

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VII  
AND THE  
MISSOURI DEPARTMENT OF NATURAL RESOURCES  
AND THE  
UNITED STATES DEPARTMENT OF THE ARMY

File: Weld, G. J.  
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A circular black and white stamp. The outer ring contains the text "REGIONAL HEARING CLERK" at the top and "REGION VII" at the bottom. In the center, the date "MAR 04 1991" is stamped, with "MAR" and "04" on the top line and "1991" on the bottom line. Below the date, the text "Environmental Protection Agency" is printed in a smaller font.

IN THE MATTER OF:

The Former Weldon Spring  
Ordnance Works  
St. Charles County, Missouri

**FEDERAL FACILITY  
AGREEMENT UNDER  
CERCLA SECTION 120**

**Administrative**  
**Docket Number:** VII-90-F-0033

PRELIMINARY STATEMENT

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:

A. The U.S. Environmental Protection Agency (U.S. EPA), Region VII, 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. §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 3004(u) and (v) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6961, 6928(h), 6924(u) and (v), as amended



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by the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter jointly referred to as RCRA/HSWA or RCRA) and Executive Order 12580;

B. U.S. EPA, Region VII, enters into those portions of this Agreement that relate to operable unit remedial actions and final remedial actions pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001, 3008(h) and 3004(u) and (v) of RCRA and Executive Order 12580;

C. the U.S. Department of the Army (DA) 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 3004(u) and (v) of RCRA, Executive Order 12580, the National Environmental Policy Act, 42 U.S.C. § 4321, and the Defense Environmental Restoration Program (DERP), 10 U.S.C. § 2701 et seq.;

D. DA enters into those portions of this Agreement that relate to operable unit remedial actions and final remedial actions pursuant to Section 120(e)(2) of CERCLA/SARA, Sections 6001, 3008(h) and 3004(u) and 3004(v) of RCRA, Executive Order 12580 and the DERP.

E. The Missouri Department of Natural Resources (MDNR) enters into those portions of this Agreement that relate to the RI/FS pursuant to Sections 120 and 121 of CERCLA/SARA, 42 U.S.C. §§ 9620 and 9621 and Sections 3006 and 6001 of RCRA, 42 U.S.C. § 6901 et seq., as adopted in Section 260.350 et seq. of the Revised Statutes of the State of Missouri, at pertinent parts, and Title 10 of the Code of State Regulations, Chapter 25 (hereinafter "10 CSR 25") and Chapter 80 (hereinafter "10 CSR 80");

F. the Missouri Department of Natural Resources (MDNR) enters into those portions of this Agreement that relate to operable unit remedial actions and final remedial actions pursuant to Sections 120(f) and 121(f) of CERCLA/SARA, 42 U.S.C. §§ 9620(f) and 9621(f) and Section 3006 of RCRA, 42 U.S.C. § 6925 as adopted in Section 260.350 et seq. of the Revised Statutes of the State of Missouri and Title 10 of the Code of State Regulations (CSR), Chapters 25 and 80.

## II. PARTIES

The Parties to this Agreement are U.S. EPA, Region VII; the Missouri Department of Natural Resources and the U.S. Department of the Army. The terms of this Agreement shall apply to and be binding upon the signatories to this Agreement and upon their successors and assigns. The undersigned representative of each party to this Agreement certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to bind legally that party to it. Each party shall provide a copy of this Agreement to all primary contractors retained to perform work pursuant to this Agreement. DA shall provide a copy of this Agreement to the present owner and any subsequent owners of any property upon which any work under this Agreement is performed, if not owned by DA or the United States. Nothing in this Agreement shall be construed as an obligation or commitment on the part of any Party to indemnify any person or entity.

## III. DEFINITIONS

Except as otherwise explicitly stated herein, terms used in

this Agreement which are defined in CERCLA shall have the meaning as defined in CERCLA. The following definitions shall apply for purposes of this Agreement:

A. "Agreement" means this Federal Facility Agreement, all attachments to this Agreement and all reports, plans, notices, and other documents developed pursuant to this Agreement.

B. "ARAR" means applicable or relevant and appropriate standard, requirement, criteria, or limitation within the meaning of Section 121(d)(2)(A) of CERCLA.

C. "Authorized representative" means a person designated to act on behalf of a Party to this agreement for a specific purpose, including inter alia, if so designated, contractors retained to perform work at or relating to the Site.

D. "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. § 9601 et seq., to include the Defense Environmental Restoration Program (DERP) added by Section 211 of SARA.

E. "Conceptual Program Plan" means a document which describes the overall project management plan for the Site, including all major Site activities (e.g., operable unit designation, anticipated removal actions, generalized field efforts, etc.) and an approximate timeline for their accomplishment.

F. "DA" means the United States Department of the Army, its employees and authorized representatives.

G. "Days" means calendar days, unless business days are

specified. Any Submittal, Written Notice of Position or Written Statement of Dispute that, under the terms of this Agreement, would be due on a Saturday, Sunday or holiday shall be due on the following business day.

H. "Emergency removal" means a removal action taken because of an imminent and substantial endangerment to human health or the environment which requires implementation of a response action in such a timely manner that consultation with EPA and MDNR would be impractical.

I. "EPA" or "U.S. EPA" means the United States Environmental Protection Agency, its employees and authorized representatives.

J. "Feasibility Study" or "FS" means that study which fully evaluates and develops remedial action alternatives to prevent or mitigate the release or migration of hazardous substances, pollutants or contaminants at and from the Site.

K. "MDNR" means the Missouri Department of Natural Resources, its employees and authorized representatives.

L. "National Contingency Plan" or "NCP" means the implementing regulations for CERCLA found in Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300.

M. "Operable Unit" means a discrete action that comprises an incremental step toward comprehensively addressing Site problems.

N. "Remedial Investigation" or "RI" means that investigation conducted to fully determine the nature and extent of any

release or threat of release of hazardous substances, pollutants or contaminants and to gather necessary data to support the Feasibility Study and Risk Assessment.

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

P. "Site" means the area formerly known as the Weldon Spring Ordnance Works (WSOW), excluding the approximately 220 acres currently designated in the March 13, 1989 Federal Register as the Weldon Spring Chemical Plant/Quarry/Pits where cleanup is being performed by the Department of Energy (DOE). The Site includes the Weldon Spring Training Area (WSTA) and any areas contaminated by the migration of hazardous substances from the WSOW proper.

Q. "Submittal" means each document, report, schedule, deliverable, work plan or other item to be submitted to EPA or MDNR pursuant to this Agreement.

R. "Timetables and Deadlines" means schedules or the time limitations contained therein that are applicable to certain documents denoted by the Parties as Primary Documents pursuant to this Agreement and certain action completion dates during the Remedial Action process established by the Parties.

