IAG COVER SHEET

FILE NAME: Milan.pdf

Title: Milan Army Ammunition Plant, Tennessee

Subject: Region 4, IV

Author: Army, DoD, Tennessee, TN

Keywords: 07/25/89, 1989, FY89

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
AND THE
UNITED STATES DEPARTMENT OF THE ARMY
AND THE
TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT

IN THE MATTER OF:	)	
	)	
The U.S. Army's	)	
	)	FEDERAL FACILITY
	)	AGREEMENT UNDER
	)	CERCLA SECTION 120
	)	and
Milan Army Ammunition Plant	)	RCRA Sections
	)	3008(h) and 3004(u)
Tennessee	)	and
	)	3004(v)
	)	Administrative
	)	Docket Number:

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:

I

Jurisdiction

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

(i) The U.S. Environmental Protection Agency (U.S. EPA), Region IV, enters into those portions of this Agreement that relate to the remedial investigation/feasibility study (RI/FS) pursuant to Section 120(e)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Section 9620(e)(1), as amended by the Superfund Amendments and

Reauthorization Act of 1986 (SARA), Pub. L. 99-499 (hereinafter jointly referred to as CERCLA/SARA or CERCLA) and Sections 6001, 3008(h), and, upon issuance of the permit, 3004(u) and 3004(v) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6961, 6928(h), and, upon issuance of the hazardous waste permit(s), 6924(u) and 6924(v), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter jointly referred to as RCRA/HSWA or RCRA) and Executive Order 12580;

(ii) U.S. EPA, Region IV, enters into those portions of this Agreement that relate to interim and final remedial actions for operable units pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001, 3008(h), and upon issuance of the hazardous waste permit(s), 3004(u) and 3004(v) of RCRA and Executive Order 12580;

(iii) The U.S. Army (Army) enters into those portions of this Agreement that relate to the RI/FS pursuant to Section 120(e)(1) of CERCLA, Sections 6001, 3008(h) and, upon issuance of the hazardous waste permit, 3004(u) and 3004 (v) of RCRA, Executive Order 12580, and the National Environmental Policy Act, 42 U.S.C. Section 4321, and the Defense Environmental Restoration Program (DERP), 10 U.S.C. Section 2701 et. seq.;

(iv) The Army enters into those portions of this Agreement that relate to remedial actions for operable units pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001 and 3008(h) and, upon issuance of the hazardous waste permit(s), 3004(u) and 3004(v) of RCRA, Executive Order 12580, and the DERP;

(v) The Tennessee Department of Health and Environment (TDHE) enters into this Agreement pursuant to Sections 120(f) and 121(f) of CERCLA/SARA, Sections 6001 and 3006 of RCRA, and the Tennessee Code Annotated Section 68-46-107 and 206.

II

Determinations

A. On the basis of the results of testing and analyses described in the Findings of Fact, infra, and U.S. EPA and TDHE files and records, the U.S. EPA and TDHE have determined that:

(1) The Milan Army Ammunition Plant (MAAP) located in Milan, Tennessee, constitutes a facility within the meaning of 42 U.S.C. Section 9601(9) and Tennessee Code Annotated Sections 68-46-202(5) and 68-46-104(5) and MAAP includes certain facilities authorized to operate under Section 3005(e) of RCRA, 42 U.S.C. Section 6925(e);

(2) Hazardous substances/hazardous constituents and pollutants or contaminants within the meaning of 42 U.S.C. Sections 9601(14) and (33) and 9604(a)(2), Section 1004(5) of RCRA, 42 U.S.C. Section 6903(5) and 40 CFR Part 261, and Tennessee Code Annotated Sections 68-46-107, 68-46-206, 68-46-104(7), and

68-46-202(2) and Tennessee Official Compilation of Rules and Regulations Chapter 1200-1-11-101(2)a have been disposed of at MAAP;

(3) There have been releases and there continue to be releases and threatened releases of hazardous substances and hazardous constituents and pollutants or contaminants into the environment within the meaning of 42 U.S.C. Sections 9601(22), 9604, 9606, and 9607 and Tennessee Official Compilation of Rules and Regulations Chapter 1200-1-11-01(2)a and Tennessee Code Annotated Sections 68-46-104(12) and 68-46-202(2)4) and Section 1004(5) of RCRA, 42 U.S.C. Section 6903(5) and 40 CFR Part 261 and Tennessee Official Compilation of Rules and Regulations Chapter 1200-1-11-101(2)a.

(4) With respect to those releases and threatened releases, the U.S. Army is a responsible party within the meaning of 42 U.S.C. Section 9607 and Tennessee Code Annotated Sections 68-46-104(7) and 68-46-202(4) and the U.S. Army is the owner of the MAAP facility;

(5) The actions to be taken pursuant to this Agreement are reasonable and necessary to protect public health or welfare or the environment; and

(6) A reasonable time for completing the actions required by this Agreement will be provided.

III

Parties

The Parties to this Agreement are the U.S. EPA, TDHE and the U.S. Army. The terms of this Agreement shall apply to and be

binding upon the U.S. EPA, the TDHE, the Army and their respective agents and assigns. The Army will notify U.S. EPA and TDHE of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection. This Agreement shall be enforceable against all of the foregoing via the Parties to this Agreement. This Paragraph shall not be construed as an agreement to indemnify any person. The Army shall notify its agents, employees, applicable contractors, and all subsequent owners, operators and lessees of MAAP of the existence of this Agreement and provide copies of this Agreement to all contractors performing any work pursuant to this Agreement. 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.

IV

Definitions

Except as noted below or otherwise explicitly stated, terms herein shall have their ordinary meaning unless defined in CERCLA and/or RCRA.

In Addition:

A. Burning Grounds Site means that area of MAAP on which open burning of explosives and explosive wastes has been conducted in the past, exclusive of the explosive burn pans which are currently in use and subject to RCRA requirments.

B. CERCLA means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C.

Sections 9601 et. seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499.

C. Entire Site means all identified and unidentified SWMUs on MAAP to which both RCRA and CERCLA to include Section 211 of SARA apply including the ranked O-line pond Site, the RCRA burning grounds Site, and the enumerated SWMUs.

D. Feasibility Study (FS) means the study which fully evaluates and develops remedial action alternatives to prevent or mitigate the migration or the release of hazardous substances and pollutants, or contaminants at the entire Site.

E. Hazardous Constituents shall have the meaning set forth in Appendix VIII of 40 C.F.R. Part 261 and Tennessee Code Annotated Section 68-46-104(7).

F. Hazardous Substances shall have the meaning set forth by Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14).

G. Hazardous Waste shall have the meaning set forth in Section 1004 of RCRA and 40 C.F.R. Part 260.

H. Interim Remedial Actions (IRA, also known as an operable unit) shall mean all discrete response actions, except removal actions as established in CERCLA and the NCP, implemented prior to a final remedial action which are taken to prevent or minimize the release of hazardous substances and pollutants or contaminants. All interim remedial actions shall be taken in accordance with 40 C.F.R. Part 300.68 and with the requirements of CERCLA.

I. MAAP means the Milan Army Ammunition Plant.

J. The National Contingeny Plan (NCP) means the plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. Section 9605, and codified at 40 C.F.R. Part 300, as amended.

K. Parties means all parties who are signatories to this Agreement.

L. Project Manager (EPA and TDHE) means the individual designated by EPA and Tennessee who oversees and provides technical assistance on the activities to be performed pursuant to this Agreement at the entire site.

M. Project Manager (U.S. Army) means the individual designated by the Army who directs the activities to be performed pursuant to this Agreement at the entire site.

N. Ranked O-line Pond Site means that portion of MAAP, and affected areas, that is listed on the National Priorities List (NPL).

O. Release shall be used as that term is defined in Section 101(22) of CERCLA, 42 U.S.C. Section 9601(22).

P. Remedial Action (RA) means the implementation of the Remedial Design consistent with the NCP and the Superfund Remedial Design and Remedial Action Guidance dated June 1986, including on-site construction and treatment processes.

Q. Remedial Design (RD) means all work undertaken to design the technical aspects of the remedial activities to be implemented at the entire site.

R. Remedial Investigation (RI) means the investigation conducted to fully determine the nature and extent of any and all

releases or threat of releases of hazardous substances and pollutants, or contaminants and to gather necessary data to support the feasibility study.

S. RCRA means the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984, Pub. L. 98-616.

T. Solid Waste Management Units (SWMUs) means those units subject to applicable RCRA requirements, identified by EPA as requiring further investigation, and specifically identified as follows:

1. Current Ammunition Destruction Area
2. Former Burn-Out Area (Sunny Slope)
3. Open Burning Grounds (including the Former Ammunition Destruction Area)
4. Landfill 144(Current Landfill)
5. "B"-Line Area (including marshy area outside of fence)
6. Closed Landfill
7. Former Borrow Pit
8. Surface Drainage Ditches Associated with All Production and Wash-Out Lines (from their points of contaminant origin to the MAAP boundary and beyond if indicated by the presence of contaminants at unacceptable levels)
9. All Settling Sumps Handling Explosive Wastes and the Surface Drainage Ditches Immediately Adjacent to Them (Lines A, B, C, D, E, X, Z, and O)
10. "O"-Line Ponds

V

Site Description

Milan Army Ammunition Plant (MAAP) is a government owned/contractor operated munitions plant located on 22,544 acres of land in West Tennessee about five miles east of the City of Milan and is situated in both Gibson and Carroll Counties (approximately half and half, longitudinally). Martin Marietta Ordnance Systems, Inc., has been the operating contractor since December 22, 1969. Less than five percent of personnel at the facility are Government employees, and only the Commanding Officer and Executive Officer are military personnel. Approximately 13,600 acres of MAAP are leased for crops and grazing, interspersed between production lines and other units of the facility. Another approximately 6,000 acres are managed timberland. Approximately 2,300 acres are licensed to the Tennessee National Guard. MAAP is engaged in loading, assembling, packing, maintaining, storing, and shipping conventional explosive munitions.

