conditions. (Ord. No. 2607, § 1, 7-18-72; Ord. No. 2691, § 1, 7-17-73)

Sec. 4-5-31. Penalty.

Any person who violates the terms of this article or any permit issued hereunder shall be guilty of a misdemeanor, punishable by a fine not exceeding five hundred dollars ($500.00) or by imprisonment not exceeding six (6) months, or by both such fine and imprisonment. Such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such violation is committed, continued or permitted and shall be subject to the same punishment as for the original offense. (Ord. No. 2607, § 1, 7-18-72)

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

MICHAEL SCHUMACHER, Ph.D.
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

JACK MILLER, REHS
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749
E-MAIL: environhealth@hca.co.orange.ca.us

SUBJECT: County Requirements for Well Permits

Dear Consultant/Contractor/Driller:

The Orange County Well Ordinance (County Ordinance No. 2607) requires that a permit be obtained prior to the construction or destruction of any well. In unincorporated County areas and in twenty-six of thirty-one Orange County cities, the Orange County Health Officer is responsible for enforcement of the well ordinance. In the remaining five cities (**Anaheim, Buena Park, Fountain Valley, Orange and San Clemente**), well ordinances are enforced by city personnel.

Permits are specifically required for all wells and soil borings except:

1. Vadose zone monitoring systems which are regulated by the administrative authority for enforcement of the Underground Storage Tank Laws and Regulations.

2. Wells used for the purpose of dewatering excavations during construction, or stabilizing hillsides or earth embankments.

3. Soil borings which meet <u>all</u> of the following conditions:

   a) less than 50 feet in depth;
   b) do not enter into groundwater;
   c) do not penetrate significant confining material beds.

To expedite the permit approval process, all the necessary attachments and applicable fees should be submitted with the permit application. The required attachments include a site plan showing the locations of all wells (proposed and existing), potential sanitary hazards and a well construction diagram. The diagram should include, at a minimum, materials of construction, depth of seals, borehole diameter, size of casing, depth to first groundwater and total depth of wells.

A permit shall remain in effect for one year from date of issuance.

PERMIT APPLICATION FEES (as of 8-1-99)

CONSTRUCTION	Fee
Water Well (Domestic, Irrigation or Industrial)	$467.00
Cathodic Protection Well	$398.00
Monitoring, Observation, Extraction or Injection Well, or Soil Boring	
Initial (First) Well	$260.00
Each Additional (same permit number, same site)	$132.00
Probe Surveys	$260.00
DESTRUCTION	
All Wells (each)	$83.00

REFUND AND LATE LEES

In the event the permit is denied or if the permit is canceled within sixty (60) days after issuance and no work has been performed, fifty percent (50%) of the fee shall be returned to the applicant. To avoid a twenty-five percent (25%) late charge, applicants are required to file for and receive approved permits prior to initiation of construction. Permit fees are not transferable between sites.

The County requires notification of at least **forty-eight hours** (48 hrs.) prior to beginning construction. Completion reports and well logs must be submitted to this Agency upon completion of work. The completion report should include the permit number, total number of wells, installed, location of wells, and as built details of well construction (e.g., depth of seals, perforation intervals, and groundwater depth).

Failure to comply with any condition of an approved permit or any aforementioned requirement is a violation of the Orange County Well Ordinance and a misdemeanor.

If you have any questions or wish to obtain a well permit application or information, please fee free to contact the County of Orange Health Care Agency, Water Quality Section at (714) 667-3657 or 667-3758.

Very truly yours,

Larry Honeybourne

Larry W. Honeybourne, REHS
Environmental Health Engineering Specialist
Water Quality Section
Environmental Health

LWH:dap

WELL PERM FEE.doc/c:wq folder

WATER WELLS

16.1 GENERAL

The District has an important interest, along with other appropriate regulatory agencies, in monitoring the groundwater basin located within its boundaries to obtain information as to its quantity, quality and other characteristics on an historical and ongoing basis. Many wells have been constructed and operated within the District for agricultural purposes by private users. From time to time, due to increasing urbanization, some of these wells are no longer needed as production wells. The purpose of this section is to regulate the construction and reconstruction of all existing and future water wells, to provide for the destruction or other use of abandoned wells, and to provide for the initiation and completion of corrective measures relative to wells within the District, to accomplish the following:

(1) To protect the quality of the groundwater within the District;

(2) To protect the health, safety, and welfare of the residents of the District;

(3) To protect the capability of the District to produce and distribute water for the use, benefit and protection of the residents of the District;

(4) To avoid premature destruction of wells that can be converted to monitoring or production use.

16.2 DEFINITIONS

(1) "Destruction" of a well means the complete filling and sealing of the well in accordance with the procedures outlined in the standards incorporated into this Section.

(2) "Well" means any excavation constructed by any method for the purpose of extracting water from or injecting water into the underground, for providing cathodic protection or electrical grounding of equipment, for making tests or observations of underground conditions, or for any other similar purpose. Wells shall include, but shall not be limited to, community water supply wells, individual domestic wells, industrial wells, agricultural wells, cathodic protection wells,

electrical grounding wells, test and exploratory holes, observation wells, saltwater barrier wells, and other wells whose regulation is necessary to fulfill the purpose of this chapter as determined by the Manager. Wells shall not include:

[a] Oil and gas wells, geothermal wells, or other wells constructed under the jurisdiction of the State Department of Conservation, except any such wells converted to use as water wells;

[b] Wells used for the purpose of dewatering excavations during construction, monitoring high groundwater during construction, monitoring or ascertaining the existence of groundwater contamination, or stabilizing hillsides or earth embankments; or

[c] Wells less than 50 feet in depth or 6 inches in diameter.

[d] Other wells whose regulation is not necessary to fulfill the purpose of this chapter as determined by the Manager.

(3) A well shall be presumed to be "abandoned" when it has not been used for its intended purpose for a period of one year.

16.3 PROHIBITED ACTS -- PERMITS REQUIRED

(1) No person, firm, or private or public corporation or agency shall construct or reconstruct any well within the boundaries of the District unless such construction or reconstruction is carried out pursuant to and in conformance with a written permit issued for that purpose by the Manager as provided in this Section.

(2) No owner or operator of an existing well shall allow it to remain in an unused condition except in accordance with Section 16.4. An used well determined to be abandoned shall be destroyed pursuant to and in conformity with the requirements of the District as set forth in this Section unless the Manager determines that the District desires to acquire and equip the well for monitoring or production purposes.

16.4 UNUSED WELLS - - DETERMINATION OF NONABANDONMENT

(1) If a well has not been used for any of the purposes set forth in the definition of "well" for a period of one year, such well shall be presumed to have been

abandoned, and the burden of proof shall thereupon be upon the owner or operator of the well to establish to the satisfaction of the Manager that the well has not been abandoned and that the owner and operator intends to continue to use the well for the intended purposes. The Manager shall require a written declaration under penalty of perjury concerning intended future use to be filed by the owner or operator of the well before the Manager determines that the well has not been abandoned. Application for the renewal of a determination of nonabandonment shall be required to be presented to the Manager by the owner or operator at the beginning of each calendar year. Such renewal applications shall be accompanied by a new written declaration filed under penalty of perjury. Test holes and exploratory holes shall be considered abandoned twenty-four hours after construction work has been completed unless otherwise determined by the Manager.

(2) In the event the Manager determines that a well is indeed abandoned, unless the Manager determines that the District desires to acquire and equip the well for monitoring or production purposes, the well shall be destroyed within thirty days in accordance with the provisions of this chapter. However, the owner shall be given written notice of this determination by the Manager. The notice shall specify the reasons for this decision and shall notify the owner of his right to request a hearing before the Board of Directors within ten days.

16.5 PERMITS

(1) Applications for permits to construct, reconstruct, or destroy any well shall be made to the Manager and shall contain or provide such information as he shall require.

(2) Each application shall be accompanied by a fee which shall be established by the Board of Directors. A permit shall remain in effect for one year from the date of issuance.

(3) Permits may be issued subject to any condition or requirement found by the Manager to be necessary to accomplish the purposes of this chapter.

(4) A permit may be canceled or the conditions amended by the Manager if he determines that to proceed with the work would result in a violation of the terms of the permit or of this Section.

(5) In the event that a permit is denied or canceled, the applicant or permit holder shall be given written notice by the Manager, which notice shall specify the reasons for his action, and shall notify the applicant or permit holder of his right to request a hearing before the Board of Directors within ten days.

16.6 COMPLETION OF WORK -- NOTICE TO MANAGER -- INSPECTION

The permittee shall notify the Manager in writing upon completion of the work performed under the permit, and no work shall be deemed to have been completed until such written notification has been received. A final inspection of the work shall be made by the Manager, and no permittee shall be deemed to have complied with the provisions of this chapter of his permit until such inspection has been performed and the work approved by the Manager.

16.7 NOTICE UPON DETERMINATION OF THREAT TO WATER QUALITY, HEALTH OR SAFETY

In the event the Manager determines that a well threatens to impair the quality of the groundwater or otherwise jeopardize the health or safety of the public, he shall send written notice to the owner and shall post a copy of the notice on the property. The notice shall state the specific facts relative to the condition, the corrective measures deemed necessary, and the date on or before which such measure shall be completed. The owner shall also be notified of his right to request a hearing before the Board of Directors within thirty days from the date such notice is issued.

16.8 IMMEDIATE ABATEMENT OF THREAT TO WATER QUALITY, HEALTH OR SAFETY

If the Manager finds that immediate action is necessary to prevent impairment of the groundwater or a threat to the health or safety of the public he may correct the condition without giving notice. The District may charge the cost of the corrective measure to the owner. However, within twenty-four hours after initiating such corrective measure, the Manager shall notify the owner of the time, date and place at which a hearing shall be held by the Board of Directors relating thereto; which date shall be not less than ten nor more than thirty days after the date of such notification.

16.9 BOARD OF DIRECTORS HEARING

(1) At the time fixed for a hearing before the Board of Directors concerning an abandoned well, a permit, or a threat to water quality, health or safety, as provided for in this chapter, the Board of Directors shall hear and consider all relevant testimony and evidence offered by the property owner and by any other interested person.

(2) If the Board of Directors determines that an unused well was incorrectly classified as abandoned or that a permit was improperly denied or canceled, it shall direct the Manager to reclassify the well or to issue or reinstate the permit.

(3) If the Board of Directors finds that a threat to water quality, health or safety, as determined by the Manager, does exist, then it shall direct the Manager to take any necessary action to protect the groundwater or the health and safety of the public unless the situation is corrected by the owner on or before a date to be specified by the Board of Directors. The cost of such corrective measures by the Manager shall be charged to the owner or operator.

(4) In instances where the Manager has corrected a condition under the immediate correction provision of Section 16.8, the Board of Directors shall ascertain and review the pertinent facts concerning the correction. If the Board of Directors determines that the Manager's actions were justified, then it shall direct that the cost be charged to the owner or operator.

16.10 STANDARDS FOR CONSTRUCTION, RECONSTRUCTION OR DESTRUCTION

Standards for the construction, reconstruction, or destruction of wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74, Chapter II, and future amendments thereto. Standards for the construction, reconstruction, or destruction of cathodic protection wells shall be the standards recommended in the State Department of Water Resources Bulletin No. 74-1, and future amendments thereto.

16.11 VIOLATION -- PENALTY

Any violation or failure to comply with any of the provisions of this Section shall be handled as provided in

herein and shall also be subject to Section 14 as applicable.

16.12 AGREEMENTS

The District may enter into agreements with property owners concerning the drilling or abandonment of wells and/or other matters covered in this Section, and providing for alternate or modified methods of meeting certain of the requirements contained herein. In such cases, the agreement(s) will govern as to the applicability of the affected requirements, in the area(s) subject to such agreements.

16.13 NO LIABILITY ASSUMED

Notwithstanding the provisions of this Section permitting or requiring the District or Manager to issue permits, make determinations and/or take corrective measures relative to construction, reconstruction abandonment and destruction of wells and quality of groundwater, the District assumes no liability to the property owners or operators of wells or any third parties, for the making of or failure to make any such determination, or the taking of or failure to take any such measure, or the issuing of or failure to issue any such permit.

APPLICATION FOR WELL CONSTRUCTION PERMIT

ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CA 92705-4720
(714) 667-3600
FAX: (714) 972-0749

WELL PERMIT NUMBER

CITY

DATE

L LOCATION (ADDRESS IF AVAILABLE)

NAME OF WELL OWNER

ADDRESS

CITY ZIP TELEPHONE

NAME OF CONSULTING FIRM

BUSINESS ADDRESS

CITY ZIP TELEPHONE

NAME OF DRILLING CO. C-57 LICENSE NO.

CITY ZIP TELEPHONE

TYPE OF WELL *(CHECK)*

- PRIVATE DOMESTIC ☐
- PUBLIC DOMESTIC ☐
- IRRIGATION ☐
- CATHODIC ☐
- MONITORING ☐
- SOIL BORING ☐
- OTHER_____ ☐
- TOTAL NUMBER _____

A. WELLS – SUBMIT A WELL CONSTRUCTION DIAGRAM (INCLUDE DIMENSIONS)

B. SOIL BORINGS AND PROBES –
TOTAL DEPTH _____
SEALING MATERIAL _____

C. PROPOSED START DATE _____

DIAGRAM OF WELL SITE *(Use additional sheets and/or attachments)*

☐ SITE PLAN ATTACHED

I hereby agree to comply in every respect with all requirements of the Health Care Agency and with all ordinances and laws of the County of Orange and of the State of California pertaining to well construction, reconstruction and destruction, including the requirements to maintain the integrity of all significant confining zones.

APPLICANT'S SIGNATURE DATE

PRINT NAME

PHONE NUMBER FAX NUMBER

FOR ACCOUNTING USE ONLY:

HSO NO. _____ CHECK NO. _____

DATE _____ AMOUNT _____

INTL. _____

APPROVAL BY OTHER AGENCIES:

JURISDICTION _____

REMARKS _____

AUTHORIZED SIGNATURE DATE

DISPOSITION OF PERMIT (DO NOT FILL IN):

☐ **APPROVED** SUBJECT TO THE FOLLOWING CONDITIONS:

A. NOTIFY THIS AGENCY AT LEAST **48 HOURS**

☐ PRIOR TO START.

☐ PRIOR TO SEALING THE ANNULAR SPACE OR FILLING OF THE CONDUCTOR CASING.

B. ☐ SUBMIT TO THE AGENCY WITHIN 30 DAYS AFTER COMPLETION OF WORK, A WELL COMPLETION REPORT AND/OR DRILLING LOGS. PLEASE REFERENCE PERMIT NO.

C. ☐ SECURE ALL MONITORING WELLS TO PREVENT TAMPERING.

D. ☐ OTHER _____

☐ **DENIED** _____

PERMIT ISSUED BY DATE

PRINT NAME PHONE NUMBER

WHEN SIGNED BY ORANGE COUNTY HEALTH CARE AGENCY REPRESENTATIVE, THIS APPLICATION IS A PERMIT.

ATTACHMENT D

MEMORANDUM OF AGREEMENT BETWEEN THE UNITED STATES DEPARTMENT OF THE NAVY AND THE CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Please note that a copy of the Memorandum of Agreement Between the United States Department of the Navy and the California Department of Toxic Substances Control is attached for informational purposes only and as a reference for the convenience of the reader of the Record of Decision. Contents of this memorandum are not subject to comment nor deemed to be an enforceable component of this Record of Decision.

Memorandum of Agreement Between
The United States Department of the Navy and
The California Department of Toxic Substances Control

Use of Model "Covenant to Restrict Use of Property" at Installations Being Closed and Transferred by the United States Department of the Navy

1. Background

   a. The purpose of this Memorandum of Agreement (MOA) is to formalize the use of two model environmental restriction covenants (attached) that have been drafted during negotiations between representatives of the United States Department of the Navy (DON) and the California Department of Toxic Substances Control (DTSC).

   b. Under CERCLA Sec. 104, as delegated to DON by E.O. 12580, and implemented pursuant to the National Contingency Plan (NCP – 40 CFR Sec. 300 et seq.) and 10 USC Sec. 2701, et seq., the cleanup of hazardous substances, pollutants and contaminants is required to be at a level that protects human health and the environment. As a result, this protection can be achieved at certain sites by the imposition of "institutional controls" (i.e., ICs – legal mechanisms to protect human health and the environment by restricting access or exposure to the contaminants in question) with or without underlying "engineering controls" (i.e., ECs – engineered mechanisms such as a cap on a landfill, designed to physically insure access or exposure to the contaminants in question is prevented). Collectively these ICs and ECs are called "land use controls" (LUCs).

   c. In the case of property being closed and transferred by DON to a nonfederal entity, it is necessary to insure that these LUCs stay in place and are honored by all future owners and occupants of the property in question, for as long as contamination is present at levels that do not permit unrestricted use. One key way such LUCs can be maintained is by DON's retention of sufficient legal title and interest to insure continuing enforcement of the terms of the LUCs. This retention would entail burdening such conveyances of title with deed covenants insuring that the deed transferring such property contain a formal restriction – a restrictive covenant – on the use of the property that will "run with the land," and is enforceable against the "servient estate" (i.e., all future owners of the land) and is retained by the United States, as represented by DON, acting as holder of the "dominant estate." In addition, DON can convey a separate and similar restrictive covenant to DTSC as provided in

Section 2 below.

d. In the State of California, such a restriction on the use of land, to protect human health and the environment is recognized by Section 1471 of the California Civil Code. This statute characterizes such a restrictive covenant as an "environmental restriction" and requires such words to be placed in the title of the document creating such an interest. DON has agreed to include such restrictive language in the deeds it executes where it imposes LUCs as a remedy under applicable law.

e. Similar to CERCLA, State environmental protection laws recognize the availability of using LUCs as remedies to protect human health and the environment. Currently, DTSC's authority under Chapter 6.5 and 6.8 of Division 20 of the California Health and Safety Code, provides statutory avenues to impose LUCs at a cleanup site to insure that the LUCs are honored by future owners. Chapter 6.5 is generally used when the cleanup site in question is one subject to the State's authorities under the hazardous waste facilities law, and Chapter 6.8 is generally used when the cleanup site in question is one subject to the State's equivalent to the federal CERCLA program.

f. In the case of property being closed and transferred to a nonfederal entity by DON where a cleanup remedy has used LUCs as a remedy as described above, DON and DTSC have a mutual interest in insuring that the "environmental restriction" imposed on the land is enforced for however long the protection of public health and the environment requires such restrictions.

g. As a result, DON and DTSC agree that it is in both parties' and the public's interests, that DTSC be in a position to enforce the "environmental restrictions" that the DON will be imposing on these transferring parcels of property. To this end, in addition to retaining the power to enforce protective covenants, DON agrees to convey a separate power to enforce such restrictive covenants to DTSC equivalent to DON's power to enforce any "environmental restrictions" burdening the transferring property by entering into a "Covenant to Restrict Use of Property." Under both Chapter 6.5 and Chapter 6.8, DTSC has the authority to monitor and enforce such "environmental restrictions" conveyed to it by the owner of property on which such an "environmental restriction" has been found necessary. Therefore, in consideration of DON's conveying such an interest, DTSC may implement as appropriate the various statutory authorities it possesses under Chapter 6.5 and Chapter 6.8 (as applicable) to insure these "environmental restrictions" are honored by all future owners and occupants.

2. Terms of Understanding:

a. DON and DTSC agree that in all future property transfers to a nonfederal agency, where DON is acting on behalf of the United States as the transferring or disposing agent, the applicable model "Covenant to Restrict Use of Property" attached to this MOU will be used throughout California when the proposed remedy involves imposing an IC (except those "early transfers" where 1) the transferee will perform the cleanup, and 2) the cleanup includes an IC in the remedy, and 3) has executed an order or enforceable agreement with DTSC or has entered into a Sec. 25222.1 agreement with DTSC, that calls for the transferee entering into a "Covenant to Restrict Use of Property" directly with DTSC).

b. DON and DTSC have entered into a number of Federal Facility Agreements and Federal Site Remediation Agreements for DON property. These Agreements generally call for coordination of the DON's satisfaction of its corrective action obligations under the Resource Conservation and Recovery Act (RCRA) and Health and Safety Code section 25200.10 with its responsibilities under CERCLA section 120(l), EO 12580, the Defense Environmental Restoration Program and the NCP. The Agreements recognize that the DON may satisfy some or all of its corrective action obligations through CERCLA response actions. Where such corrective action at hazardous waste management units is being satisfied through CERCLA, Attachment A shall be used. Attachment B is the model which will be used for hazardous waste management facilities not addressed in Federal Site Remediation or Federal Facility Agreements.

c. When issuing Proposed Plans for public comment, DON will attach a copy of this MOU and the appropriate model "Covenant to Restrict Use of Property" so as to assure the public that the specific LUC being proposed will be enforced, in part, by DON's retained power to enforce the deed covenants and conveyance of the power to enforce protective deed covenants to DTSC contemporaneously with the execution of the deed transferring DON's interests to the new owner.

d. In using these models to draft the appropriate "Covenant to Restrict Use of Property," DON's and DTSC's personnel will work collaboratively to develop the specific information applicable to the given site called for by Articles I (Statement of Facts) and IV (Restrictions) of the attached models. A final "Covenant to Restrict Use of Property" that is ready for signature for a given site, will be prepared in time to allow it to be

executed contemporaneously with the execution of the deed transferring DON's non-retained interests in the property to the new owner. In the case of "early transfers" where DON is performing the cleanup after the transfer, and is imposing an LUC at the time of the "early transfer" in support of its ongoing cleanup activities, the Parties recognize that the contents of Articles I and IV of the model covenants for such sites will likely not be as detailed as that suggested in the attached models. The degree of detail contained within the model covenant will be the information available as to the cleanup site, although the covenants must be adequate to protect human health and the environment to allow an early transfer. The form of remedy and any additional associated IC will be more fully developed once the remedy is selected and implemented.

e. The Parties recognize that given the need to tailor the terms of the "environmental restriction" to the remedy that is finally selected after seeking public comment on the Proposed Plan, the terms of the final "Covenant to Restrict Use of Property" may vary greatly from the draft proposal. The Parties recognize that the public should be given specific notice of this fact in the Proposed Plan.

f. The Parties recognize that remedies proposed by the DON will be submitted to DTSC for concurrence. However, there may be unresolved disagreements at some cleanup sites concerning the remedy being proposed by DON including, in particular, the scope and nature of the LUCs, and the terms of any underlying, proposed "Covenant to Restrict Use of Property." In such situations the Parties will use their best efforts to resolve all disputes informally. If the Parties are ultimately unable to resolve the issue in dispute, DON and DTSC reserve any rights they might have to take any action available under applicable state or federal law.

g. Either Party may terminate its involvement in this Agreement by giving thirty (30) days written notice to the other Party. Upon receipt of notice and the expiration of thirty days termination shall occur by operation of law.

Signed: _____ 10 MARCH 2000

F.R. Ruehe
Rear Admiral
United States Navy
Commander Navy Region Southwest

Date

Signed: Edwin F. Lowry 3/10/00

Edwin F. Lowry
Director
Department of Toxic Substances Control

Date

Attachment A: Model Site Mitigation Program "Environmental Restriction Covenant and Agreement"

Attachment B: Model Hazardous Waste Management Program/State Regulated Unit "Environmental Restriction Covenant and Agreement"

Approved as to form:

Date: 9 March 00 By: Mary Kay Fanyo

Approved as to form:

Date: March 16, 2000 By: [illegible]

MODEL SITE MITIGATION PROGRAM

DEED RESTRICTION

RECORDING REQUESTED BY: **[Covenantor's Name]** **[Street Address]** **[City]**, California **[Zip Code]** WHEN RECORDED, MAIL TO: Department of Toxic Substances Control Region ___ **[Street Address]** **[City]**, California **[Zip Code]** Attention: **[Name of Branch Chief]**, Chief **[Branch Designation]**	

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COVENANT TO RESTRICT USE OF PROPERTY

ENVIRONMENTAL RESTRICTION

(Re: *[Insert parcel number(s) and name of site property to be restricted.]*)

This Covenant and Agreement ("Covenant") is made by and between the United States of America acting by and through the Department of the Navy ("DON") (the "Covenantor"), the current owner of property situated in *[city]*, County of [ ], State of California, described in Exhibit "A", attached hereto and incorporated herein by this reference (the "Property"), and the State of California acting by and through the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471(c), Health and Safety Code Sections 25222.1 and 25355.5 the

Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials as defined in Health and Safety Code ("H&SC") section 25260. In addition, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104 (42 USC Section 9604), as delegated to the Covenantor by E.O. 12580, ratified by Congress in 10 USC Sec. 2701, et seq., and implemented by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP – 40 CFR Part 300) and implementing guidances and policies, the Covenantor has also determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as the result of the presence on the land of hazardous substances, pollutants and contaminants as defined in CERCLA Section 101 (42 USC Section 9601).

The Covenantor and the Department, collectively referred to as the "Parties", therefore intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health, safety and the environment.

The Covenantor retains sufficient legal title and interest in the subject property to insure continuing enforcement of the protective covenants and agreements contained within this Covenant to Restrict the Use of Property. Further in any subsequent transfers or conveyance of title to nonfederal entities the DON shall burden the property with additional deed covenants that insure that any subsequent deed or transfer contains the protective covenants and right of access and power to conduct monitoring of wastes retained on site. Those covenants and agreements shall be enforceable against the servient estate in that those protective covenants shall run with the land to

all successors and assigns.

ARTICLE I

STATEMENT OF FACTS

1.01 The Property, totaling approximately [acres] [square yards] is more particularly described and depicted in Exhibit "A", attached hereto and incorporated herein by this reference. ***[Exhibit "A" must include the legal description of the property used by the county recorder. This must include the particular description of the boundaries of the area to be subject to a particular use restriction. If the property does not already have a legal description (it generally will not if it is a portion of a larger piece of property) a survey will be required.]*** The Property is located in the area now generally bounded by ***[include narrative description of the area; this will typically be street names: e.g., Main Street on the north, Maple Street on the east, etc.]*** County of [ ], State of California.

1.02 ***[Use this paragraph if imposing additional restrictions on a portion of the Property, for example on a capped portion, or if for any other reason it is necessary to precisely identify any portion of the property, such as an area with groundwater monitoring wells. The purpose of this paragraph is to give the precise location of such areas where use restrictions generally will apply. Renumber following paragraphs accordingly.]*** A limited portion of the Property is more particularly described in Exhibit "B" which is attached and incorporated by this reference ("Capped Property") as defined below ***[or "(other identified) Property"]. [Exhibit B must include a legal description of the exact area(s) being restricted***

and any necessary diagram(s). This will generally require a legal survey and engineering drawing for the Cap or other area to be further restricted.] The [Capped *(or other description)*] Property is located in the area now generally bounded by [ ]. ***[Include language that generally describes the Capped or other identified Property.]*** The [Capped *(or other identified)* Property is also more specifically described as encompassing [ ] County Assessor's Parcel No.(s) [ ].

1.03 ***[Briefly describe the remedial measures implemented at the Property, including, if applicable, installation of a cap and construction and ongoing operation and maintenance of a groundwater treatment system, in order to identify the remaining contaminants and physical remedial measures on the Property that necessitate this deed restriction. This paragraph should also briefly discuss the regulatory context for the DON facility. Reference should be made to any applicable Federal Facility Agreement (FFA) or Federal Facility Site Remediation Agreement(FFSRA) and any corrective action obligations under RCRA or Chapter 6.5 of Division 20 of the Health and Safety Code covered by the FFA or FFSRA. This paragraph should refer to, and give the approval date for, the RAP, ROD, RAW or other decision document that selected the remedial measures at the Property and required this Covenant.]***

SAMPLE [For a facility which has an FFA or FFSRA and hazardous waste management units]: The DON and the Department entered into a Federal Facility Agreement (FFA) on [date]. Pursuant to that FFA, the DON may satisfy some or all of its corrective action obligations under the Resource Conservation and Recovery Act

(RCRA)(42 USC 6901 et seq)or California Health and Safety Code sectin 25200.10 through CERCLA response actions. ***{Proceed to additional SAMPLES as appropriate.]***

SAMPLE [For a property with remaining contamination, but no cap, O&M, or other ongoing response activities]: The Property is [a portion of a site] being remediated pursuant to a Record of Decision (ROD) pursuant to the Defense Environmental Restoration Program (DERP), 10 U.S.C. section 2701 et seq, and CERCLA; and a Remedial Action Plan (RAP) pursuant to Chapter 6.8 of Division 20 of the H&SC, under the oversight of the Department. The ROD/RAP provides that a deed restriction be required as part of the site remediation, because lead, which is a hazardous substance, as defined in H&SC section 25316, and a hazardous material as defined in H&SC section 25260 remains at depths of 10 feet or more below the surface of the Property. The DON circulated the ROD/RAP, for public review and comment. The ROD/RAP was approved by the DON and concurred in by the Department on [date], pursuant to which the Property was excavated to a depth of 10 feet, graded, then backfilled with clean soil.

SAMPLE [For a property with ongoing operation and maintenance of a monitoring or treatment system and/or cap. The exact provisions of this paragraph will vary depending upon the facts of the particular site or facility. The paragraph below is illustrative of the kind of information that should be included. Note specifically there is reference to a signed Operation and Maintenance Agreement.]: [Covenantor] ***[or party responsible for the activity, if different from***

Covenantor] is remediating the Property under the supervision and authority of the Department. The Property is [a portion of a site] being remediated pursuant to a Record of Decision (ROD) pursuant to the Defense Environmental Restoration Program (DERP), 10 U.S.C. section 2701 et seq; and a Remedial Action Plan (RAP) pursuant to Chapter 6.8 of Division 20 of the H&SC. Because hazardous substances, as defined in H&SC section 25316, which are also hazardous materials as defined in H&SC section 25260, including volatile organic compounds, total petroleum hydrocarbons, chlorinated benzenes and polychlorinated biphenyls, remain in the soil and groundwater in and under portions of the Property, the Remedial Action Plan provides that a deed restriction be required as part of the site remediation. The DON circulated the ROD/RAP for public review and comment. The ROD/RAP were approved by the DON and concurred in by Department on [*date*]. Remediation includes installing and maintaining a synthetic membrane cover ("Cap") over the Capped Property. The Cap consists of a low permeability synthetic membrane and other associated layers, as more particularly described in the engineering drawing attached as Exhibit "B" hereto. The response action also includes the installation and operation of: (1) a passive gas collection system on the Capped Property which removes volatile organic compounds migrating upward from under the Cap, (2) a vapor extraction system, which remediates certain volatile organic compound-impacted soils, and (3) groundwater monitoring wells ("Monitoring Wells"). The location of the gas collection system, vapor extraction system, and Monitoring Wells are shown on Exhibit "B". ***[This exhibit will have been identified in paragraph 1.02.]*** The operation and maintenance of the Cap, gas collection system, vapor extraction system, and Monitoring Wells is pursuant to an Operation and

Maintenance Manual incorporated into the Operation and Maintenance Agreement between [Covenantor] ***[or name of other entity]*** and the Department dated [ ]. ***[If an O&M Agreement has not been signed, the approval date for the O&M Manual or Plan should be referenced.]***

1.04 ***[This paragraph should set out specific information about the risk assessment findings relevant to the contaminants of concern remaining at the property, essentially the basis for the restrictions imposed by this covenant. The Restrictions in Paragraphs 4.01, and any requirement for Soil Management Activity and any Prohibited Activity must be linked to the contaminants and risk assessment as discussed in this paragraph. The following paragraph is given for purposes of illustration. Each site will have different facts; those should be developed in a manner similar to the sample paragraph given here. Land use must be consistent with the approved RAW, RAP or ROD and the health risk assessment.]***

SAMPLE: As detailed in the Final Health Risk Assessment ***[or other appropriate document]*** as proposed by the Covenantor and approved by the Department on [***date***], all or a portion of the surface and subsurface soils within 10 feet of the surface of the Property contain hazardous substances, as defined in H&SC section 25316, which include the following metal contaminants of concern in the ranges set forth below: arsenic (0.3 to 38.1 parts per million ("ppm"), beryllium (2.6 ppm), copper (4.6 to 756 ppm, and nickel (7.3-105 ppm). In addition, there are low pH soils. Based on the Final Risk Assessment the Department and the Covenantor have

concluded that use of the Property as a residence, hospital, school for persons under the age of 21 or day care center would entail an unacceptable cancer risk to the users or occupants of such property operated or occupied. The Department and the Covenantor have further concluded that the Property, as remediated, and operated or occupied subject to the restrictions of this Covenant, does not present an unacceptable threat to human safety or the environment, if limited to ***[as applicable:*** commercial and industrial, parks, open space,***[or other appropriate]]*** use.

SAMPLE: [Note: Groundwater restrictions in Paragraph 3.04 must be based on a discussion of what contaminants are found in groundwater at the site, and what the drinking water standards are.]

Groundwater at the Property is found 15 to 20 feet below ground surface. Contaminants in the groundwater include benzene (50- 123 ppm), chromium (75- 213 ppm) and TCE (350-780 ppm). California drinking water standards are benzene at 0.08 ppm, chromium at 30 ppm and TCE at 5 ppm. The Department and the Covenantor concludes that the groundwater presents an unacceptable threat to human health and safety absent an environmental restriction to eliminate exposure to such levels of groundwater.

ARTICLE II

DEFINITIONS

2.01 Department. "Department" means the State of California by and through the Department of Toxic Substances Control and includes its successor agencies, if

any.

2.02 Owner. "Owner" shall include the Covenantor's successors in interest, and their successors in interest, including heirs and assigns, during his or her ownership of all or any portion of the Property.

2.03 Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.04 Covenantor. "Covenantor" shall mean the United States acting through the Department of the Navy (DON).

ARTICLE III

GENERAL PROVISIONS

3.01 Restrictions to Run with the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These Restrictions are consistent with the separate restrictions placed in the deed by and in favor of the Covenantor, conveying the Property from the Convenantor to its successor in interest described above. Each and every Restriction: (a) runs with the land in perpetuity pursuant to H&SC sections 25222.1 25355.5(a)(1)(C) and Civil Code section 1471; (b) inures to the benefit of and passes with each and every portion of the Property; (c) shall apply to and bind all subsequent Occupants of the Property; (d) is for the benefit of, and is enforceable by the Department; and (e) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02 Binding upon Owners/Occupants. Pursuant to H&SC sections 25222.1, 25355.5(a)(1)(C), this Covenant binds all Owners of the Property, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners,

heirs, successors, and assignees. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the Department.

3.03 Written Notice of Hazardous Substance Release. The Owner shall, prior to the sale, lease, or rental of the Property, give written notice to the subsequent transferee that a release of hazardous substances has come to be located on or beneath the Property, pursuant to Health and Safety Code section 25359.7. Such written notice shall include a copy of this Covenant. *[This last sentence is optional, to be used at sites where it is important that buyers and tenants be specifically aware of the ongoing remediation and their obligations.]*

3.04 Incorporation into Deeds and Leases. The Restrictions set forth herein shall be incorporated by reference in each and all deeds and leases for any portion of the Property.

3.05 Conveyance of Property. The Owner shall provide notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding mortgages, liens, and other non-possessory encumbrances). The Department shall not, by reason of this Covenant alone, have authority to approve, disapprove, or otherwise affect a conveyance, except as otherwise provided by law, by administrative order, or by a specific provision of this Covenant.

ARTICLE IV

RESTRICTIONS

[The following examples are intended to be illustrative. Not all of them will be

applicable. The restrictions for a particular property should have a direct relationship to what the Health Risk Assessment said was appropriate for use at the site. The restrictions must also protect the integrity and physical accessibility of, and legal rights of access to, any ongoing remediation facilities at the site.]

4.01 Prohibited Uses. The Property shall not be used for any of the following purposes: ***[Note: These prohibitions must be based on the appropriate decision documents as set forth in Paragraphs 1.03 and 1.04]***

[Sample provisions:]

(a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation.

(b) A hospital for humans.

(c) A public or private school for persons under 21 years of age.

(d) A day care center for children.

4.02. Soil Management ***[Note: The basis for the soil restrictions must be in Paragraphs 1.03 and 1.04]***

[Sample provisions]

(a) No activities that will disturb the soil [at or below [ ] feet below grade] (e.g., excavation, grading, removal, trenching, filling, earth movement or mining) shall be allowed on the Property without a Soil Management Plan and a Health and Safety Plan approved by the Department.

(b) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of

state and federal law.

(c) The Owner shall provide the Department written notice at least fourteen (14) days prior to any building, filling, grading, mining or excavating in the Property [more than [ ] feet below the soil surface] [which will remove more than [ ] cubic yards of soil].

4.03 Prohibited Activities. ***[This paragraph will not be applicable to all sites. If not used, renumber accordingly. If there are groundwater restrictions, the basis must be in Paragraphs 1.03 and 1.04]*** The following activities shall not be conducted at the Property:

[Sample provisions]

(a) Raising of food (agricultural products intended for human consumption or use, including but not limited to food, cattle, fibers, including cotton).

(b) Drilling for [drinking irrigation] water, oil, or gas [without prior written approval by the Department].

[or] (b) Extraction of groundwater for purposes other than site remediation or construction dewatering.

[The following paragraphs are samples of restrictions that may be applicable when there is a cap, vapor and/or gas collection system, and/or groundwater monitoring system.]

4.04 Non-Interference with Cap [and Vapor Extraction System (VES)] and [Groundwater Capture System (GCS)].

[Sample provisions:]

(a) Activities that may disturb the Cap (e.g. excavation, grading, removal, trenching, filling, earth movement, or mining) shall not be permitted on or within _____ feet of the Capped Property without prior review and approval by the Department. ***[Similar restrictions may be appropriate for other ongoing remediation systems.]***

(b) All uses and development of the Capped Property shall preserve the integrity [***(if appropriate:)*** **and physical accessibility]** of the Cap. ***[Extend to other systems as appropriate.]***

(c) The Cap shall not be altered without written approval by the Department.

(d) The Owner shall notify the Department of each of the following: (i) the type, cause, location and date of any damage to the Cap and (ii) the type and date of repair of such damage. Notification to the Department shall be made as provided below within ten (10) working days of both the discovery of any such disturbance and the completion of any repairs. Timely and accurate notification by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners and Occupants. ***[Extend to other systems as appropriate.]***

4.05 Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

ARTICLE V

ENFORCEMENT

5.01 Enforcement. Failure of the Owner or Occupant to comply with any of the

Restrictions specifically applicable to include grounds for the Department to require that the Owner modify or remove any improvements ("Improvements" herein shall mean all buildings, roads, driveways, and paved parking areas), constructed or placed upon any portion of the Property in violation of the Restrictions. Violation of this Covenant by the Owner or Occupant may result in the imposition of civil and/or criminal remedies including nuisance or abatement against the Owner or Occupant as provided by law. The State of California shall have all remedies as provided at in California Civil Code Section 815.7 as that enactment may be from time to time amended.

ARTICLE VI

VARIANCE AND TERMINATION

6.01 Variance. The Owner, or with the Owner's consent, any Occupant, may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with H&SC section 25233. The Department will grant the variance only after finding that such a variance would be protective of human, health, safety and the environment.

6.02 Termination. The Owner, or with the Owner's consent, any Occupant, may apply to the Department for a termination of the Restrictions or other terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with H&SC section 25234. No termination or other terms of this Covenant shall extinguish or modify the retained interest held by the United States.

ARTICLE VII

MISCELLANEOUS

7.01 No Dedication Intended. Nothing set forth in this Covenant shall be

construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.02 Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of [name of county] within ten (10) days of the Covenantor's receipt of a fully executed original.

7.03 Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner: *[include name and address of Owner and name of person to receive service]*

To Department: *[title and address of Regional Branch Chief.]*

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

7.04 Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05 Statutory References. All statutory references include successor provisions.

IN WITNESS WHEREOF, the Parties execute this Covenant.