S. "Weldon Spring Training Area" means that 1,655 acre portion of the former Weldon Spring Ordnance Works currently owned by the DA.

T. "Written Notice of Position" means a written statement

by a Party of its position with respect to any matter about which any other Party may initiate dispute resolution pursuant to Part XI of this Agreement.

#### IV. PURPOSE

A. The general purposes of this Agreement are to:

1. Ensure that the environmental impacts associated with past and present activities at the 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 Site in accordance with CERCLA/SARA, the NCP, Superfund guidance and policy, RCRA, RCRA guidance and policy, and applicable state law; 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 Operable Unit Remedial Action alternatives which are appropriate at the Site prior to the implementation of final remedial action(s) for the Site. These alternatives shall be identified and proposed to the Parties as early as possible prior to formal proposal of Operable Unit Remedial Actions to U.S. EPA and MDNR pursuant to CERCLA/SARA and applicable state law. This process is designed to promote cooperation among the Parties in identifying Operable Unit Remedial Action alternatives prior to selection of final Operable Unit Remedial Actions.

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 Site and to establish requirements for the performance of a FS for the Site to identify, evaluate, and select alternatives for the appropriate remedial action(s) to prevent, mitigate, or abate the release or threatened release of hazardous substances, pollutants or contaminants at the Site in accordance with CERCLA/SARA and applicable state law.

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

4. Implement the selected Operable Unit and final remedial action(s) in accordance with CERCLA and applicable state law and meet the requirements of Section 120(e)(2) of CERCLA for an interagency agreement among the parties.

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

6. Coordinate response actions at the Site with the mission and support activities at WSOW.

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

8. Provide MDNR involvement in the initiation, devel-



opment, selection and enforcement of remedial actions to be undertaken at the former Weldon Spring Ordnance Works, including the review of all applicable data as it becomes available and the development of studies, reports, and action plans; and to identify and integrate State ARARs into the remedial action process.

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

#### V. INTENTION AND SCOPE

It is the intention of the Parties that this Agreement shall apply to all releases and threats of release of hazardous substances, pollutants or contaminants at or from WSOW, including such releases and threats of release at or from solid waste management units at WSOW, to which CERCLA and RCRA or CERCLA alone applies.

#### VI. STATUTORY COMPLIANCE/RCRA-CERCLA INTEGRATION

A. The Parties intend to integrate the DA's CERCLA response obligations and RCRA corrective action obligations which relate to the release 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 achieve compliance with CERCLA, 42 U.S.C. § 9601 et seq.; satisfy the corrective action requirements of Sections 3004(u) and (v) of RCRA, 42 U.S.C. § 6924(u) and (v), for a RCRA permit, and Section 3008(h), 42 U.S.C. § 6928(h), for interim status facilities; and meet or exceed all applicable or relevant and appropriate Federal and State laws and regulations, to the extent required by Section 121 of CERCLA, 42 U.S.C. § 9621

and applicable state law.

B. Based upon the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this Agreement shall obviate the need for further corrective action under RCRA (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 the former Weldon Spring Ordnance Works may require the issuance of permits under Federal and State laws. This Agreement does not affect the requirements, if any, to obtain such permits. However, if a permit is issued to the DA for on-going hazardous waste management activities at the Site, EPA and MDNR shall reference and incorporate any appropriate provisions, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit.

With respect to those portions of this Agreement incorporated by reference into permits, the parties intend that judicial

review of the incorporated portions shall, to the extent review is authorized by law, only occur under the provisions of CERCLA.

## VII. FINDINGS OF FACT

This paragraph contains findings of fact determined by U.S. EPA and MDNR as the basis for this Agreement. None of these findings are admissions by the DA for any purpose, including the extent of WSOW compliance with applicable federal or state environmental laws, nor are they in any other way legally binding on any Party.

A. The former Weldon Spring Ordnance Works (WSOW) consists of approximately 17,232 acres of land in Dardenne Township, St. Charles County, Missouri. WSOW is located about 30 miles (48 km) west of St. Louis and about 14 miles (22 km) southwest of the City of St. Charles. The site was used to produce trinitrotoluene (TNT) and dinitrotoluene (DNT) explosives. During peak operations the WSOW had more than 1,038 buildings on 17,232 acres owned and 127 acres of accompanying easement.

B. The Department of the Army began acquiring the WSOW property for its World War II TNT and DNT explosives production facility called the Weldon Spring Ordnance Works (WSOW) in late 1940 through condemnation proceedings and outright purchase. Property acquisition was completed in February, 1945. Several hundred parcels of land with a total area of 17,232 acres were ultimately obtained.

C. The Ordnance Works covered the area which now includes the Weldon Spring Training Area (WSTA), Weldon Spring Chemical Plant (WSCP), August A. Busch Wildlife Area, Weldon Spring Wild-

life Area, Francis Howell School District facilities, Village of Weldon Spring Heights, St. Charles County Water Company and Missouri Highway Department facilities, and University of Missouri Research Park. Construction of the TNT and DNT manufacturing plants began in May of 1941 and progressed generally from east to west across what is now the WSCP and WSTA properties. The prime contractor for the construction was Fraser-Brace Engineering Company, Inc.

D. The facility was composed of eighteen TNT and two DNT production lines. In late December 1941, TNT production commenced at six completed TNT lines. By the end of 1942, the other 12 TNT lines and two DNT lines were operational.

E. The Weldon Spring Ordnance Works was operated by Atlas Powder Company and had approximately 3,000 employees. TNT was not loaded into shells or casings at WSOW. Instead, the purified TNT crystals were shipped to off-site munitions plants. Production amounts were classified information, but approximations have been reconstructed from TNT wastewater records and the operating observation that each pound of TNT generated about one gallon of TNT wastewater. Each such gallon was approximately 59 percent sellite wash with the remainder Acid and Melt washes. Estimated annual production for TNT was:

- 1942 - 220 million pounds
- 1943 - 190 million pounds
- 1944 - 40 million pounds
- 1945 - 260 million pounds

F. The most significant wastewater flow from WSOW, in terms of both volume and contents, was called red water. This was the spent solution of sodium sulfite ("sellite") used to separate undesirable TNT isomers and other residual nitroaromatics from the 2,4,6-TNT.

G. Between late 1941, the start of production, and early 1942, wastewater volumes which increased from 35,000 to 536,800 gallons per day were pumped into seven lagoons on the WSOW. Overflow reached the Missouri River and Dardenne Creek through surface drainage.