The "O"-Line is a demilitarization process in which explosives are removed from rejected munitions by means of washing with steam and hot water. The "O"-Line Ponds, now capped, were eleven open impoundments used from 1942 to 1978 to settle out insoluble explosives from the washout wastewater before discharging to a surface water system leading to the Obion River. The "O"-Line Ponds Site, included on the National Priorities List, consists of the eleven capped impoundments, the original ditch conveying

wastewater from the "O"-Line to the "O"-Line Ponds, contaminated soils immediately adjacent to the impoundments, and the groundwater plume downgradient of the impoundments and the surface water system of ditches and streams that conveyed wastewater from the impoundments from their points of contaminant origin to the points that contaminants are present at unacceptable levels.

The Open Burning Grounds (OBG), a SWMU subject to RCRA (as an interim status unit under Subpart X of 40 CFR Part 265) and Tennessee Code Annotated Section 68-46-108(L), is an open area of land where explosives and propellants from rejected or spent ordnance are burned or detonated along with solvents and combustible materials contaminated with reactive wastes. Whereas these activities were formerly conducted on the ground surface or in pits, the practice now is to utilize elevated pans. This SWMU includes the contiguous area known as the Former Ammunition Destruction Area.

The SWMUs included in this Agreement are shown on the map in Attachment I and are listed below:

1. Current Ammunition Destruction Area;
2. Former Burn-Out Area (Sunny Slope);
3. Open Burning Grounds (including the Former Ammunition Destruction Area);
4. Current Landfill (SL-144);

5. "B"-Line Area (including marshy area outside of fence);

6. Closed Landfill (between Areas H and K);

7. Former Borrow Pit;

8. Surface Drainage Ditches Associated with All Production and Wash-Out Lines (from their points of contaminant origin to the MAAP boundary and beyond if indicated by the presence of contaminants at unacceptable levels);

9. All Settling Sumps Handling Explosive Wastes and the Surface Drainage Ditches Immediately Adjacent to Them (Lines A, B, C, D, E, X, Z, and O); and

10. "O"-Line Ponds (Capped).

VI

Purpose

A. The general purposes of this Agreement are to:

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

(2) establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the entire Site in accordance with Tennessee law, CERCLA/SARA, the NCP, Superfund guidance and policy, RCRA, RCRA guidance and policy; and,

(3) facilitate cooperation, exchange of information and participation of the Parties in such actions.

B. Specifically, the purposes of this Agreement are to:

(1) Identify Interim Remedial Action (IRA) alternatives which are appropriate at the entire Site prior to the implementation of final remedial action(s) for the entire Site. IRA alternatives shall be identified and proposed to the Parties as early as possible prior to formal proposal of IRAs to U.S. EPA pursuant to CERCLA/SARA. This process is designed to

promote cooperation among the Parties in identifying IRA alternatives prior to selection of final IRAs.

(2) Establish requirements for the performance of a RI 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 entire Site and to establish requirements for the performance of a FS for the entire 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 entire Site in accordance with applicable Tennessee law and CERCLA/SARA.

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

(4) Implement the selected interim and final remedial action(s) in accordance with CERCLA and meet the requirements of Section 120(e)(2) of CERCLA for an Interagency Agreement between U.S. EPA and MAAP.

(5) Assure compliance, through this Agreement, with RCRA and other federal and appliable state hazardous waste laws and regulations for matters covered by this Agreement.

(6) Coordinate response actions at the entire Site with the mission and support activities at MAAP.

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

VII

Findings of Fact

For 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. This paragraph contains findings of fact, determined solely by the U.S. EPA and TDHE, and shall not be used by any person related or unrelated to this Agreement for purposes other than determining the basis of this Agreement.

1. MAAP was constructed in 1941, and full production of explosive ordnance was begun in January 1942.

2. The installation was originally divided between the Wolf Creek Ordnance Plant operated by Proctor and Gamble Defense Corporation and the Milan Ordnance Depot operated by the U. S. Army.

3. Harvey Aluminum Sales, Inc., became the operating contractor on October 14, 1957.

4. Martin Marietta Ordnance Systems, Inc., bought Harvey Aluminum Sales, Inc., and became the operating contractor December 22, 1969.

5. From 1942 to 1978, wastewater from the "O"-Line was discharged to the "O"-Line Ponds for sedimentation of solid explosives and related compounds before discharge to Ditch B leading to Rutherford Fork of the Obion River. (Since 1978, the wastewater has been treated in an industrial waste treatment system, including sedimentation, filtration, and carbon adsorption.) The ponds were dredged out in 1971 and the solids placed in the northwestern corner of the pond area.

6. In March 1978, the U. S. Army Toxic and Hazardous Materials Agency (USATHAMA) found through a records search that the "O"-Line Ponds were contaminated with explosive wastes. It also found that there was a potential for off-post migration of hazardous chemicals.

7. In November 1978, the U. S. Army Environmental Hygiene Agency (USAEHA) analyzed water for eleven MAAP supply wells and found explosive contaminants in three of the wells in the vicinity of the "O"-Line. (The three contaminated wells were taken out of service.)

8. From 1979 to mid-1981, USATHAMA investigated potential surface and subsurface contamination at and around MAAP and published the results in the report, Milan Army Ammunition Contamination Survey, Report DRXTH-FS-FR-82131, January 1982. Contamination by explosives and associated chemicals was found in groundwater, surface water, and sediments around the "O"-Line Ponds, the open burning ground and the ammunition destruction area. The contamination was migrating toward the MAAP boundaries (North and Northwest). Results of this sampling for contaminants in water from three municipal and eleven private wells showed no explosive or organic contaminants. Thirty-three monitoring wells were installed on-site.

9.a. In June and August of 1981, TDHE sampled off-post wells for metals analysis. This included four samples from the City of Milan wells. Results of analyses indicated metals concentrations at or below applicable maximum contaminant levels.

b. In January 1982, TDHE began sampling off-post wells, including the City of Milan wells, for organic analysis. Between January and March 1982, TDHE confirmed low-level RDX contamination in two off-post private wells located northwest of the MAAP property.

c. In May 1982, TDHE notified owners of the two contaminated off-post wells of test results indicating low levels of RDX. TDHE offered assistance to help provide an alternative source of drinking water to the owners of the wells at that time. The owners declined and continue to decline the offer of an alternate drinking water source.

d. The level of RDX in these wells has remained below the U. S. Army's drinking water criteria of 34 parts per billion. TDHE has continued to sample these wells quarterly up to the present time. The results of these quarterly analyses show that the level of contamination in these wells in decreasing.

10. In September 1982, USTHAMA published the report, Milan Army Ammunition Plant "O"-Line Settling Ponds Closure Plan.

11. An additional groundwater contamination study was performed between September 1982 and March 1983 for USTHAMA by Roy F. Weston, Inc., and the results were published in the report, FinalTechnical Report, Installation Restoration Program Support and Services, Task Order Number 2, Milan Army Ammunition Plant (MAAP), Environmental Survey: Phase II, September 1983. Twenty-one additional monitoring wells were installed, and a total of sixty-three wells were sampled. The report concluded

that the "O"-Line Ponds were the principal source of explosives contamination in the groundwater at MAAP. The direction of groundwater flow was established as NNW. (The report included two appendices bound separately.)

12. On December 1, 1983, the Tennessee Department of Health and Environment (TDHE) pursuant to the Tennessee Solid Waste Law approved the proposed closure plan and construction plans and specifications for the closure of the "O"-Line Ponds.

13. On December 30, 1983, the EPA, in conjunction with the closing of the "O"-Line Ponds, concurred in the removal and discharge of the "O"-Line Pond waters.

14. Closure of the "O"-Line Ponds was completed in December 1984. The spoil piles near the "O"-Line Ponds were mounds of explosive contaminated dredged materials initially removed from those ponds' and later placed back in the "O"-Line Ponds prior to those ponds being capped in 1984.

15. A contractor to EPA, Ebasco Services Incorporated, published a report, Review and Evaluation of RI/FS Documents from the Milan Army Ammunition Plant (MAAP), Milan Tennessee, March 31, 1986, providing a review of Army reports (listed as Items 8, 10, and 11, referenced above) to determine what additional information would be required to meet EPA requirements for an RI/FS.

16. MAAP was proposed for the NPL on June 10, 1986, on the basis of the Hazard Ranking System score for the "O"-Line Pond Site.

17. By letter of September 23, 1986, EPA informed the Army that the RCRA program in the Region IV Office was designated as the lead in remedial activities.

18. By letter of November 7, 1986, EPA informed the Army of the findings of site inspections on July 10 and 23, 1986, and a file review that thirteen units would require further investigation under provisions of RCRA. Following characterization of the units in question, Solid Waste Management Unit (SWMU) Permit would be issued concurrently with the State RCRA storage permit. The letter also restated that the RCRA program had been designated the lead authority for EPA over corrective action at MAAP. (The "O"-Line Ponds Site was listed as one of the units needing remedial investigation.)

19. By letter of November 25, 1986, the Army responded to the EPA letter of November 7, 1986, taking issue with the requirement for further investigation. Three units (area of buried paint sludge the former borrow pit used as a sanitary landfill and the marshy area buried B-Line buildings used as dumping area for water/alcohol mixtures in which explosives were shipped) were declared to be misnomers in relation to releases of hazardous

materials. The letter also stated that eight of the thirteen listed units had been addressed in the report "Inventory of Federal Agency Hazardous Waste Activities", in May 1986, including assessment of groundwater, surface water, and soil contamination. The "O"-Line Pond Site had been addressed in the closure plan.