Covenantor: ***[name of Covenantor]***

By: _____

Title: ***[signatory's name and title]***

Date: _____

Department of Toxic Substances Control

By: _____

Title: ***[signatory's name and title]***

Date: _____

Approved as to form:

Date: _____ By: _____

Approved as to form:

Date: _____ By: _____

STATE OF CALIFORNIA)
)
COUNTY OF _____)

On this _____ day of _____, in the year _____,

before me _____, personally appeared

_____,

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is /are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

MODEL HAZARDOUS WASTE MANAGEMENT PROGRAM

DEED RESTRICTION

RECORDING REQUESTED BY:
[Covenantor's Name]
[Street Address]
[City], California **[Zip Code]**

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control
Region ___
[Street Address]
[City], California **[Zip Code]**
Attention: **[Name of Branch Chief]**, Chief
[Branch Designation]

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COVENANT TO RESTRICT USE OF PROPERTY

ENVIRONMENTAL RESTRICTION

(Re: *[Insert parcel number(s) and name of site property to be restricted.]*)

This Covenant and Agreement ("Covenant") is made by and between the United States of America acting by and through the Department of Navy or "DON" (the "Covenantor"), the current owner of certain property situated in *[city]*, County of _____, State of California, described in Exhibit "A", attached hereto and incorporated herein by this reference (the "Property"), and the State of California acting by and through the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code section 1471(c), the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a

result of the presence on the land of hazardous materials as defined in Health and Safety Code ("H&SC") section 25260. In addition, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104 (42 USC Section 9604), as delegated to the Covenantor by E.O. 12580, ratified by Congress in 10 USC Sec. 2701, et seq., and implemented by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP – 40 CFR Part 300) and implementing guidances and policies, the Covenantor (DON) has also determined that this Covenant is reasonably necessary to protect present or future human health and safety and the environment as the result of the presence on the land of hazardous substances, pollutants and contaminants as defined in CERCLA Section 101 (42 USC Section 9601).

The Covenantor and the Department, collectively referred to as the "Parties", therefore intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health, safety and the environment.

The Covenantor retains sufficient legal title and interest in the subject property to insure continuing enforcement of the protective covenants and agreements contained within this Covenant to Restrict the Use of Property. Further in any subsequent transfers or conveyance of title to nonfederal entities the DON shall burden the property with additional deed covenants that insure that any subsequent deed or transfer contains the protective covenants and right of access and power to conduct monitoring interest contained herein and of wastes retained on site. Those covenants and agreements shall be enforceable against the servient estate in that those protective covenants shall run with the land to all successors and assigns.

ARTICLE I

STATEMENT OF FACTS

1.01 The Property, totaling approximately [acres] [---- square yards] is more particularly described and depicted in Exhibit "A", attached hereto and incorporated herein by this reference. *[Exhibit "A" must include the legal description of the property used by the county recorder. This must include the particular description of the boundaries of the area to be subject to a specific use restriction. A survey may be required].* The Property is located in the area now generally bounded by *[include narrative description of the area; this will typically be street names: e.g. Main Street on the north, Maple Street on the east, etc.]* County of [ ], State of California.

1.02 *[Use this paragraph if imposing additional restrictions on a portion of the Property, for example on a capped portion, or if for any other reason it is necessary to precisely identify any portion of the property, such as an area with groundwater monitoring wells. The purpose of this paragraph is to give the precise location of such areas where use restrictions will apply. Renumber following paragraphs accordingly]* A limited portion of the Property is more particularly described in Exhibit "B" which is attached and incorporated by this reference ("Capped Property" or "[*other identified*] Property"). *[Exhibit B must include a legal description of the exact area(s) being restricted and any necessary diagram(s). This will generally require a legal survey and engineering drawing for the Cap or other area to be further restricted.].* The [Capped or {other identified}] Property is located in the area now generally bounded by _____. *[include language that generally describes the Capped or other identified Property]* The

[Capped or {other identified}] Property is also more specifically described as encompassing xxxx County Assessor's Parcel numbers ---.

1.03 *[Briefly describe the regulatory oversight of the facility by the Department and the CERCLA decisions including any applicable Federal Facility Agreement (FFA) or Federal Facility site Remediation Agreement (FFSRA) and implementing activities of the Covenantor, the remedial activities that have occurred at the Property, including, if applicable, installation of a cap and construction and ongoing operation and maintenance of a groundwater treatment system. This paragraph should refer to the Closure Report or other decision document such as a ROD which approved the remedial activities at the Property and required this Covenant. The paragraph needs to identify the contaminants and physical remedial measures on the Property which necessitate this deed restriction.]*

Since [*date*] the Department [*or,* the Department's predecessor in interest (California Department of Health Services)] authorized this [treatment], [storage], [disposal] facility ("Facility") pursuant to an [interim status document] [permit]. Under this authorization the Site was a hazardous waste facility, regulated by the Department, subject to the requirements of the California Hazardous Waste Control Law ("HWCL"), at Health and Safety Code ("H&S Code") section 25100 et seq., and the federal Resource Conservation and Recovery Act ("RCRA"), at 42 U.S.C. section 6901 et seq. Pursuant to the closure requirements of the HWCL, including H&S Code section 25246 and post-closure notices provisions of Title 22 California Code of Regulations [section 66265.119(b) for interim status hazardous waste facilities] [*or* 66264.119(b) for permitted hazardous waste facilities]] [*or, if restrictions required for permit:* corrective

action requirements of the HWCL, including H&S Code Section 25200.10] the Department is requiring this Covenant as part of the [facility closure] [corrective action] [permitting] of the facility. The Department circulated a [Closure Plan] [Remedial Measures Study] [*other appropriate document*], which contained a Final Health Risk Assessment [and/or Remedial Goals document], together with a draft [Environmental Impact Report] [Negative Declaration] pursuant to the California Environmental Quality Act, Public Resources Code section 21000 et seq for public review and comment from [*date*] to [*date*]. Because hazardous wastes, which are also hazardous materials as defined in Health and Safety Code sections 25117 and 25260, including [list hazardous wastes] remain in the [soil] and [groundwater] at the Property, the [Closure Plan] [Remedial Measures Study] provided that a deed restriction would be required as part of the facility remediation. The Department approved the [Closure Plan] [Remedial Measures Study] [*other appropriate document*] together with the [*environmental document*] on [*date*].

Pursuant to these documents, the Property was [*describe remedial actions taken which relate to what is left on the property. This description must include installation of any physical remedial measures. The description must identify what contaminants remain on the Property.*]

SAMPLE: Hazardous wastes, which are also hazardous materials as defined in H&S Code sections 25117 and 25260, and are CERCLA hazardous substances, pollutants or contaminant, including xxxx and yyyy, remain in the soil and groundwater at the Property. Remediation includes installing and maintaining a synthetic membrane cover ("Cap") over the Capped Property. The Cap consists of a low permeability

synthetic membrane and other associated layers over the hazardous wastes and materials, as more particularly described in the engineering drawing attached as Exhibit "B" hereto. The Remedial Measure also includes the installation and operation of: (1) a passive gas collection system ("GCS") on the Capped Property which removes miscellaneous gas/vapors migrating upward from under the Cap, (2) a vapor extraction system ("VES"), which remediates certain volatile organic compound-impacted soils, and (3) groundwater monitoring wells ("Monitoring Wells"). The location of the GCS, VES and Monitoring Wells are shown on the map attached as exhibit "--". The operation and maintenance ("O&M") of the Cap, GCS, VES, and Monitoring Wells is pursuant to an O&M Manual incorporated into the O&M Agreement between [Covenantor] *[or name of other entity]* and the Department dated September 20, 1995. *[If an O&M Agreement has not been signed, the approval date for the O&M Manual or Plan should be referenced]*

1.04 *[This paragraph should set out specific information about the risk assessment findings relevant to the contaminants of concern remaining at the property, essentially the basis for the restrictions imposed by this covenant. The Restrictions in Paragraphs 4.01, and any requirement for Soil Management Activity and any Prohibited Activity must be linked to the contaminants and risk assessment as discussed in this paragraph. The following paragraph is given for purposes of illustration. Each site will have different facts; those should be developed in a manner similar to the sample paragraph given here. You must consult with the assigned toxicologist about what are the appropriate land uses.]*

SAMPLE: As detailed in the Final Health Risk Assessment *[or other appropriate*

document] as proposed by the Covenantor and approved by the Department on *[date]*, all or a portion of the surface and subsurface soils within 10 feet of the surface of the Property contain hazardous wastes and hazardous materials, as defined in H&S Code section 25117 and 25260, which include one or more of the following metal contaminants of concern in the ranges set forth below: arsenic (0.3 to 38.1 parts per million ("ppm"), beryllium (2.6 ppm), copper (4.6 to 756 ppm, and nickel (7.3-105 ppm). In addition, there are low pH soils. Based on the Final Risk Assessment the Department and the Covenantor have concluded that use of the Property as a residence, hospital, school for persons under the age of 21 or day care center would entail an unacceptable cancer risk to the users or occupants of such property. The Department and the Covenantor have further concluded that the Property, as remediated, and operated or occupied subject to the restrictions of this Covenant, does not present an unacceptable threat to human safety or the environment, if limited to *[as applicable:* commercial and industrial use, parks, open space, [or other appropriate] use*]*.

SAMPLE [Note: Groundwater restrictions in Paragraph 3.04 must be based on a discussion of what contaminants are found in groundwater at the site, and what drinking water standards are.]: Groundwater at the Property is first found at 15 to 20 feet below ground surface. Contaminants in the groundwater include benzene (50- 123 ppm), chromium (75- 213 ppm) and TCE (350-780 ppm). California drinking water standards are benzene at .08 ppm, chromium at 30 ppm and TCE at 5 ppm. The Department and the Covenantor concludes that the groundwater presents an unacceptable threat to human health and safety absent an environmental restriction to eliminate exposure to such levels of groundwater.

ARTICLE II

DEFINITIONS

2.01 Department. "Department" shall mean the State of California by and through the California Department of Toxic Substances Control and shall include its successor agencies, if any.

2.02 Owner. "Owner" shall include the Covenantor's successor's in interest, and their successors in interest, including heirs and assigns, during his or her ownership of all of any portion of the Property.

2.03 Occupant. "Occupant" shall mean Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.04 Covenantor. "Covenantor" shall mean the United States acting through the Department of the Navy (DON).

ARTICLE III

GENERAL PROVISIONS

3.01 Restrictions to Run With the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), upon and subject to which the [Property] [Capped Property] [Restricted Property] and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These Restrictions are consistent with the separate restrictions placed in the deed by and in favor of the Covenantor, conveying the Property from the Covenantor to its successor in interest described above. Each and every one of the Restrictions: (a) shall run with the land in perpetuity pursuant to H&SC sections 25202.5, and 25202.6, and Civil Code section 1471; (b) shall inure to the benefit of and pass with each and every portion of the Property; (c) shall apply to and bind all subsequent Occupants of the Property; (d) are for the benefit of, and shall be enforceable by the State of California; and (e) are imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02 Binding Upon Owners/Occupants. Pursuant to Health and Safety Code section 25202.5(b), this Covenant shall be binding upon all of owners of the land, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the covenantee(s) herein.

3.03 Written Notice of Hazardous Substance Release. The Owner shall, prior to the sale, lease, or rental of the Property, give written notice to the subsequent

transferee that a release of hazardous substances has come to be located on or beneath the Property, pursuant to Health and Safety Code section 25359.7. Such written notice shall include a copy of this Covenant. *[This last sentence is optional, to be used at sites where it is important that buyers and tenants be specifically aware of the ongoing remediation and their obligations]*

3.04 Incorporation into Deeds and Leases. The Restrictions set forth herein shall be incorporated by reference in each and all deeds and leases for any portion of the Property.

3.05 Conveyance of Property Covenantor agrees that the Owner shall provide notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding mortgages, liens, and other non-possessory encumbrances). The Department shall not, by reason of this Covenant alone, have authority to approve, disapprove, or otherwise affect such conveyance. *[This paragraph is optional, to be used, for example, at sites with groundwater treatment systems that will require access by the Department and by the entity responsible for O&M.]*

ARTICLE IV

RESTRICTIONS

[The following examples are intended to be illustrative. Not all of them will be applicable. The restrictions for a particular property should have a direct relationship to what the Health Risk Assessment said was ok/appropriate for use at the site. The toxicologist must be involved with drafting the Restrictions. The restrictions must also protect the integrity of, and access to, any ongoing remediation facilities at the site.]

4.01 Prohibited Uses. The Property shall not be used for any of the following purposes: *[Note: These prohibitions must be based on the facts and Health Risk Assessment as set forth in Paragraph 1.04]*

[sample provisions]

(a) A residence, including any mobile home or factory built housing, constructed or installed for use as residential human habitation.

(b) A hospital for humans.

(c) A public or private school for persons under 21 years of age.

(d) A day care center for children.

4.02 Soil Management *[Note: The basis for the soil restrictions must be in Paragraph 1.04]*

[sample provisions]

(a) No activities which will disturb the soil *[*at or below xxx feet below grade*]* (e.g., excavation, grading, removal, trenching, filling, earth movement or mining) shall be permitted on the Property without a Soil Management Plan and a Health and Safety Plan submitted to the Department for review and approval.

(b) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

(c) The Owner will provide the Department written notice at least fourteen (14) days prior to any building, filling, grading, mining or excavating in the Property [more than feet below the soil surface] [which will remove more than cubic yards of soil].

4.03 Prohibited Activities. *[This paragraph will not be applicable to all sites. If*

not used, renumber accordingly. If there are groundwater restrictions, the basis must be in Paragraph 1.04] The following activities shall not be conducted at the Property: *[sample provisions]*

(a) No raising of agricultural products intended for human consumption or use, including but not limited to food,cattle, fibers including, cotton) shall be permitted on the property.

(b) No drilling for *[*drinking/IRRIGATION *]* water, oil, or gas shall be permitted on the Property *[*without prior written approval by the Department*]. [or]* (b) No groundwater shall be extracted on the Property for purposes other than site remediation or construction dewatering. *[The following paragraphs are samples of restrictions that may be applicable when there is a cap, vapor and/ or gas collection system, and/or groundwater monitoring system.]*

4.04 <u>Non-Interference with Cap [and VES] and [GCS]</u>.

[sample provisions]

(a) No activities which will disturb the Cap (e.g. excavation, grading, removal, trenching, filling, earth movement, or mining) shall be permitted on or within _____feet of the Capped Property without prior review and approval by the Department. *[Similar restrictions may be appropriate for other ongoing remediation systems.]*

(b) All uses and development of the Capped Property shall preserve the integrity of the Cap. *[Extend to other systems as appropriate.]*

(c) Any proposed alteration of the Cap shall require written approval by the Department.

(d) The Owner shall notify the Department of each of the following: (i) The

type, cause, location and date of any disturbance to the Cap which could affect the ability of the Cap to contain subsurface hazardous wastes or hazardous materials in the Capped Property, and (ii) the type and date of repair of such disturbance. Notification to the Department shall be made as provided below within ten (10) working days of both the discovery of any such disturbance(s) and the completion of any repairs. Timely and accurate notification by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners. *[Extend to other systems as appropriate.]*

4.05 Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health and safety and the environment.

ARTICLE V

ENFORCEMENT

5.01 Enforcement. Failure of the Owner or Occupant to comply with any of the Restrictions specifically applicable to it shall be grounds for the Department, by reason of this Covenant, to require that the Owner modify or remove any improvements ("Improvements" herein shall include all buildings, roads, driveways, and paved parking areas, constructed or placed upon any portion of the Property constructed in violation of the Restrictions). Violation of this Covenant by the Owner or Occupant may result in the imposition of civil and/or criminal remedies including nuisance or abatement against the Owner or Occupant as provided by law. The State of California shall have all remedies as provided in California Civil Code, Section 815.7, as that enactment may

be from time to time amended.

ARTICLE VI

MODIFICATION AND TERMINATION

6.01 Modification. Any Owner or, with the Owner's written consent, any Occupant of the Property or any portion thereof may apply to the Department for a written modification from the provisions of this Covenant. Such application shall be made in accordance with H&S Code section 25202.6. The Department will grant the modification only after finding that such a modification would be protective of human health, safety and the environment.

6.02 Termination. Any Owner, and/or, with the Owner's written consent, any Occupant of the Property, or any portion thereof, may apply to the Department for a termination of the Restrictions or other terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with H&S Code section 25202.6. The Department will grant the termination only after finding that such a termination would be protective of human health, safety and the environment. No termination of the Restrictions or other terms of this Covenant shall extinguish or modify the retained interest held by the United States.

ARTICLE VII

MISCELLANEOUS

7.01 No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

7.02 Recordation In accordance with HSC Section 25235, the Department will record this Covenant, with all referenced Exhibits, in the County of [name of county] within ten (10) days of the Department's receipt of a fully executed original.

7.03 Notices. Whenever any person gives or serves any notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Owner: *[include name and address of Owner and name of person to receive service]*

To Department: *[include name, address, and appropriate name of Department person to be served]*

Any party may change its address or the individual to whose attention a notice is to be sent by giving written notice in compliance with this paragraph.

7.04 Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

7.05 Statutory References. All statutory references include successor provisions.

IN WITNESS WHEREOF, the Parties execute this Covenant.

"Covenantor"

Date:_____ By:_____

"Department"

Date:_____ By:_____

Approved as to form:

Date: _____ By: _____

Approved as to form:

Date: _____ By: _____

STATE OF CALIFORNIA)
)
COUNTY OF _____)

On this _____ day of _____, in the year _____,

before me _____, personally appeared

_____,

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is /are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

ATTACHMENT E

COPY OF SETTLEMENT AGREEMENT AMONG THE SETTLING FEDERAL AGENCIES (SFA), ORANGE COUNTY WATER DISTRICT (OCWD), AND IRVINE RANCH WATER DISTRICT (IRWD) IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO GROUNDWATER REMEDIATION

Please note that a copy of the Settlement Agreement for groundwater at Former MCAS El Toro is attached for informational purposes only and as a reference for the convenience of the reader of the Record of Decision. Contents of this agreement are not subject to comment nor deemed to be an enforceable component of this ROD.

SETTLEMENT AGREEMENT
AMONG THE SETTLING FEDERAL AGENCIES (SFA), ORANGE COUNTY WATER DISTRICT (OCWD), AND IRVINE RANCH WATER DISTRICT (IRWD) IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO GROUNDWATER REMEDIATION

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AGREEMENT

This Settlement Agreement (hereinafter referred to as "Settlement Agreement" or "Agreement") is made and entered into by and among the Orange County Water District ("OCWD"), a Special Governmental District organized under and existing pursuant to the Orange County Water District Act, Ch. 924, Stats. 1933, as amended, the Irvine Ranch Water District ("IRWD"), and the Settling Federal Agencies ("SFA") (defined as including the United States, its agencies, departments, and instrumentalities and hence including the Department of the Navy ["DoN"] but excluding the United States Environmental Protection Agency in its regulatory capacity), concerning water supply development and groundwater remediation in areas on and adjacent to the former United States Marine Corps Air Station ("MCAS") El Toro facility in Orange County, California.

RECITALS

A. WHEREAS, the former MCAS El Toro facility has been placed by the United States Environmental Protection Agency ("USEPA") on the National Priorities List ("NPL") promulgated by USEPA pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, ("CERCLA"), 42 U.S.C. Section 9605;

B. WHEREAS, DoN, of which the United States Marine Corps ("USMC") is a component, USEPA, and the State of California Environmental Protection Agency ("CALEPA") have entered into a Federal Facility Agreement ("FFA") pursuant to Section 120 of CERCLA, 42 U.S.C. Section 9620, requiring that DoN, through the USMC, investigate and remediate releases of hazardous substances at the former MCAS El Toro NPL site ("Site") (a copy of the FFA is attached as Appendix 1);

C. WHEREAS, pursuant to the FFA, DoN has prepared Work Plans for Remedial Investigation/Feasibility Studies ("RI/FSs") for Operable Units 1 and 2A of the Site ("OU1" and "OU2A"), and these Work Plans have been approved by USEPA and CALEPA and require that DoN investigate and characterize the nature and extent of DoN's releases of hazardous substances, pollutants or contaminants to groundwater at the Site, and that DoN evaluate remedial alternatives addressing such releases;

D. WHEREAS, OCWD is a local government agency and political subdivision of the State of California and has the statutory authority and duty to manage, regulate, replenish, and protect the quality of the groundwater supplies within its boundaries for the beneficial use of the approximately two million (2,000,000) residents and water users who rely upon those groundwater resources to satisfy all or a portion of their beneficial water needs;

E. WHEREAS, IRWD is a California Water District formed and existing pursuant to California Water Code Section 34,000, et seq., and owns and operates a water distribution system for the purpose of distributing and selling potable and non-potable water to its customers and water users within its service area (the City of Irvine and other lands within the central portion of Orange County, California within the boundaries of OCWD jurisdiction);

F. WHEREAS, it is OCWD's and IRWD's position that the releases of volatile organic compounds ("VOCs") to soil and groundwater from DoN's operations at the Site have interfered with the ability of OCWD and IRWD to manage and use such groundwater;

G. WHEREAS, OCWD and IRWD have proposed a water supply development project (hereinafter referred to as the Irvine Desalter Project or "IDP") serving the following purposes: (1) interception, containment, and treatment of total dissolved solids ("TDS") and nitrate contaminant plumes in deep groundwater referred to as the "Principal Aquifer" ("PA")

originating from agricultural and natural sources; and (2) development of a water supply system drawing from the PA for the beneficial use of their customers;

H. WHEREAS, OCWD/IRWD modified the original purposes and design of the IDP (the Modified IDP) by planning for the design, construction, and operation of two separate groundwater pump-and-treat systems: 1) a Non-Potable System which incorporates containment, extraction, and treatment of groundwater from within the VOC contaminant plume addressed in DoN's proposed remedial action for OU1 and OU2A and 2) a Potable System which will be constructed and operated outside of the VOC contaminant plume (see the attached Appendix 4 for a general description of the Modified IDP and its components and assets and the attached Appendix 5 for a general map);

I. WHEREAS, OCWD and IRWD have elected to proceed with the Modified IDP contingent upon the United States' financial participation to address VOC-related CERCLA costs at the Modified IDP Non-Portable System, with OCWD and IRWD bearing all other Modified IDP costs including, but not limited to, cost related to the remediation/treatment of non-VOCs including, but not limited to, TDS and nitrates (e.g., the cost of reverse osmosis treatment), the cost of water supply infrastructure development, and the cost of pipelines from the Modified IDP to irrigation or other discharge of treatment groundwater, except as otherwise provided in this Agreement;

J. WHEREAS, Former MCAS El Toro has been closed pursuant to the Defense Base Closure and Realignment Act, P.L. 101-510, 104 Stat. 1808 (10 U.S.C. Section 2687), and DoN believes it is in the public interest to arrange with local government for the construction and long-term operation of certain components of Former MCAS El Toro remedial action;

K. WHEREAS, DoN supports the Modified IDP to the extent that it addresses VOC contamination, provides for the beneficial use of treated groundwater, and allows mutual cost savings through the United States' compensation of OCWD and IRWD for the VOC treatment and related expenses and through avoidance of reinjection costs;

L. WHEREAS, DoN has developed a number of remedial alternatives to address the VOC contamination in the groundwater zones underlying the Site, the SGU, and the PA;

M. WHEREAS, DoN's remedial alternatives for the PA are presented in, among other documents, the nine-volume MCAS El Toro OU-1 RI/FS Report dated August 9, 1996, which includes the OU1 IAFS [Interim Action Feasibility Study] Report (Vol. IV) and the OU1 IAFS Addendum (Vol. IX), and the CERCLA Proposed Plan for Remedial Action at OU1/OU2A; and DoN's remedial alternatives for the SGU are presented in, among other documents, the single volume MCAS El Toro OU2A FS Report dated December 5, 1997;

N. WHEREAS, DoN's preferred remedy for the PA is Alternative 8A (as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A), and DoN's preferred remedy for the SGU is Alternative 10B' (as described in the "Simulation of Remedial Alternatives" section of Appendix D of the OU2A FS Report);

O. WHEREAS, DoN will draft and request that USEPA and CALEPA concur upon the issuance of a Proposed Plan and Record of Decision (the "ROD") identifying and selecting Alternative 8A and Alternative 10B' as remedial action for groundwater at OU1 and OU2A, respectively;

P. WHEREAS, the Alternative 8 and Alternative 10B' combined remedial action is comprised of the following basic assets of the Modified IDP Non-Potable System (hereinafter

referred to as the "CERCLA Component of the Modified IDP" or "CCMI")(see the attached Appendices 4 & 5):

1. PA Assets (Alternative 8A), with response costs to be reimbursed by the United States pursuant to this Agreement, consisting of:

(a) Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1 located within the VOC plume in the PA.

(b) Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the CERCLA VOC treatment system located at the Central Treatment Plant (reference red line on Appendix 5 map), and the pumping and pipeline conveyance system from the CERCLA Non-Potable VOC treatment system located at the Central Treatment Plant to Injection Well IDP-1 (reference blue line on Appendix 5 map).

(c) Separate CERCLA Non-Potable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment Plant for VOC-contaminated groundwater extracted from both SGU and PA groundwater.

2. SGU Assets (Alternative 10B') designed, constructed, operated and paid by DoN, consisting of:

(a) DoN's extraction wells for interception and removal of VOC-contaminated groundwater in the Shallow Groundwater Unit (SGU).

(b) DoN's pumping and pipeline conveyance from those extraction wells to the Non-Potable pipeline conveyance system's point of connection at the former MCAS El Toro station boundary.

3. Shared CCMI/non-CCMI Component Assets at the Central Treatment

Plant (see Appendix 4 for brief description; costs allocated proportionately between the United States and OCWD/IRWD in settlement). Central Treatment Plant site real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and central monitoring and control systems.

4. DoN's monitoring wells associated with the remediation of the VOC plume in the SGU and PA;

Q. WHEREAS, past and future response costs incurred and to be incurred for construction, operation, and maintenance have been identified for the CCMI;

R. WHEREAS, in a settlement agreement dated August 4, 1993, the United States resolved its alleged liability for response costs incurred in constructing ten groundwater monitoring wells (MCAS Nos. 1 through 10), and in exchange for the United States' reimbursement of those response costs, the United States was fully and forever released from liability for those costs;

S. WHEREAS, in a settlement agreement dated September 3, 1996, the United States resolved its alleged liability for response costs incurred in constructing and operating groundwater extraction well ET-1 through December 31, 1995, and in exchange for the United States' reimbursement of those response costs, the United States was fully and forever released from liability for those costs;

T. WHEREAS, the past response costs incurred and future response costs to be incurred by OCWD/IRWD as set forth in Whereas Clause Q in these Recitals in constructing, operating, and maintaining and otherwise implementing the CCMI component of the remedial action required in the anticipated ROD are necessary costs consistent with the National Oil and

Hazardous Substances Pollution Contingency Plan (NCP) based upon currently available information; and

U. WHEREAS, the parties agree that this Settlement Agreement is fair, reasonable, and in the public interest;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants set forth herein, the Parties mutually agree as follows:

I. GENERAL.

A. Resolution. The SFA, OCWD, and IRWD desire to amicably resolve and settle any and all past, present and future claims or causes of action that OCWD and IRWD may have against the United States under Sections 107 and 113 of CERCLA, 42 U.S.C. Sections 9607 & 9613, and all other applicable Federal, State or local laws or regulations for response costs incurred and to be incurred by OCWD and IRWD for groundwater remediation and water supply development projects as a result of the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants or contaminants at or from Former MCAS El Toro without litigation and without admission of fact or liability by the United States, OCWD, or IRWD.

B. Efficacy of This Settlement Agreement. The Parties' obligations under this Settlement Agreement shall become effective upon signature by all the parties; furthermore, the Parties' obligations hereunder shall commence immediately (or shall commence as specified herein) and shall continue to completion if: (1) the ROD has received concurrence from USEPA and CALEPA or otherwise has become finalized as provided under the FFA (Attachment 1), and (2) Alternative 8A and Alternative 10B' are selected for OU1 and OU2, respectively. If the ROD is not so finalized or if a remedial action is selected for groundwater at OU1 and OU2A other than Alternative 8A for OU1 and Alternative 10B' for OU2A, this Settlement Agreement

shall be null and void, and OCWD/IRWD shall receive no payments under or as a result of this Settlement Agreement.

C. Reservation. DoN fully reserves its rights to select and USEPA fully reserves its rights to concur upon remedial actions as provided by CERCLA, the NCP, and the FFA.

II. DEFINITIONS.

Unless otherwise expressly provided herein, terms used in this Agreement that are defined in CERCLA or in regulations promulgated under CERCLA have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Agreement or in the Appendices attached hereto and incorporated hereunder, the following definitions will apply and will control over any other definition:

"Agreement" or "Settlement Agreement" means this Settlement Agreement, including all Appendices hereto. In the event of a conflict between this Settlement Agreement and any Appendix, the body of this Settlement Agreement will control.

"Alternative 8A" means the remedial alternative of that name as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A.

"Alternative 10B' " means the remedial alternative of that name as described in the OU2A FS Report dated December 5, 1997.

"CALEPA" means the California Environmental Protection Agency and its departments, agencies, boards, bureaus, and other components and their successors.

"CCMI" means the "CERCLA Component of the Modified IDP" as more fully set forth in Whereas Clause P. of the Recitals.

"Claim" means any past, present or future claim against the United States for contribution, cost recovery or other liability or financial payment with respect to any past,

present, or future civil claim, counterclaim, cross claim, indemnity, demand, liability, duty, damage, debt, lien, loss, judgment, cause of action, or other chose in action, administrative or judicial, at law or in equity, under Federal, State, or local law, whether known or unknown, fixed or contingent, suspected or unsuspected or associated in any way with or pertaining to the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants, or contaminants at or from Former MCAS El Toro, or associated in any way with the CERCLA remedial action addressed in the ROD or the Modified IDP.

"Day" means a calendar day unless expressly stated to be a working day. "Working day" means a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday or federal holiday, the period will run until the close of business of the next working day.

"DoN" means the United States Department of the Navy and all of its components, agencies, and bureaus, including but not limited to the United States Marine Corps, the Naval Facilities Engineering Command, and their successors.

"Evaluation Concentration Levels" or "ECLs" as set forth in Appendix 2 will be used as evaluation criteria for Temporary Shutdown procedures under Paragraphs III.A.4.b. and III.B.3.

"Federal Facility Agreement" or "FFA" means the agreement attached as Appendix 1.

"FFA Deliverables" means the documents that DoN is obligated to prepare pursuant to the FFA, as identified in Sections 7.3 and 7.4 of the FFA.

"Former MCAS El Toro" means the former Marine Corps Air Station El Toro located in Orange County, California.

"Future Response Costs" means all necessary response costs that OCWD and IRWD incur that are consistent with the NCP after the effective date of this Agreement in conducting

the Work under this Agreement relating in any way to any claims that OCWD or IRWD may have against the United States concerning the subject matter of this Agreement.

"IRWD" means the Irvine Ranch Water District and its successors.

"Modified IDP" means the Irvine Desalter Project as modified to accept and treat for VOC removal some of the groundwater that DoN must remediate as part of DoN's remedial action for groundwater at OU1 and OU2A, as more particularly described in Appendix 4.

"OCWD" means the Orange County Water District and its successors.

"Off-station" means locations outside the security fence lines of Former MCAS El Toro on the effective date of this Agreement as indicated on the appended map (Appendix 5).

"On-station" or "Station" means locations inside the security fence lines of Former MCAS El Toro on the effective date of this Agreement as indicated on the appended map (Appendix 5).

"Operate and Maintain" and "Operation and Maintenance" means operation and maintenance of the CCMI pursuant to the Operation and Maintenance Plan to be developed by OCWD, IRWD and to receive concurrence from USEPA and CALEPA or otherwise finalized pursuant to the FFA.

"OU1" (Site 18) means DoN's remedial action to address the release of VOCs from Former MCAS El Toro into regional groundwater, as more particularly described in Vol. IV, Sections 1.5 and 1.5.2 of the OU1 Interim RI/FS Report dated August 9, 1996.

"OU2A" (Site 24) means DoN's remedial action to address the release of VOCs from the former MCAS EL Toro VOC source area into the SGU, as more particularly described in the OU2A FS Report.

"Paragraph" means a discrete segment of this Agreement preceded by a letter or an Arabic numeral, as distinguished from a "Section," which refers to a discrete segment of this Agreement preceded by a Roman numeral.

"Party" means OCWD, IRWD, or the SFA, and "Parties" means OCWD, IRWD, and the SFA, including its officers, employees, agents, and contractors.

"Past Response Costs" means all necessary response costs that OCWD and IRWD incurred that are consistent with the NCP on or prior to the effective date of this Agreement relating in any way to any claims that OCWD or IRWD may have against the United States concerning the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants, or contaminants at or from Former MCAS El Toro including but not limited to CERCLA response costs.

"Permanent Termination" means the permanent cessation of construction and /or operation of the Modified IDP by OCWD or IRWD for any reason.

"Principal Aquifer" or "PA" means groundwater in the lowermost unconsolidated sediment layers beneath and extending beyond Former MCAS El Toro, generally below the level of the SGU, as more fully described in Section 1.7.1 (Geologic Framework) of the OU1 IAFS Report (Vol. IV).

"Record of Decision" or "ROD" means concurrence from USEPA and CALEPA or other FFA finalization of the ROD that DoN is expected to issue in calendar year 2001, selecting Alternative 8A and Alternative 10B' as the former MCAS El Toro Remedial Action for groundwater at OU1 and OU2A, respectively. Subject to Paragraph I.C., above, a Record of Decision selecting any alternative other than or altering Alternative 8A (described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A and Whereas Clauses N and P in

the Recitals hereof) and Alternative 10B' (described in the OU2A FS Report dated December 5, 1997, and Whereas Clauses N and P hereof) is not, for purposes of this Agreement, the ROD.

"Remedial Goals" means federal and any more stringent State drinking water maximum contaminant levels (MCLs).

"Section" means a discrete segment of this Agreement preceded by a Roman numeral, as distinguished from a "Paragraph," which refers to a discrete segment of this Agreement preceded by a letter or an Arabic numeral.

"Settling Federal Agencies" or "SFA" means the United States, including its agencies, departments, and instrumentalities and hence including DoN, but excluding USEPA in its regulatory capacity.

"Shallow Groundwater Unit" or "SGU" means groundwater in the uppermost unconsolidated sediment layers beneath and extending beyond Former MCAS El Toro, as more fully described in Section 1.7.1 (Geologic Framework) of the OU1 IAFS Report (Vol. IV).

"Site" means the former MCAS El Toro NPL site.

"State" means the State of California.

"Temporary Shutdown" means the temporary cessation of operation of the Modified IDP by OCWD and/or IRWD.

"United States" means the United States of America including its agencies, departments, and instrumentalities.

"USEPA" means the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"VOC Plume" means that plume of VOC-contaminated groundwater as described in the OU1 IAFS Report (Vol. IV) and the OU2A FS Report.

III. OCWD/IRWD AGREEMENT TO DESIGN, CONSTRUCT, OPERATE, AND MAINTAIN THE CCMI.

A. OCWD's and IRWD's Obligations To Design, Construct, and Operate and Maintain the Principal Aquifer Components of the CCMI.

1. OCWD and IRWD are jointly and severally responsible for and will design, construct, operate and maintain the PA Components of CCMI in accordance with this Agreement, the ROD and the requirements set forth in the former MCAS El Toro FFA and FFA deliverables set forth in Section 8.2 of the FFA that receive concurrence from USEPA and CALEPA or otherwise become finalized pursuant to the FFA Including, but not limited to, the schedules set forth therein.

2. This Agreement does not alter DoN's obligations to comply with the ROD, FFA and FFA deliverables as provided by law.

3. OCWD/IRWD will not modify the design or operation of the PA Components of the CCMI except as set forth in the finalized FFA deliverables and ROD.

4. Response to Additional Contamination.

a. Except as otherwise provided in this Agreement or in Connection with short term routine maintenance, the parties agree that payments made to OCWD/IRWD by the United States under this Agreement are made with the express assumption and understanding that OCWD/IRWD will provide uninterrupted operation of the CCMI. OCWD/IRWD will not temporarily shut down or permanently terminate operations of the PA Components of the CCMI except in accordance with the procedures set forth below. For purposes of this Agreement, DoN acknowledges that annual extractions from the principal aquifer component of the CCMI may be seasonal. Such extractions shall be consistent with the Proposed Plan, ROD, and FFA deliverables.

b. Temporary Shutdown of the CCMI.

i. In the event that contaminants not listed in Appendix 3 are detected in extracted groundwater in area groundwater monitoring or extraction well locations, or in the event that concentration or equivalent mass levels for the contaminants listed in Appendix 2 are detected at the point of connection of DoN's SGU groundwater conveyance pipeline (see Appendix 5) or the CCMI central VOC Treatment Plant intake that exceed ECLs for those contaminants as set forth in Appendix 2, the Party discovering said contaminants or levels will promptly notify in writing the other Parties, the FFA signatories, California Department of Toxic Substances Control (DTSC), California Department of Health Services (DHS), and the Santa Ana Regional Water Quality Control Board (RWQCB), and OCWD/IRWD then may, without further notice, temporarily shut down operation for the CCMI in accordance with the following.

ii. Within seven (7) calendar days following such initial notification, the Parties, the FFA signatories, and DHS will determine whether through adjusting flow rates, blending, or similar measures:

(a) The CCMI can continue to adequately treat extracted groundwater to ensure compliance with applicable Federal and State water quality standards at the point of distribution into the water supply infrastructure following treatment, or

(b) In the absence of Federal or State water quality standards, the continued supply of CCMI water poses no potential health threat to the public.

iii. If the standards in Paragraphs III.A.4.b.ii.(a) or (b) can be met, OCWD/IRWD will immediately resume operations; notify in writing DoN and the FFA signatories; and, if the operation of the CCMI must be permanently modified in any way that is inconsistent with the ROD or FFA deliverables (e.g., minimum flow rates), OCWD/IRWD must obtain DoN's and the FFA signatories' approval within ninety (90) calendar days.

iv. In the event that OCWD/IRWD determine that the standards set forth in Paragraphs III.A.4.b.ii.(a) or (b) cannot be met, OCWD/IRWD may continue temporary shutdown of the CCMI and will develop and submit a Response Plan within sixty (60) calendar days for approval by DoN and concurrence by USEPA and CALEPA (including DTSC, DHS, and RWQCB). The Response Plan will propose all practicable means available to minimize the extent and duration of termination of all or a portion of the CCMI IDP groundwater extraction and/or treatment activities. The Response Plan also will specify a timetable for resumption of operations.

v. If the approved Response Plan under Paragraph III.A.4.b.iv. provides that the CCMI will continue to operate but that additional treatment technology at the CCMI central VOC treatment plant will be required beyond VOC treatment and reverse osmosis technologies, the United States will not be responsible for any costs associated with such additional treatment technology except as otherwise provided in this Agreement, including but not limited to the terms and conditions of Paragraph IV.B.6. and Paragraphs VII.B. and VII.C. of this Agreement.

vi. OCWD/IRWD will resume full operation of the CCMI groundwater extraction and/or treatment activities as provided in the approved Response Plan or, in the alternative, upon approval of resumption of operations by USEPA and DHS.

c. Permanent Termination of the CCMI.

i. OCWD/IRWD will not permanently terminate operation of the CCMI unless it has demonstrated, and DoN has approved and USEPA and CALEPA (including DTSC, DHS, and RWQB) have concurred in writing, either that a Force Majeur condition exists as set forth in Section 10 of the FFA (Appendix 1) or, in the

alternative, that treatment of extracted groundwater to meet Federal and State drinking water quality standards and adequately protect human health and the environment is technically impracticable from an engineering perspective consistent with the substantive criteria set forth at 40 CFR Section 300.430(f)(1)(ii)(C)(3) and the NCP preamble at 55 Fed. Reg . 8748 (March 8, 1990). The availability to OCWD/IRWD of water from sources other than the PA and CCMI at a lower cost to OCWD/IRWD and its customers (taking into consideration groundwater treatment costs) will not be considered in evaluating technical impracticability.

ii. In the event of permanent termination of operations of the CCMI by OCWD/IRWD for any reason and a determination by the FFA signatories pursuant to the FFA that further active remediation of the PA by DoN is required, OCWD/IRWD will compensate the United States in accordance with Appendix 7. In the event of permanent termination of operations of the CCMI by OCWD/IRWD for any reason and a determination by the FFA signatories pursuant to the FFA that monitored natural attenuation is an appropriate remedial action for the PA and that further active remediation of the PA by DoN is not required, OCWD/IRWD will not compensate the United States in accordance with Appendix 7. OCWD/IRWD acknowledge that the ROD for OU1 and OU2A should provide that, based upon currently available information, it is anticipated that the backup, contingency remedial action for VOC contamination in the PA will consist of monitored natural attenuation in the event the CCMI is terminated for any reason.

iii. OCWD/IRWD will immediately notify in writing the Trustee of the Reversionary Trust established pursuant to Paragraph IV.B. of this Agreement of the permanent termination of the CCMI. In the event of such permanent termination,

OCWD/IRWD will not submit additional Reimbursement Requests to the Reversionary Trust Trustee as provided in Paragraph IV.B. and the Trustee will not reimburse OCWD/IRWD.

d. Any temporary shutdown or permanent termination that does not satisfy the terms of this Paragraph III.A.4. will constitute a breach of this Agreement.

e. The ROD will incorporate this Paragraph III.A.4. by reference.