H. In summer 1942, an underground wooden pipeline system for connecting the 18 TNT lines to three wastewater treatment plants was completed. The system totaled 66,000 feet and had several pump stations and intermediate settling tanks. The three treatment plants were located along the southern boundary of the WSTA. The effluent from these three plants was discharged into a collector pipeline that ran along the southern WSTA fenceline and off the WSTA site (still on the WSOW property) near its southeast corner. A fourth wastewater treatment plant was constructed along the southern fenceline, but was never completed or connected into the collector pipeline system. There were still instances of settling tank and pipeline overflow to the surface drainage system after the treatment plants were installed and running.

I. In January 1944, the TNT and DNT lines and support facilities were taken out of operation and placed on standby status. During the next four months, some decontamination and

maintenance of the production equipment, buildings, and grounds took place. The cleanup effort was halted in May 1944 when it was determined that the facility's production capacity would be needed again. In early September 1945, the contractor was notified to cease production operations.

J. At least four cleanup actions have been undertaken to remove contaminants from the former TNT manufacturing activities at WSTA. The first cleanup occurred in early 1944 during the period the facility was on standby status. It was performed by Atlas Powder Company, the facility contractor. Remediation methods included washing equipment with soda ash solution, steaming, flushing with water, excavation and removal of contaminated soils, burning, and controlled flashing.

K. The second cleanup was conducted from August 1945 through August 1946 by Atlas Powder Company and the Corps of Engineers. The Kansas City District of the Army Corps of Engineers removed 3,512 cubic yards of soil and placed it in fenced temporary storage piles, the location of which is unclear. The Corps of Engineers also burned 113,005 pounds of hand picked TNT, and burned in place 40 tons of TNT and other residues. Following this decontamination and return of the facility to the Ordnance Department and subsequently to War Assets Administration supervision, most of the decontaminated equipment was salvaged or redistributed to other government agencies and explosives manufacturers. Buildings were either salvaged, destroyed by fire, or flashed with flame and scrapped. Approximately 200 of the 1,038

buildings from the Ordnance Works were either burned or demolished by December 1946.

L. The third cleanup occurred after the General Services Administration (GSA), successor to the War Assets Administration, assumed custody of the WSTA portion of the Ordnance Works in 1950. For several months, GSA staff regraded and hauled soil from the TNT lines and hauled scrap materials.

M. Prior to transfer of some former WSOW property to the Atomic Energy Commission (AEC) in 1956 (see below), the Army decontaminated that site in 1955 as the fourth cleanup action. This included removal of 28,250 cubic yards of contaminated soil and 21,500 linear feet of buried TNT wastewater pipeline from the area that had been TNT lines 1, 2, 3, and 4. Also, 59 buildings were burned and 8 more structures were razed. Approximately 44,500 linear feet of wastewater pipeline are assumed to remain buried on the WSTA property.

N. The Army's Ordnance Department reassumed operation of the 17,232 acre WSOW from Atlas Powder Company in November 1945. By April 1946, the facility was declared surplus property; ownership was transferred from the Army to the War Assets Administration (WAA) in September 1946. In 1949, the WAA distributed the bulk of the 17,232 acres to state and local jurisdictions, leaving only the current WSTA and WSCP sites under Federal ownership. The Missouri Department of Conservation received the former magazine area on the northern half of the WSOW and created the 7,000 acre August A. Busch Memorial Wildlife Area. Two tracts of land in the northeast part of WSOW totaling 38 acres were trans-

ferred to the Francis Howell School District for school sites. Approximately 8,000 acres comprising the southern portion of WSOW were deeded to the University of Missouri for an agricultural research station. All but approximately 700 acres of this tract was sold in 1979 to the Missouri Department of Conservation and is now the Weldon Spring Wildlife Area. The remaining 1,875 acres of WSOW, which contained all the TNT lines and most other production facilities, came under custodial control of the GSA in 1950. In 1954, this area was returned to the Army under the National Industrial Plant Reserve program.

O. Part of the 1,875 acres returned to the Army was designated as an AEC plant site, and in 1956 the easternmost 205 acres were officially transferred from the Army to the AEC for construction of a uranium feed material plant to be called the Weldon Spring Chemical Plant. This plant, which produced uranium metal, began operation in 1957. The AEC also acquired a quarry located four miles south of the plant, and used the quarry for the disposal of radiologically contaminated materials. An additional 15 acres along the boundary between the WSTA and WSCP were transferred from the Army to the AEC in 1964 for construction of a pit for collection and containment of plant wastes. At the end of 1966, the WSCP ceased operation. Shortly thereafter, a portion of the WSCP site was returned to the Army to construct a plant for production of the herbicide agent orange. The plant was designed by late 1967, and in January 1968 the Army contractor began demolition and decontamination of the existing build-



ings in preparation for construction of the agent orange facility. However, the extent of radioactive contamination was greater than anticipated. The agent orange project was canceled in February 1969 with only a small fraction of the demolition/decontamination completed and no new construction started. The Army returned control and cleanup responsibility at WSCP to the AEC in 1969.

P. The core area of 1,655 acres remained inactive through the 1950's. This area was transferred to the XI U.S. Army Corps in June 1959 and designated as the Weldon Spring U.S. Army Reserve Training Area (WSTA). It is now under the jurisdiction of the Commander, U.S. Army Engineer Center and Fort Leonard Wood. The facility has been utilized extensively by Army Reserve and Missouri National Guard units from the metropolitan St. Louis area and occasionally by other military units for training exercises. WSTA was temporarily closed as a training facility in 1989 during the RI field work.

Q. In November 1943, the first investigation of the nature and extent of contamination at WSOW was conducted by V.C. Fishel and C.C. Williams of the Geological Survey, U.S. Department of Interior. The results of the investigation were presented in "The Contamination of Ground and Surface Waters by Liquid Wastes from the Weldon Spring Ordnance Works, Missouri", dated January 1944. Water elevations and samples were collected from wells, springs, and surface waters. Visual observations and colorimetric tests were used to identify areas where TNT contamination was indicated. A ground water map of the northern portion of the

Site was constructed.

R. In November 1976, the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) conducted an environmental assessment of WSTA. The subsequent USATHAMA report was titled "Installation Assessment of Weldon Spring Training Area, St. Charles, Missouri, Report No. 109, April 1977". A records search and on-site investigation was carried out to "estimate possible contamination by chemical, biological and radiological material and to assess the possibility of contaminant migration beyond the installation boundary". It was determined that the underground wastewater pipelines and several surficial locations remained contaminated from explosives manufacturing. Also, an area containing radiological material in WSTA was identified, marked and fenced. Limited surface water quality data revealed low level concentrations of TNT in the vicinity of WSTA. Ground water quality data was not available. In addition, USATHAMA identified several physical hazards on-site including partially destroyed buildings, abandoned cisterns, underground water-filled tanks and refuse from TNT manufacturing and military training exercises.