20. In February 1987, a consultant to the Army, Post, Buckley, Schuh and Jernigan, Inc., published five related reports: (1) Geophysical Investigation Plan for the Investigation and Engineering Analysis for Remedial Action at the Open Burning Grounds, Milan Army Ammunition Plant, Milan, Tennessee, (2) Data Collection and Testing Procedures Plan for the Investigation and Engineering Analysis for Remedial Action at the Open Burning Grounds, Milan Army Ammunition Plant, Milan, Tennessee, (3) Technical Approach Plan for Investigation and Engineering Analysis for Remedial Action at the Open Burning Grounds, Milan Army Ammunition Plant, Milan, Tennessee, (4) Health and Safety Master Plan for the Field Investigation for Remediation at the Open Burning Ground, Milan Army Ammunition Plant, and (5) Verification Protocol for Investigation and Engineering Analysis for Remedial Action at the Open Burning Grounds, Milan Army Ammunition Plant. The reports served as plans, specifications

and protocols for the remote-operated excavation and sampling of 55 test trenches at various locations within the Open Burning Grounds in July 1987.

21. In July 1987, the Army performed the field studies at the Open Burning Ground, as planned in the reports listed above as Item 19, under supervision of the consultant. A remote-control backhoe was used to excavate trenches down to twenty feet deep for inspection and sampling.

22. By letter of August 17, 1987, EPA informed the Army that the CERCLA program in the Region IV Office was designated lead for remedial activities for the CERCLA site ("O"-Line Pond Site) and the RCRA SWMUs at MAAP. This was a reversal of the designation by letter by September 23, 1986, for RCRA program lead.

23. MAAP was placed on the NPL effective August 21, 1987, based upon the Hazard Ranking System score for the "O"-Line Ponds Site.

24. Representatives of the Army and EPA met at the EPA Region IV Office in Atlanta, Georgia, September 22, 1987, and agreed at that meeting that September 22, 1987, would serve as a starting date for the RI/FS, since a considerable amount of site characterization work had already been performed at the ranked "O"-Line Pond Site prior to its being placed on the NPL. EPA

recommended that the Open Burning Ground be added to the RI. The Army announced it had contracted with Argonne National Laboratory to study the baseline documents and determine any data gaps following which Argonne would be "tasked to generate a complete and acceptable RI/FS." EPA advised the Army to initiate an Administrative Record (AR), explaining that EPA would work with the State of Tennessee in developing ARARs, and that a Technical Review Committee (TRC) would be established. The USAEHA was planning a study of RCRA SWMUs in 1988.

25. By letters of October 20 and 26, 1987, EPA informed the TDHE of the status of remedial activities at MAAP and requested that a working relatationship be established between EPA and TDHE for the development of ARARs, TDHE participation in the TRC and involvement in public participation in the remedial process.

26. A meeting was held at MAAP November 3-4, 1987, attended by the Army, EPA, TDHE, and Argonne National Laboratory, at which a reconnaissance was made of the "O"-Line Ponds Site, a production line and the overall facility and a draft charter for a TRC was discussed.

27. By letter of November 19, 1987, TDHE responded to the EPA letter of October 26, 1988, and committed to participate in the TRC.

28. By letter of November 19, 1987, MAAP proposed that certain monitoring wells at MAAP, which had not been used for sampling since 1983, be closed for safety and security reasons.

29. By letter of November 27, 1987, EPA responded to MAAP's letter of November 19, 1987, and recommended that no monitoring wells be closed until the RI had been completed and approved.

30. The TRC held its initial meeting on December 10, 1987. A revised draft of the TRC Charter was developed. The TRC generally concurred with the EPA recommendations not to close any monitoring wells at that time and recommended that all wells be resampled to determine changes in contaminants levels in groundwater since previous sampling. EPA was requested to provide a draft interagency agreement (IAG) at the next TRC meeting. The Army announced that the AR had been established and that it would be located at the Milan City Library.

31. An internal meeting was held at EPA on January 20, 1988, at which it was determined that an IAG could not be drafted until the Superfund Compliance Task Force provided final guidance.

32. By letter of January 22, 1988, to the Army, EPA submitted final comments on the draft TRC Charter.

33. By letter of February 1, 1988, the Army submitted to EPA a proposed timetable that included only past actions and a proposed date for submitting a Community Relations Plan (CRP).

34. By letter of February 2, 1988, the Army informed EPA that the AR had been established at the Mildred G. Field Library in Milan.

35. The TRC met at MAAP on February 23, 1988. The Army and EPA had signed the final TRC Charter, and it was passed to other members for signature. EPA informed the TRC on requirements for a CRP and RI/FS Timetable and Deadlines and stated that the drafting of an IAG would be delayed until EPA and DOD agreed on critical issues. Consultants who had planned and supervised a field study of the Open Burning Grounds presented the preliminary results of excavating and sampling from several trenches due by remote control. The data would be utilized in designing groundwater monitoring and further soil characterization studies.

36. On April 5, 1988, the Public Broadcasting System television broadcast of the "Frontline" program "Poison in the Pentagon", included a segment on uncontrolled hazardous waste disposal at MAAP.

37. By letter of May 9, 1988, the Army submitted the draft report, Remedial Investigation Work Plan for the Milan Army Ammunition Plant, Argonne National Laboratory, April 1988.

38. The TRC met at MAAP on May 24, 1988. The TRC Charter had been fully executed on April 21, 1988, and copies were distributed. The proposed IAG, being drafted by EPA, was discussed, and a tentative outline was distributed. A draft would be presented at the next TRC meeting by an EPA attorney. The TRC recommended deadlines for submittal of an RI of April 1, 1990, and of an FS of October 1, 1990. EPA and the State would be meeting to discuss ARARs.

39. By letter of June 8, 1988, EPA forwarded technical comments to the Army on the draft report, Remedial Investigation Work Plan for the Milan Army Ammunition Plant, April 1988.

40. By letter of June 13, 1988, TDHE submitted to EPA a list of State promulgated laws and regulations to be considered for ARARs.

41. EPA and TDHE published the RI/FS Timetable and Deadlines in the Jackson and Milan, Tennessee, newspapers on June 29, 1988.

VIII

Statutory Compliance/RCRA-CERCLA Integration

A. The parties intend to integrate the Army's CERCLA response obligations and RCRA corrective action obligations which relate to release(s) of hazardous substances, hazardous wastes, pollutants or contaminants covered by this Agreement into this comprehensive Agreement. Therefore, the Parties intend that activities covered by this Agreement will be deemed to achieve compliance with CERCLA, 42 U.S.C. Section 9601 et. seq.; to satisfy the corrective action requirements of Section 3008(h), 42 U.S.C. 6928(h), for interim status facilities, and, upon issuance of the hazardous waste permit(s), 3004(u) and 3004(v); and to meet or exceed all applicable relevant and appropriate Federal and State laws and regulations to the extent required by Section 121 of CERCLA, 42 U.S.C. Section 9621.

B. Based on the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement shall be deemed by the Parties to 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 (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 shall be considered an applicable or relevant and appropriate requirement pursuant to Section 121 of CERCLA.

C. The Parties recognize that the requirement to obtain permits for response actions undertaken pursuant to this Agreement shall be as provided for in CERCLA and the NCP. The Parties further recognize that on-going hazardous waste management activities at MAAP may require 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 MAAP for on-going hazardous waste management activities at the entire Site, any corrective actions section or section that addresses corrective actions therein shall incorporate any appropriate provisions, including appropriate schedules (and the provision for extension of such schedules), of this Agreement. The Parties intend that the judicial review of any permit conditions which reference this Agreement shall, to the extent authorized by law, only be reviewed under the provisions of CERCLA.

D. Nothing in this Agreement shall alter the Army's authority with respect to removal actions conducted pursuant to Section 104 of CERCLA, 42 U.S.C. Section 9604.

E. All Parties recognize that EPA may authorize, pursuant to RCRA Section 3006, TDHE to administer the corrective action portions of the Hazardous and Solid Waste Amendments (hereinafter "HSWA") specifically including 42 U.S.C. Sections 6924(u) and (v). EPA agrees to be responsible for and to issue any and all permits or portions of permits required by HSWA for the entire Site prior to such HSWA authorization.

IX

Scope of Agreement

Under this Agreement the U.S. Army agrees it shall:

1. Conduct a Remedial Investigation (RI);

2. Conduct a Feasibility Study (FS);

3. Conduct necessary Interim Remedial and Removal Actions;

4. Develop Remedial Action Alternative(s); and

5. Implement the Remedial Actions selected pursuant to Paragraphs XI and XXVIII of this Agreement for the entire Site.

6. U.S. EPA and TDHE agree to provide the Army with guidance and timely comments on all primary documents to assist the Army in the performance of the requirements under this Agreement.

X

Remedial Action

Upon completion of the public comment period for remedy selection, all Parties will consult with each other about the need for modification of the Proposed Plan and for additional public comment based on public response. After due consideration of all comments, the Army shall submit its draft Record of Decision (ROD) in accordance with Paragraph XI. If the Parties agree on the draft Record of Decision, the draft Record of Decision shall become the final Record of Decision. If the Parties are unable to reach agreement on the draft Record of Decision, resolution of the dispute shall be in accordance with Paragraph XXVIII of this Agreement. Notice of the final Record of Decision shall be

published by the Army. The final ROD shall be made available to the public prior to the commencement of the remedial action, in accordance with CERCLA Section 117(b), (c), and (d).

XI

Consultation with EPA and TDHE

Review and Comment Process for Draft and Final Documents

A. Applicability:

The provisions of this Paragraph establish the procedures that shall be used by the Army, TDHE, and U.S. EPA to provide the Parties with appropriate 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 Section 120 of CERCLA and 10 U.S.C. Section 2705, the Army will normally be responsible for issuing primary and secondary documents to U.S. EPA and TDHE. As of the effective date of this Agreement, all draft and final reports for any deliverable document identified herein shall be prepared, distributed and, for draft final documents, subject to dispute resolution in accordance with paragraphs B through J below.