B. OCWD/IRWD Commitment To Accept and Treat SGU Groundwater.

1. As described herein, OCWD will enter into a contract (Appendix 8) to accept, take ownership of, and treat groundwater extracted by DoN from the SGU and delivered by DoN to OCWD/IRWD.

2. VOC Treatment Contract.

a. DoN, subject to the availability of funds, and OCWD will enter into a contract under which OCWD/IRWD will agree to provide uninterrupted VOC removal services for groundwater extracted by DoN from the former MCAS El Toro on-station SGU. OCWD will accept and take ownership of the groundwater extracted by DoN from the former MCAS El Toro on-station SGU and delivered by DoN to OCWD for VOC treatment pursuant to the terms and conditions of the contract and as provided in the ROD and FFA deliverables.

b. After treatment, OCWD will be responsible for the disposal and/or discharge of the SGU groundwater consistent with the ROD and applicable laws and regulations. After treatment, no costs associated with the disposal and/or discharge of the SGU groundwater will be a basis for recovery by OCWD/IRWD.

c. Payment for Services.

OCWD's services to be performed under the contract will be considered utility services. Payment for utility services will be made pursuant to terms and conditions of the contract.

3. Response to Additional Contamination.

The contract will include procedures and substantive criteria for addressing the appropriateness of temporary shutdown and permanent termination by OCWD of SGU treatment activities.

4. DoN may temporarily shut down operation of the SGU extraction system without prior notice to OCWD. Such shutdown may be for any reason deemed necessary by DoN. When such shutdown occurs, the Contracting Officer will provide OCWD with written notice of the shutdown and its anticipated duration as soon as reasonably practicable. Under no circumstances will such shutdown be grounds for recovery under the Changes Clause of the contract.

5. Permanent Termination Not Permitted Under Contract.

Subject to Paragraph III.B.6. below, permanent termination by OCWD of SGU VOC treatment activities required by the contract will be deemed a breach of the contract and this Settlement Agreement unless DoN is relieved of its obligation under the FFA and ROD to remediate VOC contamination in the SGU by an amendment to the ROD. In the event of a termination of services contrary to this provision, in addition to any other remedies covered by the contract, the United States will be entitled to recover from OCWD all costs incurred by DoN in obtaining alternate VOC remediation services over and above the amount to be paid to the contractor for the connection charge and service rate at the time the services are terminated pursuant to the contract payment schedule. In the event of such termination, the connection charge and service rate for the performance period in which the contract was breached as well as

all future connection charges and service rates as set forth in the contract will not be paid to OCWD.

6. Permanent Shutdown Permitted Under Contract.

Notwithstanding any other provision of the contract, a permanent shutdown will not be considered a breach of the contract if DoN is relieved of its obligation under the FFA and ROD to remediate VOC contamination in the SGU by an appropriate amendment of the ROD. If such shutdown occurs during the base contract (ten-year-period), OCWD will be paid the balance of the connection charge according to the contract, and the service rate will be reduced on a pro rata basis based on the volume of SGU groundwater accepted and treated during the performance period prior to the termination of services by DoN.

C. OCWD/IRWD Commitment for FFA Deliverables.

1. Upon issuance and finalization of the ROD pursuant to the FFA, OCWD/IRWD will prepare draft and draft final documents for all of the following documents that the FFA requires DoN to prepare after finalization of the ROD pursuant to the FFA and that address the CCMI components of the ROD:

a. Primary document deliverables identified in Section 7.3 of the FFA:

- RD Work Plan
- RA Work Plan
- Preliminary Remedial Design
- Final Remedial Design
- Construction Quality Assurance Plan
- Construction Quality Control Plan

- Contingency Plan
- Project Closeout Reports
- Operation and Maintenance Plan

(b) Secondary document deliverables identified in Section 7.4 of the FFA:

- Well Closure Methods and Procedures.

2. DoN will be responsible for preparing all other FFA documents.

3. The FFA documents identified above as OCWD/IRWD's responsibility shall adequately address USEPA and CALEPA comments on draft deliverable documents as provided in Section 7.7 of the FFA and shall be submitted to DoN in accordance with the schedule upon which DoN and OCWD/IRWD agree and in accordance with Section 8.2 of the FFA. OCWD/IRWD and DoN will cooperate to finalize the language of draft final deliverable documents in order to address all FFA requirements and address USEPA and CALEPA comments. OCWD/IRWD will submit these draft and draft final documents in a timely manner to allow DoN to review the document prior to submittal of the documents to USEPA and CALEPA as provided in the schedule developed and approved in accordance with Sections 7.7, 7.8, 7.9, 7.10, and 8.2 of the FFA. DoN will ensure that its comments are provided to OCWD/IRWD as early as reasonably possible to avoid delay in submittals. Any delay by OCWD/IRWD in providing these documents in a timely manner, which thereby causes delay by DoN in submitting the FFA deliverables to USEPA and CALEPA as provided under the FFA, will be considered a breach of this Agreement.

D. Performance Assurance.

Within sixty (60) calendar days of the date of CERCLA ROD finalization, OCWD/IRWD will establish and maintain financial security in the amount of the total estimated cost of the CCMI for the term of this Agreement less the amount then paid to OCWD/IRWD by the United States pursuant to this Agreement. This financial security will be in the form of a highly-rated performance bond guaranteeing performance of the CCMI. The bond will be presented to DoN and be subject to DoN approval.

E. Pollution Insurance.

Within one year of the date of CERCLA ROD finalization, OCWD/IRWD will obtain pollution insurance in the minimum amount of $20,000,000 (or a lesser amount if agreed in writing among the parties) that reasonably covers risk concerning the CCMI, (except for risks associated with the SGU assets, which are addressed in the SGU contract), and OCWD/IRWD will maintain said insurance for forty years, unless commercially impracticable (with prior written notice of such asserted impracticability).

F. OCWD/IRWD Responsibility for Permits, Licenses, etc.

Except with regard to DoN's obligations as provided in the FFA, OCWD/IRWD will be responsible for obtaining all locally-issued licenses, permits, and approvals necessary for construction and operation of the CCMI, and will be the lead agency responsible for compliance with the California Environmental Quality Act, Public Resources Code sections 21000 et seq., as necessary to construct and operate the CCMI.

IV. THE UNITED STATES' OBLIGATION TO REIMBURSE OCWD/IRWD FOR PAST AND FUTURE RESPONSE COSTS RELATING TO THE DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE CCMI.

A. Payment by the United States.

As compensation for OCWD/IRWD's obligations under the preceding Paragraphs and to resolve potential liability to OCWD/IRWD for response costs, the United States agrees as follows:

1. The United States, on behalf of the SFA, will pay the agreed total amount of Fourteen Million Nine Hundred Eleven Thousand Dollars ($14,911,000) into Facility and Operations & Maintenance Accounts in a Reversionary Trust established pursuant to IV.B. of this Settlement Agreement, as compensation for past and future response costs incurred and to be incurred by OCWD/IRWD relating to the off-station components of the CCMI. This payment by the United States will be made within one hundred and eighty (180) calendar days following finalization of the ROD pursuant to the FFA.

2. The United States, on behalf of the SFA, also will pay the agreed amount of Five Million Two Hundred Fifty Thousand Dollars ($5,250,000) into a Contingency Fund Account in the Reversionary Trust established pursuant to Section IV.B. of this Settlement Agreement, as a settlement premium for purposes of resolving certain past, present, and future claims pertaining to or associated in any way with the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants, or contaminants (including but not limited to VOCs, TDS, and nitrates) at or from Former MCAS El Toro, the CCMI, or the Modified IDP as provided in Paragraphs VII.B. and VII.C. of this Agreement. This payment by the United States will be made within one hundred and eighty (180) calendar days following finalization of the ROD pursuant to the FFA. The eligible uses and eligible payments from this account are set forth more specifically in Paragraph IV.B below. (If CERCLA ROD finalization is not until July 2002, then the $5,250,000 will be increased to $5,792,000, with the amount of the incremental increase to be divided proportionally among the Contingency Fund Account components in IV.B.9.; if not until July 2003, then proportionally increased to $6,351,000; if not until July 2004, then proportionally increased to $6,926,000; if not until July 2005, then proportionally increased to $7,518,000; and if

CERCLA ROD finalization is not until July 2006 or beyond, then the amount will be renegotiated in good faith to account for escalation of costs.)

B. Reversionary Trust.

1. Within 90 days of funding, the United States will establish a Reversionary Trust to hold the funds described in Paragraphs IV.A.1. and 2. of this Settlement Agreement.

2. The Reversionary Trust will be created pursuant to a Trust Agreement between the United States, as grantor, and a suitable financial institution to be selected by the United States as Trustee. The Trustee will have the powers, duties, and responsibilities set forth in the Trust Agreement, including responsibility for maintaining financial and accounting records relating to the Trust and making payments in accordance with this Settlement Agreement to OCWD/IRWD.

3. The Trust Agreement will provide for establishment and administration of three separate accounts: the "Facility Account," the "Operations & Maintenance Account," and the "Contingency Fund Account."

4. The Facility Account will be established in the amount of Seven Million Five Hundred Seventy Two Thousand Dollars ($7,572,000) for purposes of reimbursing OCWD/IRWD for initial capital construction expenditures for off-station components of the CCMI that address PA contamination and serving as the exclusive source of Trust funds for reimbursement of such expenditures.

5. The Operations & Maintenance Account will be established in the amount of Seven Million Three Hundred Thirty Nine Thousand Dollars ($7,339,000) for purposes of reimbursing OCWD/IRWD for operations and maintenance expenditures for the off-station

components of the CCMI that address PA contamination and serving as the exclusive source of Trust funds for reimbursement of such expenditures.

6. The Contingency Fund Account will be established in the amount of Five Million Two Hundred Fifty Thousand Dollars ($5,250,000). The Contingency Fund Account will be used for phased payment as provided below in Paragraphs IV.B.9.(a) and (b). The schedule for payment is structured to provide larger payments to OCWD/IRWD within the first ten years of operation of this Agreement to more adequately address risk relating to PA groundwater extracted from Modified IDP off-station groundwater extraction wells, repair and replacement, and other contingencies relating to the Modified IDP. (See also IV.A.2.)

7. General Procedures for Payment of Reimbursement and Payment Requests From Reversionary Trust Funds.

Any request for reimbursement or payment from Reversionary Trust funds will be submitted by OCWD/IRWD to the Trustee, with copies to the United States Department of Justice (DoJ) and DoN, and will specify the account under which reimbursement is being sought and the specific basis for payment. The Trustee will pay the request unless the United States submits written objection to the request for reimbursement within thirty (30) calendar days of the United States' receipt of the request. Absent objection from the United States, the Trustee will pay the reimbursement within sixty (60) calendar days of receipt of the request for reimbursement. The Trustee will review all requests to ensure compliance with this Settlement Agreement. If the United States submits written objection to payment within thirty (30) calendar days of receipt of the request for reimbursement as provided above, OCWD/IRWD may invoke the dispute resolution procedures by providing written objection as provided in Paragraph VII.F. of this Agreement. In the event of such dispute, the Trustee will withhold reimbursement to

OCWD/IRWD. In the event that OCWD/IRWD prevails in such dispute, they will be entitled to prompt payment following the final dispute resolution decision.

8. Specific Procedures and Criteria for Requests for Reimbursement and Payment From Facility Account and Operations & Maintenance Account.

Requests for reimbursement will be submitted by OCWD/IRWD to the Trustee, with copies to the United States (DoJ and DoN) and, subject to Paragraph IV.B.7., will be paid by the Trustee, commencing three months after establishment of the Trust or one year after ROD finalization (whichever occurs earlier), and then in accordance with and consistent with the Facility Payment and Operations & Maintenance Payment schedules set forth in Appendix 6, which is hereby incorporated by reference into this Agreement.

9. Specific Procedures and Criteria for Requests for Reimbursement and Payment From Contingency Fund Account.

There are two types of payments from the Contingency Fund Account: 1) Installment Payments which are addressed in Paragraph IV.B.9.a. below and 2) Conditional Payments which are addressed in Paragraphs IV.B.9.b. and c. below. The Installment Payments are payments of fixed amounts in three increments spaced ten years apart beginning approximately one year after ROD finalization. The Conditional Payments are reimbursements of certain additional specified costs that OCWD/IRWD might incur and are subject to maximum dollar amounts during three consecutive periods. Requests for Contingency Fund Account Payments will be submitted by OCWD/IRWD to the Trustee, with copies to the United States (DoJ and DoN), and will conform to the following eligibility criteria and limitations and, subject to Paragraph IV.B.7., will be paid by the Trustee in accordance with the schedules for payment set forth below. (See also IV.A.2.)

a. Installment Payment Eligibility Criteria and Payment Schedule.

The Trustee will pay Installment Payments from the Contingency Fund Account to OCWD/IRWD in the following amounts on the following schedule upon receipt of OCWD/IRWD's advance request for payment:

i. One Million Five Hundred Thousand Dollars (1,500,000) on or about one year after ROD finalization, and

ii. One Million Dollars ($1,000,000) on or about eleven years after ROD finalization, and

iii. One Million Dollars ($1,000,000) on or about twenty-one years after ROD finalization.

b. Conditional Payment Maximum Total Dollar Amounts.

OCWD/IRWD may request that the Trustee pay Conditional Payments from the Contingency Fund Account for eligible costs under Paragraph IV.B.9.c. in amounts not to exceed the following maximum total dollar amounts for the following time periods:

i. A maximum total dollar amount not to exceed One Million Seven Hundred Fifty Thousand Dollars ($1,750,000) during the time period beginning upon one year after ROD finalization and ending not later than eleven years after that ROD date.

ii. A maximum total dollar amount not to exceed One Million Dollars ($1,000,000) during the time period beginning upon eleven years after ROD finalization and ending not later than twenty-one years after that ROD date.

iii. A maximum total dollar amount not to exceed One Million Dollars ($1,000,000) during the time period beginning upon twenty-one years after ROD finalization and ending not later than forty years after that ROD date.

c. Conditional Payment Eligibility Criteria.

The following categories of contingency costs will be eligible for reimbursement by Conditional Payments from the Contingency Fund Account, subject to the maximum total dollar amounts set forth in Paragraph IV.B.9.b., above:

i. Deductible payments that are related to:

a. Claims filed against OCWD/IRWD by entities other than OCWD/IRWD or the United States relating to releases of hazardous substances, pollutants, or contaminants attributable to DoN activities from facilities owned or operated by DoN at the former MCAS El Toro location, or

b. CERCLA response costs, which are necessary and consistent with the NCP, which are incurred by OCWD/IRWD at the off-station Principal Aquifer components of the Modified IDP as a result of the release of hazardous substances, pollutants, or contaminants attributable to DoN activities from facilities owned or operated by DoN at the former MCAS El Toro location that are detected in and extracted from the PA by off-station groundwater wells, and which address the following new or previously unknown conditions or information:

1. Hazardous substances, pollutants, or contaminants that do not appear on the list of chemicals in Appendix 3 to this Settlement Agreement and that are identified after the effective date of this Agreement;

2. Concentration levels of hazardous substances, pollutants or contaminants exceeding the ECL values for the CCMI central VOC Treatment Plant intake set forth in Appendix 2 to this Settlement Agreement that are identified in monitoring data collected and analyzed at the CCMI central VOC Treatment Plant intake after the date of finalization of the ROD; or

3. Legally enforceable Federal or State water quality standards that address hazardous substances, pollutants or contaminants included in the list in Appendix 2 to this Settlement Agreement and that are more stringent than those in effect as of the effective date of this Agreement.

ii. CCMI Repair/Replacement costs for unanticipated breakdowns that have not been covered by Operations & Maintenance Account payments and that are above and beyond ordinary and necessary maintenance and repair for the following:

a. CCMI VOC Treatment Plant (100% cost reimbursable), or

b. CCMI extraction wells, pumps, and pipelines from off-station PA extraction wells to the CCMI VOC Treatment Plant (100% cost reimbursable).

iii. pollution insurance.

iv. new groundwater monitoring wells.

v. escalated construction and/or operating costs, due to a ROD finalization after July 2002.

10. All funds remaining in the Reversionary Trust after forty years of operation and maintenance of the CCMI will revert expeditiously to the United States Treasury.

11. In the event of a permanent termination of the CCMI under Paragraph III.A.4.c. or breach of this Settlement Agreement, all funds remaining in the Reversionary Trust will revert expeditiously to the United States Treasury.

12. If the ROD is amended and the amendment is finalized pursuant to the FFA so that VOC treatment of PA groundwater is no longer required under the amended ROD, the obligation of the United States to reimburse OCWD/IRWD under this Agreement will be

terminated. Under such circumstances, the United States will notify the Trustee, who will make no further payments to OCWD/IRWD from the Reversionary Trust, and OCWD/IRWD will make no further requests for reimbursement. All funds then remaining in the Reversionary Trust will revert expeditiously to the United States Treasury.

V. OBLIGATION OF DON AND OCWD/IRWD TO SEEK APPROVAL OF THE ROD.

A. DoN will use its best efforts to draft and obtain USEPA and CALEPA concurrence as to the ROD as well as finalization of the ROD pursuant to the FFA as soon as reasonably possible, consistent with the FFA schedule and any amendments thereto.

B. OCWD/IRWD will assist and support DoN in proposing and submitting to USEPA and CALEPA as provided under the FFA a Draft and Draft Final Proposed Plan and ROD for OU1 and OU2A based upon Alternative 8A as the remedial action for the PA and Alternative 10B' as the remedial action for the SGU, respectively. Based upon currently available information, it is anticipated that the "back-up" contingency remedial action for VOC contamination in the PA will consist of monitored natural attenuation in the event that the CCMI is permanently terminated for any reason.

C. DoN will provide OCWD/IRWD with reasonable advance notice and an opportunity to participate in any meetings or telephone conferences with USEPA and CALEPA, subject to the concurrence of USEPA and CALEPA, in support of DoN's efforts to obtain approval of the ROD; provided, however, that such meeting or telephone conference has not been scheduled to discuss legally privileged matters within the scope of the attorney-client communication, attorney work product, or deliberative process privileges.

D. DoN will provide OCWD/IRWD with reasonable advance notice and opportunity to review and comment on drafts of all documents pertaining to efforts to gain approval of the

ROD except for legally privileged matters within the scope of the attorney-client communication, attorney work product, or deliberative process privileges.

E. OCWD/IRWD will provide DoN with reasonable advance notice and an opportunity to participate in any meetings or telephone conferences addressing non-privileged matters (not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges) between OCWD and IRWD on the CCMI.

F. OCWD/IRWD will provide DoN with reasonable advance notice and opportunity to review and comment on all drafts of documents pertaining to efforts to gain approval of the ROD.

G. DoN will give OCWD and IRWD notice of final and complete concurrence by USEPA and CALEPA upon the ROD or finalization of the ROD pursuant to the FFA.

VI. ACCESS FOR CONSTRUCTION, OPERATION AND MAINTENANCE, AND MONITORING PURPOSES.

A. At no cost to OCWD or IRWD, the United States will provide OCWD/IRWD with reasonable access to the Site so long as the United States owns the Site and to any DoN-owned or controlled property as necessary for OCWD/IRWD to design, construct, and operate and maintain the CCMI including, without limitation, necessary rights-of-way or easements for the construction, operation and maintenance of the CCMI. In the event the United States sells or leases the Station, the United States will reserve and record in such sale or lease agreement at no cost to OCWD or IRWD, continuing access, rights-of-way licenses and easements as necessary for OCWD/IRWD to construct, operate and maintain the CCMI. The United States will inform all prospective purchasers and lessees that a CERCLA remedial action will be operating pursuant to a ROD with USEPA and CALEPA and that OCWD/IRWD will have the right, upon

reasonable notice and so as not to unreasonably interfere with the purchaser's or lessee's operations, to take soil samples on the Station, with the purpose of confirming that no current operations have resulted in the release of hazardous substances that could impact the treatment system.

B. During the term of this Settlement Agreement, OCWD/IRWD will provide DoN, USEPA, and CALEPA with reasonable access, during normal business hours, to the CCMI facilities and to all records that are not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges and that are relevant to the construction and operation and maintenance of those facilities, for purposes of evaluating OCWD's and IRWD's compliance with this Settlement Agreement. OCWD/IRWD also will provide DoN, USEPA, and CALEPA with reasonable access, during normal business hours, to sample pre-treated and treated groundwater, and groundwater collected in groundwater monitoring wells.

C. DoN will provide OCWD and IRWD with a copy of analytical data reports for all validated analytical data collected by DoN and its authorized representatives and contractors in groundwater monitoring wells and on-station extraction wells required by the ROD, within sixty (60) calendar days after such reports become available to DoN.

D. OCWD and IRWD will provide DoN with copies of analytical data reports for all analytical data collected by OCWD and IRWD in groundwater monitoring wells and CCMI production wells, within sixty (60) days after such reports become available to OCWD and IRWD.

E. In the event that monitoring activities undertaken pursuant to this Settlement Agreement cause damage to one or more of the monitoring or production wells or create a condition in a well that prevents the future intended use of the well within the scope of this

Agreement (e.g., equipment lodged), then the entity responsible for causing the damage or creating said condition will promptly remedy the condition at its sole cost to ensure that the intended use of the well satisfies all applicable federal, state and local regulatory operation, maintenance, quality assurance/quality control, and safety standards.

F. In the event that monitoring or sampling equipment used by any party to this Settlement Agreement at a monitoring or production well that is the subject of this Agreement is lost or damaged during well monitoring activities by one of the parties, then it will be the responsibility of the party that owns the equipment to retrieve and/or repair its own equipment.

VII. OTHER PROVISIONS.

A. Ownership of CCMI.

OCWD and IRWD will own and hold sole and exclusive title to the CCMI and related facilities described in Recital P except for the SGU Assets designed, constructed and operated by DoN described in Recital P.2, and DoN's Monitoring Wells described in Recital P.4.

B. Release and Covenant Not To Sue.

1. In consideration of the terms and conditions set forth in this Agreement, and contingent upon the United States' full and final payment of the sums specified in Paragraphs IV.A.1. and IV.A.2. into the Reversionary Trust as specified above, OCWD/IRWD hereby expressly and intentionally, forever and fully releases, discharges, and covenants not to sue the United States, or its past and present officers, employees, agents, contractors, and successors, with respect to any past, present, or future claims pertaining to or associated in any way with the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants, or contaminants (including but not limited to VOCs, TDS, and nitrates) at or from Former MCAS El Toro, the CCMI, the Modified IDP, or the PA.

2. This Release will not bar the following:

(a) any proceeding or dispute arising under this Agreement, or any action to enforce this Agreement, or recover damages for its breach; or

(b) any claim for compensation under the Changes Clause of the SGU contract arising from extracted groundwater from the SGU provided by DoN to OCWD/IRWD for treatment as provided under the SGU contract (Appendix 8); or

(c) any claim arising from SGU groundwater pollution caused in whole or in part by the deliberate or negligent acts of the United States after the date of execution of this Agreement on property owned by DoN or any other instrumentality of the United States Government at the time of such acts (this will not be construed to cover any claim relating to the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants or contaminants that originate in the SGU groundwater and migrate into the PA); or

(d) any claim for pollution in the Modified IDP Potable System caused by DoN activity on DoN property and not attributable to OCWD/IRWD's unauthorized activity, provided that: 1) such pollution was caused by a chemical not listed in Appendix 3 and 2) OCWD/IRWD has exhausted insurance deductibles and all legally enforceable insurance coverage (OCWD/IRWD shall take reasonable and good faith steps to enforce said insurance coverage through binding arbitration or trial court judgment).

C. Indemnification.

Subject to Paragraph VII.B.2., OCWD and IRWD hereby agree to indemnify and hold the United States harmless from (and to defend the United States, solely at the discretion of the United States Attorney General, against) any and all past, present or future claims by any person or entity not a party to this Settlement Agreement, to the extent such claims:

1. Are related in any way to the Modified IDP;

2. Are attributable to VOCs or other hazardous, toxic or solid wastes, substances, pollutants or contaminants located in or extracted from an area defined as the maximum past, present, or future geographic reach (whether in length, width, or depth) of the detectable VOC contaminant plume in the SGU and PA included in OU1 and OU2A; or

3. Are related in any way to CERCLA remedial action required under the FFA for groundwater in OU1 and OU2A (with the sole exception of SGU groundwater extraction costs incurred by remediation contractors of the United States for OU2A).

D. Reservation of Rights.

1. In signing this Settlement Agreement, the SFA do not admit and expressly deny any and all allegations of liability concerning actual or threatened releases at or from or the presence at the former MCAS El Toro facility of hazardous, toxic or solid wastes, substances, pollutants or contaminants under Federal and State law. In signing this Agreement, OCWD and IRWD do not endorse or agree with the SFA's denial of allegations of liability.

2. Nothing in this Agreement is intended or should be construed to release any entity not involved in this Agreement from any liability of any sort, including, but not limited to, liability for past, present or future response and/or remediation costs, or from liability for damages for injury to, destruction of, or loss of natural resources arising from the release or threatened release of any hazardous substances from the former MCAS El Toro facility, or otherwise.

E. Contribution Protection.

As of the effective date of this Settlement Agreement, the Parties agree that the United States is entitled to any protection from contribution actions or claims as may be provided in

Section 113(f) of CERCLA, 42 U.S.C. Section 9613(f), federal common law, or other applicable law, for matters addressed in the Agreement.

F. Dispute Resolution Procedures.

1. In the event of a dispute between the SFA and OCWD/IRWD concerning any project or activity undertaken in accordance with this Settlement Agreement, the objecting Party will submit its objection in writing to the other Party. The Parties then will attempt to resolve the dispute within thirty (30) working days of receipt of written objection. If agreement is not reached during this period, the following individuals will meet and confer within thirty (30) working days in an effort to resolve the dispute:

(a) Commanding Officer
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132

(b) Chief
Environmental Defense Section
United States Department of Justice
601 D Street, N.W.
Washington, DC 20004

(c) General Manager
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

(d) General Manager
Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 6025
Irvine, CA 92716-6025

Such representatives may be changed from time to time as the Parties see fit and at their sole discretion. Notice of the change will be provided to the other Party. The period for negotiation may be extended by mutual agreement of the Parties.

2. In the event that the delay necessary to resolve a dispute is unacceptable because of an imminent and substantial endangerment to human health or the environment, or because DoN has been placed under an enforceable commitment to take certain action by specified dates by USEPA and/or CALEPA, or because it will substantially interfere with the conduct of national defense activities, either Party may disregard these dispute resolution procedures. Absent such circumstances, the Parties agree to exhaust administrative remedies under these dispute resolution procedures before pursuing any legal or equitable remedies they might have under this Settlement Agreement.

3. CERCLA remedial action selection decisions by DoN and FFA deliverable documents set forth in Paragraph III.C.1.(a) of this Settlement Agreement that are finalized pursuant to the procedures for finalization under the FFA, including those that receive concurrence from USEPA and CALEPA, will not be subject to these dispute resolution procedures. OCWD and IRWD retain such rights as they may have to challenge such remedy selection decisions pursuant to Section 113 of CERCLA as provided by law in the event this Agreement does not take effect as provided in Section I.

4. These dispute resolution procedures will not apply to disputes arising under the contract addressed under Paragraph III.B. of this Settlement Agreement. Contract dispute resolution procedures will be addressed in that contract.

G. Access to Information.

1. The Parties will provide to each other, upon request, copies of all documents and information within their possession or control that are not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges and that relate to the implementation of this Settlement Agreement, including, but not limited to, plans, reports, maps, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample tracking routing, or correspondence.

2. OCWD and IRWD will provide the United States, upon request, with complete, true and correct copies of non-privileged technical and cost documentation and will provide the United States with testimony in support of any future contribution, cost recovery or other civil claims made against and any proceedings instituted by the United States under federal or state statutory or common law, at law or in equity, concerning entities not involved in this Agreement regarding costs incurred pursuant to this Agreement. The United States will provide such information as provided by law to OCWD and IRWD in such claims instituted by those Parties against entities not involved in this Agreement.

H. Water Rights.

OCWD and IRWD represent that the activities they agree to undertake under this Settlement Agreement are consistent with all applicable laws and regulations regarding ownership and allocation of water rights.

I. Retention of Records.

OCWD, IRWD, and the SFA will retain documents relating to implementation of this Agreement in a manner and for a time period that complies with Section 24 of the FFA.

J. Mutual Cooperation.

1. The Parties agree to perform any activities and execute any and all documents reasonably necessary to accomplish the purposes of this Settlement Agreement. Such activities include but are not limited to DoN's cooperation in securing access for OCWD and IRWD to the Station as necessary for OCWD and IRWD to perform under this Agreement.

2. The Parties will cooperate at all times with all federal, state and local agencies involved in the investigation and remediation of hazardous substances at the Site.

3. The Parties will comply with all applicable federal and state laws and regulations in performing their obligations under this Agreement.

K. Antideficiency Act.

Payment by the United States under this Settlement Agreement is subject to the availability of appropriated funds. Nothing in this Agreement will be construed as or constitute a commitment or requirement that any federal agency or department will obligate or pay funds in contravention of the Antideficiency Act, 31 U.S.C. Section 1341, or that the Congress, at a later time, will appropriate funds sufficient to meet deficiencies.

L. Federal Tort Claims Act.

In the event of any death or injury to any person, or the loss of or damage to any property, caused by officers, employees, or contractors of the United States in connection with any of the United States' activities hereunder or in the event of any legal or equitable action instituted between the OCWD or IRWD, OCWD's or IRWD's officers, employees and contractors and the United States, the liability, if any, of the United States will be determined in accordance with the applicable provisions of the Federal Tort Claims Act (28 U.S.C. Sections 2671-2680).

M. Notice.

1. The Parties designate the following technical and legal representatives to be the primary points of contact in the performance of this Agreement:

Technical:

OCWD: William R. Mills, Jr.
General Manager
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

IRWD: Paul D. Jones II
General Manager
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92619-7000

DoN: Dana Sakamoto
Environmental Business Line Manager
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132

Legal:

OCWD: Clark F. Ide
General Counsel
Orange County Water District
10500 Ellis Avenue
Fountain Valley, CA 92708

IRWD: Malissa H. McKeith
Loeb & Loeb
1000 Wilshire Boulevard
Los Angeles, CA 90017-2475

DoJ: David M. Thompson
Environmental Defense Section
United States Department of Justice
601 D Street, N.W.
Washington, DC 20004

DoN: Rex Callaway

Office of Counsel
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132

2. These representatives may be changed from time to time as the Parties see fit and at their sole discretion. Notice of the change will be provided to the other Parties.

N. Amendment.

This Agreement may be modified only upon the mutual agreement of the Parties reflected in a written document signed by duly authorized representatives of the Parties, which document expressly makes reference to this Agreement and the intent to modify the terms of this Agreement.

O. Interpretation.

1. Captions.

Captions and section headings are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Agreement.

2. Federal Law.

This Settlement Agreement will be governed by and interpreted according to Federal substantive law and regulations.

3. Construction.

Neither IRWD/OCWD nor the United States will be considered the drafter of this Agreement or any of its provisions for the purposes of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of the Agreement.

P. Integration and Effective Date.

This Agreement constitutes the entire understanding of the Parties and will take effect upon the date of signature by the last Party to sign it.

Q. Signatories.

Each undersigned representative of a Party to this Agreement certifies that he or she has been duly authorized to enter into the Agreement by the entity on whose behalf it is indicated that the person is signing.

APPROVED AS TO FORM:

By _____
General Counsel, OCWD

Date: June 13, 2001

APPROVED AS TO CONTENT:

ORANGE COUNTY WATER DISTRICT

By _____
President

Date: June 6, 2001

By _____
General Manager

Date: June 6, 2001

APPROVED AS TO FORM:

By _____
Loeb & Loeb LLP

Date: June 19, 2001

APPROVED AS TO CONTENT:

IRVINE RANCH WATER DISTRICT

By _____
President

Date: 6/15/01

By _____
General Manager

Date: 6/15/01

Environment & Natural Resources Division
UNITED STATES DEPARTMENT OF JUSTICE

By David M. Thompson

Date: 7 Sep 01

APPROVED AS TO FORM:

By Rex Calloway
Office of Counsel,
Southwest Division
Naval Facilities
Engineering Command

Date: June 28, 2001

APPROVED AS TO CONTENT:

UNITED STATES DEPARTMENT OF THE NAVY

By
Deputy Assistant Secretary
(Installations and Facilities)

Date: 18 July 01

EL TORO
APPENDICES

Appendix 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
AND THE
STATE OF CALIFORNIA
AND THE
UNITED STATES DEPARTMENT OF THE NAVY

IN THE MATTER OF: The U.S. Department of the Navy Marine Corps Air Station El Toro	Federal Facility Agreement Under CERCLA Section 120 Administrative Docket Number: 91-2

ENCLOSUR

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
AND THE
STATE OF CALIFORNIA
AND THE
UNITED STATES DEPARTMENT OF THE NAVY

IN THE MATTER OF: The U.S. Department of the Navy Marine Corps Air Station El Toro	Federal Facility Agreement Under CERCLA Section 120 Administrative Docket Number: 91-2

Based on the information available to the Parties on the effective date of this federal facility agreement (Agreement), and without trial or adjudication of any issues of fact or law, the Parties agree as follows:

1. PURPOSE

1.1 The general purposes of this Agreement are to:

(a) Ensure that the environmental impacts associated with past and present activities at the Site are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health, welfare and the environment;

(b) Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site in accordance with CERCLA/SARA, the NCP, Superfund guidance and policy, RCRA, RCRA guidance and policy, and applicable State law; and

(c) Facilitate cooperation, exchange of information and participation of the Parties in such action; and

(d) Ensure the adequate assessment of potential injury to natural resources and the prompt notification to and cooperation and coordination with the Federal and State Natural Resource Trustees necessary to ensure the implementation of response actions achieving appropriate cleanup levels.

1.2 Specifically, the purposes of this Agreement are to:

(a) Identify operable unit alternatives which are appropriate at the Site prior to the implementation of final

remedial action(s) for the Site. OU alternatives shall be identified to the Parties as early as possible prior to proposal of OUs to EPA and the State. This process is designed to promote cooperation among Parties in identifying OU alternatives prior to the final selection of Operable Units;

(b) Establish requirements for the performance of a Remedial Investigation to determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release and threatened release of hazardous substances, pollutants, or contaminants at the Site and to establish requirements for the performance of a Feasibility Study for the Site to identify, evaluate, and select alternatives for the appropriate remedial action(s) to prevent, mitigate, or abate the release or threatened release of hazardous substances, pollutants, or contaminants at the Site in accordance with CERCLA and applicable State law;

(c) Identify the nature, objective, and schedule of response actions to be taken at the Site. Response actions at the Site shall attain that degree of cleanup of hazardous substances, pollutants or contaminants mandated by CERCLA and applicable State law;

(d) Implement the selected remedial actions(s) in accordance with CERCLA and applicable State law and meet the requirements of CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), pertaining to interagency agreements;

(e) Assure compliance, through this Agreement, with RCRA and other federal and State hazardous waste laws and regulations for matters covered herein;

(f) Coordinate response actions at the Site with the mission and support activities at Marine Corps Air Station El Toro;

(g) Expedite the cleanup process to the extent consistent with protection of human health and the environment;

(h) Provide for State involvement in the initiation, development, selection and enforcement of remedial actions to be undertaken at Marine Corps Air Station El Toro, including the review of all applicable data as it becomes available and the development of studies, reports, and action plans; and to identify and integrate State ARARs into the remedial action process;

(i) Provide for operation and maintenance of any remedial action selected and implemented pursuant to this Agreement.

2. PARTIES

2.1 The Parties to this Agreement are EPA, the Marine Corps, and the State of California. The terms of the Agreement shall

apply to and be binding upon EPA, the State of California, and the Marine Corps. The Department of the Navy hereby agrees to ensure the Marine Corps's performance of each of the Marine Corps's obligations hereunder.

2.2 This Agreement shall be enforceable against all of the Parties to this Agreement. This Section shall not be construed as an agreement to indemnify any person. The Marine Corps shall notify its agents, members, employees, response action contractors for the Site, and all subsequent owners, operators, and lessees of the Site, of the existence of this Agreement.

2.3 Each Party shall be responsible for ensuring that its contractors comply with the terms and conditions of this Agreement. Failure of a Party to provide proper direction to its contractors and any resultant noncompliance with this Agreement by a contractor shall not be considered a Force Majeure event or other good cause for extensions under Section 9 (Extensions), unless the Parties so agree. The Marine Corps will notify EPA and the State of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection.

2.4 The State of California is represented by DHS as lead agency and RWQCB as support agency. The responsibilities of the lead and support agencies are set forth in this Agreement, the Memorandum of Understanding between DHS and the State Water Resources Control Board and the Regional Water Quality Control Boards for the Cleanup of Hazardous Waste Sites (Aug. 1, 1990) and the Regional Memorandum of Understanding between DHS, Toxic Substances Control Program, Region 4, and RWQCB, each of which is attached hereto. In the event of conflict, this Agreement shall govern.

3. JURISDICTION

3.1 Each Party is entering into this Agreement pursuant to the following authorities:

(a) The U.S. Environmental Protection Agency (EPA), enters into those portions of this Agreement that relate to the remedial investigation/feasibility study (RI/FS) pursuant to CERCLA section 120(e)(1), 42 U.S.C. § 9620(e)(1), RCRA sections 6001, 3008(h) & 3004(u) and (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), and E.O. 12580;

(b) EPA enters into those portions of this Agreement that relate to operable units and final remedial actions pursuant to CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), RCRA

sections 6001, 3008(h) and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), and E.O. 12580;

(c) The Marine Corps enters into those portions of this Agreement that relate to the RI/FS pursuant to CERCLA section 120(e)(1), 42 U.S.C. § 9620(e)(1), RCRA sections 6001, 3008(h) and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), E.O. 12580, the National Environmental Policy Act, 42 U.S.C. § 4321, and DERP;

(d) The Marine Corps enters into those portions of this Agreement that relate to operable units and final remedial actions pursuant to CERCLA section 120(e)(2), 42 U.S.C. § 9620(e)(2), RCRA sections 6001, 3008(h), and 3004(u) & (v), 42 U.S.C. § 6961, 6928(h), 6924(u) & (v), E.O. 12580 and the DERP; and

(e) The State, represented by DHS and the RWQCB, enters into this Agreement pursuant to CERCLA sections 120(f) and 121, 42 U.S.C. § 9620(f) and 9621; California Health and Safety Code section 102 and division 20, chapters 6.5 and 6.8; and California Water Code division 7.

4. DEFINITIONS

4.1 Except as noted below or otherwise explicitly stated, the definitions provided in CERCLA, CERCLA case law, and the NCP shall control the meaning of terms used in this Agreement.

(a) "Agreement" shall mean this document and shall include all Appendices to this document except to the extent the Parties agree that any part of any Appendix is inconsistent with this Agreement. Except to such extent, all Appendices shall be made an integral and enforceable part of this document. Copies of Appendices shall be available as part of the administrative record, as provided in subsection 26.3.

(b) "ARARs" shall mean federal and State applicable or relevant and appropriate requirements, standards, criteria, or limitations selected pursuant to section 121 of CERCLA. ARARs shall apply in the same manner and to the same extent that such are applied to any non-governmental entity, facility, unit, or site, as set forth in CERCLA section 120(a)(1), 42 U.S.C. § 9620(a)(1), subject to CERCLA section 121(d)(4), 42 U.S.C. § 9621(d)(4) and E.O. 12580 § 2(d) & (g).