S. A follow-up to the installation assessment was conducted in 1986 by Environmental Science and Engineering, Inc. (ESEI). The investigation team concluded that contaminants were present on the WSTA and had the potential to migrate off the installation. As a result, they recommended that an RI be conducted.

T. In June 1983, Envirodyne Engineers was contracted by the Army to investigate the possible presence of 2,3,7,8-TCDD (diox-

in) at WSTA. The field work consisted of collecting ten composite roadway soil samples from various locations throughout the installation. The analysis did not detect 2,3,7,8-TCDD in any of the samples.

U. A radiological survey at WSTA was performed in October 1985 by Oak Ridge Associated Universities (ORAU). Six areas where some low-level radioactive soil and water contamination existed, including natural uranium (U-238 + U-235 + U-234), radium-226, radium-228 and thorium, were identified within WSTA and a seventh area was identified on property owned by the Missouri Department of Conservation but controlled by the Army.

V. At approximately the same time as the ESEI study, a research and field investigation of WSTA was performed by the Campbell Design Group of St. Louis, Missouri. The research phase involved a records search and interviews with personnel who had either worked at the WSTA or had participated in a study of the area. Data collected during this phase indicated that the potential hazards at the WSTA included contamination from explosives, radioactive materials, asbestos, DDT, sulfur and sodium compounds. The field phase entailed the identification of sources of soil and surface water contamination and the collection and analysis of soil, surface water, and sediment samples. Contaminants found in the soil included TNT, DNT, sulfates, and lead. No explosives contamination was found in the sediment or surface water samples. Based on the results of their investigations, the Campbell Design Group concluded that a remedial investigation of the site should be undertaken to determine the extent and signif-

icance of the contamination problem.

W. In July 1987, Law Environmental, Inc., Governmental Services Division was contracted by the Corps of Engineers, Kansas City District to conduct a surface investigation. Soil samples from one TNT processing plant, one sellite production plant, one waste treatment plant and both DNT processing plants were collected and analyzed using a field screening technique. Samples from on-site and off-site surface waters and a burning ground were analyzed for nitroaromatic content, volatiles, semi-volatiles, sulfates, nitrates, sulfites and metals. Additional sampling included soil samples from roadways for dioxin analysis and from power plant no. 1 for DDT content. In their report "Surface Investigation for Weldon Spring Training Area", Law Environmental determined that high concentrations of residual TNT and associated compounds were present and openly visible within the wash house, wastewater settling tank and grainer house areas, and the burning ground. The public health assessment indicated the presence of potential risks, from the incidental ingestion of soil and the inhalation of fugitive dusts, for certain workers and guardsmen exposed longer than certain threshold periods of time. Law Environmental concluded that a more detailed investigation of the site should be performed to further delineate and isolate contaminants throughout WSTA and associated off-site areas.

X. In June 1989, IT Corporation completed a draft Remedial Investigation report. Over 5,000 soil samples were analyzed for

TNT using a field screening technique. Over 500 soil samples were also analyzed in the laboratory. Samples from the wooden wastewater pipelines, ground water, springs, sediment, and area lakes were also collected and analyzed. A soil vapor survey of selected areas was conducted. The IT investigation was confined primarily to the current WSTA property. As a result of the investigation, several areas were identified as having contaminants present in various media. The following table includes the highest concentrations of selected contaminants identified by the investigation:

<u>Contaminant</u>	<u>Concentration</u>	<u>media/location</u>
TNT	61,494 mg/kg	soil/TNT Plant 16
TNT	150,809 mg/kg	soil/TNT Plant 4
lead	10,200 mg/kg	soil/Sellite Plant 4
PCB	42 mg/kg	soil/Sellite Plant
TNB	7.3 ug/l	ground water/MWV16
2,4-DNT	8.5 ug/l	ground water/MWV09
2,6-DNT	5.1 ug/l	ground water/MWV09
TNT	12 ug/l	ground water/MWV09
TNT	3 ug/l	Spring D

Y. In October 1989, the IT RI/FS contract was modified by the addition of six new or expanded sampling activities. These include 14 additional monitoring wells, resampling the 33 existing wells and 10 springs, air monitoring, soil sampling for lead, and wooden pipeline sampling. Field work for these activities, excluding wooden pipeline sampling, was initiated on October 31, 1989.

2. Parallel efforts to assess the nature and extent of contamination at the Weldon Spring Chemical Plant and Quarry have been conducted under the auspices of the DOE or its predecessor (U.S. Energy Research and Development Administration) from 1977 to the present, but are not covered by this Agreement.

#### VIII. DETERMINATIONS

This paragraph contains determinations of law made solely by the U.S. EPA and MDNR. As with the Findings of Fact, infra, they are not admissions by the DA for any purpose.

A. The former Weldon Spring Ordnance Works is a facility within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9);

B. hazardous substances and pollutants or contaminants within the meaning Sections 101(14) and 101(33) of CERCLA have been disposed of at WSOW;

C. there is a release or threatened release of hazardous substances and pollutants or contaminants into the environment at the Site as defined at Section 101(22) of CERCLA, 42 U.S.C. § 9601(22);

D. the Site is a federal facility within the meaning of Section 120 of CERCLA, 42 U.S.C. § 9620, and Section 211 of SARA, 10 U.S.C., 2701(c)(1)(B).

E. The actions required to be taken pursuant to this Agreement are necessary to protect the public health and welfare and the environment and are consistent with the National Contingency Plan; and

F. the schedule for completing the actions required by this Agreement complies with the requirements of Section 120(e) of CERCLA, 42 U.S.C. § 9620(e).

#### IX. WORK TO BE PERFORMED

It is hereby agreed by the Parties that DA shall conduct each of the following activities as set forth below:

##### A. Remedial Investigation and Feasibility Study

1. DA shall conduct in compliance with the schedule established pursuant to Part XXIX of this Agreement a Remedial Investigation and Feasibility Study in accordance with the guidelines set forth in the document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA", OSWER Directive 9335.3-01 (October 1988), or as may be revised. The Remedial Investigation shall include, inter alia, the design and implementation of a monitoring program to define the extent and nature of soil contamination, surface water contamination, ground water contamination, and air contamination if any, at the Site and the extent and nature of releases of hazardous substances from the Site.

2. In accordance with Parts X and XXIX of this Agreement, DA shall submit to EPA and MDNR for review and approval all RI and FS Work Plans.

3. DA shall implement the RI and FS in accordance with the schedules established pursuant to Part XXIX of this Agreement.

4. The Parties agree that final Site cleanup level criteria will only be determined following completion of a Site-

wide Risk Assessment to be prepared by the DA as part of the Remedial Investigation. The RI shall be coordinated with the Feasibility Study such that both activities are completed in a timely and cost effective manner.