The designation of a document as "draft" or "final" is solely for purposes of consultation with U.S. EPA, and TDHE in accordance with this Paragraph. 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.

B. General Process for RI/FS and RD/RA Documents

1. Primary documents include those reports that are major, discrete portions of RI/FS and RD/RA. Primary documents are initially issued by the Army in draft subject to review and comment by U.S. EPA and TDHE. Following receipt of comments on a particular draft primary document, the Army 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 within 30 days after issuance of a draft final document if dispute resolution is not invoked or as modified by decision of the dispute resolution process.

2. 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 Army in draft subject to review and comment by U.S. EPA and TDHE. Although the Army 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.

C. Primary Reports:

1. The Army shall complete and transmit draft reports for the following primary documents to U.S. EPA and TDHE for review and comment in accordance with the provisions of this Paragraph:

1. RI Work Plan

2. Risk Assessment

3. RI Report

4. Initial Screening of Alternatives

5. FS Report

6. Proposed RA Plan

7. Proposed ROD

8. Remedial Design

9. Remedial Action Work Plan

2. Only the draft final reports for the primary documents identified above shall be subject to dispute resolution. The Army shall complete and transmit draft primary documents in accordance with the timetable and deadlines established in Paragraph XXV of this Agreement.

D. Secondary Documents:

1. The Army shall complete and transmit draft reports for the following secondary documents to U.S. EPA and TDHE for review and comment in accordance with the provisions of this Paragraph:

1. Initial Remedial Action/Data Quality Objectives

2. Site Characterization Summary

3. Detailed Analysis of Alternatives

4. Post-screening Investigation Work Plan

5. Treatability Studies

6. Sampling and Data Results

2. Although U.S. EPA and/or TDHE may comment on the draft reports for the secondary documents listed above, such documents shall not be subject to dispute resolution except as provided by

Paragraph B hereof. Target dates shall be established for the completion and transmission of draft secondary reports pursuant to Paragraph XXV of this Agreement.

E. Meetings of the Project Managers on Development of Reports:

The Project Managers shall meet approximately every thirty (30) days, except as otherwise agreed by the Parties, to review and discuss the progress of work being performed at the entire Site on the primary and secondary documents. Prior to preparing any draft report specified in Paragraphs C and D above, the Project Managers shall meet to discuss the report results in an effort to reach a common understanding, to the maximum extent practicable, with respect to the results to be presented in the draft report.

F. Identification and Determination of Potential ARARs

1. For those primary reports or secondary documents that consist of or include ARAR determinations, prior to the issuance of a draft report, the Project Managers shall meet to identify and propose, to the best of their ability, all potential ARARs pertinent to the report being addressed. Draft ARAR determinations shall be prepared by the Army in accordance with Section 121(d)(2) of CERCLA, the NCP and pertinent guidance issued by U.S. EPA, which is not inconsistent with CERCLA and the NCP.

2. 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

proposed as a remedy and the characteristics of a site. The Parties recognize that ARAR identification is necessarily an iterative process and that potential ARARs must be re-examined throughout the RI/FS process until the ROD is approved.

G. Review and Comment on Draft Reports:

1. The Army shall complete and transmit each draft primary report to U.S. EPA and TDHE on or before the corresponding deadline established for the issuance of the report. The Army shall complete and transmit the draft secondary document in accordance with the target dates established for the issuance of such reports established pursuant to Paragraph XXV of this Agreement.

2. Unless the parties mutually agree to another time period, all draft reports shall be subject to a 60-day period for review and comment. Review of any document by the U.S. EPA and TDHE may concern all aspects of the Report (including completeness) and should include, but is not limited to, technical evaluation of any aspect of the document, consistency with CERCLA, the NCP, and appropriate sections of RCRA and any pertinent guidance or policy promulgated by the U.S. EPA and TDHE. Comments by the U.S. EPA and/or TDHE shall be provided with adequate specificity so that the Army may respond to the comment and, if appropriate, make changes to the draft report. Comments shall refer to any pertinent sources of authority or references upon which the comments are based, and, upon request of the Army, the U.S. EPA and/or TDHE shall provide a

copy of the cited authority or reference. In cases involving complex or unusually lengthy reports, U.S. EPA and/or TDHE may extend the 60-day comment period for an additional 20 days by written notice to the Army prior to the end of the 60-day period. On or before the close of the comment period, U.S. EPA and TDHE shall transmit by next-day mail their written comments to the Army.

3. Representatives of the Army shall make themselves readily available to U.S. EPA and TDHE during the comment period for purposes of informally responding to questions and comments on draft reports. Oral comments made during such discussions need not be the subject of a written response by the Army at the close of the comment period.

4. In commenting on the draft report which contains a proposed ARAR determination, U.S. EPA and/or TDHE shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that U.S. EPA and/or TDHE does object, it shall explain the bases for its objection in detail and shall identify any ARARs which it believes were not properly addressed in the proposed ARAR determination.

5. Following the close of the comment period for a draft report, the Army shall give full consideration to all written comments on the draft report submitted during the comment period. Within thirty (30) days of the close of the comment period on a draft secondary report, the Army shall transmit to U.S. EPA and TDHE its written response to comments received within the comment

period. Within 30 days of the close of the comment period on a draft primary report, the Army shall transmit to U.S. EPA and TDHE a draft final primary report, which shall include the Army's response to all written comments, received within the comment period. While the resulting draft final report shall be the responsibility of the Army, it shall be the product of consensus to the maximum extent possible.

6. The Army may extend the 30-day period for either responding to comments on a draft report or for issuing the draft final primary report for an additional twenty (20) days by providing notice to U.S. EPA and TDHE. In appropriate circumstances, this time period may be further extended in accordance with Paragraph XXVI herein.

H. Availability of Dispute Resolution for Draft Final Primary Documents:

1. Dispute resolution shall be available to the Parties for draft final primary reports as set forth in Paragraph XXVIII.

2. When dispute resolution is invoked on a draft final primary report, work may be stopped in accordance with the procedures set forth in Paragraph XXVIII regarding dispute resolution.

I. Finalization of Reports:

The draft final primary report shall serve as the final primary report if no party invokes dispute resolution regarding the document or, if invoked, at completion of the dispute resolution process should the Army position be sustained. If the Army's

determination is not sustained in the dispute resolution process, the Army shall prepare, within not more than 35 days, a revision of the draft final report which conforms to the results of dispute resolution. In appropriate circumstances, the time period for this revision period may be extended in accordance with Paragraph XXVI hereof.

J. Subsequent Modifications of Final Reports: Following finalization of any primary report pursuant to Paragraph I above, U.S. EPA, TDHE, or the Army may seek to modify the report, including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in Paragraphs 1 and 2 below.

1. U.S. EPA, TDHE, or the Army may seek to modify a report after finalization if it determines, based on new information (i.e., information that became available, or conditions that became known, after the report was finalized) that the requested modification is necessary. U.S. EPA, TDHE, or the Army may seek such a modification 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 based on new information.

2. In the event that a consensus is not reached by the Project Managers on the need for a modification, either U.S. EPA, TDHE, or the Army may invoke dispute resolution to determine if such modification shall be conducted. Modification of a report

shall be required only upon a showing that: (1) the requested modification is based on significant new information, and (2) the requested modification may 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.

3. Nothing in this paragraph shall alter U.S. EPA's or TDHE's ability to request the performance of additional work which was not contemplated by this Agreement. The Army's obligation to perform such work must be established by either a modification of a report or document or by amendment to this Agreement.

XII

Permits

A. The Parties recognize that under Sections 121(d) and 121(e)(1) of CERCLA/SARA, 42 U.S.C. Sections 9621(d) and 9621(e)(1), and the NCP, portions of the CERCLA 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 applicable or relevant and appropriate federal and state standards, requirements, criteria, or limitations which would have been included in any such permit.

When the Army proposes a response action (including a Work Plan pursuant to this Agreement) to be conducted entirely on-site, which in the absence of Section 121(e)(1) of CERCLA/SARA

and the NCP would require a federal or state permit, the Army shall include in the Submittal:

(1) Identification of each permit which would otherwise be required;

(2) Identification of the standards, requirements, criteria, or limitations which would have had to have been met to obtain each such permit;

(3) Explanation of how the response action proposed will meet the standards, requirements, criteria or limitations identified in (2) immediately above.

Upon request of the Army, U.S. EPA and the TDHE will provide their position with respect to (2) and (3) above in a timely manner.

B. Subparagraph A above is not intended to relieve the Army of the requirement(s) of obtaining any federal, state, or local permit whenever it proposes response actions involving the shipment or movement off-site of a hazardous substance and/or hazardous waste.

C. The Army shall notify the TDHE Commissioner and U.S. EPA in writing of any permits required for off-site activities as soon as it becomes aware of the requirement. Upon request, the Army shall provide the TDHE Commissioner and U.S. EPA copies of all such permit applications and other documents related to the permit process.

D. If a permit which is necessary for implementation of this Agreement is not issued, or is issued or renewed in a manner

which is materially inconsistent with the requirements of this Agreement, the Army agrees it shall notify the TDHE Commissioner and U.S. EPA of its intention to propose modifications to necessary primary documents in accordance with Paragraph XI(j) of this Agreement.

E. During any appeal of any permit required to implement this Agreement or during review of any of the Army's proposed modifications as provided in Subparagraph D above, the Army shall continue to implement those portions of this Agreement which can be reasonably implemented pending final resolution of the permit issue(s).