(c) "CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act, Public Law 96-510, 42 U.S.C. § 9601 et seq., as amended by SARA and any subsequent amendments.

(d) "Days" shall mean calendar days, unless business days are specified. Any submittal that under the terms of this Agreement would be due on Saturday, Sunday, or holiday shall be due on the following business day. References herein to specific

numbers of days shall be understood to exclude the day of occurrence.

(e) "DERP" shall refer to the Defense Environmental Restoration Program, as defined in 10 U.S.C. § 2701.

(f) "Department of Defense" shall mean the U.S. Department of Defense.

(g) "DRC" shall have the meaning given in subsection 12.2.

(h) "DHS" shall mean the California Department of Health Services, its successors and its employees and authorized representatives.

(i) "EPA" shall mean the U.S. Environmental Protection Agency, its successors and its employees and authorized representatives.

(j) "Facility" shall have the same definition as in CERCLA section 101(9), 42 U.S.C. § 9601(9).

(k) "Feasibility Study" or "FS" means a study conducted pursuant to CERCLA and the NCP which fully develops, screens and evaluates in detail remedial action alternatives to prevent, mitigate, or abate the migration or the release of hazardous substances, pollutants, or contaminants at and from the Site. The Marine Corps shall conduct and prepare the FS in a manner to support the intent and objectives of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

(l) "FOIA" shall mean the Freedom of Information Act, 5 U.S.C. § 552 et seq., and any subsequent amendments thereto.

(m) "Marine Corps" shall mean the U.S. Marine Corps (a component of the U.S. Department of the Navy) and its employees, members, agents, and authorized representatives. "Marine Corps" shall also include the U.S. Department of the Navy and the U.S. Department of Defense, to the extent necessary to effectuate the terms of this Agreement, including, but not limited to, appropriations, funding and Congressional Reporting Requirements.

(n) "Meeting," in regard to Project Managers, shall mean an in-person discussion at a single location or a conference telephone call of all Project Managers. A conference call will suffice for an in-person meeting at the concurrence of the Project Managers.

(o) "National Contingency Plan" or "NCP" shall refer to the regulations contained in 40 C.F.R. § 300.1 et seq., including any amendments thereto.

(p) "Natural Resource Trustee(s)" and "Federal or State Natural Resource Trustees" shall have the same meaning and authority provided in CERCLA and the NCP.

(q) "Natural Resource Trustee(s) Notification and Coordination" shall have the same meaning as provided in CERCLA and the NCP.

(r) "Operable Unit" or "OU" shall have the meaning

provided in the NCP.

(s) "Operation and maintenance" shall mean activities required to maintain the effectiveness of response actions.

(t) "Parties" shall mean the parties to this Agreement.

(u) "Project Manager" shall have the meaning given in Section 18 of this Agreement.

(v) "QAPP" shall mean a Quality Assurance Project Plan.

(w) "RCRA" or "RCRA/HSWA" shall mean the Resource Conservation and Recovery Act of 1976, Public Law 94-580, 42 U.S.C. § 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, and any subsequent amendments.

(x) "Remedial Design" or "RD" shall have the same meaning as provided in the NCP.

(y) "Remedial Investigation" or "RI" means that investigation conducted pursuant to CERCLA and the NCP, as supplemented by the substantive provisions of the EPA RCRA Facilities Assessment guidance. The RI serves as a mechanism for collecting data for Site and waste characterization and conducting treatability studies as necessary to evaluate performance and cost of the treatment technologies. The data gathered during the RI will also be used to conduct a baseline risk assessment, perform a feasibility study, and support design of a selected remedy. The Marine Corps shall conduct and prepare the RI in a manner to support the intent and objectives of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

(z) "Remedy" or "Remedial Action" or "RA" shall have the same meaning as provided in section 101(24) of CERCLA, 42 U.S.C. § 9601(24), and the NCP, and may consist of Operable Units.

(aa) "Remove" or "Removal" shall have the same meaning as provided in section 101(23) of CERCLA, 42 U.S.C. § 9601(23), and the NCP.

(bb) "RWQCB" shall mean the Regional Water Quality Control Board, Santa Ana Region, its successors and its employees, members and authorized representatives.

(cc) "SARA" shall mean the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499.

(dd) "SEC" shall have the meaning given in subsection 12.6.

(ee) "Site," for purposes other than obtaining permits, shall include Marine Corps Air Station El Toro (including any adjacent real property subject to the jurisdiction of the commanding general of Marine Corps Air Station El Toro), the Facility (as defined above) and any area necessary for performance of remedial actions. For purposes of obtaining

permits, "on-site" shall have the meaning provided in the NCP and "off-site" shall mean all locations that are not on-site.

(ff) "State" shall mean the State of California and its employees and authorized representatives, represented by DHS and the RWQCB as set forth in this Agreement, and shall refer to both DHS and the RWQCB unless otherwise specified.

5. DETERMINATIONS

5.1 This Agreement is based upon the placement of Marine Corps Air Station El Toro, Orange County, California, on the National Priorities List by EPA on Nov. 15, 1989, 55 Federal Register 6154. FEB 16, 1990

5.2 Marine Corps Air Station El Toro is a facility under the jurisdiction, custody, or control of the U.S. Department of Defense within the meaning of E.O. 12580, 52 Federal Register 2923, 29 January 1987. The Department of the Navy is authorized to act in behalf of the Secretary of Defense for all functions delegated by the President through E.O. 12580 which are relevant to this Agreement.

5.3 Marine Corps Air Station El Toro is a federal facility under the jurisdiction of the Secretary of Defense within the meaning of CERCLA section 120, 42 U.S.C. § 9620, and SARA section 211, 10 U.S.C. § 2701 et seq., and subject to DERP.

5.4 The Department of the Navy is the authorized delegate of the President under E.O. 12580 for receipt of notification by the State of its ARARs as required by CERCLA section 121(d)(2)(A)(ii), 42 U.S.C. § 9621(d)(2)(A)(ii).

5.5 The authority of the Marine Corps to exercise the delegated removal authority of the President pursuant to CERCLA section 104, 42 U.S.C. § 9604, is not altered by this Agreement.

5.6 The actions to be taken pursuant to this Agreement are reasonable and necessary to protect the public health, welfare, or the environment.

5.7 There are areas within the boundaries of Marine Corps Air Station El Toro where hazardous substances have been deposited, stored, placed, or otherwise come to be located in accordance with 42 U.S.C. § 9601(9) & (14).

5.8 There have been releases of hazardous substances, pollutants or contaminants at or from Marine Corps Air Station El Toro into the environment within the meaning of 42 U.S.C. § 9601(22), 9604, 9606, and 9607.

5.9 With respect to these releases, the Marine Corps is an owner, operator and/or generator subject to the provisions of 42 U.S.C. § 9607 and within the meaning of California Health and Safety Code section 25323.5(a), and is a person within the meaning of California Health and Safety Code section 25118 and California Water Code section 13050(c).

5.10 Included as an Attachment to this Agreement is a map showing areas of known contamination, based on information available at the time of the signing of this Agreement.

6. WORK TO BE PERFORMED

6.1 The Parties agree to perform the tasks, obligations and responsibilities described in this Section in accordance with CERCLA and CERCLA guidance and policy; the NCP; pertinent provisions of RCRA and RCRA guidance and policy; E.O. 12580; applicable State laws and regulations; and all terms and conditions of this Agreement including documents prepared and incorporated in accordance with Section 7 (Consultation).

6.2 The Marine Corps agrees to undertake, seek adequate funding for, fully implement and report on the following tasks, with participation of the Parties as set forth in this Agreement:

(a) Remedial Investigations of the Site;

(b) Federal and State Natural Resource Trustee Notification and Coordination;

(c) Feasibility Studies for the Site;

(d) All response actions, including Operable Units, for the Site; and

(e) Operation and maintenance of response actions at the Site.

6.3 The Parties agree to:

(a) Make their best efforts to expedite the initiation of response actions for the Site, particularly for Operable Units; and

(b) Carry out all activities under this Agreement so as to protect the public health, welfare and the environment.

6.4 Upon request, EPA and the State agree to provide any Party with guidance or reasonable assistance in obtaining and

interpreting guidance relevant to the implementation of this Agreement.

6.5 The Parties recognize that any discovered release of hazardous substances determined to have originated either on or off Marine Corps Air Station El Toro and to have been caused by a party other than the Marine Corps, including groundwater plumes mingled with plumes originating on Marine Corps Air Station El Toro, may be addressed by a separate agreement between the responsible parties and appropriate regulatory agencies. Nothing in this subsection 6.5 shall reduce or otherwise affect the Marine Corps's obligations under this Agreement except as may be specifically provided in such other agreement if EPA is a party thereto and such other agreement refers to this Agreement.

7. CONSULTATION: Review and Comment Process for Draft and Final Documents

7.1 Applicability: The provisions of this Section establish the procedures that shall be used by the Parties to provide each other with appropriate technical support, notice, review, comment, and response to comments regarding RI/FS and RD/RA documents, specified herein as either primary or secondary documents. In accordance with CERCLA section 120, 42 U.S.C. § 9620, and 10 U.S.C. § 2705, the Marine Corps will normally be responsible for issuing primary and secondary documents to EPA and the State. As of the effective date of this Agreement, all draft, draft final and final deliverable documents identified herein shall be prepared, distributed and subject to dispute in accordance with subsections 7.2 through 7.10 below. The designation of a document as "draft" or "final" is solely for purposes of consultation with EPA and the State in accordance with this Section. Such designation does not affect the obligation of the Parties to issue documents, which may be referred to herein as "final," to the public for review and comment as appropriate and as required by law.

7.2 General Process for RI/FS and RD/RA Documents:

(a) Primary documents include those reports that are major, discrete portions of RI/FS and/or RD/RA activities. Primary documents are initially issued by the Marine Corps in draft subject to review and comment by EPA and the State. Following receipt of comments on a particular draft primary document, the Marine Corps will respond to the comments received and issue a draft final primary document subject to dispute resolution. The draft final primary document will become the final primary document either thirty (30) days after receipt by EPA and the State of a draft final document if dispute resolutio

is not invoked or as modified by decision of the dispute resolution process.

(b) Secondary documents include those reports that are discrete portions of the primary documents and are typically input or feeder documents. Secondary documents are issued by the Marine Corps in draft subject to review and comment by EPA and the State. Although the Marine Corps will respond to comments received, the draft secondary documents may be finalized in the context of the corresponding primary documents. A secondary document may be disputed at the time the corresponding draft final primary document is issued.

7.3 Primary Documents:

(a) The Marine Corps shall complete and transmit drafts of the following primary documents for each operable unit and for the final remedy to EPA and the State, for review and comment in accordance with the provisions of this Section; provided, however, that the Marine Corps need not complete a draft primary document for an operable unit if (x) the same primary document completed or to be completed with respect to another operable unit covers all topics relevant to the operable unit at issue, and (y) the Parties agree in writing that such draft primary document need not be completed.

(1) RI/FS Workplans, including Sampling and Analysis Plans

(2) QAPPs

(3) Community Relations Plans (May be amended as appropriate to address Operable Units. Any such amendments shall not be subject to the threshold requirements of subsection 7.10. Any disagreement regarding amendment of the CRP shall be resolved pursuant to Section 12 (Dispute Resolution).)

(4) RI Reports

(5) FS Reports

(6) Proposed Plans

(7) Records of Decision (RODs)

(8) Remedial Design Work Plan

(9) Preliminary Remedial Design

(10) Final Remedial Design

(11) Remedial Action Work Plan

(12) Construction Quality Assurance Plan

(13) Construction Quality Control Plan

(14) Contingency Plan

(15) Project Closeout Report

(16) Federal and State Natural Resource Trustee Notifications.

(17) Operation and Maintenance Plan

(b) Only draft final primary documents shall be subject to dispute resolution. The Marine Corps shall complete

and transmit draft primary documents in accordance with the timetable and deadlines established in Section 8 (Deadlines).

(c) Primary documents may include target dates for subtasks as provided in subsections 7.4(b) and 18.3. The purpose of target dates is to assist the Marine Corps in meeting deadlines, but target dates do not become enforceable by their inclusion in the primary documents and are not subject to Section 8 (Deadlines), Section 9 (Extensions) or Section 13 (Enforceability).

7.4 Secondary Documents:

(a) The Marine Corps shall complete and transmit drafts of the following secondary documents for each operable unit and for the final remedy to EPA and the State for review and comment; provided, however, that the Marine Corps need not complete a draft secondary document for an operable unit if (x) the same secondary document or a primary document completed or to be completed with respect to another operable unit covers all topics relevant to the operable unit at issue, and (y) the Parties agree in writing that such draft secondary document need not be completed.

(1) Site Characterization Summaries (part of RI)
(2) Sampling and Data Results
(3) Treatability Studies (only if generated)
(4) Initial Screenings of Alternatives
(5) Risk Assessments
(6) Well closure methods and procedures
(7) Detailed Analyses of Alternatives
(8) Post-Screening Investigation Work Plans
(9) RCRA Facility Assessment

(b) Although EPA and the State may comment on the drafts of the secondary documents listed above, such documents shall not be subject to dispute resolution except as provided by subsection 7.2. Target dates for the completion and transmission of draft secondary documents shall be established by the Project Managers. The Project Managers also may agree upon additional secondary documents that are within the scope of the listed primary documents.

7.5 Meetings of the Project Managers. (See also Section 18.) The Project Managers shall meet in person approximately every ninety (90) days to review and discuss the progress of work being performed at the Site, including progress on the primary and secondary documents. However, such meetings may be held more frequently (but not more often than every thirty (30) days) as needed upon request by any Project Manager, or less frequently if agreed by the Parties. Prior to preparing any draft document specified in subsections 7.3 or 7.4 above, the Project Managers

shall meet in an effort to reach a common understanding with respect to the contents of the draft document.

7.6 Identification and Determination of Potential ARARs:

(a) The State lead agency will contact in writing those State and local governmental agencies that are a potential sources of ARARs in a timely manner as set forth in NCP § 300.515(d).

(b) Prior to the issuance of a draft primary or secondary document for which ARAR determinations are appropriate, the Project Managers shall meet to identify and propose all potential pertinent ARARs, including any permitting requirements that may be a source of ARARs. At that time and within the time period described in NCP § 300.515(h)(2), the State shall submit the proposed ARARs obtained pursuant to paragraph 7.6(a) to the Marine Corps, along with a list of agencies that failed to respond to the State's solicitation of ARARs and copies of the solicitations and any related correspondence.

(c) The Marine Corps will contact the agencies that failed to respond and again solicit their inputs.

(d) The Marine Corps will prepare draft ARAR determinations in accordance with CERCLA section 121(d)(2), 42 U.S.C. § 9621(d)(2), the NCP and pertinent guidance issued by EPA.

(e) In identifying potential ARARs, the Parties recognize that actual ARARs can be identified only on a site-specific basis and that ARARs depend on the specific hazardous substances, pollutants and contaminants at a site, the particular actions associated with a proposed remedy and the characteristics of a site. The Parties recognize that ARAR identification is necessarily an iterative process and that potential ARARs must be identified and discussed among the Parties as early as possible, and must be reexamined throughout the RI/FS process until a ROD is issued.

7.7 Review and Comment on Draft Documents:

(a) The Marine Corps shall complete and transmit each draft primary document to EPA and the State on or before the corresponding deadline established for the issuance of the document. The Marine Corps shall complete and transmit the draft secondary documents in accordance with the corresponding target dates.

(b) Review of any document by EPA and the State may concern all aspects of it (including completeness) and should include, but will not be limited to, technical evaluation of any aspect of the document and consistency with CERCLA, the NCP, applicable California law, and any pertinent guidance or policy issued by EPA or the State (except that any State guidance that

is not "promulgated" (as defined in the NCP) shall constitute a "to be considered" item (as that phrase is used in the NCP)). To expedite the review process, the Marine Corps shall make an oral presentation of each primary document at the next scheduled Project Managers meeting after transmittal of the draft document, and shall do so with respect to secondary documents if a majority of the Project Managers other than the Marine Corps so requests. Comments by the EPA, DHS and RWQCB shall be provided with adequate specificity so that the Marine Corps may respond and, if appropriate, make changes to the draft document. Comments shall refer to any pertinent sources of authority or references upon which the comments are based and, upon request of the Marine Corps, the EPA, DHS or RWQCB, as appropriate, the commenter shall provide a copy of the cited authority or reference.

(c) Unless the Parties agree to another period, all draft documents shall be subject to a sixty (60) day period for review and comment. At or before the close of the comment period, EPA and the State shall transmit their written comments to the Marine Corps. For unusually lengthy or complex documents, EPA or the State may extend the sixty (60) day comment period for an additional thirty (30) days by written notice to the Marine Corps prior to the end of the sixty (60) day period. In appropriate circumstances, this period may be further extended in accordance with Section 9 (Extensions).

(d) Representatives of the Marine Corps shall make themselves readily available to EPA and the State during the comment period for purposes of informally responding to questions and comments on draft documents. Oral comments made during such discussions need not be the subject of a written response by the Marine Corps on the close of the comment period.

(e) In commenting on a draft document which contains a proposed ARAR determination, EPA, DHS or RWQCB shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that EPA or the State does object, it shall explain the basis for its objection in detail and shall identify any ARARs which it believes were not properly addressed in the proposed ARAR determination.

(f) Following the close of the comment period for a draft document, the Marine Corps shall give full consideration to all written comments. If the Marine Corps requests, the Parties shall hold a meeting to discuss such comments within fifteen (15) days of the close of the comment period on a draft secondary document or draft primary document. On a draft secondary document, the Marine Corps shall, within sixty (60) days of the close of the comment period, transmit to the EPA and the State its written response to the comments received. On a draft primary document, the Marine Corps shall, within sixty (60) days of the close of the comment period, transmit to EPA and the State

a draft final primary document, which shall include the Marine Corps's response to all written comments received within the comment period. While the resulting draft final document shall be the responsibility of the Marine Corps, it shall be the product of consensus to the maximum extent possible.

(g) The Marine Corps may extend the sixty (60) day period for either responding to comments on a draft document or for issuing the draft final primary document for an additional thirty (30) days by providing written notice to EPA and the State. In appropriate circumstances, this time period may be further extended in accordance with Section 9 (Extensions).

7.8 Availability of Dispute Resolution for Draft Final Primary Documents:

(a) Dispute resolution shall be available to the Parties for draft final primary documents as set forth in Section 12 (Dispute Resolution).

(b) When dispute resolution is invoked on a draft final primary document, work may be stopped in accordance with the procedures set forth in subsection 12.9 regarding dispute resolution.

7.9 Finalization of Documents: The draft final primary document shall serve as the final primary document if no party invokes dispute resolution regarding the document or, if invoked, at completion of the dispute resolution process should the Marine Corps's position be sustained. If the Marine Corps's determination is not sustained in the dispute resolution process, the Marine Corps shall prepare, within not more than sixty (60) days of resolution of the dispute, a revision of the draft final document which conforms to the results of dispute resolution. In appropriate circumstances, the time period for this revision period may be extended in accordance with Section 9 (Extensions).

7.10 Subsequent Modification of Final Documents: Following finalization of any primary document pursuant to subsection 7.9 above, any Party may seek to modify the document including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in paragraphs 7.10(a) and (b) below. (These restrictions do not apply to the Community Relations Plan.)

(a) Any Party may seek to modify a document after finalization by submitting a concise written request to the Project Managers of the other Parties. The request shall specify the nature of the requested modification and how the request is appropriate under subparagraphs 7.10(b)(1) and (2) below.

(b) In the event that a consensus is not reached by the Project Managers on the need for a modification, any Party

may invoke dispute resolution to determine if such modification shall be conducted. Modification of a document shall be required only upon a showing that:

(1) The requested modification is based on information that is (A) new (i.e., information that becomes available or known after the document was finalized) and (B) significant; and

(2) The requested modification could be of significant assistance in evaluating impacts on the public health or the environment, in evaluating the selection of remedial alternatives, or in protecting human health and the environment.

(c) Nothing in this Section shall alter EPA's or the State's ability to request the performance of additional work which was not contemplated by this Agreement. The Marine Corps' obligation to perform such work under this Agreement must be established by either a modification of a document or by amendments to this Agreement.

8. DEADLINES

8.1 All deadlines agreed upon before the effective date of this Agreement shall be made an Appendix to this Agreement. To the extent that deadlines have already been mutually agreed upon by the Parties prior to the execution of this Agreement, they will satisfy the requirements of this Section and remain in effect, shall be published in accordance with subsection 8.2, and shall be incorporated into the appropriate work plans.

8.2 Within twenty-one (21) days of issuance of the Record of Decision for any operable unit or for the final remedy, the Marine Corps shall propose deadlines for completion of the following draft primary documents:

(a) Remedial Design/Remedial Action Work Plans
(b) Preliminary Remedial Design
(c) Final Remedial Design
(d) Construction Quality Assurance Plan
(e) Construction Quality Control Plan
(f) Contingency Plan
(g) Project Closeout Report

Within fifteen (15) days of receipt, EPA, DHS and RWQCB shall review and provide comments to the Marine Corps regarding the proposed deadlines. Within fifteen (15) days following receipt of the comments the Marine Corps shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed deadlines. All agreed-upon deadlines shall be incorporated into the appropriate

work plans. If the Parties fail to agree within thirty (30) days on the proposed deadlines, the matter shall immediately be submitted for dispute resolution pursuant to Section 12 (Dispute Resolution). The final deadlines established pursuant to this subsection shall be published by EPA, in conjunction with the State, and shall become an Appendix to this Agreement.

8.3 For any operable units not identified as of the effective date of this Agreement, the Marine Corps shall propose deadlines for all documents listed in subsection 7.3(a)(1) through (7) (with the exception of the Community Relations Plan and any document that comes within the proviso to such subsection) within twenty-one (21) days of agreement on the proposed operable unit by all Parties. These deadlines shall be proposed, finalized and published using the procedures set forth in subsection 8.2.

8.4 The deadlines set forth in this Section, or to be established as set forth in this Section, may be extended pursuant to Section 9 (Extensions). The Parties recognize that one possible basis for extension of the deadlines for completion of the Remedial Investigation and Feasibility Study Reports is the identification of significant new Site conditions during the performance of the remedial investigation.

9. EXTENSIONS

9.1 Timetables, deadlines and schedules shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by a Party shall be submitted to the other Parties in writing and shall specify:

(a) The timetable, deadline or schedule that is sought to be extended;

(b) The length of the extension sought;

(c) The good cause(s) for the extension; and

(d) The extent to which any related timetable and deadline or schedule would be affected if the extension were granted.

9.2 Good cause exists for an extension when sought in regard to:

(a) An event of Force Majeure;

(b) A delay caused by another Party's failure to meet any requirement of this Agreement;

(c) A delay caused by or resulting from the good faith invocation of dispute resolution or the initiation of judicial action;

(d) A delay caused, or which is likely to be caused, by an extension (including without limitation an extension under subsection 7.7) in regard to another timetable and deadline or schedule;

(e) A delay caused by public comment periods or hearings required under State law in connection with the State's performance of this Agreement or by receipt of unusually extensive public comments under the NCP in connection with the Marine Corps's performance of this Agreement;

(f) Any work stoppage within the scope of Section 11 (Emergencies and Removals); or

(g) Any other event or series of events mutually agreed to by the Parties as constituting good cause.

9.3 Absent agreement of the Parties with respect to the existence of good cause, a Party may seek and obtain a determination through the dispute resolution process that good cause exists.

9.4 Within seven days of receipt of a request for an extension of a timetable, deadline or schedule, each receiving Party shall advise the requesting Party in writing of the receiving Party's position on the request. Any failure by a receiving Party to respond within the seven-day period shall be deemed to constitute concurrence with the request for extension. If a receiving Party does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

9.5 If there is consensus among the Parties that the requested extension is warranted, the Marine Corps shall extend the affected timetable and deadline or schedule accordingly. If there is no consensus among the Parties as to whether all or part of the requested extension is warranted, the timetable and deadline or schedule shall not be extended except in accordance with a determination resulting from the dispute resolution process.

9.6 Within seven days of receipt of a statement of nonconcurrence with the requested extension, the requesting Party may invoke dispute resolution.

9.7 A timely and good faith request by the Marine Corps for an extension shall toll any assessment of stipulated penalties or application for judicial enforcement of the affected timetable and deadline or schedule until a decision is reached on whether the requested extension will be approved. If dispute resolution is invoked and the requested extension is denied, stipulated

penalties may be assessed and may accrue from the date of the original timetable, deadline or schedule. Following the grant of an extension, an assessment of stipulated penalties or an application for judicial enforcement may be sought only to compel compliance with the timetable and deadline or schedule as most recently extended.

10. FORCE MAJEURE

10.1 A Force Majeure shall mean any event arising from causes beyond the control of a Party that causes a delay in or prevents the performance of any obligation under this Agreement, including, but not limited to:

(a) acts of God;
(b) fire;
(c) war or national emergency declared by the President or Congress and affecting the Marine Corps;
(d) insurrection;
(e) civil disturbance;
(f) explosion;
(g) unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance;
(h) adverse weather conditions that could not be reasonably anticipated;
(i) unusual delay in transportation;
(j) restraint by court order or order of public authority;
(k) inability to obtain, at reasonable cost and after exercise of reasonable diligence, any necessary authorizations, approvals, permits, or licenses due to action or inaction of any governmental agency or authority other than the Department of the Navy (including Marine Corps);
(l) delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and
(m) insufficient availability of appropriated funds which have been diligently sought. In order for Force Majeure based on insufficient funding to apply to the Marine Corps, the Marine Corps shall have made timely request for such funds as part of the budgetary process as set forth in Section 15 (Funding).

A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the Party affected thereby. Force Majeure shall not include increased costs or expenses of response actions, unless (i) such increase could not reasonably have been anticipated at the time the estimate thereof

was made and (ii) funding for such increase has been diligently sought and is not available.

11. EMERGENCIES AND REMOVALS

11.1 Discovery and Notification

If any Party discovers or becomes aware of an emergency or other situation that endangers public health or safety or the environment at or near the Site, which is related to or may affect the work performed under this Agreement, that Party shall immediately orally notify all other Parties. If the emergency arises from activities conducted pursuant to this Agreement, the Marine Corps shall then take immediate action to notify the appropriate State and local agencies and affected members of the public.

11.2 Work Stoppage

In the event any Party determines that activities conducted pursuant to this Agreement will cause or otherwise be threatened by a situation described in subsection 11.1, the Party may propose the termination of such activities. If the Parties mutually agree, the activities shall be stopped for such period of time as is required to abate the danger. In the absence of mutual agreement, the activities shall be stopped in accordance with the proposal, and the matter shall be immediately referred to the EPA Hazardous Waste Management Division Director for a work stoppage determination in accordance with Section 12.9.

11.3 Removal Actions

(a) The provisions of this Section shall apply to all removal actions as defined in CERCLA section 101(23), 42 U.S.C. § 9601(23), and California Health and Safety Code section 25323, including all modifications to, or extensions of, the ongoing removal actions, and all new removal actions proposed or commenced following the effective date of this Agreement.

(b) Any removal actions conducted at the Site shall be conducted in a manner consistent with this Agreement, CERCLA, the NCP and E.O. 12580.

(c) Nothing in this Agreement shall alter the Marine Corps' authority with respect to removal actions conducted pursuant to section 104 of CERCLA, 42 U.S.C. § 9604.

(d) Nothing in this Agreement shall alter any authority the State or EPA may have with respect to removal actions conducted at the Site.

(e) All reviews conducted by EPA and the State pursuant to 10 U.S.C. § 2705(b)(2) will be expedited so as not to unduly jeopardize fiscal resources of the Marine Corps for funding the removal actions.

(f) If a Party determines that there is an endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance, pollutant or contaminant at or from the Site, the Party may request that the Marine Corps take such response actions as may be necessary to abate such danger or threat and to protect the public health or welfare or the environment. Such actions might include provision of alternative drinking water supplies or other response actions listed in CERCLA section 101(23) or (24), or such other relief as the public interest may require.

11.4 Notice and Opportunity to Comment

(a) The Marine Corps shall provide the other Parties with timely notice and opportunity to review and comment upon any proposed removal action for the Site, in accordance with 10 U.S.C. § 2705(a) and (b). The Marine Corps agrees to provide the information described below pursuant to such obligation.

(b) For emergency response actions, the Marine Corps shall provide EPA and the State with notice in accordance with subsection 11.1. Such oral notification shall, except in the case of extreme emergencies, include adequate information concerning the Site background, threat to the public health and welfare or the environment (including the need for response), proposed actions and costs (including a comparison of possible alternatives, means of transportation of any hazardous substances off-site, and proposed manner of disposal), expected change in the situation should no action be taken or should action be delayed (including associated environmental impacts), any important policy issues, and the Marine Corps On-Scene Coordinator recommendations. Within forty-five (45) days of completion of the emergency action, the Marine Corps will furnish EPA and the State with an Action Memorandum addressing the information provided in the oral notification, and any other information required pursuant to CERCLA and the NCP, and in accordance with pertinent EPA guidance, for such actions.

(c) For other removal actions, the Marine Corps will provide EPA and the State with any information required by CERCLA or the NCP, and in accordance with pertinent EPA guidance, such as the Action Memorandum, the Engineering Evaluation/Cost Analysis (when required under the NCP) and, to the extent it is not otherwise included, all information required to be provided in accordance with paragraph 11.4(b). Such information shall be

furnished at least forty-five (45) days before the response action is to begin.

(d) All activities related to ongoing removal actions shall be reported by the Marine Corps in the progress reports described in Section 18 (Project Managers).

11.5 Any dispute between the Parties as to whether a proposed nonemergency response action is (a) properly considered a removal action, as defined by 42 U.S.C. § 9601(23), or (b) consistent, to the extent deemed practicable under CERCLA section 104(a)(2), with any remedial action shall be resolved pursuant to Section 12 (Dispute Resolution). Such dispute may be brought directly to the DRC or the SEC (each as defined in Section 12) at any Party's request.

11.6 Alternative Dispute Resolution for Subsection 11.3(f)

(a) The following procedures shall apply only to disputes as to whether the Marine Corps will take any removal action requested under subsection 11.3(f). Such disputes shall be submitted to the DRC, which shall have ten (10) days to unanimously resolve the dispute. The DRC shall forward an unresolved dispute to the SEC within four (4) days of the end of the ten-day period.

(b) The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The EPA representative on the SEC is the Regional Administrator of EPA Region 9. The Department of the Navy's representative on the SEC is the Commander, Southwest Division, Naval Facilities Engineering Command. The DHS representative on the SEC is the Regional Administrator, Region 4. The RWQCB representative on the SEC is the Assistant Executive Officer. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within seven (7) days, the Department of the Navy SEC representative shall issue a written position on the dispute. EPA or the State may, within four (4) days of the such representative's issuance of the Department of the Navy's position, issue a written notice elevating the dispute to the Department of the Navy's Secretariat Representative for resolution in accordance with all applicable laws and procedures. In the event EPA or the State elects not to elevate the dispute to the Secretariat Representative within the designated four (4) day escalation period, EPA and the State shall be deemed to have agreed with the Department of the Navy SEC representative's written position with respect to the dispute.

(c) Upon escalation of a dispute to the Department of the Navy's Secretariat Representative pursuant to subsection 11.6(b) above, the Secretariat Representative will review and resolve the dispute within seven (7) days. Before resolving the dispute, the Secretariat Representative shall, upon request, meet and confer with the EPA Administrator, the DHS Chief Deputy Director and the RWQCB Executive Officer to discuss the issue(s) under dispute. The Secretariat Representative shall provide the EPA and the State with its final decision in writing. If EPA or the State does not concur with such decision, the nonconcurring party must transmit indication thereof to the Secretariat Representative within fourteen (14) days of receipt of such decision. Failure to transmit such nonconcurrence will be presumed to signify concurrence.

12. DISPUTE RESOLUTION

12.1 Except as specifically set forth in subsection 11.6 or elsewhere in this Agreement, if a dispute arises under this Agreement, the procedures of this Section shall apply. Any Party may invoke this dispute resolution procedure. All Parties to this Agreement shall make reasonable efforts to informally resolve disputes at the Project Manager or immediate supervisor level. If resolution cannot be achieved informally, the procedures of this Section shall be implemented to resolve a dispute.

12.2 Within thirty (30) days after: (a) receipt by EPA and the State of a draft final primary document pursuant to Section 7 (Consultation), or (b) any action which leads to or generates a dispute, the disputing Party shall submit to the Dispute Resolution Committee (DRC) a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the disputing Party's position with respect to the dispute and the technical, legal or factual information the disputing Party is relying upon to support its position.

12.3 Prior to any Party's issuance of a written statement of a dispute, the disputing Party shall engage the other Party in informal dispute resolution among the Project Managers and/or their immediate supervisors. During this informal dispute resolution period the Parties shall meet as many times as are necessary to discuss and attempt resolution of the dispute.

12.4 The DRC will serve as a forum for resolution of dispute for which agreement has not been reached through informal dispute resolution. The Parties shall each designate one individual and an alternate to serve on the DRC. The individuals designated to serve on the DRC shall be employed at the policy level Senior Executive Service (SES) or equivalent or be

delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The EPA representative on DRC is the Assistant Director for Superfund of EPA's Region 9. The Department of the Navy's designated member is the Director, Facilities Management, Southwest Division, Naval Facilities Engineering Command. The DHS representative is the DHS Chief of the Site Mitigation Branch, Region 4. The RWQCB representative is the Chief, Special Projects Unit. Written notice of any delegation of authority from a Party's designated representative on the DRC shall be provided to all other Parties pursuant to the procedures of Section 21 (Notification).

12.5 Following elevation of a dispute to the DRC, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-one (21) day period, the written statement of dispute shall be forwarded to the Senior Executive Committee (SEC) for resolution within seven (7) days after the close of the twenty-one (21) day resolution period.

12.6 The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The EPA representative on the SEC is the Regional Administrator of EPA Region 9. The Department of the Navy's representative on the SEC is the Commander, Southwest Division, Naval Facilities Engineering Command. The DHS representative on the SEC is the Regional Administrator, Region 4. The RWQCB representative on the SEC is the Assistant Executive Officer. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, EPA's Regional Administrator shall issue a written position on the dispute. The Department of the Navy or the State may, within fourteen (14) days of the Regional Administrator's issuance of EPA's position, issue a written notice elevating the dispute to the Administrator of EPA for resolution in accordance with all applicable laws and procedures. In the event the Department of the Navy or the State elects not to elevate the dispute to the Administrator within the designated fourteen (14) day escalation period, the Department of the Navy and the State shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

12.7 Upon escalation of a dispute to the Administrator of EPA pursuant to subsection 12.6 above, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the EPA

Administrator shall meet and confer with the Department of the Navy's Secretariat Representative, the DHS Chief Deputy Director and the RWQCB Executive Officer to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the Department of the Navy and the State with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Section shall not be delegated.

12.8 The pendency of any dispute under this Section shall not affect any Party's responsibility for timely performance of the work required by this Agreement, except that the time period for completion of work affected by such dispute shall be extended for a period of time usually not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by this Agreement which are not affected by the dispute shall continue and be completed in accordance with the applicable timetable and deadline or schedule.

12.9 When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Hazardous Waste Management Division Director for EPA Region 9 requests, in writing, that work related to the dispute be stopped because, in EPA's opinion, such work is inadequate or defective, and such inadequacy or defect is likely to yield an adverse effect on human health or the environment, or is likely to have a substantial adverse effect on the remedy selection or implementation process. DHS or RWQCB may request the EPA Hazardous Waste Management Division Director to order work stopped for the reasons set out above. To the extent possible, the Party seeking a work stoppage shall consult with the other Parties prior to initiating a work stoppage request. After work stoppage, if a Party believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the Party may meet with the other Parties to discuss the work stoppage. Following this meeting and further considerations of this issue, the EPA Hazardous Waste Management Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the EPA Hazardous Waste Management Division Director may immediately be subject to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of the Party requesting dispute resolution.

12.10 Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Section (or before such later date as is agreed by the Parties), the Marine

Corps shall incorporate the resolution and final determination into the appropriate plan, schedule or procedures and proceed to implement this Agreement according to the amended plan, schedule or procedures. The deadline set forth above may in appropriate circumstances be extended in accordance with Section 9 (Extensions).

12.11 Except as set forth in Section 31 (Covenant Not to Sue and Reservation of Rights), resolution of a dispute pursuant to this Section (as it may be modified pursuant to subsection 11.6) constitutes a final resolution of any dispute arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section.

12.12 For purposes of all dispute resolution procedures set forth in this Agreement and other decisions of the Parties that may be taken to dispute resolution, the Parties agree as follows:

(a) DHS and RWQCB will jointly designate which of the two agencies shall voice the State's position for specified subjects and which shall do so for unspecified subjects. DHS and RWQCB shall provide EPA and the Marine Corps with an initial designation within thirty (30) days after the execution of this agreement. DHS and RWQCB may modify the initial designation or subsequent designations. DHS and RWQCB shall notify EPA and the Marine Corps in writing of any modification. Such modification shall become effective upon receipt by EPA and the Marine Corps.

(b) The agency designated in accordance with paragraph 12.12(a) shall represent the State with a single voice throughout the dispute resolution process and in all decisions of the Parties that may be taken to dispute resolution.

13. ENFORCEABILITY

13.1 The Parties agree that:

(a) Upon the effective date of this Agreement, any standard, regulation, condition, requirement or order which has become effective under CERCLA and is incorporated into this Agreement is enforceable by any person pursuant to CERCLA section 310, and any violation of such standard, regulation, condition, requirement or order will be subject to civil penalties under CERCLA sections 310(c) and 109;

(b) All timetables or deadlines associated with the RI/FS shall be enforceable by any person pursuant to CERCLA

section 310, and any violation of such timetables or deadlines will be subject to civil penalties under CERCLA sections 310(c) and 109;

(c) All terms and conditions of this Agreement which relate to remedial actions, including corresponding timetables, deadlines or schedules, and all work associated with remedial actions, shall be enforceable by any person pursuant to CERCLA section 310(c), and any violation of such terms or conditions will be subject to civil penalties under CERCLA sections 310(c) and 109; and

(d) Any final resolution of a dispute pursuant to Section 12 (Dispute Resolution) of this Agreement which establishes a term, condition, timetable, deadline or schedule shall be enforceable by any person pursuant to CERCLA section 310(c), and any violation of such terms, condition, timetable, deadline or schedule will be subject to civil penalties under CERCLA sections 310(c) and 109.

13.2 Nothing in this Agreement shall be construed as authorizing any person to seek judicial review of any action or work where review is barred by any provision of CERCLA including CERCLA section 113(h).

13.3 Nothing in this Agreement shall be construed as a restriction or waiver of any rights the EPA or the State may have under CERCLA, including but not limited to any rights under sections 113 and 310, 42 U.S.C. § 9613 and 9659, and/or applicable state law. The Marine Corps does not waive any rights it may have under CERCLA sections 120 and 121, SARA section 211 and E.O. 12580.

13.4 The Parties agree to exhaust their rights under Section 12 (Dispute Resolution) prior to exercising any rights to judicial review that they may have.

13.5 The Parties agree that all Parties shall have the right to enforce the terms of this Agreement.

14. STIPULATED PENALTIES

14.1 In the event that the Marine Corps (a) fails to submit a primary document listed in Section 7 (Consultation) to EPA and the State pursuant to the appropriate timetable or deadline in accordance with the requirements of this Agreement, or (b) fails to comply with a term or condition of this Agreement which relates to an operable unit or final remedial action (unless excused under this Agreement), EPA may assess a stipulated

penalty against the Marine Corps. The State may also recommend to EPA that a stipulated penalty be assessed. A stipulated penalty may be assessed in an amount not to exceed $5,000 for the first week (or part thereof), and $10,000 for each additional week (or part thereof) for which a failure set forth in this subsection occurs.