#### B. Operable Unit Remedial Actions

1. In accordance with Part XXIX of this Agreement, DA shall propose deadlines for the completion of Operable Unit Work Plans for any Operable Unit remedial actions currently anticipated. These workplans shall be reviewed in accordance with Part X of this Agreement.

2. All Operable Unit remedial actions undertaken pursuant to this Agreement shall comply with all NCP requirements and EPA guidelines governing such actions.

3. All requirements for Remedial Action Selection and Implementation pursuant to this Agreement shall apply to the selection and implementation of Operable Unit remedial actions.

#### C. Remedial Action Selection

1. Upon approval of a FS Report by EPA and MDNR, the DA shall, after consultation with EPA and MDNR pursuant to Part X of this Agreement, publish the proposed plan for public review and comment in accordance with the public participation requirements of Part XXVII of this Agreement.

2. Within sixty (60) days of the completion of the public comment period on the proposed plan, DA shall submit its proposed Record of Decision (ROD) to EPA. The EPA Administrator, in consultation with the DA and MDNR pursuant to Part X of this



Agreement, shall make final selection of the remedial action for the Site. The remedial action selected by the EPA Administrator shall be final and is not subject to dispute.

3. Within fifteen (15) months of receipt of written notice of final approval of the ROD by EPA, DA shall commence substantial continuous physical onsite remedial action at the Site.

4. DA shall implement the remedial action in accordance with the provisions, time schedule, standards and specifications set forth in the approved Remedial Action Work Plan.

5. Before commencement of any remedial action, DA shall provide for public participation in accordance with Part XXVII of this Agreement.

#### D. Removal Actions

1. Any removal actions undertaken by the DA at the Site shall be conducted in a manner consistent with CERCLA, the NCP, and applicable state law.

2. For all removal actions except emergency removals, prior to undertaking the action, DA shall advise EPA and MDNR, in writing, as to the basis for the action, the nature of the action, the expected time period during which the action will be implemented, and the impact, if any, on any remedial action contemplated at the Site. For emergency removals, DA shall provide as much advance notice as the circumstances leading to the removal action allow.

3. Prior to the initiation of any removal action which is not an emergency removal, the DA shall provide EPA and MDNR

with an adequate opportunity for timely review and comment on any such proposed removal action. Following consideration of EPA and MDNR comments, the DA shall provide to EPA and MDNR a written response to those comments, as soon as practicable. DA determination as to the necessity for taking emergency removal action on the Site shall not be subject to Parts XI and XXXI of this Agreement.

4. Upon completion of a removal action, DA shall provide to EPA and MDNR, in writing, notification of the completion of the removal action and a description of the action taken.

5. Nothing in this Agreement shall alter the DA's authority with respect to removal actions conducted pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and Section 211 of SARA, 10 U.S.C. 2701(c).

#### X. CONSULTATION WITH U.S. EPA and MDNR

##### A. Applicability:

The provisions of this Part establish the procedures that shall be used by the DA, U.S. EPA, and MDNR 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. § 2705, the DA will normally be responsible for issuing primary and secondary documents to U.S. EPA and MDNR. As of the effective date of this Agreement, all draft and final reports for any deliverable document identified herein shall be prepared, distributed and subject to dispute 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 MDNR in accordance with this Part. 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 or RD/RA activities. Primary documents are initially issued by the DA in draft subject to review and comment by U.S. EPA and MDNR. Following receipt of comments on a particular draft primary document, the DA will respond in writing 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 30 days after issuance, 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 DA in draft subject to review and comment by U.S. EPA and MDNR. Although the DA 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 following documents have been previously submitted for review and comment:

a. Surface Investigation Report for Weldon Spring Training Area, by Law Environmental, Inc., March, 1988;

b. Draft Work Progression Plan; Drilling, Monitoring Well Installation and Sampling Plan; and Data Management Plan, Weldon Spring Training Area RI/FS, Weldon Spring, Missouri, by IT Corporation, February 10, 1988;

c. Draft Quality Control Plan, Weldon Spring Training Area RI/FS, Weldon Spring, Missouri, by IT Corporation, February 10, 1988;

d. Draft Remedial Investigation Report, Weldon Spring Training Area, Vol I, II and III, by IT Corporation, June 1989;

2. The DA shall complete and transmit draft reports and plans for the following primary documents to U.S. EPA and MDNR for review and comment in accordance with the provisions of this Section:

- a. Conceptual Program Plan
- b. Report on Surface Investigation of Specific Training Areas
- c. Remedial Investigation Work Plans, Including Sampling and Analysis Plans and a QAPP
- d. Remedial Investigation Reports, including Risk Assessments

- e. Pipeline Sampling Report
- f. Feasibility Study Work Plans
- g. Feasibility Study Reports
- h. Proposed Plans
- i. Records of Decision
- j. Operable Unit Work Plans and Reports
- k. Remedial Design Workplans
- l. Final Remedial Designs
- m. Remedial Action Work Plans
- n. Remedial Action Reports
- o. Community Relations Plan

3. Only the draft final reports for the primary documents identified above shall be subject to dispute resolution. The DA shall complete and transmit draft primary documents in accordance with the timetable and deadlines established pursuant to Part XXIX of this Agreement.

D. Secondary Documents:

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

- a. Operable Unit Remedial Action Objectives/Data Quality Objectives
- b. Health and Safety Plans for RI/FS Activities
- c. Initial Screening of Alternatives
- d. Detailed Analysis of Alternatives
- e. Pre-design Technical Summary

- f. Preliminary Design (30%)
- g. Intermediate Design (60%)
- h. Pre-final Design (90%)
- i. Treatability Studies (if necessary)
- j. Construction Quality Assurance Plans
- k. Construction Quality Control Plans
- l. Health and Safety Plans for Field Construction Activities
- m. Contingency Plans
- n. Operation and Maintenance Plans

2. Although U.S. EPA and MDNR 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 Part XXIX of this Agreement.

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

The Project Managers shall meet approximately every 30 days, except as otherwise agreed by the Parties, to review and discuss the progress of work being performed at the 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. MDNR shall identify all potential State ARAR's as early in the remedial process as possible consistent with the requirements of CERCLA Section 121(d)(2)(A)(ii) and the NCP. The DA shall consider any additional written interpretations of ARARs provided by the State. Draft ARAR determinations shall be prepared by the DA in accordance with Section 121(d)(2) of CERCLA, the NCP and pertinent guidance issued by U.S. EPA, that is consistent 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 a ROD is issued.

G. Review and Comment on Draft Reports:

1. The DA shall complete and transmit each draft primary report to U.S. EPA and MDNR on or before the corresponding deadline established for the issuance of the report. The DA shall complete and transmit the draft secondary document in

accordance with the target dates established for the issuance of such reports established pursuant to Part XXIX of this Agreement.