F. Except as otherwise provided in CERCLA, or as agreed to by the Parties, the Army shall comply with applicable state and federal hazardous waste management requirements such as those in §§ 3004 and 3005 of RCRA at the MAAP facility.

G. To the extent that this information has been provided by the Army in another document or report required under this Agreement, it is not the intent of the parties that this paragraph require resubmission of this information.

XIII

Creation of Danger

In the event the TDHE Commissioner or the U.S. EPA determines that activities conducted pursuant to this Agreement or any other circumstances or activities, may present an imminent and substantial endangerment to the health or welfare of the people on the entire Site or in the surrounding

area or to the environment, the TDHE Commissioner or the U.S. EPA may order the Army to stop further implementation of this Agreement for such period of time as needed to abate the danger and/or may require the Army to take whatever action is necessary to abate the danger.

TDHE or EPA shall within twenty-four (24) hours of directing a work stoppage under this paragraph, present the reasons therefor, in writing to the Army. Within seventy-two (72) hours of written request by the Army for review of any directed work stoppage, the TDHE Commissioner or EPA Division Director shall meet with the Army to discuss the potential danger and possible measures to abate or mitigate the danger and shall determine in writing whether continued work stoppage is necessary.

Notwithstanding any other provision of this Agreement, the Army retains the right, consistent with E.O. 12580, to conduct such emergency actions as may be necessary to alleviate immediate threats to human health or the environment from the release or threat of release of hazardous substances, pollutants or contaminants at or from MAAP. Such actions may be conducted at any time, either before or after the issuance of the ROD. However, consistent with 10 U.S.C. Section 2705, the Army shall require that an adequate opportunity for timely review and comment be afforded to U.S. EPA, TDHE, and local officials after making a proposal to carry out response actions with respect to any discovery of releases or threatened releases of hazardous substances and before

undertaking such response actions. The preceding sentence does not apply if the action is an emergency removal taken because of imminent and substantial endangerment to human health or the environment and consultation would be impractical.

The Army shall provide the other Parties with oral notice as soon as possible after the Army determines that an emergency action is necessary. In addition, within seven days of initiating such action, in the event consultation was impractical, the Army shall provide written notice to the other Parties explaining why such action is or was necessary to abate an imminent and substantial endangerment to include any requested factual, technical, scientific bases for such action and available supporting documents. Upon completion of such an emergency action, the Army shall notify the other parties in writing that the emergency action has been implemented. Such notice shall state whether, and to what extent, the emergency action varied from that described in any prior notice.

XIV

Letter Reporting

The Army agrees it shall submit to the TDHE Commissioner and the U.S. EPA quarterly letter progress reports which describe the actions which the Army has taken during the previous quarter to implement the requirements of this Agreement. Letter reports shall also describe the activities scheduled to be taken during the upcoming quarter. Progress reports shall be submitted by the tenth

(10) day of each quarter following the effective date of this Agreement. The letter reports shall include a detailed statement of the manner and extent to which the requirements and time schedules set out in the Attachments to this Agreement are being met. In addition, the letter reports shall identify any anticipated delays in meeting time schedules, the reason(s) for the delay and actions taken to prevent or mitigate the delay.

XV

Notification

A. Unless otherwise specified, any report or Submittal provided pursuant to a schedule or deadline identified in or developed under this Agreement shall be sent by certified-mail, return receipt requested, Federal Express, or similar method which provides a record of the send and receipt date, and addressed or hand delivered to:

U.S. Environmental Protection Agency
Region IV
MAAP Project Manager
Site Investigation and Support Branch
345 Courtland Street, N.E.
Atlanta, Georgia 30365

and

TDHE Division of Solid Waste
Tennessee MAAP Project Manager
295 Summar Avenue
Jackson, Tennessee 38301

Documents sent to the Army shall be addressed as follows unless the Army specifies otherwise by written notice:

Commander,
ATIN: SMCMI-EN
Milan Army Ammunition Plant
Milan, Tennessee 38358-5000

Unless otherwise requested, all routine correspondence such as the quarterly letter reports may be sent via regular mail to the above-named persons.

XVI

Project Managers

The U.S. EPA, TDHE and the Army shall each designate a Project Manager and Alternates (hereinafter jointly referred to as Project Manager) for the purpose of overseeing the implementation of this Agreement. Within ten (10) days of the effective date of this Agreement, all parties shall notify the other parties of the name and address of their Project Manager. Any party may change its designated Project Manager by notifying the other Parties, in writing, within five days of the change. To the maximum extent possible, communications between the Parties concerning the terms and conditions of this Agreement shall be directed through the Project Managers. Each Project Manager shall be responsible for assuring that all communications from the other Project Managers are appropriately disseminated and processed by the entities which the Project Manager represents.

Subject to the limitations set forth in Paragraph XIX, Site Access, the TDHE and U.S. EPA Project Managers shall have the authority to: (1) take samples, request split samples of Army samples and ensure that work is performed in accordance with the terms of any finalized work plan; (2) observe all activities performed pursuant to this Agreement, take photographs and make

such other reports on the progress of the work as the Project Manager deems appropriate; (3) review records, files and documents relevant to this Agreement; and (4) recommend and request minor field modifications to the work to be performed pursuant to this Agreement, or in techniques, procedures or design utilized in carrying out this Agreement, which are necessary to the completion of the project.

The Army Project Manager may also recommend and request minor field modifications to the work to be performed pursuant to this Agreement, or in techniques, procedures or design used in carrying out this Agreement, which are necessary to the completion of the project.

Any field modifications proposed under this Paragraph by any Party must be approved orally by all three (3) Project Managers to be effective. If agreement cannot be reached on the proposed additional work or modification to work, dispute resolution as set forth in Paragraph XXIX may be used in addition to this Paragraph. Within five (5) business days following a proposed modification made pursuant to this Paragraph, the Project Manager who requested the modification shall prepare a memorandum detailing the modification and the reasons therefore and shall provide or mail a copy of the memorandum to the other Project Managers. The Parties recognize that modifications and corresponding changes to remedial investigation and response action contracts may necessitate extensions of timetables and deadlines.

The Project Manager for the Army shall be physically present on MAAP or reasonably available to supervise work performed at MAAP during implementation of the work performed pursuant to this Agreement and shall make himself or herself available to U.S. EPA and TDHE Project Managers for the pendency of this Agreement. The absence of the U.S. EPA or TDHE Project Managers from the entire Site shall not be cause for work stoppage.

XVII

Sampling and Data/Document Availability

The Parties shall make available to each other quality assured results of sampling, summary of sampling results, tests or other data generated by any Party, or on their behalf, with respect to the implementation of this Agreement within ninety (90) days of their collection or performance. The Army shall use quality assurance, quality control and chain of custody procedures throughout all sample collection and analysis activities. The Army shall develop a Quality Assurance Project Plan (QAPP), as necessary, for review and comment by EPA and TDHE. The Army shall submit all protocols used for sampling and analysis to EPA and TDHE for review and comment as to substantive equivalency with established EPA protocols. The Army shall also ensure that the laboratory(s) utilized for analysis participate in the U.S. Army Toxic and Hazardous Materials Agency Quality Assurance/Quality Control program. If quality assurance is not completed within ninety (90) days, raw data or results shall be submitted within the ninety (90) day period and quality-assured data or results shall be submitted as soon as they become available.

At the request of either the TDHE or U.S. EPA Project Manager, the Army shall allow split or duplicate samples to be taken by the TDHE or U.S. EPA. The Army's Project Manager shall endeavor to notify the U.S. EPA and TDHE Project Managers not less than ten (10) business days in advance of any sample collection. If it is not possible to provide ten (10) business days prior notification, the Army shall notify the TDHE and U.S. EPA Project Managers immediately after becoming aware that samples will be collected.

XVIII

Retention of Records

Each Party to this Agreement shall preserve for a minimum of ten (10) years after termination of this Agreement all of its records and documents in its possession or in the possession of its divisions, employees, agents, accountants, contractors or attorneys which relate in any way to the presence of hazardous substances, pollutants and contaminants at the entire Site or to the implementation of this Agreement, despite any document retention policy to the contrary. After this ten (10) year period, each Party shall notify the other Parties at least forty-five (45) days prior to destruction or disposal of any such documents or records. Upon request by any Party, the requested Party shall make available such records or documents.

XIX

Site Access

A. Without limitation on any authority conferred on U.S. EPA or TDHE by statute or regulation, the U.S. EPA, TDHE and/or their

authorized representatives, shall have authority to enter the entire Site at all reasonable times for purposes consistent with this Agreement, subject to any statutory or regulatory requirements as may be necessary to protect national security. Such arthority sahll include, but not be limited to: (1) inspection records, operating logs, contracts and other documents relevant to implementation of this Agreement; (2) reviewing the progress of the Army, its response action contractors or lessees in implementing this Agreement; (3) conducting such tests as the TDHE and the U.S. EPA Project Managers deem necessary; and (4) verifying the data submitted to the U.S. EPA and TDHE by the Army. Before using any camera, sound or other electronic recording device on MAAP, U.S. EPA and TDHE shall request permission of the Army Project Manager. The Army shall not unreasonably withhold such permission.

B. Upon arrival at the MAAP entrance, the Army shall provide and escort whenever U.S. EPA and TDHE require access to restricted areas of MAAP for purposes consistent with the provisions of this Agreement.

C. Consistent with Federal statutes and regulations, should the Army determine it will be necessary to deny access, the Army shall provide an explanation within forty-eight (48) hours of the reason for the denial and, to the extent possible,

provide a recommendation for accommodating the requested access in an alternate manner. The Parties agree that this Agreement is subject to CERCLA Section 120(j), 42 U.S.C. Section 9620(j).