14.2 Upon determining that an event described in subsection 14.1(a) or 14.1(b) has occurred, EPA shall notify the Marine Corps in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the Marine Corps shall have fifteen (15) days after receipt of the notice to invoke dispute resolution on the question whether such event has in fact occurred. The Marine Corps shall not be liable for the stipulated penalty assessed by EPA if the event is determined, through the dispute resolution process, not to have occurred. No assessment of a stipulated penalty shall be final until the conclusion of dispute resolution procedures related to the assessment of the stipulated penalty.

14.3 The annual reports required by CERCLA section 120(e)(5), 42 U.S.C. § 9620(e)(5), shall include, with respect to each final assessment of a stipulated penalty against the Marine Corps under this Agreement, each of the following:

(a) The federal facility responsible for the failure;
(b) A statement of the facts and circumstances giving rise to the failure;
(c) A statement of any administrative or other corrective action taken at the relevant federal facility, or a statement of why such measures were determined to be inappropriate;
(d) A statement of any additional action taken by or at the federal facility to prevent recurrence of the same type of failure; and
(e) The total dollar amount of the stipulated penalty assessed for the particular failure.

14.4 Stipulated penalties assessed pursuant to this Section shall be payable to the Hazardous Substances Response Trust Fund only in the manner and to the extent expressly provided for in acts authorizing funds for, and appropriations to, the Department of Defense. EPA and the State agree, to the extent allowed by law, to share equally any stipulated penalties paid on behalf of Marine Corps Air Station El Toro between the Hazardous Substance Response Trust Fund and an appropriate State fund.

14.5 In no event shall this Section give rise to a

stipulated penalty in excess of the amount set forth in CERCLA section 109, 42 U.S.C. § 9609.

14.6 This Section shall not affect the Marine Corps' ability to obtain an extension of a timetable, deadline or schedule pursuant to Section 9 (Extensions).

14.7 Nothing in this Agreement shall be construed to render any officer or employee of the Marine Corps personally liable for the payment of any stipulated penalty assessed pursuant to this Section.

15. FUNDING

15.1 It is the expectation of the Parties to this Agreement that all obligations of the Marine Corps arising under this Agreement will be fully funded. The Marine Corps agrees to seek sufficient funding through the Department of Defense budgetary process to fulfill its obligations under this Agreement.

15.2 In accordance with CERCLA section 120(e)(5)(B), 42 U.S.C. § 9620 (e)(5)(B), the Marine Corps shall include, in its submission to the Department of Defense annual report to Congress, the specific cost estimates and budgetary proposals associated with the implementation of this Agreement.

15.3 Any requirement for the payment or obligation of funds, including stipulated penalties, by the Marine Corps established by the terms of this Agreement shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted.

15.4 If appropriated funds are not available to fulfill the Marine Corps' obligations under this Agreement, EPA and the State reserve the right to initiate an action against any other person, or to take any response action, which would be appropriate absent this Agreement.

15.5 Funds authorized and appropriated annually by Congress under the "Environmental Restoration, Defense" appropriation in the Department of Defense Appropriation Act and allocated by the Deputy Assistant Secretary of Defense for Environment to the

Department of the Navy will be the source of funds for activities required by this Agreement consistent with section 211 of CERCLA, 10 U.S.C. Chapter 160. However, should the Environmental Restoration, Defense appropriation be inadequate in any year to meet the total Department of the Navy CERCLA implementation requirements, the Department of Defense shall employ and the Department of the Navy shall follow a standardized Department of Defense prioritization process which allocates that year's appropriations in a manner which maximizes the protection of human health and the environment. A standardized Department of Defense prioritization model shall be developed and utilized with the assistance of EPA and the states.

16. EXEMPTIONS

16.1 The obligation of the Marine Corps to comply with the provisions of this Agreement may be relieved by:

(a) A Presidential order of exemption issued pursuant to the provisions of CERCLA section 120(j)(1), 42 U.S.C. § 9620(j)(1), or RCRA section 6001, 42 U.S.C. § 6961; or

(b) The order of an appropriate court.

16.2 The State reserves any statutory right it may have to challenge any Presidential order relieving the Marine Corps of its obligations to comply with this Agreement.

17. STATUTORY COMPLIANCE/RCRA-CERCLA INTEGRATION

17.1 The Parties intend to integrate into this comprehensive Agreement the Marine Corps's CERCLA response obligations with the Marine Corps's (a) RCRA corrective action obligations, (b) State corrective/remedial action obligations, and (c) obligations under all Orders and other statutory requirements of RWQCB, in each case relating to releases of hazardous substances, hazardous wastes, pollutants or contaminants covered by this Agreement and which have been or will be adequately addressed by the remedial actions provided for under this Agreement. Therefore, the Parties intend that activities covered by this Agreement will achieve compliance with CERCLA, 42 U.S.C. § 9061 et seq.; satisfy the corrective action requirements of RCRA section 3004(u) & (v), 42 U.S.C. § 6924(u) & (v), for a RCRA permit, and RCRA section 3008(h), 42 U.S.C. § 6928(h), for interim status facilities; and meet or exceed all applicable or relevant and appropriate federal and State laws and regulations, to the extent required by CERCLA section 121, 42

U.S.C. § 9621.

17.2 Based upon the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this Agreement shall obviate the need for further corrective action under RCRA or otherwise applicable State hazardous waste or water quality protection laws (i.e., no further corrective action shall be required). The Parties agree that with respect to releases of hazardous waste covered by this Agreement, RCRA and such State laws shall be considered an applicable or relevant and appropriate requirement pursuant to CERCLA section 121, 42 U.S.C. § 9621.

17.3 The Parties recognize that the requirement to obtain permits for response actions undertaken pursuant to this Agreement shall be as provided in CERCLA and the NCP. The Parties further recognize that ongoing hazardous waste management activities at Marine Corps Air Station El Toro may require the issuance of permits under federal and State laws. This Agreement does not affect the requirements, if any, to obtain such permits. However, if a permit is issued to the Marine Corps for ongoing hazardous waste management activities at the Site, the issuing party shall reference and incorporate in a permit condition any appropriate provision, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit. The Parties intend that any judicial review of any permit condition which references this Agreement shall, to the extent authorized by law, only be reviewed under the provisions of CERCLA.

18. PROJECT MANAGERS

18.1 Within ten (10) days after the date of execution of this Agreement, EPA, the Marine Corps, DHS and RWQCB shall each designate a Project Manager and an alternate (each hereinafter referred to as Project Manager), for the purpose of overseeing the implementation of this Agreement. The Project Managers shall be responsible on a daily basis for assuring proper implementation of the RI/FS and the RD/RA in accordance with the terms of the Agreement. In addition to the formal notice provisions set forth in Section 21 (Notification), to the maximum extent possible, communications among the Marine Corps, EPA, and the State on all documents, including reports, comments, and other correspondence concerning the activities performed pursuant to this Agreement, shall be directed through the Project

Managers. A contractor may not serve as Project Manager, unless the other Parties shall consent in writing.

18.2 The Marine Corps, EPA, DHS and RWQCB may change their respective Project Managers. The other Parties shall be notified in writing within five days of the change.

18.3 The Project Managers shall meet to discuss progress as described in subsection 7.5. Although the Marine Corps has ultimate responsibility for meeting its respective deadlines or schedule, the Project Managers shall assist in this effort by consolidating the review of primary and secondary documents whenever possible, and by scheduling progress meetings to review reports, evaluate the performance of environmental monitoring at the Site, review RI/FS or RD/RA progress, discuss target dates for elements of the RI/FS to be conducted in the following one hundred and eighty (180) days, resolve disputes, and adjust deadlines or schedules. At least one week prior to each scheduled progress meeting, the Marine Corps will provide to the other Parties a draft agenda and summary of the status of the work subject to this Agreement. Unless the Project Managers agree otherwise, the minutes of each progress meeting, the meeting agenda and all documents discussed during the meeting that were not previously provided shall constitute a progress report. The Marine Corps will send to all Project Managers (a) within ten business days after the meeting, all such documents not previously provided and (b) within twenty-one calendar days after the meeting, the minutes and agenda. If an extended period occurs between Project Manager progress meetings, the Project Managers may agree that the Marine Corps shall prepare an interim progress report and provide it to the other Parties. The report shall include the information that would normally be discussed in a progress meeting.

18.4 The authority of the Project Managers shall include, but is not limited to:

(a) Taking samples and ensuring that sampling and other field work is performed in accordance with the terms of any final work plan and QAPP;

(b) Observing, and taking photographs and making such other reports on the progress of the work as the Project Managers deem appropriate, subject to the limitations set forth in Section 25 (Access to Marine Corps Air Station El Toro) hereof;

(c) Reviewing records, files and documents relevant to the work performed, subject to the limitations set forth in subsection 23.1 hereof;

(d) Determining the form and specific content of th

Project Manager meetings and of progress reports based on such meetings; and

(e) Recommending and requesting minor field modifications to the work to be performed pursuant to a final work plan, or to techniques, procedures, or design utilized in carrying out such work plan.

18.5 Any minor field modification proposed by any Party pursuant to this Section must be approved orally by all Parties' Project Managers to be effective. The Marine Corps Project Manager will make a contemporaneous record of such modification and approval in a written log, and a copy of the log entry will be provided as part of the next progress report. Even after approval of the proposed modification, no Project Manager will require implementation by a government contractor without approval of the appropriate Government Contracting Officer.

18.6 The Project Manager for the Marine Corps shall be responsible for day-to-day field activities at the Site. The Marine Corps Project Manager or other designated representative of Marine Corps Air Station El Toro shall be present at the Site or reasonably available to supervise work during all hours of work performed at the Site pursuant to this Agreement. For all times that such work is being performed, the Marine Corps Project Manager shall inform the command post at Marine Corps Air Station El Toro of the name and telephone number of the designated representative responsible for supervising the work.

18.7 The Project Managers shall be reasonably available to consult on work performed pursuant to this Agreement and shall make themselves available to each other for the pendency of this Agreement. The absence of EPA, DHS, RWQCB or Marine Corps Project Managers from the Facility shall not be cause for work stoppage of activities taken under this Agreement.

18.8 If the Project Manager for DHS or RWQCB cannot attend any Project Managers' meeting, the agency unable to attend shall provide reasonable notice (48 hours' advance notice if possible) to all other Project Managers regarding such absence and whether the Project Manager for the other State agency is authorized to speak for the absent agency. If such other agency's Project Manager is not so authorized, the absent agency shall, to the extent practical, provide its concerns and comments to all other Parties within a reasonable time prior to the meeting.

19. PERMITS

19.1 The Parties recognize that under sections 121(d) and 121(e)(1) of CERCLA, 42 U.S.C. § 9621(d) and 9621(e)(1), and the NCP, portions of the response actions called for by this Agreement and conducted entirely on-site are exempted from the procedural requirement to obtain a federal, State, or local permit but must satisfy all the promulgated (as defined in NCP § 300.400(g)(4)) applicable or relevant and appropriate federal and State substantive standards, requirements, criteria, or limitations which would have been included in any such permit.

19.2 This Section is not intended to relieve the Marine Corps from any applicable regulatory requirements, including obtaining a permit, whenever it proposes a response action involving either the movement of hazardous substances, pollutants, or contaminants off-site, or the conduct of a response action off-site.

19.3 The Marine Corps shall notify EPA and the State in writing of any permit required for off-site activities as soon as it becomes aware of the requirement. The Marine Corps agrees to obtain any permits necessary for the performance of any work under this Agreement. Upon request, the Marine Corps shall provide EPA and the State copies of all such permit applications and other documents related to the permit process. Copies of permits obtained in implementing this Agreement shall be appended to the appropriate submittal or progress report. Upon request by the Marine Corps Project Manager, the Project Managers of EPA and the State will assist Marine Corps Air Station El Toro to the extent feasible in obtaining any required permit.

20. QUALITY ASSURANCE

20.1 In order to provide quality assurance and maintain quality control regarding all field work and sample collection performed pursuant to this Agreement, the Marine Corps agrees to designate a Quality Assurance Officer (QAO) who will ensure that all work is performed in accordance with approved work plans, sampling plans and QAPPs. The QAO shall maintain for inspection a log of quality assurance field activities and provide a copy to the Parties upon request.

20.2 To ensure compliance with the QAPP, the Marine Corps shall, upon request by EPA or the State, use its best efforts to obtain access to all laboratories performing analysis on behalf of the Marine Corps pursuant to this Agreement. If such access is not obtained for any laboratory, EPA or the State may reject all or portions of the data generated by such laboratory and

require the Marine Corps to have the same or comparable data analyzed by a laboratory that will grant such access.

21. NOTIFICATION

21.1 All Parties shall transmit primary and secondary documents, and comments thereon, and all notices required herein by next day mail, hand delivery, or facsimile, or by certified mail if transmitted sufficiently ahead of the applicable deadline. Notifications shall be deemed effective upon receipt.

21.2 Notice to the individual Parties pursuant to this Agreement shall be sent to the addresses specified by the Parties. Initially these shall be as follows:

EPA:
Mr. John Hamill
Remedial Project Manager, Marine Corps Air Station El Toro
U.S. Environmental Protection Agency, Region 9
Hazardous Waste Management Division, H-7-5
~~1235 Mission Street~~ 75 HAWTHORN STREET
San Francisco, CA ~~94103~~ 94105

State:
JOE J. ZARNOCH
~~Manny Alonso~~, Project Manager
Preremedial and Federal Facilities Unit
California Department ~~of [redacted]~~
Toxic Substances Control ~~[redacted]~~
Region 4, Site Mitigation Branch
245 West Broadway, Suite 350
Long Beach, CA 90802; and

~~Ken Williams~~ JOHN BRODERICK
Water Resource Control Engineer
Regional Water Quality Control Board, Santa Ana Region
~~6809 Indiana Ave., Suite 200~~ 2010 IOWA AVENUE, SUITE 100
Riverside, CA ~~92506~~ 92507

Marine Corps: F. ANDREW PISZKIN
~~Larry Nuzum~~, Remedial Project Manager
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

21.3 All routine correspondence may be sent via first class mail to the above addresses.

MCAS EL TORO
COMMANDING GENERAL
SANTA ANA, CA 92709

require the Marine Corps to have the same or comparable data analyzed by a laboratory that will grant such access.

21. NOTIFICATION

21.1 All Parties shall transmit primary and secondary documents, and comments thereon, and all notices required herein by next day mail, hand delivery, or facsimile, or by certified mail if transmitted sufficiently ahead of the applicable deadline. Notifications shall be deemed effective upon receipt.

21.2 Notice to the individual Parties pursuant to this Agreement shall be sent to the addresses specified by the Parties. Initially these shall be as follows:

EPA:

John Hamill
Remedial Project Manager, Marine Corps Air Station El Toro
U.S. Environmental Protection Agency, Region 9
Hazardous Waste Management Division, H-7-5
1235 Mission Street
San Francisco, CA 94103

State:

Manny Alonzo, Project Manager
Preremedial and Federal Facilities Unit
California Department of Health Services
Toxic Substances Control Division
Region 4, Site Mitigation Branch
245 West Broadway, Suite 350
Long Beach, CA 90802; and

Ken Williams
Water Resource Control Engineer
Regional Water Quality Control Board, Santa Ana Region
6809 Indiana Ave., Suite 200
Riverside, CA 92506

Marine Corps:

Larry Nuzum, Remedial Project Manager
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

21.3 All routine correspondence may be sent via first class mail to the above addresses.

22. DATA AND DOCUMENT AVAILABILITY

22.1 Each Party shall make all sampling results, test results or other data or documents generated through the implementation of this Agreement available to the other Parties. All quality assured data shall be supplied within sixty (60) days of its collection. If the quality assurance procedure is not completed within sixty (60) days, raw data or results shall be submitted within the sixty (60) day period and quality assured data or results shall be submitted as soon as they become available. The procedures of Section 9 (Extensions) shall apply to the sixty-day period referred to herein.

22.2 The sampling Party's Project Manager shall notify the other Parties' Project Managers not less than 10 days in advance of any sample collection. If it is not possible to provide 10 days prior notification, the sampling Party's Project Manager shall notify the other Project Managers as soon as possible after becoming aware that samples will be collected. Each Party shall allow, to the extent practicable, split or duplicate samples to be taken by the other Parties or their authorized representatives. Other Parties desiring to collect split or duplicate samples shall inform the sampling Party before the time of sample collection. Each Party receiving split or duplicate samples shall on request provide the sampling Party with its chain of custody documents relating to such sample.

23. RELEASE OF RECORDS

23.1 The Parties may request of one another access to or a copy of any record or document relating to this Agreement or the Installation Restoration Program. If the Party that is the subject of the request (the originating Party) has the record or document, that Party shall provide to the requesting Party access to or a copy of the record or document; provided, however, that no such access or copy need be provided if the record or document is identified as confidential and is subject to a claim of confidentiality because of attorney-client privilege or attorney work product or under the following provisions of FOIA: deliberative process, enforcement confidentiality, or properly classified for national security under law or executive order.

23.2 Records or documents identified by the originating Party as confidential pursuant to (a) non-disclosure provisions of FOIA other than those listed in subsection 23.1 above, or (b)

the California Public Records Act, section 6250 et seq. of the California Government Code, shall be released to the requesting Party if the requesting Party states in writing that it will not release the record or document to the public without first consulting with the originating Party and either (x) receiving the originating Party's prior approval or (y) if the originating Party does not approve, giving the originating Party opportunity to contest, in accordance with applicable statutes and regulations, the preliminary decision to release. Records or documents which are provided to the requesting Party and which are not identified as confidential may be made available to the public without further notice to the originating Party.

23.3 The Parties will not assert one of the above exemptions, including any available under FOIA or the California Public Records Act, even if available, if no governmental interest (including the interest established by law in protecting confidential business information) would be jeopardized by access or release as determined solely by the asserting Party.

23.4 Subject to section 120(j)(2) of CERCLA, 42 U.S.C. § 9620(j)(2), any documents required to be provided by Section 7 (Consultation) and analytical data showing test results will not be subject to subsection 23.2 or the proviso to subsection 23.1.

23.5 This Section does not change any requirement regarding press releases in Section 26 (Public Participation and Community Relations).

23.6 Disputes between EPA and the Marine Corps concerning matters covered by this Section 23 shall be subject to Section 12 (Dispute Resolution). Disputes between (a) DHS or the RWQCB and (b) EPA or the Marine Corps shall not be subject to Section 12 and shall instead be pursued through the originating Party's standard procedures concerning releasability of documents under FOIA or the California Public Records Act.

24. PRESERVATION OF RECORDS

24.1 Notwithstanding any document retention policy to the contrary, during the pendency of this Agreement and for a minimum of ten years after its termination, (a) the Marine Corps shall preserve all records and documents that were at any time in its possession or in the possession of its contractors and (b) each other Party shall preserve all records and documents it prepared or to which it substantially contributed, in each case that relate to (x) the implementation of the Installation Restoration

Program at the Site, or (y) the actions carried out pursuant to this Agreement. After this ten-year period, each Party shall notify the other Parties at least 45 days prior to destruction of any such records or documents.

25. ACCESS TO MARINE CORPS AIR STATION EL TORO

25.1 Without limitation of any authority conferred on EPA or the State by statute or regulation, EPA, the State or their authorized representatives shall be allowed to enter Marine Corps Air Station El Toro at reasonable times for purposes consistent with the provisions of the Agreement, subject to any statutory and regulatory requirements necessary to protect national security or mission essential activities. Such access shall include, but not be limited to, reviewing the progress of the Marine Corps in carrying out the terms of this Agreement; ascertaining that the work performed pursuant to this Agreement is in accordance with approved work plans, sampling plans and QAPPs; and conducting such tests as EPA, the State, or the Project Managers deem necessary.

25.2 The Marine Corps shall honor all reasonable requests for access by the EPA or the State, conditioned upon presentation of proper credentials. The Marine Corps Project Manager or his/her designee will provide briefing information, coordinate access and escort to restricted or controlled-access areas, arrange for base passes and coordinate any other access requests which arise.

25.3 EPA and the State shall provide reasonable notice (which shall, if practical, be 48 hours' advance notice) to the Marine Corps Project Manager to request any necessary escorts. EPA and the State shall not use any camera, sound recording or other recording device at Marine Corps Air Station El Toro without the permission of the Marine Corps Project Manager. The Marine Corps shall not unreasonably withhold such permission.

25.4 The access by EPA and the State granted in subsection 25.1 shall be subject to those regulations necessary to protect national security or mission essential activities. Such regulation shall not be applied so as to unreasonably hinder EPA or the State from carrying out their responsibilities and authority pursuant to this Agreement. In the event that access requested by either EPA or the State is denied by the Marine Corps, the Marine Corps shall provide an explanation within 48 hours of the reason for the denial, including reference to the applicable regulations, and, upon request, a copy of such regulations. The Marine Corps shall expeditiously make

alternative arrangements for accommodating the requested access. The Parties agree that this Agreement is subject to CERCLA section 120(j), 42 U.S.C. § 9620(j), regarding the issuance of Site Specific Presidential Orders as may be necessary to protect national security.

25.5 If EPA or the State requests access in order to observe a sampling event or other work being conducted pursuant to this Agreement, and access is denied or limited, the Marine Corps agrees to reschedule or postpone such sampling or work if EPA or the State so requests, until such mutually agreeable time when the requested access is allowed. The Marine Corps shall not restrict the access rights of the EPA or the State to any greater extent than the Marine Corps restricts the access rights of its contractors performing work pursuant to this Agreement.

25.6 All Parties with access to Marine Corps Air Station El Toro pursuant to this Section shall comply with all applicable health and safety plans.

25.7 To the extent the activities pursuant to this Agreement must be carried out on other than Marine Corps property, the Marine Corps shall use its best efforts, including its authority under CERCLA section 104, to obtain access agreements from the owners which shall provide reasonable access for the Marine Corps, EPA, and the State and their representatives. The Marine Corps may request the assistance of the State in obtaining such access, and upon such request, the State will use its best efforts to obtain the required access. In the event that the Marine Corps is unable to obtain such access agreements, the Marine Corps shall promptly notify EPA and the State.

25.8 With respect to non-Marine Corps property on which monitoring wells, pumping wells, or other response actions are to be located, the Marine Corps shall use its best efforts to ensure that any access agreements shall provide for the continued right of entry for all Parties for the performance of such remedial activities. In addition, any access agreement shall provide that no conveyance of title, easement, or other interest in the property shall be consummated without the continued right of entry.

25.9 Nothing in this Section shall be construed to limit EPA's and the State's full right of access as provided in 42 U.S.C. § 9604(e) and California Health and Safety Code section 25185, except as that right may be limited by 42 U.S.C. § 9620(j)(2), E.O. 12580, or other applicable national security

regulations or federal law.

26. PUBLIC PARTICIPATION AND COMMUNITY RELATIONS

26.1 The Parties agree that any proposed removal actions and remedial action alternative(s) and plan(s) for remedial action at the Site arising out of this Agreement shall comply with the administrative record and public participation requirements of CERCLA sections 113(k) and 117, 42 U.S.C. § 9313(k) and 9617, relevant community relations provisions in the NCP, EPA guidances, and, to the extent they may apply, State statutes and regulations. The State agrees to inform the Marine Corps of all State requirements which it believes pertain to public participation. The provisions of this Section shall be carried out in a manner consistent with, and shall fulfill the intent of, Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

26.2 The Marine Corps shall develop and implement a community relations plan (CRP) addressing the environmental activities and elements of work undertaken by the Marine Corps, except as provided in Section 11 hereof.

26.3 The Marine Corps shall establish and maintain an administrative record at a place, at or near the federal facility, which is freely accessible to the public, which record shall provide the documentation supporting the selection of each response action. The administrative record shall be established and maintained in accordance with relevant provisions in CERCLA, the NCP, and EPA guidances. A copy of each document placed in the administrative record, not already provided, will be provided by the Marine Corps to the other Parties. The administrative record developed by the Marine Corps shall be updated and new documents supplied to the other Parties on at least a quarterly basis. An index of documents in the administrative record will accompany each update of the administrative record.

26.4 Except in case of an emergency, any Party issuing a press release with reference to any of the work required by this Agreement shall advise the other Parties of such press release and the contents thereof at least 48 hours prior to issuance.

27. FIVE-YEAR REVIEW

27.1 Consistent with 42 U.S.C. § 9621(c) and in accordance with this Agreement, if the selected remedial action results in

any hazardous substances, pollutants or contaminants remaining at the Site, the Parties shall review the remedial action program at least every five (5) years after the initiation of the final remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

27.2 If, upon such review, any of the Parties proposes additional work or modification of work, such proposal shall be handled under subsection 7.10 of this Agreement.

27.3 To synchronize the five-year reviews for all operable units and final remedial actions, the following procedure will be used: Review of operable units will be conducted every five years counting from the initiation of the first operable unit, until initiation of the final remedial action for the Site. At that time a separate review for all operable units shall be conducted. Review of the final remedial action (including all operable units) shall be conducted every five years thereafter.

28. TRANSFER OF REAL PROPERTY

28.1 No change in the ownership of Marine Corps Air Station El Toro shall in any way alter the responsibility of the Parties under this Agreement. The Marine Corps shall not transfer any real property comprising the federal facility except in compliance with section 120(h) of CERCLA, 42 U.S.C. § 9620(h). Prior to any sale of any portion of the land comprising the federal facility which includes an area within which any release of hazardous substance has come to be located, or any property which is necessary for proceeding with the remedial action, the Marine Corps shall give written notice of that condition to the buyer of the land. At least thirty (30) days prior to any conveyance subject to section 120(h) of CERCLA, the Marine Corps shall notify all Parties of the transfer of any real property subject to this Agreement and the provisions made for any additional remedial actions, if required. The provisions of this subsection 28.1 shall not apply to the extent federal statute adopted after the effective date of this Agreement places restrictions on transfer of real property by the Marine Corps that are inconsistent with such provisions.

28.2 Until six months following the effective date of the final regulations implementing CERCLA section 120(h)(2), 42 U.S.C. § 9620(h)(2), the Marine Corps agrees to comply with the most recent version of the regulations as proposed and all other substantive and procedural provisions of CERCLA section 120(h) and subsection 28.1.

29. AMENDMENT OR MODIFICATION OF AGREEMENT

29.1 This Agreement can be amended or modified solely upon written consent of all Parties. Such amendments or modifications may be proposed by any Party and shall be effective the third business day following the day the last Party to sign the amendment or modification sends its notification of signing to the other Parties. The Parties may agree to a different effective date.

30. TERMINATION OF THE AGREEMENT

30.1 The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by the Marine Corps of written notice from EPA, with concurrence of the State, that the Marine Corps has demonstrated that all the terms of this Agreement have been completed. If EPA denies or otherwise fails to grant a termination notice within 90 days of receiving a written Marine Corps request for such notice, EPA shall provide a written statement of the basis for its denial and describe the Marine Corps actions which, in the view of EPA, would be a satisfactory basis for granting a notice of completion. Such denial or failure to grant shall be subject to dispute resolution.

30.2 This Section shall not affect the requirements for periodic review at maximum five-year intervals of the efficacy of the remedial actions.

31. COVENANT NOT TO SUE AND RESERVATION OF RIGHTS

31.1 In consideration for the Marine Corps's compliance with this Agreement, and based on the information known to the Parties or reasonably available on the effective date of this Agreement, EPA, the Marine Corps, and the State agree that compliance with this Agreement shall stand in lieu of any administrative, legal, and equitable remedies against the Marine Corps available to them regarding the releases or threatened releases of hazardous substances including hazardous wastes, pollutants or contaminants at the Site which are the subject of any RI/FS conducted pursuant to this Agreement and which have been or will be adequately addressed by the remedial actions provided for under this Agreement. The above notwithstanding, EPA and the State reserve all rights each may have with regard to

the Marine Corps's taking any removal action requested under subsection 11.3(f) after exhaustion of the alternative dispute resolution process set forth in subsection 11.6.

31.2 Notwithstanding this Section or any other Section of this Agreement, the State shall retain any statutory right it may have to obtain judicial review of any final decision of the EPA on selection of remedial action pursuant to any authority the State may have under CERCLA, including sections 121(e)(2), 121(f), 310, and 113.

32. OTHER CLAIMS

32.1 Nothing in this Agreement shall constitute or be construed as a bar or release from any claim, cause of action or demand in law or equity by or against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous waste, pollutants, or contaminants found at, taken to, or taken from the federal facility. Unless specifically agreed to in writing by the Parties, EPA and the State shall not be held as a party to any contract entered into by the Department of the Navy (including the Marine Corps) to implement the requirements of this Agreement.

32.2 This Agreement shall not restrict EPA, the State or the Marine Corps from taking any legal or response action for any matter not part of the subject matter of this Agreement.

33. RECOVERY OF EPA EXPENSES

33.1 The Parties agree to amend this Agreement at a later date in accordance with any subsequent national resolution of the issue of cost reimbursement. Pending such resolution, EPA reserves any rights it may have with respect to cost reimbursement.

34. STATE SUPPORT SERVICES

34.1 Compensation for State support services rendered in connection with this Agreement are governed by the Defense/State Memorandum of Agreement, executed on May 31, 1990, between DHS on behalf of the State and the Department of Defense. In the event such Memorandum of Agreement is terminated or no longer in effec

for any reason, subsections 34.2 through shall 34.12 shall apply.

34.2 The Marine Corps agrees to request funding and reimburse the State, subject to the conditions and limitations set forth in this Section and subject to Section 15 (Funding), for all reasonable costs it incurs in providing services in direct support of the Marine Corps's environmental restoration activities pursuant to this Agreement at the Site.

34.3 Reimbursable expenses shall consist only of actual expenditures required to be made and actually made by the State in providing the following assistance to Marine Corps Air Station El Toro:

(a) Timely technical review and substantive comment on reports or studies which the Marine Corps prepares in support of its response actions and submits to the State.

(b) Identification and explanation of unique State requirements applicable to military installations in performing response actions, especially State ARARs.

(c) Field visits to ensure investigations and clean-up activities are implemented in accordance with appropriate State requirements, or in accordance with agreed upon conditions between the State and the Marine Corps that are established in the framework of this Agreement.

(d) Support and assistance to the Marine Corps in the conduct of public participation activities in accordance with federal and State requirements for public involvement.

(e) Participation in the review and comment functions of Marine Corps Technical Review Committees.

(f) Other services specified in this Agreement.

34.4 Within ninety (90) days after the end of each quarter of the federal fiscal year, the State shall submit to the Marine Corps an accounting of all State costs actually incurred during that quarter in providing direct support services under this Section. Such accounting shall be accompanied by cost summaries and be supported by documentation which meets federal auditing requirements. The summaries will set forth employee-hours and other expenses by major type of support service. All costs submitted must be for work directly related to implementation of this Agreement and not inconsistent with either the National Contingency Plan (NCP) or the requirements described in OMB Circulars A-87 (Cost Principles for State and Local Governments) and A-128 (Audits for State and Local Cooperative Agreements with State and Local Governments) and Standard Forms 424 and 270. The Marine Corps has the right to audit cost reports used by the State to develop the cost summaries. Before the beginning of

each fiscal year, the State shall supply a budget estimate of what it plans to do in the next year in the same level of detail as the billing documents.

34.5 Except as allowed pursuant to subsections 34.6 or 34.7 below, within ninety (90) days of receipt of the accounting provided pursuant to subsection 34.3 above, the Marine Corps shall reimburse the State in the amount set forth in the accounting.

34.6 In the event the Marine Corps contends that any of the costs set forth in the accounting provided pursuant to subsection 34.4 above are not properly payable, the matter shall be resolved through the process set forth in subsection 34.10 below.

34.7 The Marine Corps shall not be responsible for reimbursing the State for any costs actually incurred in the implementation of this Agreement in excess of one percent (1%) of the Marine Corps's total lifetime project costs incurred through construction of the remedial action(s). Circumstances could arise whereby fluctuations in the Marine Corps estimates or actual final costs through the construction of the final remedial action creates a situation where the State receives reimbursem in excess of one percent of these costs. Under these circumstances, the State remains entitled to payment for services rendered prior to the completion of a new estimate if the services are within the ceiling applicable under the previous estimate. This Section does not cover the cost of services rendered prior to October 17, 1986; services and properties not owned by the federal government; and activities funded from sources other than Defense Environmental Restoration Account appropriations.

(a) Funding of support services must be constrained so as to avoid unnecessary diversion of the limited Defense Environmental Restoration Account funds available for the overall cleanup, and

(b) Support services should not be disproportionate to overall project costs and budget.

34.8 Either the Marine Corps or the State may request, on the basis of significant upward or downward revisions in the Marine Corps's estimate of its total lifetime costs through construction used in subsection 34.7 above, a renegotiation of the cap. Failing an agreement, either the Marine Corps or the State may initiate dispute resolution in accordance with subsection 34.10 below.

34.9 The State agrees to seek reimbursement for its expenses solely through the mechanisms established in this Section, and reimbursement provided under this Section shall be in settlement of any claims for State response costs relative to the Marine Corps's environmental restoration activities at the Site.

34.10 Section 12 (Dispute Resolution) notwithstanding, this subsection shall govern any dispute between the Marine Corps and the State regarding the application of this Section or any matter controlled by this Section including, but not limited to, allowability of expenses and limits on reimbursement. While it is the intent of the Marine Corps and the State that these procedures shall govern resolution of disputes concerning State reimbursement, informal dispute resolution is encouraged.

(a) The Marine Corps, DHS and RWQCB Project Managers shall be the initial points of contact for coordination of dispute resolution under this Subsection.

(b) If the Marine Corps, DHS and RWQCB Project Managers are unable to resolve a dispute, the matter shall be referred to the Commander, Southwest Division, Naval Facilities Engineering Command, or his designated representative, the DHS Regional Administrator, Region 4, and the RWQCB Assistant Executive Officer as soon as practicable, but in any event within five (5) working days after the dispute is elevated by the Project Managers.

(c) If the persons listed in paragraph 34.10(b) above are unable to resolve the dispute within ten (10) working days, the matter shall be elevated to the DHS Chief Deputy Director, the RWQCB Executive Officer and the Deputy Assistant Secretary of the Navy for Installations and the Environment.

(d) In the event persons listed in paragraph 34.10(c) above are unable to resolve a dispute, the State retains any legal and equitable remedies it may have to recover its expenses. In addition, the State may withdraw from this Agreement by giving sixty (60) days notice to the other Parties.

34.11 Nothing herein shall be construed to limit the ability of the Marine Corps to contract with the State for technical services that could otherwise be provided by a private contractor including, but not limited to:

(a) Identification, investigation, and cleanup of

any contamination beyond the boundaries of Marine Corps Air Station El Toro;

(b) Laboratory analysis; or

(c) Data collection for field studies.

34.12 Nothing in this Agreement shall be construed to constitute a waiver of any claims by the State for any expenses incurred prior to the effective date of this Agreement.

35. STATE PARTICIPATION CONTINGENCY

35.1 If either DHS or RWQCB fails to sign this Agreement within thirty (30) days of notification of the signature by both EPA and the Marine Corps, this Agreement will be interpreted as if that agency were not a signatory and any reference to that agency in this Agreement will have no effect.

35.2 If both DHS and RWQCB do not sign this Agreement within the 30-day period described in subsection 35.1, this Agreement will be interpreted as if the State were not a Party and any reference in this Agreement to the State, DHS and RWQCB will have no effect. In addition, Marine Corps Air Station El Toro shall have to comply only with those State requirements, conditions or standards, including those specifically listed in this Agreement, that Marine Corps Air Station El Toro would otherwise have had to comply with absent this Agreement.

35.3
If either subsection 35.1 or subsection 35.2 applies,

(a) the Marine Corps agrees to transmit all primary and secondary documents to the agency or agencies that did not sign this Agreement at the same time such documents are transmitted to EPA; and

(b) EPA intends to consult with the agency or agencies that did not sign this Agreement with respect to the above documents and during implementation of this Agreement.

36. EFFECTIVE DATE AND PUBLIC COMMENT

36.1 The provisions of this Section shall be carried out in a manner consistent with, and shall fulfill the intent of Section 17 (Statutory Compliance/RCRA-CERCLA Integration).

36.2 Within fifteen (15) days of the date of the execution of this Agreement, the Marine Corps shall announce the availability of this Agreement to the public for a forty-five

(45) day period of review and comment, including publication in at least two major local newspapers of general circulation. Comments received shall be transmitted to the other Parties within seven (7) days after the end of the comment period. The Parties shall review such comments within fourteen (14) days after such seven-day period and shall meet within seven (7) days after such 14-day period to determine whether this Agreement should be made effective in its present form.

(a) If it is determined that this Agreement should be made effective, EPA shall promptly notify all Parties in writing, and this Agreement shall become effective on the date that Marine Corps Air Station El Toro receives such notification.

(b) If the determination in paragraph 36.2(a) is not made, the Parties shall meet to discuss any proposed changes. If changes are agreed upon, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date it is signed by EPA.

(c) If the Parties cannot agree to modify this Agreement pursuant to paragraph 36.2(b) within the second seven day period set forth above (or within such other time period as the Parties agree upon), the Parties shall submit their written notices of position concerning those provisions still in dispute to the DRC. If the DRC is unable to resolve the dispute, the dispute shall be elevated to the SEC. If changes are agreed upon by the DRC or SEC, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date it is signed by EPA.

(d) If the SEC cannot resolve the dispute and the proposed changes would impose substantial additional obligations on a Party, such Party may withdraw from this Agreement. Withdrawal by the Marine Corps shall not affect the obligation of the Marine Corps to comply with CERCLA section 120, 42 U.S.C. § 9620, or limit the enforcement powers of EPA or the State.

36.3 Any response action underway upon the effective date of this Agreement shall be subject to the terms of this Agreement unless the Parties agree otherwise.

36.4 At the start of the public comment period, the Marine Corps will also transmit copies of this Agreement, for review and comment, to the appropriate Federal Natural Resource Trustees. The State will transmit copies to appropriate State and local agencies and compile and consolidate comments from these

agencies. The State will work with the Marine Corps prior to the start of the public comment period to develop the list of appropriate State and local agencies.

37. BASE CLOSURE

37.1 The Marine Corps does not currently plan to close Marine Corps Air Station El Toro. However, in the event that Marine Corps Air Station El Toro is closed, such closure, except as is otherwise specifically provided by law, will not affect the Marine Corps's obligation to comply with the terms of this Agreement and to specifically ensure the following:

(a) Continuing rights of access for EPA and the State in accordance with the terms and conditions of Section 25 (Access to Marine Corps Air Station El Toro);
(b) Availability of a Project Manager to fulfill the terms and conditions of the Agreement;
(c) Designation of alternate DRC members as appropriate for the purposes of implementing Section 12 (Dispute Resolution); and
(d) Adequate resolution of any other problems identified by the Project Managers regarding the effect of base closure on the implementation of this Agreement.

37.2 Base closure will not of itself constitute a Force Majeure under Section 10 (Force Majeure), nor will it constitute good cause for extensions under Section 9 (Extensions), unless agreed by the Parties.

38. APPENDICES AND ATTACHMENTS

38.1 Appendices shall be an integral and enforceable part of this Agreement. They shall include the most current versions of:

(a) Deadlines previously established.
(b) Site-specific outline of key elements to be included in the RI/FS Workplan, QAPP, Community Relations Plan, RI Report, FS Report and Treatability Studies.
(c) All final primary and secondary documents which will be created in accordance with Section 7 (Consultation).
(d) All deadlines which will be established in accordance with Section 8 (Deadlines) and which may be extended in accordance with Section 9 (Extensions).
(e) All final primary documents and all completed secondary documents agreed upon by the Parties prior to the

effective date of this Agreement.