2. Unless the Parties mutually agree to another time period, all draft reports shall be subject to a 45-day period for review and comment. Review of any document by the U.S. EPA and MDNR 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, and consistency with CERCLA, the NCP and any pertinent guidance or policy issued by the U.S. EPA and with applicable State law. Comments by the U.S. EPA and MDNR shall be provided with adequate specificity so that the DA may respond to the comments 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 DA, the U.S. EPA shall provide a copy of the cited authority or reference. In cases involving complex or unusually lengthy reports, U.S. EPA or MDNR may extend the 45-day comment period for an additional 20 days by written notice to the DA prior to the end of the 45-day period. On or before the close of the comment period, U.S. EPA and MDNR shall transmit their written comments to the DA.

3. Representatives of the DA shall make themselves readily available to U.S. EPA and MDNR 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 DA on the



close of the comment period.

4. In commenting on a draft report which contains a proposed ARAR determination, U.S. EPA and MDNR shall include a reasoned statement of whether they object to any portion of the proposed ARAR determination. To the extent that U.S. EPA and MDNR do object, they shall explain the basis for their objection in detail and shall identify any ARARs which they believe were not properly addressed in the proposed ARAR determination.

5. Following the close of the comment period for a draft report, the DA shall give full consideration to all written comments on the draft report submitted during the comment period. Within 45 days of the close of the comment period on a draft secondary report, the DA shall transmit to U.S. EPA and MDNR its written response to comments received within the comment period. Within 45 days of the close of the comment period on a draft primary report, the DA shall transmit to U.S. EPA and MDNR a draft final primary report, which shall include the DA's response to all written comments received within the comment period. While the resulting draft final report shall be the responsibility of the DA, it shall be the product of consensus to the maximum extent possible.

6. The DA may extend the 45 day period for either responding to comments on a draft report or for issuing the draft final primary report for an additional 20 days by providing notice to U.S. EPA and MDNR. In appropriate circumstances, this time period may be further extended in accordance with Part XII hereof.

#### 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 Part XI.

2. When dispute resolution is invoked on a draft final primary report, work may be stopped in accordance with the procedures set forth in Part XI 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 DA's position be sustained. If the DA's determination is not sustained in the dispute resolution process, the DA shall prepare, within not more than 45 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 Part XII hereof.

##### J. Subsequent Modifications of Final Reports:

Following finalization of any primary report pursuant to Paragraph I (Finalization of Reports) immediately above, a Party may seek to modify the report, including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in Subparagraphs 1 and 2 below.

1. Any Party may seek to modify a report after finalization if it determines, based on new information (i.e., informa-

tion that became available, or conditions that became known, after the report was finalized) that the requested modification is necessary. A Party may seek such a modification by submitting a concise written request to the Project Manager 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, any party 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 could be of significant assistance in evaluating impacts on the public health or the environment, in evaluating the selection of remedial alternatives, or in protecting human health and the environment.

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

#### XI. RESOLUTION OF DISPUTES

Except as specifically set forth elsewhere in this Agreement, if a dispute arises under this Agreement, the procedures of this Part 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 Part shall be implemented to resolve a dispute.

A. Within thirty (30) days after: (1) the issuance of a draft final primary document pursuant to Part X (Consultation) 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 technical, legal or factual 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 (Senior Executive Service [SES] or equivalent) or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The U.S. EPA representative on the DRC is the Waste Management Division Director of U.S. EPA's

Region VII. The DA's designated member is the Deputy Commanding General, Fort Leonard Wood/Assistant Commandant U.S. Army Engineer School. The MDNR designated representative is the Director of the Division of Environmental Quality. 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 Part XVIII.

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 signed by all parties. 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 VII. The MDNR representative on the SEC is the Director of the Missouri Department of Natural Resources. The DA's representative on the SEC is the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health) OASA (I,L,&E). The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision signed by all parties. 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 DA or MDNR may, within twenty-one (21) 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 neither the DA nor MDNR elect to elevate the dispute to the Administrator within the designated twenty-one (21) day escalation period, the DA and MDNR shall be deemed to have agreed with the 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 Subpart 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 Director of MDNR and the DA Secretariat-Representative to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the DA and MDNR with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Part shall not be delegated.

G. MDNR reserves its right to maintain an action under section 121(f)(3)(B) of CERCLA, 42 U.S.C. § 9621(f)(3)(B) to challenge the selection of a remedial action that does not attain a legally applicable or relevant and appropriate standard, requirement, criteria or limitation.

H. The pendency of any dispute under this Part shall not affect the DA'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.

I. When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Hazardous Waste Division Director for U.S. EPA's Region VII 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. MDNR may request the U.S. EPA's Region VII Division Director to order work stopped for the reasons set out above. To the extent possible, the Party seeking a work stoppage shall consult with the other Parties prior to initiating a work stoppage request. After stoppage of work, if a Party believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the Party may meet with the Party ordering a work stoppage to discuss the work stoppage. Following this meeting, and further consideration of the issues, the EPA Region VII Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the EPA Region VII 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 Party requesting dispute resolution.

J. Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Part, the DA 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.

K. Resolution of the dispute pursuant to this Part of the Agreement constitutes a final resolution of the dispute arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Part of this Agreement.

L. In the event that MDNR continues to dispute the position of the Administrator of EPA, MDNR reserves its rights to the extent provided by law including but not limited to Sections 113(h), 121 and 310 of CERCLA, and Part XXX (Enforceability) of this Agreement to bring an action in federal court to seek relief regarding such dispute and to seek injunctive relief to preserve the dispute, pending resolution.

## XII. EXTENSIONS

A. Either a timetable and deadline or a schedule shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by the DA 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, as defined in Part XXXII of this Agreement;
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 DA 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 MDNR shall advise the DA in writing of their respective positions on

the request. Any failure by U.S. EPA and MDNR to respond within the 7-day period shall be deemed to constitute concurrence in the request for extension. If U.S. EPA or MDNR do not concur in the requested extension, they shall include in their statements of nonconcurrence an explanation of the basis for their positions.

E. If there is consensus among the Parties that the requested extension is warranted, the DA shall extend the affected timetable and deadline or schedule accordingly. If there is no consensus among the Parties as to whether all or part of the requested extension is warranted, the timetable and deadline or schedule shall not be extended except in accordance with a determination resulting from the dispute resolution process.

F. Within seven days of receipt of a statement of nonconcurrence with the requested extension, the DA 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.