D. All Parties with access to MAAP pursuant to this Paragraph shall comply with all applicable health and safety plans.

E. To the extent that access is required to areas of the Site presently owned by or leased to parties other than the Army, the Army agrees to exercise all of its authorities to obtain access from the owners or lessees within thirty (30) calendar days after the effective date of this Agreement or of the date requirements therefor are identified.

F. To the extent that activities pursuant to this Agreement must be carried out on other-than-Army property, the Army shall use its best efforts to obtain access agreements from the property owners. These agreements shall provide reasonable access for the Army, EPA, TDHE and their respresentatives. In the event that the Army is unable to obtain such access agreements, the Army shall promptly notify U.S. EPA and TDHE.

G. The Army may request the assistance of the U.S. EPA and TDHE where access problems arise.

XX

Five Year Review

The Army agrees that U.S. EPA and TDHE will review the remedial actions taken on the entire Site no less often than

every five years after the initiation of the final remedial action as long as hazardous substances, pollutants or contaminants remain at the Site to assure that human health and the environment are being protected by the remedial action being implemented. If upon such review it is the judgment of the U.S. EPA and the TDHE that additional action or modification of the remedial action is appropriate, the U.S. EPA and/or the TDHE shall require the Army to implement such additional or modified action in accordance with Paragraph XI(j) of this Agreement.

Any dispute of a determination under this Paragraph shall be resolved under Paragraph XXIX of this Agreement.

XXI

Other Claims

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 and hazardous wastes and hazardous constituents, pollutants, or contaminants found at, taken to, or taken from MAAP.

The U.S. EPA and TDHE shall not be held as a party to any contract entered into by the Army to implement the requirements of this Agreement.

Subject to Paragraph XI(j), this Agreement shall not restrict U.S. EPA or TDHE from taking any legal or response action for work not contemplated by this Agreement.

XXII

Confidential Information

The Army may assert a confidentiality claim covering all or part of the information requested by this Agreement. Analytical data shall not be claimed as confidential from U.S. EPA and TDHE by the Army; however, analytical data may be claimed as confidential from the public pursuant to 40 CFR Part 2. Information determined to be confidential by U.S. EPA pursuant to 40 CFR Part 2 shall be afforded the protection specified therein and such information shall be treated by the TDHE Commissioner as "non-public data" pursuant to Tennessee Statute Section 68-46-109. If no claim of confidentiality accompanies the information at the time it is submitted to the U.S. EPA or the TDHE Commissioner or is submitted prior to public release of the information, the information may be made available to the public without further notice to the Army.

XXIII

Reservation of Rights for Recovery of Other Expenses

A. The Parties agree to amend this Agreement at a later date in accordance with any subsequent resolution of the national issues of cost reimbursement.

XXIV

Recovery of Expenses - TDHE

Pursuant to its authority under 10 U.S.C. Section 2701(d) and subject to the limitations in this Paragraph and Paragraph XXXVIII (Funding) the Army agrees to request funding from Congress and to reimburse TDHE for costs incurred in the execution of this Agreement. Reimbursable costs shall consist only of actual expenditures required to be made and actually made by TDHE to fulfill its participation under Paragraphs XI (Consultation) and XX (Five Year Review). All costs claimed by TDHE shall be reasonable, allocable to this Agreement, and shall not be in violation of Federal or State statutes or regulations. Travel expense claimed by TDHE shall not exceed those expenses adopted by the Department of Finance and Administration for reimbursement of travel expenses. In the event that TDHE contracts for services that are of the same type that it performs within the Agency, the reimbursable costs shall be limited to the amount that TDHE would have expended if it had performed the service itself. Neither interest nor profit shall be payable. TDHE's records shall be maintained in accordance with generally accepted accounting principles and in a manner substantially equivalent to 49 C.F.R. Section 52-230-4, Accounting Standards (1987), and 49 C.F.R. Section 52-230-4, Administration of Cost Accounting Standards (1987).

The total reimbursable costs payable during the first two federal fiscal years of this agreement shall not exceed the amount then necessary to be equivalent to $75,000, November 1988, U. S. Dollars per fiscal year. The total reimbursable cost payable during each subsequent federal fiscal year shall be renegotiated in accordance with this section. The Consumer Price Index, as determined by the United States Department of Labor, Bureau of Labor Statistics, shall be used to determine necessary adjustment to then current dollars.

An accounting shall be presented to the Army by TDHE within ninety (90) days of the end of the Federal Government fiscal year. The accounting shall include all reimbursable costs incurred during the previous Federal fiscal year. Such accounting shall be accompanied by cost summaries which lay out man-hours and other expenses by major type of support services. The Army has the right to audit cost reports or invoices used by TDHE to develop cost summaries. The Army will, upon timely receipt of documented invoices, pay the allowable portion of all such invoices within ninety (90) days of presentation.

The TDHE shall maintain adequate accounting records sufficient to identify all expenses related to this Agreement. The TDHE agrees to maintain these financial records for a period of ten years from the termination date of this Agreement as specified in Paragraph XVIII (Retention of Records) of this Agreement. The TDHE agrees to provide the Army or its designated

representative reasonable access to all financial records for this purpose of audit for a period of ten years from the termination date of this Agreement.

As of April 1 of each year, TDHE shall submit to the Army a budget estimate for projected costs for activities reimbursable under this Agreement for the following Federal fiscal year.

The provisions of this Paragraph shall be reviewed by the Parties each year after this Agreement takes effect. The purpose of this review shall be to determine if it would be equitable to change the annual amount available for payment of reimbursable costs to TDHE. Any such change is not subject to dispute resolution procedures of Paragraph XXIX but will be resolved in accord with the procedures set forth in this Paragraph. Neither the Army nor TDHE shall unreasonably withhold consent to such a change.

In the event that the Army believes that costs set forth in the accounting information described above are not reasonable, properly allocable to this Agreement, or are otherwise in violation of this Agreement, or if the Army and TDHE have any other dispute concerning cost reimbursement, including any disagreement over a cap for future coast reimbursement. The Army and TDHE agree to attempt to resolve the disputes through the procedures described below. The Army project manager and the TDHE project manager shall be the primary points of contact to coordinate resolution of disputes arising under this Paragraph.

If the TDHE project manager and the Army project manager are unable to agree, the matter shall be referred to the installation commander or his designated representative and the chief of the designated program office of TDHE as soon as practicable, but in any event, within five (5) working days. Should they be unable to agree within ten (10) working days, the matter shall be elevated to the Commmissioner, TDHE, and the Deputy for Environment, Safety and Occupational Health, Office of the Assistant Secretary of the Army [(Installation and Logistics) (DESOH, ASA(ISL)]. In the event the Commissioner, TDHE, and the DESOH, ASA(I&L), are unable to resolve a dispute, TDHE may withdraw as a Party to this Agreement by providing written notice of its withdrawal to each of the Parties. Such withdrawal by TDHE will terminate all of the duties and responsibilities which TDHE may have under this Agreement. In the event of TDHE's withdrawal purusant to this Paragraph, TDHE retains all of its legal and equitable remedies to recover any costs not previously reimbursed by the Army.

XXV

Stipulated Penalties

A. In the event that the Army fails to submit a primary document to U.S. EPA pursuant to the appropriate timetable or deadline in accordance with the requirements of this Agreement, or fails to comply with a term or condition of this Agreement which relates to an interim or final remedial action, U.S. EPA may assess a stipulated penalty against the Army. 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 Paragraph occurs.

B. Upon determining that the Army has failed in a manner set forth in Subparagraph A, U.S. EPA shall so notify the Army in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the Army shall have fifteen (15) days after receipt of the notice to invoke dispute resolution on the question of whether the failure did in fact occur. The Army shall not be liable for the stipulated penalty assessed by U.S. EPA if the failure 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.

C. The annual reports required by Section 120(e)(5) of CERCLA shall include, with respect to each final assessment of a stipulated penalty against the Army under this Agreement, each of the following:

1. The facility responsible for the failure;
2. A statement of the facts and circumstances giving rise to the failure;
3. A statement of any administrative or other corrective action taken at the relevant facility, or a statement of why such measures were determined to be inappropriate;

4. A statement of any additional action taken by or at the facility to prevent recurrence of the same type of failure; and

5. The total dollar amount of the stipulated penalty assessed for the particular failure.

D. Stipulated penalties assessed pursuant to this Paragraph shall be payable to the Hazardous Substances Superfund only in the manner and to the extent expressly provided for in Acts authorizing funds for, and appropriations to, the DOD.

E. In no event shall this Paragraph give rise to a stipulated penalty in excess of the amount set forth in Section 109 of CERCLA.

F. This Paragraph shall not affect the Army's ability to obtain an extension of a timetable, deadline or schedule pursuant to Paragraph XXVI of this Agreement.

G. Nothing in this Agreement shall be construed to render any officer or employee of the DOD personally liable for the payment of any stipulated penalty assessed pursuant to this Paragraph.

XXVI

Deadlines

A. The following deadlines have been established, in conjunction with TDHE, for the submittal of draft primary documents pursuant to this Agreement:

Deadline	Action
January 5, 1989	Draft RI/FS Scope of Work (for the entire Site)

B. Within twenty-one (21) days of the effective date of this Agreement, the Army shall provide deadlines for completion of the following draft primary documents:

1. RI/FS Work Plan, including Sampling and Analysis Plan and QAPP
2. Risk Assessment
3. RI Report
4. Initial Screening of Alternatives
5. FS Report
6. Proposed RA Plan
7. Proposed ROD

. Within fifteen (15) days of receipt, U.S. EPA, in conjunction with TDHE, shall review and provide comments to the Army regarding the proposed deadlines. Within fifteen (15) days following receipt of the comments the Army shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed deadlines. If the Parties agree on the proposed deadlines, the finalized deadlines shall be incorporated into the 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 Paragraph XXIX of this Agreement. The final deadlines established pursuant to this Paragraph shall be published by U.S. EPA, in conjunction with TDHE.