38.2 Attachments shall be for information only and shall not be enforceable parts of this Agreement. The information in these attachments is provided to support the initial review and comment upon this Agreement, and they are only intended to reflect the conditions known at the signing of this Agreement. None of the facts related therein shall be considered admissions by, nor are they legally binding upon, any Party with respect to any claims unrelated to, or persons not a Party to, this Agreement. They shall include:

(a) Map(s) of Marine Corps Air Station El Toro (see also subsection 5.10)
(b) Chemicals of Concern
(c) Statement of Facts
(d) Installation Restoration Program Activities

EPA Region IX/State of California/Marine Corps FFA
Marine Corps Air Station El Toro

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

UNITED STATES DEPARTMENT OF THE NAVY

24 October 1990
DATE

JACQUELINE E. SCHAFER
Assistant Secretary of the Navy
(Installations and Environment)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

10.24.90
DATE

DANIEL W. MCGOVERN
Regional Administrator, Region 9

STATE OF CALIFORNIA

DEPARTMENT OF HEALTH SERVICES

DATE

JOHN A. HINTON
Regional Administrator, Region 4
Toxic Substances Control Program

REGIONAL WATER QUALITY CONTROL BOARD, SANTA ANA REGION

DATE

GERARD THIBEAULT
Executive Officer

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

UNITED STATES DEPARTMENT OF THE NAVY

DATE

NANCY STEHLE
Deputy Director
Assistant Secretary of the Navy
(Installations and Environment)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE

DANIEL W. MCGOVERN
Regional Administrator, Region 9

STATE OF CALIFORNIA

DEPARTMENT OF HEALTH SERVICES

9/21/90
DATE

JOHN A. HINTON
Regional Administrator, Region 4
Toxic Substances Control Program

REGIONAL WATER QUALITY CONTROL BOARD, SANTA ANA REGION

DATE

GERARD THIBEAULT
Executive Officer

EPA Region IX/State of California/Marine Corps FFA
Marine Corps Air Station El Toro

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UNITED STATES DEPARTMENT OF THE NAVY

DATE

NANCY STEHLE
Deputy Director
Assistant Secretary of the Navy
(Installations and Environment)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE

DANIEL W. MCGOVERN
Regional Administrator, Region 9

STATE OF CALIFORNIA

DEPARTMENT OF HEALTH SERVICES

DATE

JOHN A. HINTON
Regional Administrator, Region 4
Toxic Substances Control Program

REGIONAL WATER QUALITY CONTROL BOARD, SANTA ANA REGION

9/20/90
DATE

GERARD J. THIBEAULT
Executive Officer

Appendices

A) Deadlines Previously Established
B) Outline of Topics to Be Addressed in the RI/FS
C) All Final and Secondary Documents Which Will Be Created in Accordance With Section 7 (Consultation)
D) All Deadlines Which Will Be Established In Accordance With Section 8 (Deadlines) and Which May Be Extended in Accordance With Section 9 (Extensions)

Revised Appendix A

El Toro MCAS

OU 1	Due Date
Phase I Technical Memo	7 MAY 93
Draft Phase II Workplan	9 AUG 93
Draft RI Report	30 DEC 94
Draft FS Report	23 MAR 95
Draft Proposed Plan	23 JUN 95
Draft Record of Decision	29 DEC 95

OUs 2 and 3	Due Date
Phase I Technical Memo	7 MAY 93
Draft Phase II Workplan	9 AUG 93
Draft RI Report	2 JAN 95
Draft FS Report	1 JUN 95
Draft Proposed Plan	1 SEP 95
Draft Record of Decision	12 MAR 96

OU 4	Due Date
Draft RI/FS Workplan	18 AUG 93

Other FFA Milestones and submittal dates for OU 4 will be established following concurrence on the RFA Report.

REVISED

Appendix A

Deadlines Previously Established

Documents not submitted before the effective date of this agreement:

1. In accordance with Section 8.1 of this Agreement, the following deadlines for submission of Draft Primary Documents have been agreed upon by the Parties before the effective date of this Agreement:

	-OU 1-	-OU 2&3-	-OU 4-
Draft RI/FS Workplan (Includes Field Sampling Plan, Quality Assurance Project Plan, and Community Relations Plan)	30 Sep 90	30 Sep 90	15 Dec 91
Draft RI Report (Includes Baseline Risk Assessment)	15 Jun 92	15 Oct 92	15 Sep 93
Draft FS Report (Includes treatability study results)	15 Aug 92	15 Feb 93	15 Jan 94
Draft Proposed Plan	15 Nov 92	15 May 93	15 Apr 94
Draft ROD (Includes Responsiveness Summary)	15 Apr 93	15 Oct 93	15 Sep 94

2. The following deadlines for submission of Draft Secondary Documents for the RFA/Confirmation Study have been agreed upon by the Parties before the effective date of this Agreement. The Navy will make best efforts to incorporate all RFA sites requiring further action into the RI/FS by these dates. If all sites cannot be addressed by then, a schedule for the remaining sites will be negotiated by all Parties, per Section 29 of this Agreement.

Draft Report on records search, VSI and sample plan	15 Mar 91
Draft RFA Report	15 Dec 91

OPERABLE UNITS
(As Defined by the Effective Date of the Agreement)

Operable Unit # 1
- Site 18 - Regional Groundwater Investigation

Operable Unit # 2
- Site 2 - Magazine Road Landfill
  Site 3 - Original Landfill
  Site 5 - Perimeter Road Landfill
  Site 17 - Communication Station Landfill
  Site 10 - Petroleum Disposal Area

Operable Unit # 3
- Site 1 - Explosive Ordnance Disposal Range
  Site 4 - Ferrocene Spill Area
  Site 6 - Drop Tank Drainage Area No. 1
  Site 7 - Drop Tank Drainage Area No. 2
  Site 8 - DPDO Storage Yard
  Site 9 - Crash Crew Pit No. 1
  Site 11 - Transformer Storage Area
  Site 12 - Sludge Drying Beds
  Site 13 - Oil Change Area
  Site 14 - Battery Acid Disposal Area
  Site 15 - Suspended Fuel Tanks
  Site 16 - Crash Crew Pit No. 2
  Site 19 - ACER Site
  Site 20 - Hobby Shop
  Site 21 - Material Management Group, Building 320
  Site 22 - Tactical Air Fuel Dispensing System

The RFA/Confirmation Study
- The RFA will perform a records search, visual site inspection and a sampling plan, to identify all solid waste management units (SWMUs), and review the sites proposed by the California Regional Water Quality Control Board and all questionable or qualifying underground storage tanks.

Operable Unit # 4
- Any Sites identified during the RFA/Confirmation Study that warrant inclusion and qualify for the RI/FS Program.
  Site 23 - Wastewater Treatment Plant Sewer Lines
  Leaking Hazardous Substance Tanks
  Final ROD for Overall Site

Appendix B
Outline of Topics to Be Addressed In The Remedial Investigation/Feasibility Study and Related Reports

The following outlines list topics to be included at a minimum in the RI/FS Documents in Section 7.3(a)(1)-(5) and 7.4(a)(3), as set forth in the most recent version of the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (OSWER Directive 9355.3-01, Interim Final, October, 1988) and applicable State law. The documents shall also include additional topics and tasks, as appropriate, as set forth in the guidance.

1.0 RI/FS Work Plan
- Executive Summary
- 1. Introduction
- 2. Site Background and Setting
- 3. Initial Evaluation
  - 3.1 Types and Volumes of Waste Present
  - 3.2 Potential Pathways of Contaminant Migration/Preliminary Public Health and Environmental Impacts
  - 3.3 Preliminary Identification of Operable Units
  - 3.4 Preliminary Identification of Response Objectives and Remedial Action Alternatives
- 4. Work Plan Rationale
  - 4.1 Data Quality Objectives
  - 4.2 Work Plan Approach
- 5. RI/FS Tasks
- 6. Costs and key assumptions
- 7. Schedule (including Operable Units)
- 8. Project Management
  - 8.1 Staffing
  - 8.2 Coordination
- 9. References
- Appendices

2.0 Quality Assurance Project Plan
- Title Page
- Table of Contents
- 1. Project Description
- 2. Project Organization and Responsibilities
- 3. QA Objectives for Measurement of Data
- 4. Sampling Procedures
- 5. Sample Custody
- 6. Calibration Procedures
- 7. Analytical Procedures
- 8. Data Reduction, Validation and Reporting
- 9. Internal Quality Control
- 10. Performance and Systems Audits
- 11. Preventative Maintenance
- 12. Data Assessment Procedures
- 13. Corrective Action
- 14. Quality Assurance Reports

3.0 Sampling and Analysis Plans
1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

4.0 Community Relations Plan
1. Overview of Community Relations Plan
2. Capsule Site Description
3. Community Background
4. Highlights of Program
5. Techniques and Timing
Appendices

5.0 RI Report
Executive Summary
1. Introduction
1.1 Purpose of Report
1.2 Site Background
1.2.1 Site Description
1.2.2 Site History
1.2.3 Previous Investigations
1.3 Report Organization
2. Study Area Investigation
2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
2.1.2 Surface Features (topographic mapping, etc.) (natural and manmade features)
2.1.3 Contaminant Source Investigations
2.1.4 Surface-water and Sediment Investigations
2.1.5 Geologic Investigations
2.1.6 Soil and Vadose Zone Investigations
2.1.7 Ground Water Investigations
2.1.8 Human Population Surveys
2.1.9 Ecological Investigations
2.2 If technical memoranda documenting field ac-activities were prepared, they may be included in an appendix and summarized in this chapter.
3. Physical Characteristics of the Study Area
3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
3.1.1 Surface Features
3.1.2 Meteorology
3.1.3 Surface Water Hydrology
3.1.4 Geology
3.1.5 Soils
3.1.6 Hydrogeology
3.1.7 Demography and Land Use
3.1.8 Ecology

4. Nature and Extent of Contamination
   4.1 Presents the results of site characterization, both natural chemical components and contaminants in the following:
      4.1.1 Sources
      4.1.2 Soils and Vadose Zone
      4.1.3 Ground Water
      4.1.4 Surface Water and Sediments
      4.1.5 Air
      4.1.6 Biota
      4.1.7 Fish and Wildlife
5. Contaminant Fate and Transport
   5.1 Potential Routes of Migration (i.e., air, ground water, etc.)
   5.2 Contaminant Persistence
      5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest.
   5.3 Contaminant Migration
      5.3.1 Discuss factors affecting contaminant migration for the media of importance (e.g., sorption onto soils, solubility in water, movement of ground water, etc).
      5.3.2 Discuss modeling methods and results, if applicable.
6. Baseline Risk Assessment
   6.1 Human Health Evaluation
      6.1.1 Exposure Assessment
      6.1.2 Toxicity Assessment
      6.1.3 Risk Characterization
   6.2 Environmental Evaluation
7. Summary and Conclusions
   7.1 Summary
      7.1.1 Nature and Extent of Contamination
      7.1.2 Fate and Transport
      7.1.3 Risk Assessment
   7.2 Conclusions
      7.2.1 Data Limitations and Recommendations for Further Work
      7.2.3 Recommended Remedial Action Objectives

6.0 FS Report
Executive Summary
1. Introduction
   1.1 Purpose and Organization of Report
   1.2 Background Information (Summarized from RI)
      1.2.1 Site Description
      1.2.2 Site History
      1.2.3 Nature and Extent of Contamination
      1.2.4 Contaminant Fate and Transport
      1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies

2.1 Introduction
2.2 Remedial Action Objectives - Presents the development of remedial action objectives fc each medium of interest (ground water, soil, surface water, air, ecological, etc.). For each medium, the following should be discussed:
2.2.1 Contaminants of Interest
2.2.2 Allowable Exposure Based on Risk Assessment (Including ARARs)
2.2.3 Development of Remediation Goals
2.3 General Response Actions - For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or disposal technologies may be applied.
2.4 Identification and Screening of Technology Types and Process Options - For each medium of interest, describes:
2.4.1 Identification and Screening of Technologies
2.4.2 Evaluation of Technologies and Selection of Representative Technologies

3. Development and Screening of Alternatives
3.1 Development of Alternatives - Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the site as a whole.
3.2 Screening of Alternatives (if conducted)
3.2.1 Introduction
3.2.2 Alternative 1
3.2.2.1 Description
3.2.2.2 Evaluation of:
- Effectiveness
- Implementability
- Cost
3.2.3 Alternative 2
3.2.3.1 Description
3.2.3.2 Evaluation
3.2.4 Alternative 3

4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Assessment of:
- Overall Protection
- Compliance with ARARs
- Long-term Effectiveness and Permanence
- Reduction of Toxicity, Mobility or Volume Through Treatment
- Short-Term Effectiveness
- Implementability
- Cost
- State Acceptance

- Community Acceptance

4.2.2 Alternative 2

4.2.2.1 Description

4.2.2.2 Assessment

4.2.3 Alternative 3

4.3 Comparative Analysis

Bibliography

Appendices

7.0 Treatability Investigations - The need for treatability testing should be identified as early in the RI/FS process as possible. The purpose is to provide information needed for the detailed analysis of alternatives and to allow selection of a remedial action with a reasonable certainty of achieving the response actions. In general, treatability testing will include the following:

1. A work plan for Bench or Pilot Scale - see Chapter 5 of the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (October, 1988), for example work plan outlines
2. Performing field sampling, and or bench testing or pilot testing
3. Evaluating data from field studies and or bench or pilot testing
4. Preparing a brief report documenting the results of the testing

Appendix C
All Final Primary and Secondary Documents Which Will Be Created In Accordance With Section 7 (Consultation)

(To be incorporated by reference)

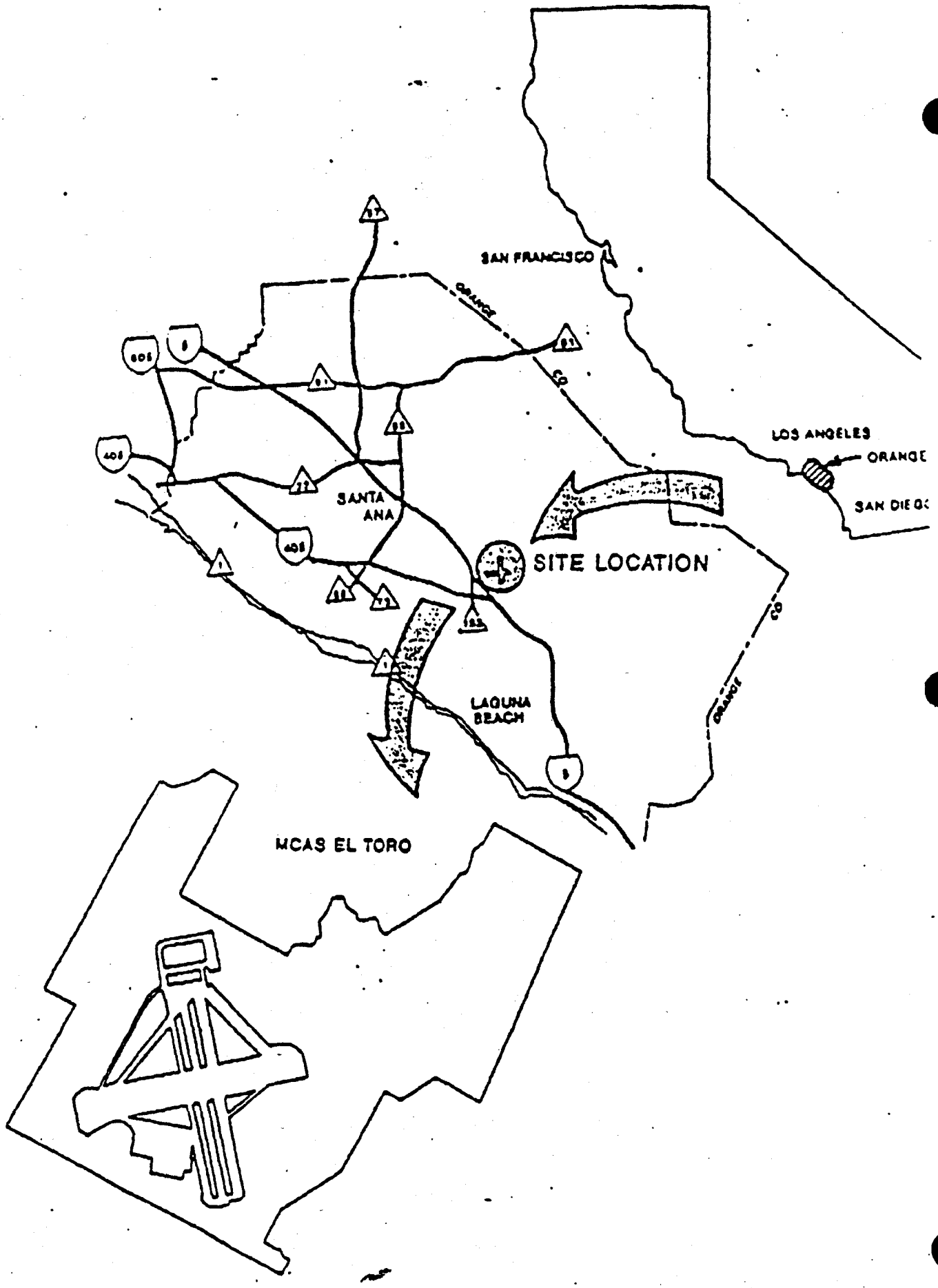
Appendix D
All Deadlines Which Will Be Established In Accordance With Section 8 (Deadlines) and Which May Be Extended in Accordance With Section 9 (Extensions)

(To be incorporated by reference)

Attachments

A) Site Maps
B) Chemicals of Concern
C) Statement of Facts
D) IRP Activities

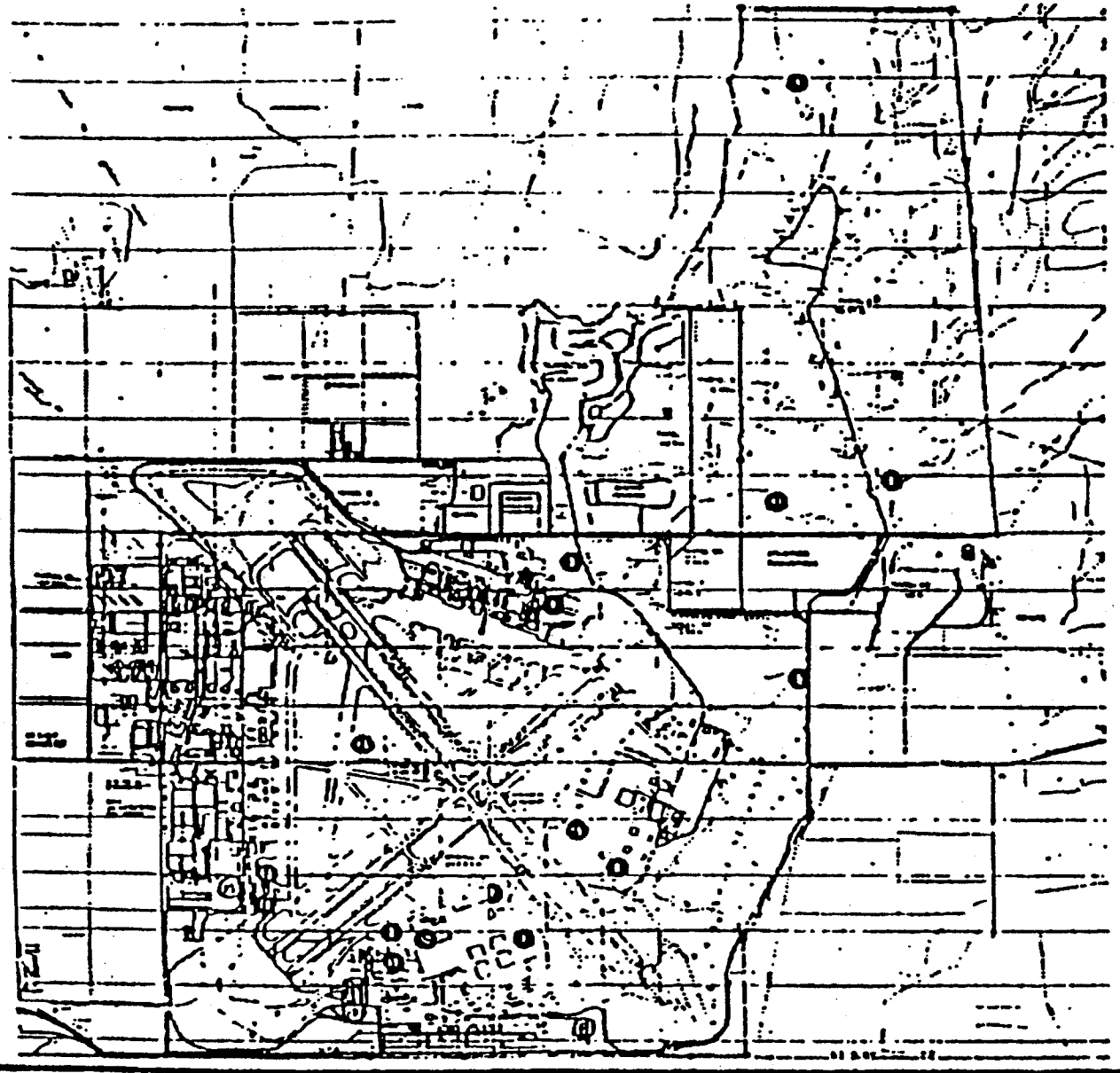
Attachment A
Site Map(s)



MCAS EL TORO
SITE LOCATION

TECHNICAL ATTACHMENTS

Federal Facilities Agreement



INSTALLATION RESTORATION PROGRAM
MARINE CORPS AIR STATIONS
TUSTIN AND E. TORO, CALIFORNIA

LEGEND

SITE NUMBER AND LOCATION

SCALE IN FEET

0 2000 4000

FIGURE 9

MCAS EL TORO, CALIFORNIA

Attachment B
Chemicals of Concern

Chemicals of Concern
El Toro Marine Corps Air Station

This description of the toxicity of chemicals of concern at El Toro MCAS is for reference only and should not be interpreted as describing effects on any individual person.

This list represents chemicals of concern known at the time of this Agreement. It is based on limited sampling only and does not include chemicals suspected of being present at one or more sites at El Toro. An assessment of any risk of these chemicals to potentially exposed populations will be conducted as part of the Remedial Investigation (RI). This list may change as the RI continues.

DEFINITIONS

Acute Toxicity - Toxicity manifested within a relatively short time interval (i.e., as short as a few minutes to as long as several days). Such toxicity is frequently caused by a single dose of the toxicant.

Chronic Toxicity - The adverse effects manifested after a long time period of uptake of small quantities of a toxicant. The dose is small enough that no acute effects are manifested, and the time period is frequently a significant part of the expected normal lifetime of the organism. The most serious manifestation of chronic toxicity is carcinogenesis, but other types of chronic toxicity are also known (e.g., reproductive effects and behavioral effects).

Chemicals of Concern
El Toro Marine Corps Air Station

Acetone 67-64-1

Acute: irritation of eyes, nose and throat, headaches, dizziness and dermatitis, CNS depression, bronchial irritation and pulmonary congestion.

Chronic: CNS depression and respiratory system damage

Benzene 71-43-2

Acute: strong CNS depressant, dizziness, weakness, heart irregularities, coma, convulsions, cerebral edema, cardiac and respiratory failure

Chronic: hematopoietic system depression, bone marrow damage, anemia, skin rash, aplastic anemia, leukemia

Carbon Tetrachloride 56-23-5

Acute: headaches, nausea, dizziness, eye irritation, dermatitis, gastrointestinal upset

Chronic: kidney damage (nephrosis), liver degeneration and jaundice, CNS depression, possible mutagen, suspected human carcinogen

Chlorobenzene 108-90-7

Acute: irritation of the eyes and nose, drowsiness, incoherence, skin irritation, liver damage

Chronic: kidney and liver damage, possible mutagen

Chemicals of Concern
El Toro Marine Corps Air Station

Chloroform 67-66-3

Acute: pupil dilation, irritation of mucous membranes, conjunctiva and skin, loss of reflexes, sensation and consciousness, cardiac/respiratory failure.

Chronic: heart, liver and kidney damage, possible mutagen, suspected human carcinogen

1,1-Dichloroethane 75-34-3

Acute: eye irritant, unconsciousness, liver, kidney and lung damage, CNS depression

Chronic: loss of appetite, nausea, epigrastric pain, mucous membrane irritant, liver and kidney impairment

1,1-Dichloroethene 75-35-4

Acute: CNS depressant, unconsciousness, eye and skin irritant

Chronic: liver and kidney damage

cis-1,2-Dichloroethylene 156-59-2

Acute: none found

Chronic: possible mutagen and suspected human carcinogen

trans-1,2-Dichloroethylene 156-60-5

Acute: nausea, vomiting, weakness, tremor and cramps, dermatitis

Chronic: mutagen, CNS Depression, kidney damage

Chemicals of Concern
El Toro Marine Corps Air Station

Ethyl Benzene 100-41-4

Acute: eye, skin and mucous membrane irritation, dermatitis, CNS depression

Chronic: possible teratogen and mutagen, chronic dermatitis

Methyl Ethyl Ketone 78-93-3

Acute: irritation of eyes and nose, headaches, dizziness, vomiting

Chronic: peripheral and central nervous system depression, possible teratogen

Tetrachloroethylene 127-18-4

Acute: dermatitis, eye and mucous membrane irritation, CNS depression, gastrointestinal irritation

Chronic: liver damage, mutagen, possible teratogen and human carcinogen

Toluene 108-88-3

Acute: eye, skin and mucous membrane irritation, CNS depression

Chronic: dermatitis, possible teratogen, mutagen, liver and bone marrow damage, CNS damage

1,1,1-Trichloroethane 71-55-6

Acute: eye, skin and mucous membrane irritant, cardiac arrhythmia, CNS depression

Chronic: dermatitis, possible teratogen and carcinogen; mutagen

Chemicals of Concern
El Toro Marine Corps Air Station

1,1,2-Trichloroethane 79-00-5

Acute: CNS depression, eye and nose irritant

Chronic: CNS depression, liver and kidney damage

Trichloroethylene 79-01-6

Acute: skin, eyes and mucous membrane irritant, CNS depression

Chronic: dermatitis, possible tumorigen, teratogen and carcinogen; mutagen, gastrointestinal and liver damage

Xylenes 1330-20-7

Acute: nose, eye and throat irritant, dizziness, drowsiness, nausea, kidney and liver damage, CNS depression

Chronic: eye damage, dermatitis, tremors, liver and kidney damage, digestive disorders, fatigue, loss of appetite

Attachment C

Statement of Facts

For the purposes of this Agreement, the following constitutes a summary of the facts upon which this Agreement is based. None of the facts related herein shall be considered admissions by any Party, nor shall they be used by any person for purposes unrelated to this Agreement.

The Parties have determined that:

1. El Toro Marine Corps Air Station (El Toro) is located on 5,000 acres in a primarily urban area of El Toro, Orange County, California. The base lies at the foot of the Santa Ana Mountains and encompasses a portion of the Tustin Plain. Soils at the installation grade from a thin layer of sand and gravel near the mountains, to thick deposits of silt and clay underlying the Tustin Plain. Ground water in this area is recharged primarily by agricultural irrigation water, and by infiltration in stream channels entering the basin from the Santa Ana Mountains. Four intermittent streams flow either through or adjacent to the El Toro site. Two flow along the border of the facility, with two passing through the center of the site. All three streams flow into San Diego Creek southwest of the site, with San Diego Creek flowing into Newport Bay 14km from the site. San Diego Creek was originally an intermittent stream, but is now a continuosly flowing, low gradient stream due to surface water runoff from development in the watershed. Newport Bay empties into the Gulf of Santa Catalina.

2. The United States Marine Corps established El Toro in 1943. El Toro is the center for USMC aviation operations on the west coast.

3. Major activities at El Toro contributing to the generation of hazardous wastes include vehicle maintenance, ground support maintenance, aircraft maintenance, and aircraft corrosion control. Other waste generating activities include munitions disposal, pest control, fire protection training, and laboratory operations including photo development, non-destructive inspection, and fuel analysis.

4. Wastes generated by the maintenance operations include spent solvents and waste oils (including TCE, TCA, MEK, toluene, and PD-680), fuels, and greases removed from the spent solvents, and spent strippers.

5. Aircraft washrack activities result in discharge of alkaline soaps, detergents, and small amounts of PD-680. Vehicle and aircraft waste discharge produces the greatest volume of industrial waste of any of the base activities.

6. El Toro was placed on the National Priorities List of Hazardous Sites on February 16, 1990.

7. Work under the Installation Restoration Program has identified 22 sites sites thus far, requiring investigation under the RI/FS. The Santa Ana Regional Water Quality Control Board requested in June 1989 that approximately thirty additional sites be investigated for possible inclusion in the IR program. Additional source identification will be conducted during the RI/FS workplanning and under the RCRA/CERCLA integration provision of this agreement. Those sources will be incorporated into the RI/FS work. Sites identified thus far include:

Site 1 - Explosive Ordnance Disposal (EOD) - Possible soil contamination from ordnance disposal, including low-level radioactive wastes.

Site 2 - Magazine Road Landfill - Landfill used for disposal of unburned wastes. Possible contamination of soil and/or groundwater sources includes polychlorinated biphenyls (PCBs), petroleum hydrocarbons, organic solvents, and heavy metals.

Site 3 - Original Landfill - Landfill along Agua Chinon Wash containing burned wastes. Possible contamination of soil and/or groundwater sources includes PCBs, petroleum hydrocarbons, organic solvents, and heavy metals.

Site 4 - Ferrocene Spill Area - Drainage ditch adjacent to North 9th Street, near building 658, with possible soil and/or groundwater contamination from ferrocen and hydrocarbon carrier spill that occurred in 1983.

Site 5 - Perimeter Road Landfill - Landfill north of station golf course containing burned wastes. Possible contamination from organic solvents, paint residue and oily wastes.

Site 6 - Drop Tank Drainage Area No. 1 - Possible contamination from disposal of JP-5 fuel and lubricating oil.

Site 7 - Drop Tank Drainage Area No. 2 - Possible contamination from JP-5 and waste lubricating oil disposed of on area soil as a dust suppressant from 1969 to 1983.

Site 8 - DPDO Storage Area - Possible contamination from a spill of several gallons of transformer fluid containing PCB's. The 1984 spill occurred adjacent to ramp 633. Approximately 10,000 lbs. of material was removed to about 1 foot in depth in the spill area.

Site 9 - Crash Crew Pit No. 1 - Possible groundwater contamination from waste liquids percolating into the surrounding soils during crash crew training.

Site 10 - Petroleum Disposal Area - Possible contamination from petroleum wastes used as a dust suppressant from 1952 to mid 1960.

Site 11 - Transformer Storage Area - Possible contamination from PCB spillage onto soil during 1968 to 1983 timeframe.

Site 12 - Sludge Drying Beds - Located west of building 493, a secondary treatment plant dewatered sludge in drying beds. Reportedly, 880 cubic yards of sludge was plowed under at this location.

Site 13 - Oil Change Area - Possible soil contamination from land disposal of heavy equipment waste crankase oil.

Site 14 - Battery Acid Disposal Area - Possible heavy metal, organic compound, and petroleum hydrocarbon contmination from battery acids oil wastes and paint wastes disposed of on soil.

Site 15 - Suspended Fuel Tanks - Diesel fuel spill of more than 500 gallons from elevated fuel tanks between 1979 and 1984. Site 15 is located northeast of building 31. These tanks have been removed.

Site 16 - Crash Crew Pit No. 2 - Possible soil and/or groundwater contamination from crash crew training.

Site 17 - Communication Station Landfill - Landfill adjacent to buildings 394 and 573 containing an unkown quantity of liquid wastes.

Site 18 - Perimeter Investigation Area - Investigation to identify whether TCE contamination observed off-station is a result of past waste generation or disposal activities on-station.

Site 19 - Assess, Critique, Evaluate and Review (ACER) Site-Area situated near buildings 404 and 414 with possible soil and/or groundwater contamination from JP-5 fuel and a fuel bladder rupture that occurred in early 1986.

Site 20 - Hobby Shop (Building 626). Possible soil contamination from used oil and solvents. A 600 gallon waste oil tank is located west of building 626 along with three 50 gallon storage drums for solvents inside the building.

Site 21 - Material Management Group & Supply Center Storage (Building 320). Drums containing chemicals are stored outside building 320. Possible soil contamination from leaking drums

Site 22 - Tactical Air Fuel Dispensing System (TAFDS) Operations Area. Previously removed fuel bladders west of Site #10. Located east of building 369 and consisting of four 10,000 gallon rubberized fabric tanks used for aircraft fueling. Possible soil and groundwater contamination from leaking tanks, fittings and hoses. These tanks have been removed.

Site 23 - Wastewater treatment plant sewer lines. Possible soil and groundwater contamination from leaking sewer lines.

Attachment D
Installation Restoration Activities

In 1976 the Department of Defense (DOD) initiated the Installation Restoration Program (IRP) to evaluate, characterize, and control the potential migration of possible contaminants resulting from past operations and disposal practices on DOD facilities.

The four phases of the IRP are:

Phase 1 - Problem Identification/Records Search
Phase 2 - Problem Confirmation/Quantification Study
Phase 3 - Technology Base Development
Phase 4 - Corrective Action

In response to the DOD IRP, the Navy Assessment and Control of Installation Pollutants (NACIP) Program was instituted. NACIP was conceived as a three-phase process, including an Initial Assessment Study (IAS) (identification of sites); Confirmation Study (CS) (investigation of sites), and; Corrective Measures Implementation.

The NACIP Program was replaced by the current IRP in 1983. Since the current IRP was authorized, modifications have been made to include compliance with CERCLA/SARA and use of National Contingency Plan terminology and procedures. As a result of these changes, the Navy now complies with NCP terminology and requirements and follows the EPA Remedial Investigation/Feasibility Study (RI/FS) process.

The three major IRP investigations conducted at the El Toro MCAS are documented in the Initial Assessment Study of MCAS El Toro (May, 1986), the MCAS El Toro Perimeter Investigation (April, 1989), and the MCAS El Toro Off-Station Remedial Investigation, Draft Work Plan (November, 1989). The IAS addressed seventeen sites and recommended nine for further investigation. In response to regulatory agency comments during September 1986, four sites were added to the Site Investigation. A Plan of Action for further study was developed, reviewed the the Technical Review Committee, and finalized in August 1988.

The number of sites thus far identified under the IRP is twenty-two, which are described in Attachment C, Statement of Facts. It should be noted that the discovery and identification of IR sites (or RI sites) will be an iterative, on-going process. During the course of the investigation new information may be obtained or new sites observed that will require inclusion into the RI/FS. In addition, the RCRA Corrective Action requirements that must be fulfilled under the terms of this Agreement, require identification of Solid Waste Management Units that must be evaluated for inclusion in the RI/FS. State requirements for addressing releases must be included, as well.

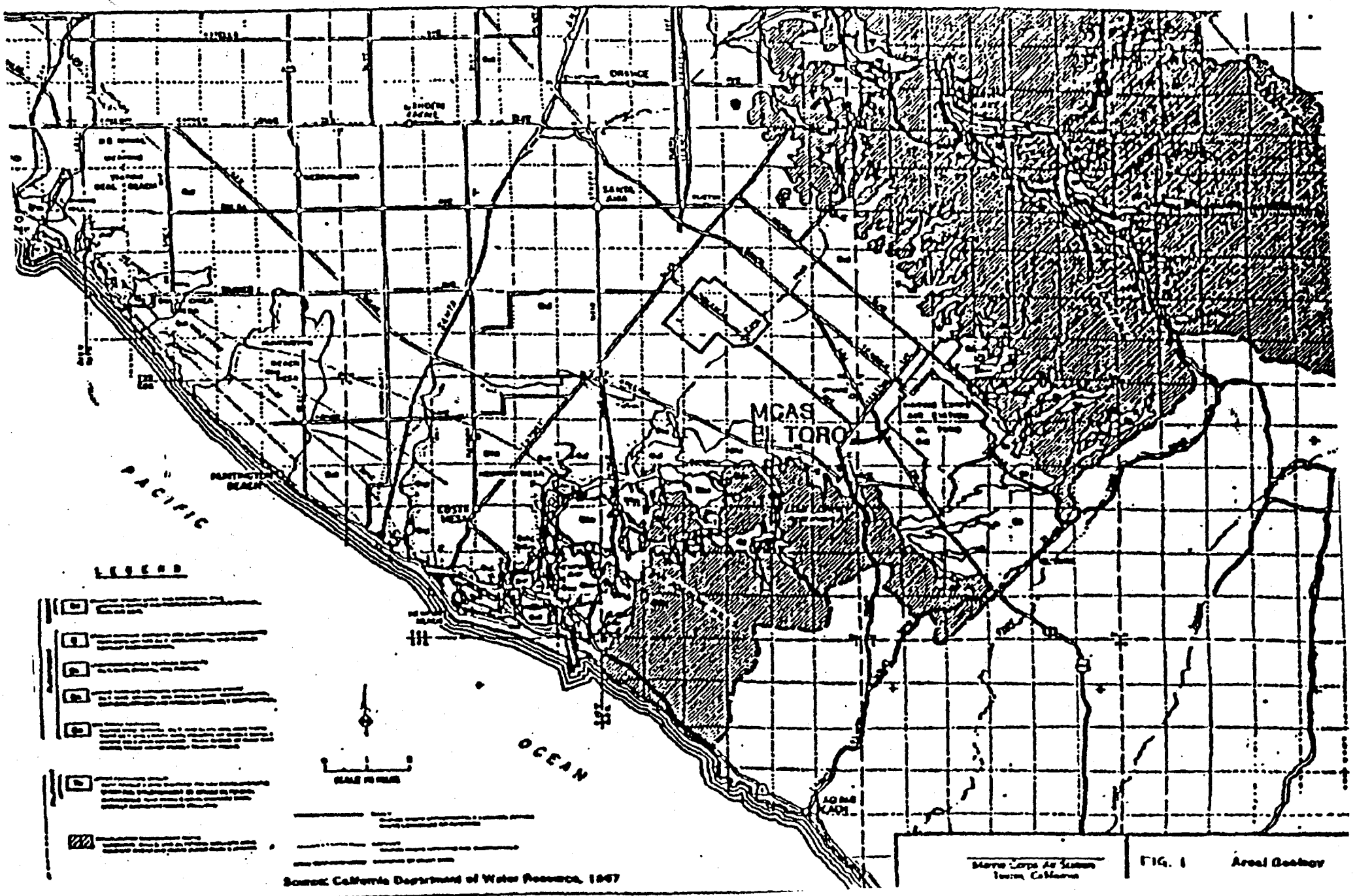


FIG. 1 Areal Geology

Appendix 2

Appendix 2

Evaluation Concentration Levels (ECL) for Groundwater

(all units as micrograms/liter)

Analytes	ECL for Point of Connection of DoN's Shallow Groundwater Unit (SGU) Conveyance Pipeline (a)	ECL for CCMI central VOC Treatment Plant Intake
General Chemistry (mg/L)		
ALKALINITY AS CACO3	302	290
Ca	287	169
Cl	393	264
HCO3	363	
HCO3 (AS CACO3)	302	
K	5	4
Na	188	195
NO3	181	67
NO3(N)	30.2	8
NO3/NO2(N)	33.5	
SO4	479	376
SILICA	60	59
TDS	2147	1450
pH	N/A	>5.9 & <9.1
Metals and Cyanide (µg/L)		
Ag	100	
Al	50	40
As	2.1	10
Ba	200 (b)	68
Cd	5	4
CN	200	
Co	9.2	
Cr (total)	50	9
Cu	50 (b)	70
Fe	300	240
Hg	2	0.6
Mg	91.2	
Mn	79.3	110

Appendix 2

Evaluation Concentration Levels (ECL) for Groundwater

(all units as micrograms/liter)

Analytes	ECL for Point of Connection of DoN's Shallow Groundwater Unit (SGU) Conveyance Pipeline (a)	ECL for CCMI central VOC Treatment Plant Intake
Ni	233	
Pb	50	8
Sb	27.1	
Se	33.2	19
V	25.7	
Zn	200 (b)	
Radionuclides (pCi/L)		
GROSS BETA	50	11.5
GROSS ALPHA	15	6.3
Volatile Organic Compounds (µg/L)		
1,1,1-TCA	200	15.4
1,1,2-TCA	5	
1,1,2-TRICHOLORO-1,2,2-TRIFLUOROETHANE	0.2	
1,1-DCA	5	
1,1-DCE	6	
1,2-DCA	1.8	0.14
1,2-DCE (TOTAL)	10	
1,2-DCE, Cis-	6	
BENZENE	4.5	0.35
CARBON DISULFIDE	1.8	
CCl4	3.6	0.28
CHLOROFORM	80	6.4
ETHYLBENZENE	680	52.5
METHYL CHLORIDE	2.8	
METHYLENE CHLORIDE	5	
PCE	5.2	0.5
PHENOL	17.7	
TCE	237	22

Appendix 2

Evaluation Concentration Levels (ECL) for Groundwater

(all units as micrograms/liter)

Analytes	ECL for Point of Connection of DoN's Shallow Groundwater Unit (SGU) Conveyance Pipeline (a)	ECL for CCMI central VOC Treatment Plant Intake
TOLUENE	150	11.6
XYLENE (TOTAL)	1750	
Other Organic Constituents (µg/L)		
2-HEXANONE	3.5	
2-PENTANONE, 4-HYDROXY-4-METHYL	16.5	
BENZYL BUTYL PHTHALATE	100	
BIS(2-ETHYLHEXYL)PHTHALATE	17.7	
DI-N-OCTYL PHTHALATE	7.0	
STYRENE	100	
TPH DIESEL	513	
TPHVOA	132	
PERCHLORATE	23 (c)	1.8
METHYL TERTIARY BUTYL ETHER (MTBE)	5	

Notes:

(a) Highest concentration of either:

1. Source of Maximum Credible Values (MCVs): Table C-1g of OU-1 IAFS Addendum dated August 9, 1996. Inorganic Data: Average values are unchanged from monitoring well values, maximum credible data are 1.59 times average value. VOC and SVOC Data: Average values are based on monitoring well data for each VOC and SVOC times the ratio of the average (highest or lowest, depending on which column) TCE concentration at the extraction well (See Table C-1e of the OU-1 IAFS Addendum) divided by the average TCE value for the monitoring wells. Maximum credible data are calculated similarly using peak (90% confidence level) TCE data; or
2. Most stringent primary, secondary, or proposed Maximum Contaminant Level (MCL), Federal or State

(b) Revised due to OCWD/IRWD requirement (June 24, 1998).