### XIII. CREATION OF DANGER

A. In the event the EPA or MDNR determines that activities conducted pursuant to this Agreement are creating an imminent and substantial endangerment to the health or welfare of the people on the Site or in the surrounding area or to the environment, the EPA or MDNR may direct DA to stop further implementation of work under this Agreement for such period of time as necessary to abate such endangerment.

B. Any Party directing the DA to stop work pursuant to this provision shall within 24 hours of doing so provide a written statement of the basis for its directing the work stoppage. DA shall have three business days from receipt of this written statement to request a review of the work stoppage. This request shall include a statement as to DA's basis for recommending that the work stoppage cease and as to possible measures to abate or mitigate the danger. Within 72 hours of an Army request for review, the EPA Division Director or the MDNR Director of the Division of Environmental Quality shall determine in writing whether continued work stoppage is necessary. This final decision shall be subject to Resolution of Disputes procedures.

C. Any such work stoppages may be a basis for modifying the schedule of activities affected by the work stoppage.

### XIV. REPORTING

Throughout the course of these activities, DA shall submit to EPA and MDNR written quarterly progress reports, which shall include, at a minimum, the following:

1. A description of the actions completed during the

quarter towards compliance with this Agreement;

2. a description of all actions scheduled for completion during the quarter which were not completed along with a statement indicating why such actions were not completed and an anticipated completion date;

3. copies of all data and sampling and test results and all other laboratory deliverables received by DA and completed pursuant to this Agreement during the quarter, if not previously provided; and

4. a description of the actions which are scheduled for the following quarter.

These quarterly reports shall be due on or before the tenth day of the month following the quarter for which the report is submitted.

#### XV. MONITORING AND QUALITY ASSURANCE

A. In accordance with Part X of this Agreement, DA shall develop a Quality Assurance Project Plan (QAPP) for each Remedial Investigation, including investigations conducted for an Operable Unit, for review and comment by EPA and MDNR. The QAPPs shall be prepared in accordance with EPA Document QAMS-005/80 and applicable guidance as developed and provided by EPA and shall include but not be limited to: sampling methodology; sample storage and shipping methods; documentation; sampling and chain-of-custody procedures; calibration procedures; laboratory quality control/quality assurance procedures and frequency. DA shall use the quality assurance, quality control, and chain of custody

procedures specified in the QAPPs throughout all field investigation, sample collection and laboratory analysis activities. The Army shall inform and obtain the approval of EPA and MDNR in planning all sampling and analysis.

B. DA shall submit all methods and protocols used for sampling and analysis to EPA and MDNR for review and approval. Where established EPA protocols exist, review shall be for substantive equivalency.

C. The Army shall ensure that all samples analyzed pursuant to this Agreement are analyzed by a laboratory which participates in the U.S. Army Corps of Engineers quality assurance/quality control (QA/QC) program outlined in ER 1110-1-263 or another QA/QC program equivalent to that specified in the documents entitled "USEPA Contract Laboratory Program Statement of Work for Organic Analysis" (October 1986) and "USEPA Contract Laboratory Program of Work for Inorganic Analysis" (July 1985). Further evaluation by EPA and MDNR Quality Assurance Office personnel may entail, upon request by EPA or MDNR, the analysis of performance evaluation samples to demonstrate the quality of each laboratory's analytical data.

D. The DA shall also ensure that appropriate EPA and MDNR personnel or their authorized representatives will be allowed access to the laboratory(s) and personnel utilized by the DA in implementing this Agreement. Such access shall be for the purpose of validating sample analyses, protocols and procedures required by the Remedial Investigation and Quality Assurance Project Plan.

#### XVI. SAMPLING AND DATA/DOCUMENT AVAILABILITY

A. DA shall make available to EPA and MDNR all results of sampling, tests and other data collection, including quality assurance documentation obtained by it, or on its behalf, with respect to the implementation of this Agreement, within thirty (30) days of receipt of such results. This includes, but is not limited to, sampling of all areas known or suspected to have been contaminated by hazardous substances, including any water supply wells and systems. If quality assurance is not completed within thirty (30) days of the receipt of results, summarized raw data or results shall be submitted within the thirty (30) day period and quality assured data or results shall be submitted as soon as they become available.

B. At the request of EPA or MDNR, DA shall allow the Party making the request to collect split or duplicate samples of all samples collected pursuant to this Agreement. To the maximum extent practicable, DA shall notify EPA and MDNR at least fourteen (14) days prior to any sample collection. If it is not possible to provide fourteen (14) days advance notice, DA shall provide as much notice as possible of the date and time that samples will be collected. EPA and MDNR will make the results of all sampling, tests, or other data available to each other and to DA within thirty (30) days of receipt of such results.

#### XVII. CONFIDENTIAL BUSINESS INFORMATION

A. DA may assert a business confidentiality claim covering all or part of the information submitted pursuant to this Agree-

ment, in accord with Section 104(e)(7) of CERCLA. The information covered by such a claim will be disclosed by EPA only to the extent and by the procedures specified in 40 C.F.R. Part 2, Subpart B. Such a claim may be made by placing on or attaching to the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend or other suitable form of notice employing language such as "trade secret", "proprietary", or "company confidential". Allegedly confidential portions of otherwise non-confidential documents should be clearly identified and may be submitted separately to facilitate identification and handling by EPA. If confidential treatment is sought only until a certain date or occurrence of a certain event, the notice should so state. If no such claim accompanies the information when it is received by EPA, the information may be made available to the public without further notice to DA. EPA will, to the extent practical, honor claims of confidentiality received after the submittal of the information.

B. Information determined to be confidential by EPA pursuant to 40 CFR Part 2 shall be afforded the protection specified therein. Such information shall be reviewed by the MDNR Director for confidentiality pursuant to sections 260.430, 260.550 and 610.010 et seq., Revised Statutes of the State of Missouri, and any regulations promulgated thereunder, and treated accordingly.

#### XVIII. PROJECT MANAGERS

A. The following individuals are designated as Project Manager for the respective party:

For EPA:

Greg McCabe  
Waste Management Division  
U.S. Environmental Protection Agency  
Region VII  
726 Minnesota Avenue  
Kansas City, Kansas 66101  
Telephone Number 913/551-7709

For DA:

Weldon Spring Ordnance Works Project Manager  
Corps of Engineers, Kansas City District  
601 E. 12th Street  
Kansas City, Missouri 64106-2896  
Telephone Number 816/426-2609

For MDNR:

Jim Bell  
Division of Environmental Quality  
Missouri Department of Natural Resources  
P.O. Box 176  
Jefferson City, Missouri 65102  
Telephone Number 314/751-3020

B. All verbal notices and written documents, including, but not limited to written notices, reports, plans, and schedules, requested or required to be submitted pursuant to this Agreement shall be directed to the designated Project Managers. To the maximum extent possible, all 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 Managers represent.