C. Within twenty-one (21) days of the issuance of the Record of Decision, the Army shall propose deadlines for completion of the following draft primary documents:

1. Remedial Design

2. Remedial Action Work Plan

These deadlines shall be proposed, finalized and published utilizing the same procedures set forth in subparagraph B above.

D. Whenever the date for submission of any item or notification required by this Agreement falls upon a weekend or state or federal holiday, the time period for submission of that item or notification is extended to the next working day following the week-end or holiday.

E. Within twenty-one (21) days of receipt by EPA and TDHE of the final RI and FS Work Plans, the Army shall furnish target completion dates for secondary documents listed in the RI and FS Work Plans.

F. The deadlines set forth in this Paragraph or to be established as set forth in this Paragraph may be extended pursuant to Paragraph XXVI of this Agreement. 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.

XXVII

Extension of Schedules

A. Either a timetable and deadline or a schedule shall be extended upon receipt of timely request for extension and when good cause exists for the requested extension. Any request for extension by the Army shall be submitted in writing and shall specify:

1. The timetable and deadline or the schedule that is sought to be extended;
2. The length of the extension sought;
3. The good cause(s) for the extension; and
4. Any related timetable and deadline or schedule that would be affected if the extension were granted.

B. Good cause exists for an extension when sought in regard to:

1. An event of Force Majeure;
2. A delay caused by another party's failure to meet any requirement of this agreement;
3. A delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;
4. A delay caused, or which is likely to be caused, by the grant of an extension in regard to another timetable and deadline or schedule; and

5. Any other event or series of events mutually agreed to by the Parties as constituting good cause.

C. Absent agreement of the Parties with respect to the existence of good cause, the Army may seek and obtain a determination through the dispute resolution process that good cause exists.

D. Within seven days of receipt of a request for an extension of a timetable and deadline or a schedule, U.S. EPA and TDHE shall advise the Army in writing of their respective positions on the request. Any failure by U.S. EPA or TDHE to respond within the 7-day period shall be deemed to constitute concurrence in the request for extension. If U.S. EPA or TDHE does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its postion.

E. If there is consensus among the Parties that the requested extension is warranted, the Army 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 the determination resulting from the dispute resolution process.

F. Within seven days of receipt of a statement of nonconcurrence with the requested extension, the Army may invoke dispute resolution.

G. A timely and good faith request 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.

XXVIII

Force Majeure

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, acts of God; fire; war; insurrection; civil disturbance; explosion; unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance; adverse weather conditions that could not be reasonably anticipated; unusual delay in transportation; restraint by court order or order of public authority; 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 Army; delays caused by compliance with applicable statutes

or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and insufficient availability of appropriated funds, if the Army shall have made timely request for such funds as part of the budgetary process as set forth in Paragraph XXXVI (Funding) of this Agreement. A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the Parties affected thereby. Force Majeure shall not include increased costs or expenses of Response Actions, whether or not anticipated at the time such Response Actions were initiated.

XXIX

Resolution of Disputes

Except as specifically set forth elsewhere in this Agreement, if a dispute arises under this Agreement, the procedures of this Paragraph shall apply.

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 Paragraph shall be implemented to resolve a dispute.

A. Within thirty (30) days after: (1) issuance of a draft final primary document pursuant to Paragraph XI (Review of Draft Documents) of this Agreement, or (2) 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 information the disputing Party is relying upon to support its position.

B. Prior to any Party's issuance of a written statement of dispute, the disputing Party shall engage the other Parties 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.

C. The DRC will serve as a forum for resolution of disputes 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 (SES or equivalent) or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The U.S. EPA representative on the DRC is the Waste Management Division Director of U.S. EPA's Region IV. The Army's designated member is the Commander of MAAP. Tennessee's designated member is J. Thomas Tiesler, Director, Division of Solid Waste Management. 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 Paragraph XV (Notification).

D. 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.

E. The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The U.S. EPA representative on the SEC is the Regional Administrator of U.S. EPA's Region IV. The Army's representative on the SEC is the DESOH, ASA (I & L). Tennessee's representative on SEC is Wayne Scharber, Assistant Commissioner for the Bureau of Environment.

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, U.S. EPA's Regional Administrator shall issue a written position on the dispute. The Army or Tennessee may, within fourteen (14) days of the Regional Administrator's issuance of U.S. EPA's position, issue a written notice elevating the dispute to the Administrator of U.S. EPA for resolution in accordance with all applicable laws and procedures. In the event that the Army or Tennessee elects not to elevate the dispute to the Administrator within the designated fourteen (14) day escalation period, the Army or Tennessee shall be deemed to have agreed with Regional Administrator's written position with respect to the dispute.

F. Upon escalation of a dispute to the Administrator of U.S. EPA pursuant to Subparagraph E, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the U.S EPA Administrator shall meet and confer with the Army Secretariat Representative and Commissioner of TDHE to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the Army and the Commissioner of TDHE with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Paragraph shall not be delegated.

G. The pendency of any dispute under this Paragraph shall not affect the Army'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 schedule.

H. When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Waste Management Division Director for U.S. EPA's Region IV requests, in writing, that work related to the dispute be stopped because, in U.S. 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. To the extent possible, U.S. EPA shall consult with TDHE and the Army prior to initiating a work stoppage request. After stoppage of work, if the Army believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the Army may meet with the Division Director to discuss the work stoppage. Following this meeting, and further consideration of the issues, the Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the Division Director may immediately be subjected to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of the Army.

I. Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Paragraph, the Army 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.

J. Resolution of a dispute pursuant to this Paragraph of the Agreement 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 Paragraph of this Agreement.

XXX

Transfer of Property

No conveyance of title, easement, or other interest in the Army property on which any containment system, treatment system,

monitoring system or other response action(s) is required, installed or implemented pursuant to this Agreement shall be consummated by the Army without provision for performance under the Agreement, including continued maintenance of any such system or other response action(s). At least thirty (30) days prior to any conveyance, the Army shall notify U.S. EPA and the TDHE Commissioner of the transfer of real property subject to this Agreement and the provisions made for any additional remedial action measures, if required. The Army shall not transfer any real property from MAAP except in compliance with CERCLA Section 120(h), 42 U.S.C. Section 9620(h).

XXXI

Removal Actions

A. Consistent with Paragraph VIII(D) of this Agreement any removal action conducted on the Site shall be conducted in a manner consistent with this Agreement, CERCLA, appropriate Tennessee law and the NCP.

B. The Army shall provide the EPA with timely notice of any proposed removal action in accordance with 10 U.S.C. Section 2705.

XXXII

Public Participation

A. The Parties agree that this Agreement and any subsequent proposed remedial action alternative(s) and plan(s) for remedial action arising out of this Agreement shall comply with the administrative record and public participation requirements of

CERCLA/SARA, including Section 117 of SARA, the NCP, U.S. EPA guidances on public participation and administrative records.

B. The Army shall develop and implement a Community Relations Plan (CRP) which responds to the need for an interactive relationship with all interested community elements, both on MAAP and off, regarding activities and elements of work undertaken by the Army. The Army agrees to develop and implement the CRP in a manner consistent with Section 117 of SARA, the NCP, U.S. EPA guidelines set forth in U.S. EPA's Community Relations Handbook, and any modifications thereto.

C. Any Party issuing a formal press release to the media regarding any of the work required by this Agreement shall advise the other Parties of such press release and the contents thereof, at least forty-eight (48) hours before the issuance of such press release and of any subsequent changes prior to release.

D. The Army agrees it shall establish and maintain an administrative record, which will include an index of all documents contained therein, at or near MAAP in accordance with Section 113(k) of CERCLA/SARA. The administrative record shall be established and maintained in accordance with current and future U.S. EPA policy and guidelines. A copy of each document placed in the administrative record will be provided to the U. S. EPA and TDHE as it is generated. An updated index of documents in the administrative record shall be provided to U.S. EPA and TDHE on a semiannual basis.

E. The Army agrees it shall follow the public participation requirements of CERCLA/SARA Section 113(k) and comply with any guidance and/or regulations promulgated by U.S. EPA with respect to such Section.

XXXIII

Public Comment

A. Within fifteen (15) days of the date of the acceptance by signing of this Agreement by all Parties, U.S. EPA shall announce the availability of this Agreement to the public for review and comment. U.S. EPA shall accept comments from the public for a period of forty-five (45) days after such announcement. Promptly upon the completion of the comment period, U.S. EPA shall transmit to the other Parties copies of all comments received within the comment period. The Parties shall review all such comments and, within thirty (30) days of the close of the comment period, shall either determine that:

(1) the Agreement should be made effective in its present form, in which case the U.S. EPA shall notify the other Parties in writing, and the Agreement shall become effective on the date that the Army receives such notification; or

(2) modification of the Agreement is necessary, in which case the Parties shall meet to amend the Agreement by mutual consent or, if the Parties do not mutually agree within fifty (50) days of the close of the comment period, the Parties shall submit their written notices of position directly to the DRC and the procedures of Paragraph XXIX shall apply.

B. In the event of significant modification by mutual consent, through dispute resolution, or public comment, notice procedures of Sections 117 and 211 of SARA shall be followed and a responsiveness summary shall be published by the U.S. EPA.