(c) Highest value detected in SGU to date.

Appendix 3

APPENDIX 3

Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	X	X	24
79-00-5	1,1,2-TRICHLOROETHANE	X		24
75-35-4	1,1-DICHLOROETHYLENE	X		24
106-93-4	1,2-DIBROMOETHANE			24
95-50-1	1,2-DICHLOROBENZENE			24
107-06-2	1,2-DICHLOROETHANE	X	X	24
540-59-0	1,2-DICHLOROETHYLENE (TOTAL)	X	X	24
78-87-5	1,2-DICHLOROPROPANE		X	24
106-46-7	1,4-DICHLOROBENZENE			24
78-93-3	2-BUTANONE		X	24
110-75-8	2-CHLOROETHYL VINYL ETHER			18
104-76-7	2-ETHYL-1-HEXANOL			24
149-57-5	2-ETHYL-HEXANOIC ACID			24
928-68-7	2-HEPTANONE, 6-METHYL-			24
591-78-6	2-HEXANONE	X	X	24
123-42-2	2-HYDROXY-2-METHYL-4-PENTANONE			24
91-57-6	2-METHYLNAPHTHALENE			24
107-87-9	2-PENTANONE			24
108-10-1	4-METHYL-2-PENTANONE		X	24
75-07-0	ACETALDEHYDE			24
67-64-1	ACETONE		X	24
10-09-3	ALKALINITY (AS CACO3)	X	X	24
7429-90-5	ALUMINUM	X	X	24
7664-41-7	AMMONIA		X	24
7440-36-0	ANTIMONY	X	X	24
7440-38-2	ARSENIC	X	X	24
7440-39-3	BARIUM	X	X	24

APPENDIX 3

Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
71-43-2	BENZENE	X	X	24
3622-84-2	BENZENESULFONAMIDE, N-BUTYL-			18
7440-41-7	BERYLLIUM		X	24
71-52-3	BICARBONATE	X	X	24
10-26-4	BIOCHEMICAL OXYGEN DEMAND			24
80-05-7	BISPHENOL A			24
10-26-4	BOD5			18
75-27-4	BROMODICHLOROMETHANE		X	24
75-25-2	BROMOFORM		X	24
123-72-8	BUTANAL			24
85-68-7	BUTYL BENZYL PHTHALATE			24
7440-43-9	CADMIUM	X	X	24
7440-70-2	CALCIUM	X	X	24
75-15-0	CARBON DISULFIDE	X	X	24
56-23-5	CARBON TETRACHLORIDE	X		24
10-27-5	CHEMICAL OXYGEN DEMAND			24
16887-00-6	CHLORIDE	X	X	24
124-48-1	CHLORODIBROMOMETHANE			18
67-66-3	CHLOROFORM	X	X	24
74-87-3	CHLOROMETHANE		X	24
57-88-5	CHOLESTEROL			24
7440-47-3	CHROMIUM	X	X	24
156-59-2	CIS-1,2-DICHLOROETHENE		X	24
7440-48-4	COBALT	X	X	24
7440-50-8	COPPER	X	X	24
541-05-9	CYCLOTRISILOXANE, HEXAMETHYL-			18
117-84-0	DI-N-OCTYL PHTHALATE			24
100-41-4	ETHYLBENZENE	X	X	24

APPENDIX 3

Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
16984-48-8	FLUORIDE		X	24
111-71-7	HEPTANAL			24
66-25-1	HEXANAL			24
7439-89-6	IRON	X	X	18
7439-89-6F	IRON, FERRIC			24
15438-31-0	IRON, FERROUS			24
7439-92-1	LEAD	X	X	24
136777-61-2	M,P-XYLENE			24
7439-95-4	MAGNESIUM	X	X	24
7439-96-5	MANGANESE	X	X	24
7439-97-6	MERCURY	X	X	24
1634-04-4	METHYL TERT-BUTYL ETHER (MTBE)	X	X	24
75-09-2	METHYLENE CHLORIDE	X	X	24
7439-98-7	MOLYBDENUM			24
544-63-8	MYRISTIC ACID			24
91-20-3	NAPHTHALENE			24
7440-02-0	NICKEL	X	X	24
14797-55-8	NITRATE-N	X	X	24
10-28-6	NITRATE/NITRITE-N	X	X	24
14797-65-0	NITRITE			24
124-19-6	NONANAL			24
124-13-0	OCTANAL			24
57-10-3	PALMITIC ACID			24
110-62-3	PENTANAL			24
7778-74-7	PERCHLORATE	X	X	24
14265-44-2	PHOSPHATE		X	24
7440-09-7	POTASSIUM	X	X	24
123-38-6	PROPANAL			24

APPENDIX 3

Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
115-07-1	PROPYLENE			24
129-00-0	PYRENE			24
7782-49-2	SELENIUM	X	X	24
7631-86-9	SILICA	X	X	24
7440-21-3	SILICON			24
7440-22-4	SILVER	X	X	24
7440-23-5	SODIUM	X	X	24
7440-24-6	STRONTIUM			24
100-42-5	STYRENE	X	X	24
14808-79-8	SULFATE	X	X	24
127-18-4	TETRACHLOROETHYLENE	X	X	24
109-99-9	TETRAHYDROFURAN			24
7440-28-0	THALLIUM		X	24
108-88-3	TOLUENE	X	X	24
10-33-3	TOTAL DISSOLVED SOLIDS	X	X	24
10-92-4	TOTAL HARDNESS (as CaCO3)		X	24
10-07-1	TOTAL KJELDAHL NITROGEN		X	24
10-35-5	TOTAL ORGANIC CARBON		X	24
10-32-2	TOTAL SUSPENDED SOLIDS			24
1330-20-7	TOTAL XYLENES			24
68334-30-5	TPH AS DIESEL	X	X	18
8006-61-9	TPH AS GASOLINE (TPHVOA)	X	X	24
156-60-5	TRANS-1,2-DICHLOROETHENE			24
79-01-6	TRICHLOROETHYLENE	X	X	24
75-69-4	TRICHLOROFLUOROMETHANE		X	24
791-28-6	TRIPHENYLPHOSPHINE OXIDE			24
7440-62-2	VANADIUM	X	X	24
108-05-4	VINYL ACETATE			18

APPENDIX 3

Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
75-01-4	VINYL CHLORIDE		X	24
1330-20-7	XYLENES (TOTAL)	X	X	18
7440-66-6	ZINC	X	X	24
7440-14-4	RADIUM (naturally occurring)		X	2
7440-61-1	URANIUM (naturally occurring)		X	2
ADDITIONAL ANALYTES SPECIFICALLY LISTED ON APPENDIX 2 AND/OR IDENTIFIED BY IRWC/OCWD				
	Gross Alpha	X	X	
	Gross Beta	X	X	
57-12-5	Cyanide	X		
	1,2-Dichloroethylene, Cis-	X		
71-55-6	1,1,1-Trichloroethane	X		
	1,1-Dichloroethane	X		
	2-Pentanone, 4-Hydroxy-4-Methyl	X	X	
108-90-7	Chlorobenzene		X	
	Chlorodibromomethane		X	
75-71-8	Dichlorodifluoromethane (CFC-12)		X	
	Methyl Chloride	X	X	
U00000321	Total Trihalomethanes (TTHMs)		X	
76-13-1	Trichlorotrifluoroethane (Freon 113)		X	
	4-Methylphenol		X	
	Benzyl Butyl Phthalate	X	X	
	Bis(2-Ethylhexyl)Phthalate	X	X	
	Di-N-Butyl Phthalate (DBP)		X	
	Di-N-Octyl Phthalate	X	X	
	Diethyl Phthalate (DEP)		X	
84-66-2	Dimethyl Phthalate		X	
86-30-6	N-Nitrosodiphenylamine		X	

APPENDIX 3

Known Analytes Detected in On-Base and Off-Base Groundwater Wells

ID/CAS Number (a)	Analyte Name	Listed on App. 2	OCWD/IRWD Identified	El Toro Site ID
108-95-2	Phenol	X	X	
U00000004	4,4'-DDT		X	
309-00-2	Aldrin		X	
58-89-9	BHC-gamma (lindane)		X	
60-57-1	dieldrin		X	
76-44-8	Heptachlor		X	
	2,4,5-Trichlorophenoxyacetic Acid		X	
	MCPP		X	
	Total Recoverable Petroleum Hydrocarbons		X	
10043-92-2	Radon		X	
	Bicarbonate (as CaCO3)	X	X	
7440-42-8	Boron		X	
	Bromide		X	
	Carbonate (as CaCO3)		X	
PCS-00080	Color (filtered) - units		X	
PCS-00081	Color (apparent or unfiltered) - units		X	
	Electrical Conductivity (umhos/cm)		X	
	MBAS (Surfactants)		X	
	Nitrate-NO3	X	X	
7727-37-9	Nitrogen, Total Organic		X	
	pH - units	X	X	
	Temperature		X	
PCS-00070	Turbidity		X	
	Tributyltin		X	

Footnotes:

(a) Chemical Abstract Service (CAS) Registry identification number, other system identification code, or unknown.

Appendix 4

Appendix 4

Primary Components of Modified Irvine Desalter Project

The Modified Irvine Desalter Project (IDP) is comprised of both a Potable Water System (Potable System) and a Non-potable Water System (Non-potable System); each is an entirely separate groundwater extraction, conveyance, treatment and delivery/discharge system.

None of the assets of the Potable System are included in, associated with, or related to the MCAS El Toro groundwater CERCLA actions. Certain specified assets of the Non-potable System are also not associated with or related to the MCAS El Toro groundwater CERCLA actions (see below).

Each System is designated by color(s) on the Appendix 5 map. The Potable System in green and the Non-potable System in red and blue.

The Primary Components of the Modified IDP are as follows:

1. CERCLA Component of the Modified IDP (CCMI).

The CCMI consists of the following assets of the Non-potable System (see Whereas Clause P of the Recitals):

a. Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1 are located within the VOC plume in the Principal Aquifer (PA).

b. Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the separate Non-Potable VOC treatment system located at the Central Treatment Plant (reference red line on Appendix 5 map).
Pumping and pipeline conveyance system from the Non-Potable VOC treatment system located at the Central Treatment Plant to Injection Well IDP-1 (reference blue line on Appendix 5 map).

c. Separate Non-Potable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment

Plant for VOC-contaminated groundwater extracted from both SGU and PA groundwater.

d. DON's extraction wells for interception and removal of VOC-contaminated groundwater in the Shallow Groundwater Unit (SGU). DON's pumping and pipeline conveyance from those extraction wells to the Non-Potable pipeline conveyance system's point of connection at the MCAS El Toro station boundary.

e. DON's monitoring wells associated with the remediation of the VOC plume in the SGU and PA.

2. Non-CERCLA Component of the Modified IDP (non-CCMI).

The following Potable System and Non-potable System assets of the Modified IDP are non-CERCLA.

a. The entire Potable System of the Modified IDP including:

1. Extraction Wells TIC-110, IRWD-75, IRWD-76, and IRWD-77 located outside and cross gradient of the VOC plume in the PA.

2. Pumping and pipeline conveyance system from the extraction wells outside and cross gradient of the VOC plume in the PA to the separate Potable System water treatment system (including treatment for VOCs) located at the Central Treatment Plant.

3. The Potable System water treatment system (including treatment for VOCs) located at the Central Treatment Plant for groundwater extracted from outside and cross gradient of the VOC contaminant plume in the PA.

4. The Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

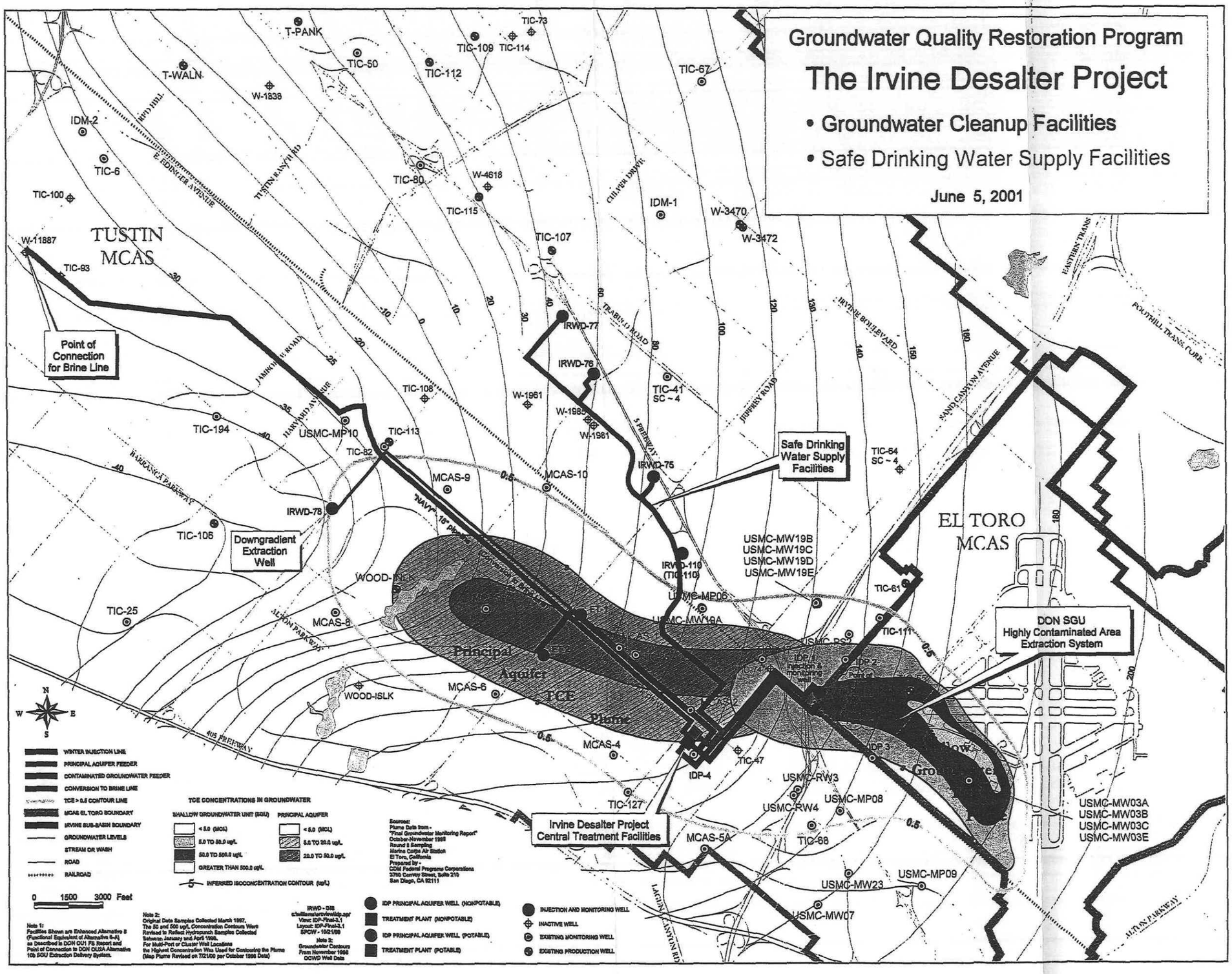
5. The monitoring wells associated with the operation and performance of the Potable System.

b. The Non-Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

3. Shared CCMI/non-CCMI Component Assets at the Central Treatment Plant (costs allocated proportionately in settlement).

Central Treatment Plant site real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and central monitoring and control systems.

Appendix 5


Groundwater Quality Restoration Program
The Irvine Desalter Project
• Groundwater Cleanup Facilities
• Safe Drinking Water Supply Facilities
June 5, 2001
TUSTIN MCAS
EL TORO MCAS
Point of Connection for Brine Line
Downgradient Extraction Well
Safe Drinking Water Supply Facilities
DON SGU Highly Contaminated Area Extraction System
Irvine Desalter Project Central Treatment Facilities
Principal Aquifer TCE Plume
T-PANK
T-WALN
W-1838
IDM-2
TIC-6
TIC-100
W-11887
TIC-93
TIC-50
TIC-112
TIC-109
TIC-114
TIC-73
TIC-67
TIC-80
W-4618
TIC-115
TIC-107
IDM-1
W-3470
W-3472
IRWD-77
IRWD-76
TIC-41 SC - 4
W-1961
W-1983
W-1981
TIC-108
TIC-194
USMC-MP10
TIC-113
TIC-82
MCAS-9
MCAS-10
IRWD-75
IRWD-78
TIC-106
TIC-64 SC - 4
USMC-MW19B
USMC-MW19C
USMC-MW19D
USMC-MW19E
IRWD-110 (TIC-110)
USMC-MP06
USMC-MW19A
TIC-61
TIC-111
TIC-25
MCAS-8
WOOD-ISLK
MCAS-6
MCAS-4
IDP-4
TIC-47
TIC-127
USMC-RW3
USMC-RW4
USMC-MP08
TIC-68
MCAS-5A
USMC-MW23
USMC-MP09
USMC-MW07
USMC-MW03A
USMC-MW03B
USMC-MW03C
USMC-MW03E
WINTER INJECTION LINE
PRINCIPAL AQUIFER FEEDER
CONTAMINATED GROUNDWATER FEEDER
CONVERSION TO BRINE LINE
TCE > 0.5 CONTOUR LINE
MCAS EL TORO BOUNDARY
IRVINE SUB-BASIN BOUNDARY
GROUNDWATER LEVELS
STREAM OR WASH
ROAD
RAILROAD
TCE CONCENTRATIONS IN GROUNDWATER
SHALLOW GROUNDWATER UNIT (SGU)
< 5.0 (MCL)
5.0 TO 50.0 ug/L
50.0 TO 500.0 ug/L
GREATER THAN 500.0 ug/L
PRINCIPAL AQUIFER
< 5.0 (MCL)
5.0 TO 20.0 ug/L
20.0 TO 50.0 ug/L
INFERRED ISOCONCENTRATION CONTOUR (ug/L)
0 1500 3000 Feet
IDP PRINCIPAL AQUIFER WELL (NONPOTABLE)
TREATMENT PLANT (NONPOTABLE)
IDP PRINCIPAL AQUIFER WELL (POTABLE)
TREATMENT PLANT (POTABLE)
INJECTION AND MONITORING WELL
INACTIVE WELL
EXISTING MONITORING WELL
EXISTING PRODUCTION WELL

Appendix 6

Facility Capital and Operation and Maintenance Reimbursement Schedule

Assumptions

Investment Rate (net) 6.479%
Annual Inflation Rate 3.000%

Year O&M	Year Project	Trust Deposit	Payments Facility	Payments O & M	Accum. Payments	Trust Balance
	0.0	$14,911,000	$500,000		$500,000	$15,200,062
	1.0		$707,200		$1,207,200	$15,286,405
	2.0		$6,364,800		$7,572,000	$9,410,100
0.5	2.5			$182,619	$7,754,619	$9,480,102
1.0	3.0			$185,358	$7,939,977	$9,549,207
1.5	3.5			$188,139	$8,128,116	$9,617,347
2.0	4.0			$190,961	$8,319,077	$9,684,453
2.5	4.5			$193,825	$8,512,902	$9,750,453
3.0	5.0			$196,733	$8,709,634	$9,815,273
3.5	5.5			$199,684	$8,909,318	$9,878,836
4.0	6.0			$202,679	$9,111,997	$9,941,082
4.5	6.5			$205,719	$9,317,716	$10,001,868
5.0	7.0			$208,805	$9,526,520	$10,061,189
5.5	7.5			$211,937	$9,738,457	$10,118,875
6.0	8.0			$215,116	$9,953,573	$10,174,895
6.5	8.5			$218,343	$10,171,916	$10,229,133
7.0	9.0			$221,618	$10,393,533	$10,281,492
7.5	9.5			$224,942	$10,618,475	$10,331,869
8.0	10.0			$228,316	$10,846,791	$10,380,158
8.5	10.5			$231,741	$11,078,532	$10,426,251
9.0	11.0			$235,217	$11,313,749	$10,470,035
9.5	11.5			$238,745	$11,552,495	$10,511,392
10.0	12.0			$242,326	$11,794,821	$10,550,202
10.5	12.5			$245,961	$12,040,782	$10,586,341
11.0	13.0			$249,651	$12,290,433	$10,619,678
11.5	13.5			$253,395	$12,543,829	$10,650,081
12.0	14.0			$257,196	$12,801,025	$10,677,411
12.5	14.5			$261,054	$13,062,079	$10,701,526
13.0	15.0			$264,970	$13,327,049	$10,722,278
13.5	15.5			$268,945	$13,595,994	$10,739,515
14.0	16.0			$272,979	$13,868,973	$10,753,079
14.5	16.5			$277,074	$14,146,047	$10,762,808
15.0	17.0			$281,230	$14,427,276	$10,768,533
15.5	17.5			$285,448	$14,712,725	$10,770,080
16.0	18.0			$289,730	$15,002,454	$10,767,272
16.5	18.5			$294,076	$15,296,530	$10,759,921
17.0	19.0			$298,487	$15,595,017	$10,747,838
17.5	19.5			$302,964	$15,897,981	$10,730,823
18.0	20.0			$307,509	$16,205,490	$10,708,674
18.5	20.5			$312,121	$16,517,612	$10,681,180
19.0	21.0			$316,803	$16,834,415	$10,648,123
19.5	21.5			$321,555	$17,155,970	$10,609,279
20.0	22.0			$326,379	$17,482,349	$10,564,416
20.5	22.5			$331,274	$17,813,623	$10,513,295
21.0	23.0			$336,243	$18,149,866	$10,455,669
21.5	23.5			$341,287	$18,491,153	$10,391,284
22.0	24.0			$346,406	$18,837,559	$10,319,877
22.5	24.5			$351,602	$19,189,162	$10,241,177
23.0	25.0			$356,876	$19,546,038	$10,154,903
23.5	25.5			$362,230	$19,908,268	$10,060,768
24.0	26.0			$367,663	$20,275,931	$9,958,474
24.5	26.5			$373,178	$20,649,109	$9,847,713
25.0	27.0			$378,776	$21,027,884	$9,728,169
25.5	27.5			$384,457	$21,412,342	$9,599,515
26.0	28.0			$390,224	$21,802,566	$9,461,415
26.5	28.5			$396,077	$22,198,643	$9,313,519
27.0	29.0			$402,019	$22,600,662	$9,155,471
27.5	29.5			$408,049	$23,008,711	$8,986,901
28.0	30.0			$414,170	$23,422,880	$8,807,428
28.5	30.5			$420,382	$23,843,263	$8,616,658
29.0	31.0			$426,688	$24,269,951	$8,414,187
29.5	31.5			$433,088	$24,703,039	$8,199,598
30.0	32.0			$439,585	$25,142,623	$7,972,460
30.5	32.5			$446,178	$25,588,802	$7,732,329
31.0	33.0			$452,871	$26,041,673	$7,478,748
31.5	33.5			$459,664	$26,501,337	$7,211,246
32.0	34.0			$466,559	$26,967,896	$6,929,337
32.5	34.5			$473,557	$27,441,453	$6,632,519
33.0	35.0			$480,661	$27,922,114	$6,320,278
33.5	35.5			$487,871	$28,409,985	$5,992,082
34.0	36.0			$495,189	$28,905,174	$5,647,382
34.5	36.5			$502,617	$29,407,790	$5,285,614
35.0	37.0			$510,156	$29,917,946	$4,906,196
35.5	37.5			$517,808	$30,435,754	$4,508,529
36.0	38.0			$525,575	$30,961,330	$4,091,995
36.5	38.5			$533,459	$31,494,789	$3,655,958
37.0	39.0			$541,461	$32,036,249	$3,199,763
37.5	39.5			$549,583	$32,585,832	$2,722,735
38.0	40.0			$557,826	$33,143,659	$2,224,177
38.5	40.5			$566,194	$33,709,853	$1,703,374
39.0	41.0			$574,687	$34,284,539	$1,159,587
39.5	41.5			$583,307	$34,867,846	$592,057
40.0	42.0			$592,057	$35,459,903	$0

MCAS EL TORO GROUNDWATER SETTLEMENT

Contingency Trust Payment Schedule
Joint Regional Groundwater Project with OCWD/IRWD

5.475% Net Trust Earnings

	Eligible Payments			
Beginning of Year	Scheduled Installments	Maximum Contingencies	Accum. Payments	Trust Balance
				$5,250,000
0	$1,500,000	$1,750,000	$3,250,000	$2,000,000
1	$0	$0	$3,250,000	$2,109,500
2	$0	$0	$3,250,000	$2,224,995
3	$0	$0	$3,250,000	$2,346,814
4	$0	$0	$3,250,000	$2,475,302
5	$0	$0	$3,250,000	$2,610,824
6	$0	$0	$3,250,000	$2,753,767
7	$0	$0	$3,250,000	$2,904,536
8	$0	$0	$3,250,000	$3,063,559
9	$0	$0	$3,250,000	$3,231,289
10	$1,000,000	$1,000,000	$5,250,000	$1,298,702
11	$0	$0	$5,250,000	$1,369,806
12	$0	$0	$5,250,000	$1,444,803
13	$0	$0	$5,250,000	$1,523,906
14	$0	$0	$5,250,000	$1,607,340
15	$0	$0	$5,250,000	$1,695,342
16	$0	$0	$5,250,000	$1,788,161
17	$0	$0	$5,250,000	$1,886,063
18	$0	$0	$5,250,000	$1,989,325
19	$0	$0	$5,250,000	$2,098,241
20	$1,000,000	$1,000,000	$7,250,000	$103,620
21	$0	$0	$7,250,000	
22	$0	$0	$7,250,000	
23	$0	$0	$7,250,000	
24	$0	$0	$7,250,000	
25	$0	$0	$7,250,000	
26	$0	$0	$7,250,000	
27	$0	$0	$7,250,000	
28	$0	$0	$7,250,000	
29	$0	$0	$7,250,000	
30	$0	$0	$7,250,000	

Appendix 7

Unrealized Facility Benefit Refund Schedule
Joint Regional Groundwater Project with OCWD/IRWD

Method Used to Calculate Facility Benefit Reduction
Years 3 through 22: Double Declining Balance (DDB)
Years 23 through 42: Straight Line (SL)

			Unrealized Facility Benefit	
Year	Description of Benefit	Payments	DDB	SL
1	Past Costs & Facility Design	$1,207,200	—	—
3	Facility Construction	$6,364,800	$7,572,000	
4			$7,193,400	
5			$6,833,730	
6			$6,492,044	
7			$6,167,441	
8			$5,859,069	
9			$5,566,116	
10			$5,287,810	
11			$5,023,420	
12			$4,772,249	
13			$4,533,636	
14			$4,306,954	
15			$4,091,607	
16			$3,887,026	
17			$3,692,675	
18			$3,508,041	
19			$3,332,639	
20			$3,166,007	
21			$3,007,707	
22			$2,857,321	
23				$2,714,455
24				$2,571,589
25				$2,428,723
26				$2,285,857
27				$2,142,991
28				$2,000,125
29				$1,857,259
30				$1,714,393
31				$1,571,527
32				$1,428,661
33				$1,285,795
34				$1,142,929
35				$1,000,063
36				$857,196
37				$714,330
38				$571,464
39				$428,598
40				$285,732
41				$142,866
42				($0)

Appendix 8

SOLICITATION, OFFER AND AWARD	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	RATING	PAGE OF 1	FA 65

2. CONTRACT NO.	3. SOLICITATION NO.	4. TYPE OF SOLICITATION	5. DATE ISSUED	6. REQUISITION/PURCH
To Be determined		☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)	To be determined	

7. ISSUED BY CODE N68711	8. ADDRESS OFFER TO (If other than Item 7)
Naval Facilities Engineering Command Southwest Division, BRAC Operations 20 Pacific Highway, San Diego, CA 92132-5190	SAME AS ITEM 7

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and 1 copy for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, until 7/17/00

10. CAUTION – LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10.

All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL: SWDIV, BRAC Operations Office, San Diego	A. NAME Theodoris Broussard, Contracting Officer	B. TELEPHONE NO. (Include area code) (NO COLLECT C (619) 532-0764

11. TABLE OF CONTENTS

	SEC.	DESCRIPTION	PAGE(S)		SEC.	DESCRIPTION	PAGE(S)
		PART I – THE SCHEDULE				**PART II – CONTRACT CLAUSES**	
☒	A	SOLICITATION/CONTRACT FORM	1	☒	I	CONTRACT CLAUSES	25-64
☒	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2-6			PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACH.	
☒	C	DESCRIPTION/SPECS./WORK STATEMENT	7-17	☒	J	LIST OF ATTACHMENTS	65
	D	PACKAGING AND MARKING	N/A			PART IV – REPRESENTATIONS AND INSTRUCTIONS	N/A
☒	E	INSPECTION AND ACCEPTANCE	18-19	☒	K	REPRESENTATIONS, CERTIFICATIONS AND	N/A
☒	F	DELIVERIES OR PERFORMANCE	20-21			OTHER STATEMENTS OF OFFERORS	N/A
☒	G	CONTRACT ADMINISTRATION DATA	22		L	INSTRS., CONDS., AND NOTICES TO OFFERORS	N/A
☒	H	SPECIAL CONTRACT REQUIREMENTS	23-24		M	EVALUATION FACTORS FOR AWARD	N/A

OFFER (Must be fully completed by offeror) Applicable to Blocks 15, 16, 17 & 18 below.

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days *unless a different period is inserte the offeror)* from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered the designated point(s), within the time specified in the Schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)	10 CALENDAR DAYS _____%	20 CALENDAR DAYS _____%	30 CALENDAR DAYS _____%	CALENDAR DA _____%

ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and Related documents numbered and dated:)	AMENDMENT NO	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SI
(Reserved for Orange County Water District to complete) Orange County Water District 10500 Ellis Avenue Fountain Valley CA 92708			OFFER (Type or print) Jerry King, President William R. Mills Jr., General Manager

15B. TELEPHONE NO. (Include area code)	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE – ENTER	17. SIGNATURE	18. OFFER D.
(714) 378-3200	☐ SUCH ADDRESS IN SCHEDULE.		6-6-2001

AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT As Cited in Supplemental Agreement	21. ACCOUNTING AND APPROPRIATION See Availability of Funds Clause – Section I

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:		
__ 10 U.S.C. 2304(c)(1) ___ 41 U.S.C. 253(c)( )	23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM G-1
24. ADMINISTERED BY (If other than Item 7) CODE	25. PAYMENT WILL BE MADE BY CODE	
26. NAME OF CONTRACTING OFFICER (Type or print) TDB	27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	28. AWARI DATE TDB

IMPORTANT – Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

STANDARD FORM 33 (Rev. 4-85)

APPROVED AS TO FORM
By _____
General Counsel for
Orange County Water District

PART I - THE SCHEDULE

SECTION B - SUPPLIES OR SERVICES AND PRICES

Base Years One through Ten

Schedule of Work:

Treatment of on-station SGU groundwater for VOCs, The former Marine Corps Air Station El Toro.

CLIN	Description	Price
0001	Year 1 -VOC SGU Treatment	$195,869*
0002	Year 2 -VOC SGU Treatment	$198,106*
0003	Year 3 -VOC SGU Treatment	$200,409*
0004	Year 4 -VOC SGU Treatment	$202,782*
0005	Year 5 -VOC SGU Treatment	$205,226*
0006	Year 6 -VOC SGU Treatment	$207,743*
0007	Year 7 -VOC SGU Treatment	$210,336*
0008	Year 8 -VOC SGU Treatment	$213,006*
0009	Year 9 -VOC SGU Treatment	$215,757*
0010	Year 10 -VOC SGU Treatment	$218,591*
Total for CLINs 0001 through 0010		**$2,067,823***

***This proposed price schedule is based on information provided by Attachment B-1 of Section J, to include projected/proposed rates of capital recovery and annual SGU treatment requirements.**

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

Option Years One through Thirty

Schedule of Work:

Treatment of on-station SGU groundwater for VOCs, the former Marine Corps Air Station
El Toro.

0011	Option 1 -VOC SGU Treatment	$100,189*
0012	Option 2 -VOC SGU Treatment	$103,195*
0013	Option 3 -VOC SGU Treatment	$106,290*
0014	Option 4 -VOC SGU Treatment	$109,479*
0015	Option 5 -VOC SGU Treatment	$112,764*
0016	Option 6 -VOC SGU Treatment	$116,146*
0017	Option 7 -VOC SGU Treatment	$119,631*
0018	Option 8 -VOC SGU Treatment	$123,220*
0019	Option 9 -VOC SGU Treatment	$126,916*
0020	Option 10-VOC SGU Treatment	$130,724*
0021	Option 11 -VOC SGU Treatment	$134,646*
0022	Option 12 -VOC SGU Treatment	$138,685*
0023	Option 13 -VOC SGU Treatment	$142,846*
0024	Option 14 -VOC SGU Treatment	$147,131*
0025	Option 15 -VOC SGU Treatment	$151,545*

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. . OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

Option Years One through Thirty

Schedule of Work:

Treatment of on-station SGU groundwater for VOCs, the former Marine Corps Air Station El Toro.

0026	Option 16 -VOC SGU Treatment	$156,091*
0027	Option 17 -VOC SGU Treatment	$160,774*
0028	Option 18 -VOC SGU Treatment	$165,597*
0029	Option 19 -VOC SGU Treatment	$170,565*
0030	Option 20-VOC SGU Treatment	$175,682*
0031	Option 21-VOC SGU Treatment	$180,952*
0032	Option 22 -VOC SGU Treatment	$186,381*
0033	Option 23 -VOC SGU Treatment	$191,972*
0034	Option 24-VOC SGU Treatment	$197,732*
0035	Option 25 -VOC SGU Treatment	$203,664*
0036	Option 26 -VOC SGU Treatment	$209,773*
0037	Option 27 -VOC SGU Treatment	$216,067*
0038	Option 28 -VOC SGU Treatment	$222,549*
0039	Option 29 -VOC SGU Treatment	$229,225*

0040	Option 30 -VOC SGU Treatment	$236,102*
Total Options (CLINs 0011 through 0040)		**$4,766,532***

***This proposed price schedule is based on information provided by Attachment B-1 of Section J, to include projected/proposed rates of capital recovery and annual SGU treatment requirements.**

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

SUMMARY PAGE

Base Years	**CLIN 0001 – 0010**	**$2,067,823***
Options	**CLIN 0011 – 0040**	**$4,766,532***
Total CLIN 0001 – 0040		**$6,834,355***

***This proposed price schedule is based on information provided by Attachment B-1 of Section J, to include projected/proposed rates of capital recovery and annual SGU treatment requirements.**

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer. OCWD shall not be obliged to perform any work under this contract until it receives notice of the availability of such funds.

PART I - THE SCHEDULE

SECTION C: DESCRIPTION/SPECIFICATION/WORK STATEMENT

STATEMENT OF WORK

Treatment of On-Station Shallow Groundwater Unit (SGU) Groundwater for Volatile Organic Compounds (VOCs)

1. Orange County Water District (OCWD) shall accept and take ownership of groundwater extracted by the Department of the Navy (DON) from the former Marine Corps Air Station (MCAS) El Toro on-Station Shallow Groundwater Unit (SGU) and delivered by DON to OCWD for Volatile Organic Compound (VOC) treatment. OCWD shall, at its own expense, dispose of or otherwise discharge the SGU groundwater after VOC treatment either through acceptance at the Modified Irvine Desalter Project (IDP) for beneficial use or otherwise discharging via re-injection, irrigation, or surface water discharge in accordance with the Record of Decision (ROD) for Operable Units (OU) 1 and OU2A.

2. Scope of the project. OCWD and Irvine Ranch Water District (IRWD) have proposed a water supply development project (the Modified "IDP") which will, in part, accept, treat for VOC removal, and dispose of the groundwater that DON must remediate as part of the ROD for OU1 and OU2A. The United States will bear the VOC treatment costs and OCWD will bear all costs associated with a water supply system, including but not limited to TDS and nitrate treatment. This will be accomplished through a Settlement Agreement (the "SA") which is attached hereto as Attachment C-1 and is incorporated herein by reference. The SA describes each of the party's rights, responsibilities, and liabilities concerning the scope of the entire project. The SA will set forth the scope of the United States' financial contribution and liability for off-station VOC remediation, and will set forth the general scope of this contract for on-station shallow groundwater unit ("SGU") VOC remediation and disposal. The Total CERCLA Remediation Project (hereinafter referred to as the "CERCLA component of Modified IDP" or "CCMI") consists of the following components, which are described in detail in Appendix 4 to the SA: a Principal Aquifer (off station) component with costs shared by OCWD and the United States pursuant to the SA and a SGU (on-station) component designed, constructed, operated, and paid for by DON with OCWD required under this contract to accept, treat for VOCs, and take ownership of the SGU groundwater.

3. Scope of Agreements: The SA and this contract are intended by the parties thereto to resolve and settle any and all past, present and future claims, causes of action, and liabilities that OCWD and IRWD may have against the United States under Section 107(a) of CERCLA, 42 U.S.C. Section 9607(a), and all other applicable Federal, State or local laws or regulations for response costs incurred by OCWD and IRWD for groundwater remediation and water supply development projects in the vicinity of the former MCAS El Toro.

4. Definitions.

A. CERCLA definitions govern. Unless otherwise expressly provided herein, terms used in this contract, which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations.

B, "CCMI" shall mean the "CERCLA Component of the Modified IDP" as more fully set forth in Whereas Clause No. P. of the Recitals in the SA, Appendix 4 of the SA, and identified as the red-colored region in Appendix 5 (Map) of the SA.

C. The "SA" shall mean the "Settlement Agreement among the Settling Federal Agencies, Orange County Water District, and Irvine Ranch Water District in regard to the former Marine Corps Air Station El Toro Groundwater Remediation" including all Appendices thereto. In the event of any conflict between the terms of this contract and the terms of the SA, the terms of the SA shall take precedence unless otherwise noted herein.

D. For SA definitions refer to Section II in the SA.

5. This contract shall be signed by OCWD and the Department of the Navy (each, a "Party" and collectively the "Parties") and shall only go into effect if and when the ROD for OU1 and OU2A is finalized pursuant to the FFA and such ROD identifies and selects Alternative 8A (as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A) and Alternative 10B' (as described in the OU2A Feasibility Study Report for OU2A). In the event different alternatives are selected and approved, this contract shall become null and void. Under no circumstances will the failure of the contract to come into effect be treated as either a termination for the convenience of the government under Section I of this contract or a termination for default under Section I of this contract. Under no circumstances will the United States reimburse OCWD or its subcontractors for any costs whatsoever in the event that Alternative 8A and Alternative 10B' are not selected and approved.