XXXIV

Enforceability

A. The Parties agree that:

(1) 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 Section 310 of CERCLA, and any violation of such standard, regulation, condition, requirement or order will be subject to civil penalties under Sections 310(c) and 109 of CERCLA; and

(2) all timetables or deadlines associated with the RI/FS shall be enforceable by any person pursuant to Section 310 of CERCLA, and any violation of such timetables or deadlines will be subject to civil penalties under Sections 310(c) and 109 of CERCLA;

(3) all terms and conditions of this Agreement which relate to interim or final remedial actions, including corresponding timetables, deadlines or schedules, and all work associated with the interim or final remedial actions, shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such terms or conditions will be subject to civil penalties under Sections 310(c) and 109 of CERCLA; and

(4) any final resolution of a dispute pursuant to Paragraph XXXIV of this Agreement which establishes a term, conditions, timetable, deadline or schedule shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such term, conditions, timetable, deadline or schedule will be subject to civil penalties under Sections 310(c) and 109 of CERCLA.

(5) Nothing in this Agreement shall be construed as authorizing any person to seek judicial review of any CERCLA action or work where review is barred by any provision of CERCLA, including Section 113(h) of CERCLA.

(6) The Parties agree that all Parties shall have the right to enforce the terms of this Agreement.

(7) All terms and conditions of the Agreement incorporated into the HSWA permit shall become enforceable by TDHE, upon HSWA authorization, as terms and conditions of that permit; and

(8) Consistent with this Agreement, TDHE agrees to exhaust fully the remedies provided in Paragraph XI (Consultation) and Paragraph XXVIII (Dispute Resolution) of this Agreement prior to taking any other enforcement action relative to the entire Site.

XXXV

Reservation of Rights

By entering into this Agreement, TDHE does not implicitly or expressly waive any of its rights or authority, under any law, but expressly reserves herein all of its rights and authorities thereunder, including, but not limited to, all provisions of the

Hazardous Waste Management Act of 1977, T.C.A. Section 68-46-101 et. seq. or any provision of any other State, Federal, or local law including any laws pursuant to a federally authorized program. In addition, by entering into this Agreement and despite any other provision contained herein, the State of Tennessee does not waive its sovereign immunity.

XXXVI

Termination

The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by the Army of written notice from U.S. EPA and the TDHE Commissioner that the Army has demonstrated, to the satisfaction of the U.S. EPA and TDHE Commissioner, that all the terms of this Agreement have been completed. The Army may propose in writing the termination of this Agreement upon a showing that the objectives of this Agreement have been satisfied. A Party opposing termination of this Agreement shall notify the Army in writing, and provide a copy of the objection to the other Party, within ninety (90) days of receipt of the Army proposal. No Party shall unreasonably withhold such approval.

XXXVII

Effective Date/Modification

This Agreement is effective in accordance with Paragraph XXXII and as indicated in this Paragraph.

Any Party may submit a written request for modification to the other Parties. Unless all Parties mutually consent to the

modification, such written request for a modification shall be subject to Dispute Resolution. In the event of significant modification, the notice procedures of CERCLA Section 117 and Section 211 of SARA shall be followed. If there is a request for a modification, all Paragraphs of the Agreement, other than those for which modification is sought, shall become effective on the thirty-first day following the close of the comment period. Paragraphs for which modification is requested shall each become effective on the date agreement is reached, or dispute resolution concludes as to that Paragraph, or of conclusion of any required comment procedures pursuant to CERCLA Section 117, whichever is later.

XXXVIII

Funding

It is the expectation of the Parties to this Agreement that all obligations of the Army arising under this Agreement will be fully funded. The Army agrees to seek sufficient funding through the DOD budgetary process to fulfill its obligations under this Agreement.

In accordance with Section 120(e)(5)(B) of CERCLA, 42 U.S.C. Section 9620(e)(5)(B), the DOD shall include in its annual report to Congress the specific cost estimates and budgetary proposals associated with the implementation of this Agreement.

Any requirement for the payment or obligation of funds, including stipulated penalties, by the Army 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. Section 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.

If appropriated funds are not available to fulfill the Army's obligations under this Agreement, U.S. EPA and TDHE reserve the right to initiate an action against any other person or to take any response action which would be appropriate absent this Agreement.

Funds authorized and appropriated annually by Congress under the "Environmental Restoration, Defense" appropriation in the Department of Defense Appropriation Act and allocated by the DASD(E) to the Army will be the source of funds for activities required by this Agreement consistent with Section 211 of SARA, 10 U.S.C. Chapter 160. However, should the Environmental Restoration, Defense appropriation be inadequate in any Federal fiscal year to meet the total Army CERCLA/SARA implementation requirements, the DOD shall employ and the Army shall follow a standardized DOD prioritization process which allocates that year's appropriations in a manner which maximizes the protection of human health and the environment. A standardized DOD prioritization model shall be developed and utilized with the assistance of U.S. EPA and the states.

The source of funds for non-DERA activities or requirements covered by this Agreement will be those Operation and Maintenance Funds made available by Congress to MAAP specifically for those activities or requirements.

IT IS SO AGREED:

June 8, 1989
Date

J. W. LUNA
Commissioner
Tennessee Department of Health
and Environment

6/23/89
Date

Lewis D. Walker
Lewis D. Walker
Deputy Assistant Secretary of the Army
Environmental Safety and Occupational
Health
Office of the Assistant Secretary
of the Army (I & L)

7/9/89
Date

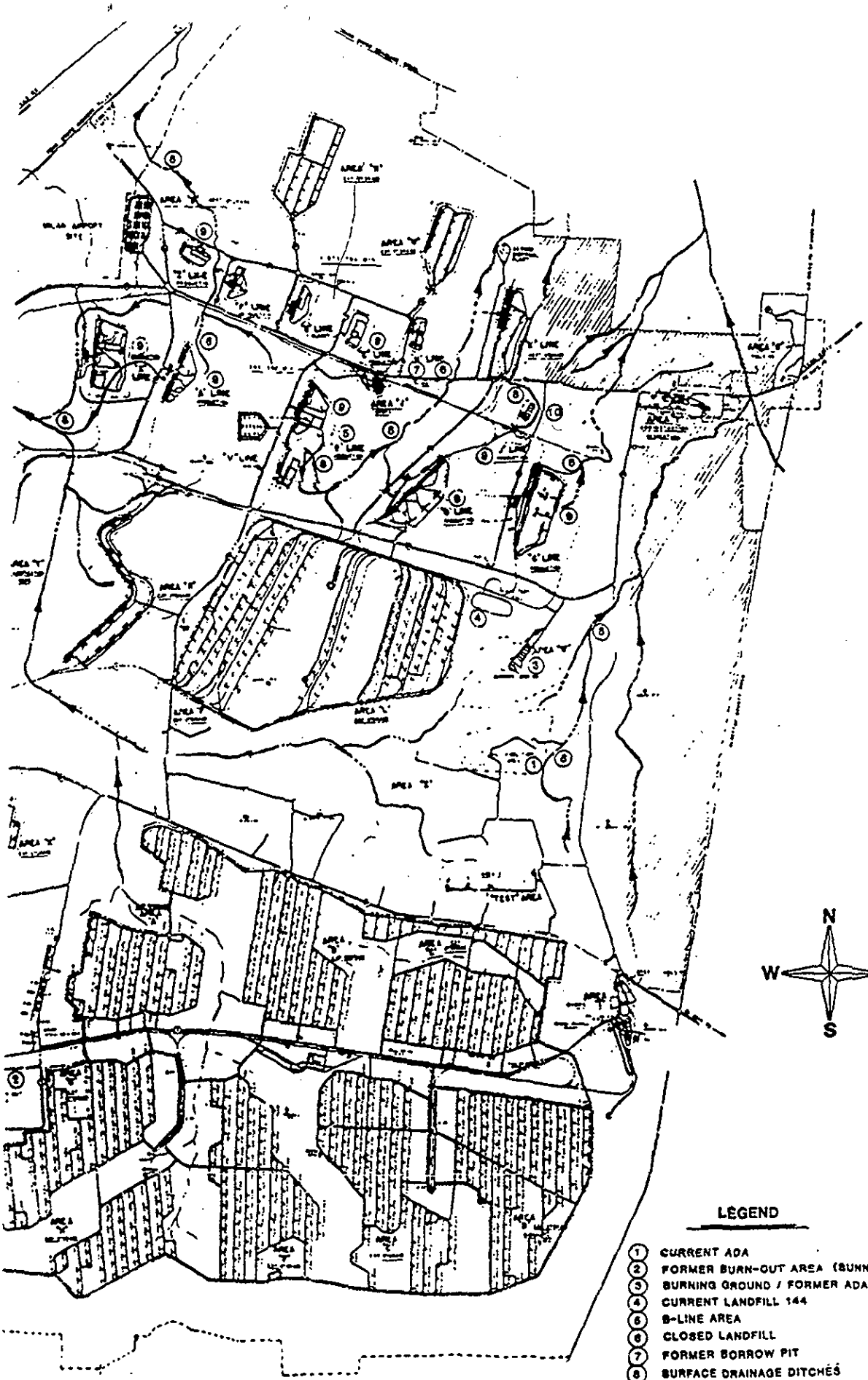
Jonathan Z. Cannon
for Acting Assistant Administrator
United States Environmental
Protection Agency

7/12/89
Date

Greer C. Tidwell
Greer C. Tidwell
Regional Administrator
United States Environmental
Protection Agency

7/25/89
Date

Michael P. Tucker, Lieutenant Colonel
Commanding Officer
Milan Army Ammunition Plant



LEGEND

1. CURRENT ADA
2. FORMER BURN-OUT AREA (SUNNY SLOPE)
3. BURNING GROUND / FORMER ADA
4. CURRENT LANDFILL 144
5. B-LINE AREA
6. CLOSED LANDFILL
7. FORMER BORROW PIT
8. SURFACE DRAINAGE DITCHES
9. EXPLOSIVE SETTLING SUMPS & ADJACENT DRAINAGE DITCHES, LINES A,B,C,D,E,X,Z,O
10. O-LINE PONDS (CAPPED)

MILAN ARMY AMMUNITION PLANT

SWMU'S

REQUIRING FURTHER STUDY