6. General Information.

A. OCWD shall provide all labor, personnel, equipment, materials, supplies, transportation, reproduction, and mailing services to perform the requirements of this contract, **in accordance with the terms, conditions and provisions of the SA**

B. **All** site construction work at THE FORMER MCAS El Toro, if any, is to be performed during normal working hours, which shall be from 7:00 A.M. to 4:00 P.M., Monday through Friday, excluding Government holidays, unless approved by the Contracting Officer, upon reasonable advance request by OCWD. **Subject to Paragraph 9 below, the shallow groundwater unit (SGU) will operate 24 hours per day, seven days a week throughout the year.**

C. Each performance period will be one year in duration. OCWD shall accept, treat for VOCs, and take ownership of SGU groundwater on a continuous basis which shall commence in accordance with the time period established pursuant to the SA and after notice to OCWD by the Contracting Officer that funds for the first performance period are available.

7. Intentionally Omitted

8. VOC Treatment.

A. Uninterrupted VOC Treatment Services. Except as otherwise provided by this contract or in connection with short-term routine maintenance, OCWD shall provide the United States with uninterrupted VOC treatment services. OCWD shall accept and take ownership of groundwater extracted by DON from the former MCAS El Toro on-station SGU and delivered by DON to OCWD for VOC treatment pursuant to the terms and conditions of this contract and as provided in the ROD and Federal Facility Agreement (FFA) documents as referenced in Paragraph III.C of the SA. The required amount of SGU groundwater to be accepted and treated in any given period of performance will be the lesser of the volume furnished by DON or 208,000,000 gallons at a **maximum flow** rate of **440 gallons per minute through 550 gallons per minute or such other rate as agreed to by the parties.** Without any increases in the contract compensation, OCWD may, in its sole discretion, accept a larger flow of water from the United States, if available.

B. OCWD shall be responsible for the disposal and/or discharge of the SGU groundwater after VOC treatment either through acceptance at the CCMI for beneficial use or otherwise discharging via re-injection, irrigation, or surface water discharge in accordance with the ROD for OU1 and OU2A. In no event will the costs associated with disposal of the SGU groundwater be a basis for the recovery of any additional costs by OCWD whatsoever.

C. Payment for Services. Payment for all services under the contract shall be subject to Paragraph 9 below related to temporary and permanent shutdowns. Payments will be made after the successful completion of each period of performance, as identified in Section B of the contract. Within 30 days of the successful completion of each performance period, OCWD shall submit invoices to the cognizant Contracting Officer for certification. Payment shall be made pursuant to the Prompt Payment Act, 31USC 3901, et seq.

1. OCWD will be paid an annual connection charge pursuant to Section B of this contract, including Attachment B-1 (column c), not to exceed $1,213,190. The connection charge will be paid in not more than ten equal installments and during the base contract only.

2. OCWD will also be paid a service rate on an annual basis for VOC treatment and groundwater disposal pursuant to Section B and Attachment B-1 (column d) of this contract. In the event OCWD accepts and treats less than 208,000,000 gallons of SGU groundwater during a performance period, whether it be within the base contract or an option year, the VOC treatment and groundwater service payment set forth in Attachment B-1 (column d) will be reduced on a pro rata basis, based on the actual volume of SGU groundwater accepted and treated during the performance period. Clause 52-241-6 of this contract shall be interpreted in a manner consistent with this provision.

9. Shutdowns.

A. Temporary Shutdown. In the event that contaminants not listed in Appendix 3 to the SA are detected in extracted groundwater, in local groundwater monitoring or extraction wells, or if concentration or equivalent mass levels of contaminants listed in Appendix 2 of the SA are detected at the point of connection of DON's SGU groundwater conveyance pipeline (described in Appendix 4 of the SA and depicted on the map in Appendix 5 of the SA) or at the CCMI central VOC treatment plant intake in excess of the Evaluation Concentration Levels for those contaminants as set forth in Appendix 2 of SA , the Party discovering said contaminants or levels shall promptly notify DON, the United States Environmental Protection Agency (USEPA), the California Department of Toxic Substances Control (DTSC), the California Department of Health Services (DHS) and the Santa Ana Regional Water Quality Control Board (RWQCB). Without further notice, OCWD may temporarily shutdown operation of the CCMI. In the event of any shutdown lasting longer than five days, OCWD shall provide written notice of such shutdown to the contracting officer. This notice shall contain the precise reason for the shutdown and its anticipated duration.

B. Shutdown Resolution. Within seven (7) calendar days following the initial prompt notification to DON, USEPA, etc., the Parties shall determine whether through adjusting flow rates, blending or similar measures:

1. The CCMI can continue to adequately treat extracted groundwater to ensure compliance with applicable Federal and State drinking water standards at the point of distribution into the water supply infrastructure following treatment, or

2. In the absence of Federal or State drinking water standards, whether the continued supply of CCMI waters poses no potential health threat to the public.

3. If the standards in Paragraphs 9.B.1 or 2 can be met, OCWD shall immediately resume operations.

4. In the event that OCWD determines that the standards set forth in Paragraphs 9.B.1 or 2 cannot be met at the point of distribution into the water supply infrastructure following treatment, OCWD may continue temporary shutdown of the CCMI. OCWD shall develop and submit within sixty (60) calendar days for approval to DON, USEPA, and CALEPA (including DTSC, DHS and the RWQCB) a Response Plan. The Response Plan shall propose all practicable means available to minimize the extent and duration of termination of all or a portion of the CCMI groundwater extraction and/or treatment activities. The Response Plan shall specify a timetable for resumption of operations.

C. Additional Treatment at the CCMI. If the approved Response Plan under Paragraph 9.B.4 provides that the CCMI shall continue to operate but that additional treatment technology at the CCMI shall be required beyond the design capacity of the VOC treatment and reverse osmosis systems or to develop different treatment technologies, any claim for compensation by OCWD for the cost of constructing and operating such additional treatment technology shall be addressed in accordance with Changes Clause Provisions and Paragraph 14.

D. The Government may temporarily shutdown operation of the SGU extraction system without prior notice to the contractor. Such shutdown may be for any reason deemed necessary by the Government. When such shutdown occurs, the Contracting Officer shall provide OCWD with written notice of the shutdown and its anticipated duration, as soon as reasonably practicable. Under no circumstances will such shutdown be valid grounds for recovery under this contract. .

E. Payments and Temporary Shutdown Periods. In the event of a Temporary Shutdown of the CCMI treatment system, the annual service rate payment to OCWD as set forth in Paragraph 8.C.2 will be reduced on a pro rata basis during the shutdown period, OCWD shall continue to be credited the full connection charge set forth in Paragraph 8.C.1for that annual performance period.

F. Effect of Temporary Shutdown Under this Contract. A temporary shutdown shall not be grounds for seeking relief under the termination for convenience provisions of this contract. Other than as specified under Paragraph 9 of this contract, a temporary shutdown shall not be deemed a basis for recovery of any costs including delay and/or overhead costs under the Changes Clause in Section I of this contract.

G. The contract shall not be terminated for default for any temporary shutdown that is conducted in accordance with the procedures enumerated herein.

H. Permanent Shutdown not permitted Under the Contract.

Notwithstanding any other provision of this contract, OCWD shall continue to provide the VOC treatment services regardless of whether or not the SGU groundwater can be used for a municipal water supply. In the event that OCWD determines pursuant to applicable regulations that the groundwater cannot be used for water supply purposes after treatment, OCWD shall be responsible for otherwise disposing of the treated groundwater at no additional cost to the government.

Permanent termination by OCWD of SGU VOC treatment activities required by this contract shall be deemed a breach of the contract unless DON is relieved of its obligation to USEPA and CALEPA to remediate VOC contamination in the SGU by an amendment to the ROD. In the event of a termination of services contrary to this provision, in addition to any other remedies covered by this contract, the United States shall be entitled to recover from OCWD all incremental costs incurred by the United States in obtaining alternate VOC remediation services over and above the amount to be paid to the contractor for the connection charge and service rate at the time the services are terminated pursuant to the contract payment schedule. In the event of such termination, the connection charge and service rate for the performance period in which the contract was breached, as well as all future connection charges and service rates as set forth in Attachment B-1 (columns c & d) to this contract, will not be recoverable.

J. Permanent Shutdown Permitted Under the Contract. Notwithstanding any other provision of this contract, a permanent shutdown without breach of this contract will apply when DON is relieved of its obligation to USEPA and CALEPA to remediate VOC contamination in the SGU by an appropriate amendment to the ROD. If such time is within the base contract (ten-year period), OCWD will be paid the balance of the connection charge according to Attachment B-1 (column c) of this contract. The service rate will be reduced on a pro rata basis, based on the volume of SGU groundwater accepted and treated during the performance period prior to the termination of services by DON.

10. Bonds, Permits, and Licenses.

A. Bonding Requirements. OCWD shall obtain and provide a performance bond as per Section III, paragraph D of the SA and provide copies of such bond to the Contracting Officer.

B. OCWD Responsibility for Permits, Licenses, Etc. Except with regard to DON's obligations as provided in the FFA (Appendix 1 to the SA), OCWD shall be responsible for obtaining all required licenses, permits, and approvals necessary for the construction and operation of the non-CERCLA portion of the Modified IDP, and shall be the lead agency responsible for compliance with the California Environmental Quality Act, Public Resources Code sections 210000 et seq. as necessary to construct and operate the Modified IDP. The CCMI portion of the Modified IDP is exempt from permit requirements under CERCLA.

11. Reasonable Access to the Former MCAS El Toro ("the Site"). DON shall provide OCWD and its subcontractors with reasonable access to the Site, so long as DON owns the Site. DON shall also provide OCWD and its subcontractors a license to use property at the Site to perform this contract. In the event DON sells or leases the Site, DON shall reserve and record in such

sale or lease agreements continuing access, rights-of -Way licenses and easements as necessary for OCWD to perform the contract. DON shall inform all prospective purchasers and/or lessees that a CERCLA remediation action system will be operating pursuant to a ROD with USEPA and CALEPA and OCWD and its subcontractors shall have the right, upon reasonable notice to all purchasers and/or lessees, and so as not to unreasonably interfere with the purchaser or lessee's operations, to perform this contract. OCWD and its subcontractors shall also have the right to sample soil and groundwater on the Site pursuant to Paragraph VI.A of the SA.

12. Access to Records and Information.

A. During the term of this contract, OCWD and its subcontractors shall provide DON, USEPA and CALEPA with reasonable access, during normal business hours, to the CCMI facilities and to all records that are not within the scope of the attorney-client communication or attorney work product or deliberative process privileges and that are relevant to the construction and operation and maintenance of those facilities, for purposes of evaluating OCWD's and its subcontractors' compliance with this contract. OCWD and its subcontractors shall also provide reasonable access to DON, USEPA, and CALEPA, during normal business hours, to sample pre-treated and treated groundwater and groundwater collected in groundwater monitoring wells.

B. The Parties shall provide to each other, upon written request, copies of all documents and information within their possession or control that is not within the scope of the attorney-client communication or attorney work product or deliberative process privileges and that relates to the performance of this contract, including, but not limited to, plans, reports, maps, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample tracking routing, correspondence or other documents or information of official record relating to the performance of this contract.

1. DON shall provide OCWD a copy of analytical data reports for all validated analytical data collected by DON and its authorized representatives and contractors in groundwater monitoring wells and on-station extraction wells required by the ROD within sixty (60) calendar days after such reports become available to DON.

2. OCWD and its subcontractors shall provide DON copies of analytical data reports for all quality assured and controlled analytical data collected by OCWD and its subcontractors in groundwater monitoring wells, CCMI production wells, and finished water (post treatment) within sixty (60) calendar days after such reports become available to OCWD and its subcontractors.

C. In the event monitoring activities undertaken pursuant to this contract cause damage to one or more of the monitoring or production wells or create a condition in the well(s) which prevents the future intended use of the well(s) within the scope of this contract (e.g., equipment lodged), then the Party responsible for causing the damage or creating said condition shall promptly remedy the condition at its sole cost to ensure that the intended use of the well(s) satisfies all applicable federal, state and local regulatory operation, maintenance, quality assurance/quality control, and safety standards.

D. In the event monitoring or sampling equipment used by any Party to this contract at one or more monitoring or production wells subject to this contract, is lost or damaged during well monitoring activities by one of the Parties, then it will be the sole responsibility of the Party that owns the equipment to retrieve and/or repair its own equipment.

E. OCWD and its subcontractors shall provide the Contracting Officer, following request, complete, true and correct copies of technical and cost documentation relating to the performance of this contract. OCWD and its subcontractors shall make available to the United States, such information gathered or testimony in support of any future contribution, cost recovery or other civil claims made and proceedings instituted by the United States under federal or state statutory or common law, at law or in equity, against third parties for reimbursement of all or a portion of the costs incurred pursuant to this contract. The United States shall provide such information, documentation, and testimony to OCWD and its subcontractors in such claims instituted by the Parties hereto against third parties as provided by law.

13. Required Reports. OCWD shall be responsible for providing the Contracting Officer with copies of all reports and documents in accordance with the requirements of the FFA in Paragraph III.C in the SA.

14. Changes Clause Provisions. OCWD agrees that it will only seek to recover costs relating to groundwater deliveries to OCWD from the SGU under the Changes Clause (Part II, Section I, Paragraph 52.243-1 and Alternate I) of this contract under the following specific circumstances and that the Changes Clause shall be interpreted in a manner consistent with these circumstances:

A. OCWD expressly warrants and represents that it will make no attempt to seek additional monies for work, circumstances, events, and chemicals found at the former MCAS EL Toro other than in the specific circumstances stated herein and that it will abide by the "Mutual Release of Liability and Covenant Not to Sue" language in Paragraph VII. B of the SA. OCWD may seek recovery under the Changes Clause of this contract for:

1. Any valid claim for CERCLA response costs by OCWD and its subcontractors necessary and consistent with the NCP based upon the following new or previously unknown conditions or information concerning releases of hazardous substances, pollutants or contaminants when OCWD and its subcontractors demonstrate that such releases:

a. Are a result of DON's activities and

b. Result in the incurrence of additional necessary responses costs consistent with the NCP for construction or treatment by OCWD and its subcontractors in order to comply with regulatory standards or provide adequate protection of human health and the environment.

2. New or previously unknown conditions as used in this paragraph are defined as:

a. Hazardous substances, pollutants or contaminants released as a result of DON's activities which do not appear on the List of chemicals in Appendix 3 to the SA and are identified after the effective date of this contract; or

b. Concentration levels of hazardous substances, pollutants or contaminants which exceed the Evaluation Concentration Level (ECL) values set forth in Appendix 2 to the SA are identified in monitoring data collected and analyzed after the effective date of this contract and the increased concentration levels are attributable to DON activities; or

c. Legally enforceable Federal or State drinking water standards which address hazardous substances, pollutants or contaminants included in Appendix 2 to the SA that are more stringent than those in effect as of the effective date of this contract are enacted or promulgated after the effective date of the contract.

15. Intentionally Omitted.

16. Disputes Procedures.

Notwithstanding any other provision contained herein, prior to exercising any rights available under the Disputes Clause of this contract (Par. 52.233-1), or the Contract Disputes Act (41 U.S.C. Sections 601-613), each Party agrees to submit its objections and views in writing to the other Party. The Parties will then attempt to resolve the dispute within thirty (30) working days after receipt of the objections and views. If agreement is not reached during this period or such

longer period as the Parties jointly agree to, the Parties may pursue such remedies as are available under the Disputes Clause of this contract

17. Water Rights. OCWD warrants and represents that the actions it agrees to undertake under this contract are consistent with all applicable laws and regulations regarding ownership and allocation of water rights.

18 Retention of Records.

OCWD, its subcontractors, and the United States shall retain all documents of record relating to the performance of this contract in a manner and for a time period that complies with Section 24 of the FFA.

19. Other Provisions.

A. The Parties shall at all times cooperate with all federal, state and local agencies involved in the investigation and remediation of hazardous substances at the Site.

B. The Parties shall comply with all applicable federal and state laws and regulations in performing their obligations under this contract; in the event of conflict between such laws, federal law shall be paramount and controlling.

C. In the event of any death or injury to any person, or the loss of or damage of any property, caused by officers, employees, or contractors of the United States in connection with any of the United States' activities hereunder or in the event of any legal or equitable action instituted between the OCWD or its subcontractors, OCWD's or its subcontractors' officers, employees and contractors and the United States, the liability, if any, of the United States shall be determined in accordance with the applicable provisions of the Federal Tort Claims Act (28 U.S.C. Sections 2671-2680).

PART I - THE SCHEDULE

SECTION E: INSPECTION AND ACCEPTANCE

Title		Page No.
FAR 52.246-4 (Aug 1996)	Inspection of Services - Fixed Price	

52.246-4 -- Inspection of Services -- Fixed-Price.

(Aug. 1996)

(a) *Definition: "Services,"* as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by re-performance, the Government may --

(1) Require the Contractor to take necessary action to ensure that future performance conforms to contract requirements; and

(2) Reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may --

(1) By contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service; or

(2) Terminate the contract for default.

PART I - THE SCHEDULE

SECTION F: DELIVERIES OR PERFORMANCE

PART I - THE SCHEDULE

F-1 TERM OF CONTRACT

Term of contract for contracts utilizing fiscal year funds: The contract awarded as a result of this offer shall extend from the date of contract award, through 365 calendar days from the date of award to represent one full year, for a total of ten (10) years of SGU VOC treatment services pursuant to CLINs 0001 through 0010, cited in Section B of this contract.

F-2 OPTIONS

The United States government reserves the right to exercise options for additional services pursuant to CLINs 0011 through 0040, as cited in Section B and in accordance with the provisions of FAR Clause 52.217-9, "Option to Extend the Term of The Contract", as referenced in Section I of this contract.

F-3 WORK SCHEDULE/PERIOD OF PERFORMANCE

OCWD/IRWD shall arrange its work so as not to interfere with the normal occurrence of business at the former MCAS El Toro. Whenever non-essential services have been scheduled on the date a holiday occurs, such services shall be performed on the following work day.

PART I - THE SCHEDULE

SECTION G: CONTRACT ADMINISTRATION DATA

G-1 Contract Administrative Data

The Administrative Contracting Officer for this contract is:

Department of Navy
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132

G-2 The Contracting Officer's Technical Representative (COTR) for this contract shall be designated at time of contract award.

G-3 The cognizant payment office for this contract shall be designated at time of contract award.

PART I - THE SCHEDULE

SECTION H: SPECIAL CONTRACT REQUIREMENTS

H-1 Pre-Performance Conference

Prior to commencing work, the contractor may be required to meet with the Contracting Officer and/or designated technical personnel at a mutually agreeable time and place to discuss and develop mutual understandings concerning scheduling, performance and administration of the contract.

H-2 Privity of Contract

As a result of awarding this contract, the Government's obligation remains solely with the prime contractor, Orange County Water District (OCWD), in accordance with the terms and conditions cited herein and in the Settlement Agreement, cited and referenced in Section J.

H-3 Subcontract to IRWD

To the extent necessary to perform this contract, OCWD will enlist Irvine Ranch Water District (IRWD), as subcontractor.

H-4 Order of Precedence (Pre-disputes)

For disputes arising under the terms and conditions of this contract, such disputes will be governed by the Pre-disputes procedures, paragraph C.16, and the Disputes clause (FAR 52.233-1) of the contract. All disputes arising under the terms and conditions of the Settlement Agreement shall be

governed by VII.F, "Disputes Resolution Procedures", of the Settlement Agreement.

H-5 Indemnification and Contribution Protection.

A. OCWD hereby agrees to defend, indemnify and hold the United States harmless from any and all past, present or future liability, costs, claims, demands, duties, damages, debts, causes of action, administrative or judicial, at law or equity, under federal, state, or local law (collectively referred to as "claims"), by any person or entity not a party to the SA to the same extent as set forth in the SA.

B. OCWD hereby indemnifies and holds harmless the United States from and against any and all claims, liens, demands, causes of actions, obligations, damages, liabilities, judgments and costs, including attorney's fees and expenses, known or unknown and now or hereafter existing which arise as a result of, or in connection with OCWD's activities or those activities of its agents, employees and subcontractors in performance of this contract except to the extent caused in whole or in part by the deliberate or negligent acts of the United States after the date of execution of this contract on or with property owned by DoN or any other instrumentality of the United States at the time of such acts (this exception will not be construed to cover any claim relating to the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants or contaminants that originate in the SGU groundwater and migrate into the Principal Aquifer).

C. As of the effective date of this contract, the Parties agree the United States is entitled to protection from contribution actions or claims as provided in Section 113(f) of CERCLA, 42 U.S.C. Section 9613(f), federal common law, or other applicable law, for matters addressed in this contract and the SA.

H-6 Changes Clause Provisions

OCWD agrees to the specific limitations on the scope of recovery available under the Changes Clause of this contract, as set forth in Section C.14 of this contract.

H-7 Yearly Funding

OCWD's obligations to perform under this contract shall be contingent upon notice of availability of funds from the Contracting Officer. See Section B.

H-8. Service Provisions Applicability

Paragraph I-52-241-6 (2) of this contract shall apply to flow rate and volume meters.

PART II – CONTRACT CLAUSES

SECTION I -REQUIRED PROVISIONS OR CLAUSES

UTILITY SERVICE

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52.243-1 Changes--Fixed-Price.

(Aug 1987)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications.

(2) Method of shipment or packing.

(3) Place of delivery.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

Alternate I (Apr 1984). If the requirement is for services, other than architect-engineer or other professional services, and no supplies are to be furnished, substitute the following paragraph (a) for paragraph (a) of the basic clause:

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Description of services to be performed.

(2) Time of performance (*i.e.*, hours of the day, days of the week, etc.).

(3) Place of performance of the services.

52.202-1 Definitions. (Oct. 1995)

(a) 'Head of the agency' (also called 'agency head') or 'Secretary' means the Secretary (or Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, including any deputy or assistant chief official of the agency; and the term 'authorized representative' means any person, persons, or board (other than the Contracting Officer) authorized to act for the head of the agency or Secretary.

(b) 'Commercial component' means any component that is a commercial item.

(c) 'Commercial item' means--

(1) Any item, other than real property, that is of a type customarily used for non-governmental purposes and that--

(i) Has been sold, leased, or licensed to the general public; or

(ii) Has been offered for sale, lease, or license to the general public;

(2) Any item that evolved from an item described in paragraph (c)(1) of this clause through advances in technology or performance and that is not yet available in the commercial marketplace, but will be available in the commercial marketplace in time to satisfy the delivery requirements under a Government solicitation;

(3) Any item that would satisfy a criterion expressed in paragraphs (c)(1) or (c)(2) of this clause, but for--

(i) Modifications of a type customarily available in the commercial marketplace; or

(ii) Minor modifications of a type not customarily available in the commercial marketplace made to meet Federal Government requirements. 'Minor' modifications means modifications that do not significantly alter the non-governmental function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is minor include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is minor;

(4) Any combination of items meeting the requirements of paragraphs (c)(1), (2), (3), or (5) of this clause that are of a type customarily combined and sold in combination to the general public;

(5) Installation services, maintenance services, repair services, training services, and other services if such services are procured for support of an item referred to in paragraphs (c)(1), (2), (3), or (4) of this clause, and if the source of such services--

(i) Offers such services to the general public and the Federal Government contemporaneously and under similar terms and conditions; and

(ii) Offers to use the same work force for providing the Federal Government with such services as the source uses for providing such services to the general public;

(6) Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog or market prices for specific tasks performed under standard commercial terms and conditions. This does not include services that are sold based on hourly rates without an established catalog or market price for a specific service performed;

(7) Any item, combination of items, or service referred to in subparagraphs (c)(1) through (c)(6), notwithstanding the fact that the item, combination of items, or service is transferred between or among separate divisions, subsidiaries, or affiliates of a Contractor; or

(8) A non-developmental item, if the procuring agency determines the item was developed exclusively at private expense and sold in substantial quantities, on a competitive basis, to

multiple State and local Governments.

(d) 'Component' means any item supplied to the Federal Government as part of an end item or of another component.

(e) 'Non-developmental item' means'--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (e)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (e)(1) or (e)(2) solely because the item is not yet in use.

(f) 'Contracting Officer' means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(g) Except as otherwise provided in this contract, the term 'subcontracts' includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

52.203-5 Covenant Against Contingent Fees.
(APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) 'Bona fide agency,' as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

'Bona fide employee,' as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

'Contingent fee,' as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

'Improper influence,' as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

52.203-6 Restrictions on Subcontractor Sales to the Government. (JUL 1995)

(a) Except as provided in (h) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed $100,000.

52.203-7 Anti-Kickback Procedures.
(JUL 1995)

(a) Definitions.

'Kickback,' as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

'Person,' as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

'Prime contract,' as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

'Prime Contractor' as used in this clause, means a person who has entered into a prime contract with the United States.

'Prime Contractor employee,' as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

'Subcontract,' as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

'Subcontractor,' as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

'Subcontractor employee,' as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from--

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold from sums owed a subcontractor under the prime contract the amount of the kickback. The Contracting Officer may order that monies withheld under subdivision (c)(4)(ii) of this

clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed $100,000.

52.204-4 Printing/Copying Double-Sided on Recycled Paper.

(JUN 1996)

(a) In accordance with Executive Order 12873, dated October 20, 1993, as amended by Executive Order 12995, dated March 25, 1996, the Offeror/Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed/copied double-sided on recycled paper that has at least 20 percent post consumer material.

(b) The 20 percent standard applies to high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white woven envelopes, and other uncoated printed and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock. An alternative to meeting the 20 percent post consumer material standard is 50 percent recovered material content of certain industrial by-products.

52.204-1 Approval of Contract.
(DEC 1989)

This contract is subject to the written approval of identify Theodoris Bressard, Contracting Officer, shall not be binding until so approved.

52.204-2 Security Requirements.

(AUG 1996)

(a) This clause applies to the extent that this contract involves access to information classified 'Confidential,' 'Secret,' or 'Top Secret.'

(b) The Contractor shall comply with--

(1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DOD 5220.22-M); and

(2) Any revisions to that manual, notice of which has been furnished to the Contractor.

(c) If, subsequent to the date of this contract, the security classification or security requirements under this contract are changed by the Government and if the changes cause an increase or decrease in security costs or otherwise affect any other term or condition of this contract, the contract shall be subject to an equitable adjustment as if the changes were directed under the Changes clause of this contract.

(d) The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph (d) but excluding any reference to the Changes clause of this contract, in all subcontracts under this contract that involve

access to classified information.

52.216-24 Limitation of Government Liability.
(APR 1984)

(a) In performing this contract, the Contractor is not authorized to make expenditures or incur obligations exceeding the limitations of the SGU Settlement Agreement.

(b) The maximum amount for which the Government shall be liable if this contract is terminated is cited in the SGU Settlement Agreement.

52.223-13 Certification of Toxic Chemical Release Reporting.

(OCT 1996)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in

sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: [Check each block that is applicable.]

[ ] (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

[ ] (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

[ ] (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

[ ] (iv) The facility does not fall within Standard Industrial

Classification Code (SIC) designations 20 through 39 as set forth in

section 19.102 of the Federal Acquisition Regulation; or

[ ] (v) The facility is not located within any State of the

United States, the District of Columbia, the Commonwealth of Puerto

Rico, Guam, American Samoa, the United States Virgin Islands, the

Northern Mariana Islands, or any other territory or possession over

which the United States has jurisdiction.

52.223-10 Waste Reduction Program.
(OCT 1997)

(a) Definition. 'Waste reduction,' as used in this clause, means preventing or decreasing the amount of waste being generated through waste prevention, recycling, or purchasing recycled and environmentally preferable products.

(b) Consistent with the requirements of Section 701 of Executive Order 12873, the Contractor shall establish a program to promote cost-effective waste reduction in all operations and facilities covered by this contract. Any such program shall comply with applicable Federal, State, and local requirements, specifically including Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6901, et seq.) and implementing

regulations.

52.223-14 Toxic Chemical Release Reporting.
(OCT 1996)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C.

11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulation (FAR); or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall--

(i) Submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and

(ii) Continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical

release filing and reporting requirements.

(e) Except for acquisitions of commercial items as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

52.232-18 Availability of Funds (Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until OCWD receives notice of such availability, to be confirmed in writing by the Contracting Officer.

52.233-1 Disputes.
(OCT 1995)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). The dispute resolution procedures in this Section 52.233-1 and the Contract Disputes Act of 1978 apply to issues relating directly to the treatment of

extracted SGU groundwater under this contract and do not apply to disputes arising under the SA and the PA component of the CCMI.

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) 'Claim,' as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) Contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim--
(A) Exceeding $100,000; or

(B) Regardless of the amount claimed, when using-

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: 'I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.'

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use

ADR. If the Contractor refuses an offer for alternative disputes resolution, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request. When using arbitration conducted pursuant to 5 U.S.C. 575-580, or when using any other ADR technique that the agency elects to handle in accordance with the ADRA, any claim, regardless of amount, shall be accompanied by the certification described in subparagraph (d)(2)(iii) of this clause, and executed in accordance with subparagraph (d)(3) of this clause.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at' the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

52.236-7 Permits and Responsibilities. (Nov 1991)

OCWD shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. OCWD

shall also be responsible for all damages to persons or property that occur as a result of OCWD's fault or negligence. OCWD shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

52.236-9 -Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvement (Apr 1984)

(a) OCWD shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the former MCAS El Toro, which are not to be removed and which do not unreasonably interfere with the work required under this contract. OCWD shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, OCWD shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) OCWD shall protect from damage all existing improvements and utilities (1) at or near the former MCAS El Toro and (2) on adjacent property of a third party, the locations of which are made known to or should be known by OCWD. OCWD shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If OCWD fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to OCWD.

52.241-3 Scope and Duration of Contract.
(FEB 1995)

(a) Until DON is relieved of its obligation to USEPA and CALEPA to remediate VOC contamination in the SGU by appropriate amendment to the ROD, OCWD agrees to furnish and the Government agrees to purchase this utility service in accordance with the applicable tariff(s), rules, and regulations as approved by the applicable governing regulatory body and as set forth in the contract.

(b) It is expressly understood that neither the Contractor nor the Government is under any obligation to continue any service under the terms and conditions of this contract beyond the expiration date.

(c) The Contractor shall provide the Government with one complete set of rates, terms, and conditions of service which are in effect as of the date of this contract and any subsequently approved rates.

(d) The Contractor shall be paid at the applicable rate(s) under the tariff and the Government shall be liable for the minimum monthly charge, if any, specified in this contract commencing with the period in which service is initially furnished and continuing for the term of this contract. Any minimum monthly charge specified in this contract shall be equitably prorated for the periods in which commencement and termination of this contract become effective.

52.241-4 Change in Class of Service.
(FEB 1995)

(a) In the event of a change in the class of service, such service shall be provided at the Contractor's lowest available rate schedule applicable to the class of service furnished.

(b) Where the Contractor does not have on file with the regulatory body approved rate schedules applicable to services provided, no clause in this contract shall preclude the parties from negotiating a rate schedule applicable to the class of service furnished.

52.241-5 Contractor's Facilities.
(FEB 1995)

(a) The Contractor, at its expense, unless otherwise provided for in this contract, shall furnish, install, operate, and maintain all facilities required to furnish service hereunder, and measure such service at the point of delivery specified in the Service Specifications. Title to all such facilities shall remain with the Contractor and the Contractor shall be responsible for loss or damage to such facilities, except that the Government shall be responsible to the extent that loss or damage has been caused by the Government's negligent acts or omissions.

(b) Notwithstanding any terms expressed in this clause, the Contractor shall obtain approval from the Contracting Officer prior to any equipment installation, construction, or removal at the former MCAS El Toro. The Government hereby grants to the Contractor, free of any rental or similar charge, but subject to the limitations specified in this contract, a revocable permit or license to enter the service location for any proper purpose under this contract. This permit or license includes use of the site or sites agreed upon by the parties hereto for the installation, operation, maintenance, and repair of the facilities of the Contractor required to be located upon Government premises. All applicable taxes and

other charges in connection therewith, together with all liability of the Contractor in construction, operation, maintenance and repair of such facilities, shall be the obligation of the Contractor.

(c) Authorized representatives of the Contractor will be allowed access to the facilities on Government premises at reasonable times to perform the obligations of the Contractor regarding such facilities. It is expressly understood that the Government may limit or restrict the right of access herein granted in any manner considered necessary (e.g., national security, public safety).

(d) Unless otherwise specified in this contract, the Contractor shall, at its expense, remove such facilities and restore Government premises to their original condition as near as practicable within a reasonable time after the Government terminates this contract. In the event such termination of this contract is due to the fault of the Contractor, such facilities may be retained in place at the option of the Government for a reasonable time while the Government attempts to obtain service elsewhere comparable to that provided for hereunder.

52.241-6 Service Provisions.
(FEB 1995)

(a) Measurement of service. (1) All service furnished by the Contractor shall be measured by suitable metering equipment of standard manufacture, to be furnished, installed, maintained, repaired, calibrated, and read by the Contractor at its expense. When more than a single meter is installed at a service location, the readings thereof may be billed conjunctively, if appropriate. In the event any meter fails to register (or registers incorrectly) the service furnished, the parties shall agree upon the length of time of meter malfunction and the quantity of service delivered during

such period of time. An appropriate adjustment shall be made to the next invoice for the purpose of correcting such errors. However, any meter which registers not more than _five (5)__ percent slow or fast shall be deemed correct.

(2) The Contractor shall read all meters at periodic intervals of approximately 30 days or in accordance with the policy of the cognizant regulatory body or applicable bylaws. All billings based on meter readings of less than _365___ days shall be prorated accordingly.

(b)Meter test. (1) The Contractor at its expense, shall periodically inspect and test Contractor-installed meters at intervals not exceeding _five (5)____ year(s). The Government has the right to have representation during the inspection and test.

(2) At the written request of the Contracting Officer, the Contractor shall make additional tests of any or all such meters in the presence of Government representatives. The cost of such additional tests shall be borne by the Government if the percentage of errors is found to be not more than __five (5)__ percent slow or fast.

(3) No meter shall be placed in service or allowed to remain in service which has an error in registration in excess of _five (5)___ percent under normal operating conditions.

(c) Change in volume or character Reasonable notice shall be given by the Contracting Officer to the Contractor regarding any material changes anticipated in the volume or characteristics of the utility service required at each location.

(d) Continuity of service and consumption. The Contractor shall use reasonable diligence to provide a regular and uninterrupted supply of service at each service location, but shall not be liable for

damages, breach of contract or otherwise, to the Government for failure, suspension, diminution, or other variations of service occasioned by or in consequence of any cause beyond the control of the Contractor, including but not limited to acts of God or of the public enemy, fires, floods, earthquakes, or other catastrophe, strikes, or failure or breakdown of transmission or other facilities. If any such failure, suspension, diminution, or other variation of service shall aggregate more than _____ hour(s) (not applicable see section C paragraph 8.C.2) during any billing period hereunder, an equitable adjustment shall be made in the monthly billing specified in this contract (including the minimum monthly charge).

52.242-13 Bankruptcy.
(JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

52.244-6 Subcontracts for Commercial Items and Commercial Components.
(APR 1998)

(a) Definitions.

'Commercial item,' as used in this clause, has the meaning contained in the clause at 52.202-1, Definitions.

'Subcontract,' as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or non-developmental items as

components of items to be supplied under this contract.

(c) Notwithstanding any other clause of this contract, the Contractor is not required to include any FAR provision or clause, other than those listed below to the extent they are applicable and as may be required to establish the reasonableness of prices under Part 15, in a subcontract at any tier for commercial items or commercial components:

(1) 52.222-26, Equal Opportunity (E.O. 11246);

(2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212(a));

(3) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 793); and

(4) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996).

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

52.249-2 Termination for Convenience of the Government (Fixed-Price). (Sep 1996) Alternate I

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government--

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; *provided*, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the

form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit; restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

Alternate I (Sep 1996):

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(1)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the

contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-8 Default (Fixed-Price Supply and Service) (Apr 1984)

(a)

(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor,

terminate this contract in whole or in part if the Contractor fails to --

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see subparagraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see subparagraph (a)(2) of this clause).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(1) acts of God or of the public enemy,
(2) acts of the Government in either its sovereign or contractual capacity,
(3) fires,

(4) floods,
(5) epidemics,
(6) quarantine restrictions,
(7) strikes,
(8) freight embargoes, and
(9) unusually severe weather.

In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any

(1) completed supplies, and

(2) partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract.

Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials

delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J: LIST OF ATTACHMENTS

Attachment Number	TITLE
Attachment A-1	Schedule of Price & Payments
Attachment B-1	Settlement Agreement Among the Settling Federal Agencies (SFA), Orange County Water District (OCWD), and Irvine Ranch Water District (IRWD) - Marine Corps Air Station (MCAS) El Toro Groundwater Remediation-dated_____

Attachment A-1
Schedule of Price & Payments

Former MCAS El Toro
VOC Treatment/Disposal of Shallow Groundwater

Service Contract Payments

Period of Performance # (a)	(b)	Overhead (connection charge) (c)	VOC Treatment & Groundwater Disposal Services (d)	Annual Payments (e)	Cumulative Payments (f)
	0	$0	$0	$0	$0
Contract Year	1	$121,319	$74,550	$195,869	$195,869
Contract Year	2	$121,319	$76,787	$198,106	$393,975
Contract Year	3	$121,319	$79,090	$200,409	$594,384
Contract Year	4	$121,319	$81,463	$202,782	$797,165
Contract Year	5	$121,319	$83,907	$205,226	$1,002,391
Contract Year	6	$121,319	$86,424	$207,743	$1,210,134
Contract Year	7	$121,319	$89,017	$210,336	$1,420,470
Contract Year	8	$121,319	$91,687	$213,006	$1,633,476
Contract Year	9	$121,319	$94,438	$215,757	$1,849,232
Contract Year	10	$121,319	$97,272	$218,591	$2,067,823
Option Year	1	$0	$100,189	$100,189	$2,168,012
Option Year	2	$0	$103,195	$103,195	$2,271,207
Option Year	3	$0	$106,290	$106,290	$2,377,497
Option Year	4	$0	$109,479	$109,479	$2,486,976
Option Year	5	$0	$112,764	$112,764	$2,599,740
Option Year	6	$0	$116,146	$116,146	$2,715,887
Option Year	7	$0	$119,631	$119,631	$2,835,517
Option Year	8	$0	$123,220	$123,220	$2,958,737
Option Year	9	$0	$126,916	$126,916	$3,085,654
Option Year	10	$0	$130,724	$130,724	$3,216,377
Option Year	11	$0	$134,646	$134,646	$3,351,023
Option Year	12	$0	$138,685	$138,685	$3,489,708
Option Year	13	$0	$142,846	$142,846	$3,632,553
Option Year	14	$0	$147,131	$147,131	$3,779,684
Option Year	15	$0	$151,545	$151,545	$3,931,229
Option Year	16	$0	$156,091	$156,091	$4,087,320
Option Year	17	$0	$160,774	$160,774	$4,248,094
Option Year	18	$0	$165,597	$165,597	$4,413,691
Option Year	19	$0	$170,565	$170,565	$4,584,256
Option Year	20	$0	$175,682	$175,682	$4,759,938
Option Year	21	$0	$180,952	$180,952	$4,940,891
Option Year	22	$0	$186,381	$186,381	$5,127,272
Option Year	23	$0	$191,972	$191,972	$5,319,244
Option Year	24	$0	$197,732	$197,732	$5,516,976
Option Year	25	$0	$203,664	$203,664	$5,720,639
Option Year	26	$0	$209,773	$209,773	$5,930,413
Option Year	27	$0	$216,067	$216,067	$6,146,479
Option Year	28	$0	$222,549	$222,549	$6,369,028
Option Year	29	$0	$229,225	$229,225	$6,598,253
Option Year	30	$0	$236,102	$236,102	$6,834,355

file: SGUKTR
F.A. Piszkin

Attachment B-1

Settlement Agreement Among the Settling Federal Agencies (SFA), Orange County Water District (OCWD), and Irvine Ranch Water District (IRWD) - Marine Corps Air Station (MCAS) El Toro Groundwater Remediation

-dated _____