C. The EPA and MDNR Project Managers shall have the authority to:

1. Take samples, request split samples of DA samples



and ensure that work is performed properly and pursuant to EPA protocols as well as pursuant to the Attachments and plans incorporated into this Agreement;

2. observe all activities performed pursuant to this Agreement, take photographs or have photographs taken, and make such other reports on the progress of the work as the Project Manager deems appropriate, subject to the limitations set forth in Part XIX, Access, of this Agreement;

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.

D. The DA Project Manager may 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.

E. Any field modifications proposed under this Part by any Party must be approved orally by all (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 Part XI may be used in addition to this Part. Within five (5) business days following a modification made pursuant to this Part, 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.

F. The Project Manager for the DA shall be physically present on the Site or reasonably available to supervise work performed at the Site during implementation of the work performed pursuant to this Agreement and shall be available to EPA and MDNR for the pendency of this Agreement. The EPA and MDNR Project Managers need not be present at the Site and their absence from the Site shall not be cause for work stoppage.

G. Any Party may change its designated Project Manager and shall notify the other Parties, in writing, within five days of the change.

#### XIX. ACCESS

A. Subject to any statutory and regulatory requirements as may be necessary to protect national security, DA shall provide access to EPA and MDNR to all DA-owned or controlled property upon which any activities are being conducted or have been conducted pursuant to this Agreement such that EPA and MDNR and their authorized representatives are able to enter and move freely about such property at all reasonable times for the purposes related to activities conducted pursuant to this Agreement, including, inter alia, the following:

1. Inspecting and copying records, files, photographs,

operating logs, contracts and other documents relative to the implementation of this Agreement;

2. reviewing the status of activities being conducted pursuant to this Agreement;

3. collecting such samples or conducting such tests as EPA or MDNR determines are necessary or desirable to monitor compliance with the terms of this Agreement or to protect the public health, welfare, or the environment;

4. using sound, optical or other types of recording equipment to record activities which have been or are being conducted pursuant to this Agreement; and

5. verifying data and other information submitted by DA pursuant to this Agreement.

B. The DA shall provide an escort whenever EPA or MDNR require access to restricted areas of WSTA for purposes consistent with the provisions of this Agreement. EPA and the State shall provide reasonable notice to the DA Project Manager to request any necessary escorts. EPA and MDNR shall not use any camera, sound recording or other electronic recording device at WSTA without the permission of the DA Project Manager or his delegee. The DA shall not unreasonably withhold such permission.

C. The rights to access by EPA and the State, granted in Paragraph A. of this section, shall be subject to those regulations as may be necessary to protect national security. Upon denying any aspect of access the DA shall provide an explanation within 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 § 120(j), 42 U.S.C. § 9620(j), regarding the issuance of Site Specific Presidential Orders as may be necessary to protect national security.

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

E. To the extent that activities pursuant to this Agreement must be carried out on other than DA property, the DA shall use its best efforts to obtain access agreements from the owners which shall provide reasonable access for the DA, EPA, MDNR and their representatives. In the event that the DA is unable to obtain such access agreements, the DA shall promptly notify EPA and MDNR.

#### XX. RECORD PRESERVATION

DA shall, without regard to any document retention policy to the contrary, preserve during the pendency of this Agreement and for a minimum of seven (7) years after its termination, all records and documents in its possession, custody or control which relate in any way to work performed pursuant to this Agreement. After this seven-year period has lapsed, DA shall notify EPA at least thirty (30) calendar days prior to the destruction of any such document. DA shall make available the documents or copies of such documents, unless withholding is authorized and determined appropriate by law.

#### XXI. RESERVATION OF RIGHTS

A. Notwithstanding compliance with the terms of this

Agreement, DA is not released from liability, if any, for any actions beyond the terms of this Agreement taken by the EPA or MDNR with respect to the Site. EPA and MDNR reserve the right to take any enforcement action pursuant to RCRA, CERCLA and/or any other available legal authority for relief including, but not limited to, injunctive relief, monetary penalties, and punitive damages for any violation of law or this Agreement.

B. If EPA determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance, pollutant or contaminant at or from the Site, EPA will request that the DA take such response actions as may be necessary to abate such danger or threat and to protect the public health or welfare or the environment. For any such endangerment which may occur outside the WSTA, and for which DA fails to take such response action, EPA reserves its rights under CERCLA and the NCP to undertake any response actions necessary to abate such endangerment and, to the extent permitted by law, to seek reimbursement from DA for all costs incurred in so responding. DA responsibility, if any, for reimbursement of such costs shall be subject to Section XXXIII (Funding) of this Agreement and to its right to have any question regarding appropriateness, in whole or part, of such reimbursement determined through Dispute Resolution in accord with Section XI of this Agreement prior to any such payments becoming due.

C. EPA and MDNR reserve such rights as they may have to

undertake response action(s) to address the release or threat of release of hazardous substances within the WSTA for which DA fails to take such response actions and, to the extent permitted by law, to seek reimbursement from DA thereafter for the costs incurred in so responding.

D. The DA reserves the right to raise or assert any defense, whether procedural or substantive, in law or equity, or to raise any issue as to jurisdiction, or standing of any Party, or any other matter in any proceeding related or not related to this Agreement, which the DA might otherwise be entitled to raise or assert.

#### XXII. OTHER APPLICABLE LAWS

A. Except as otherwise provided in Part XXIII, below, with regard to permits, all actions required to be taken pursuant to this Agreement shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations, including, but not limited to, any permitting or licensing requirements.

B. All reports, plans, specifications, and schedules submitted pursuant to this Agreement are, upon approval by EPA and MDNR, incorporated into this Agreement.

#### XXIII. PERMITS

A. As provided in Section 121(e)(1) of CERCLA, 42 U.S.C. § 9621(e)(1), no Federal, State, or local permit shall be required for those portions of the response actions undertaken pursuant to this Agreement which are conducted entirely on-Site. Such on-Site response actions must satisfy all applicable or relevant and

appropriate Federal and State standards, requirements, criteria, or limitations which would have been included in any such permit. For each response action proposed by DA which in the absence of § 121(e)(1) of CERCLA would require a permit, DA shall include the following information in the Feasibility Study report:

1. The identity of each permit which would otherwise be required;

2. the standards, requirements, criteria, or limitations which would have had to have been met to obtain each such permit, including input received from MDNR in accordance with Section 121(d)(2)(A)(ii) of CERCLA; and

3. a description of how the proposed response action will meet the standards, requirements, criteria or limitations which would be included in each such permit.

B. DA shall make timely and complete application or request for all permits, licenses or other authorizations necessary to implement those portions of any response actions required by this Agreement which are not conducted entirely on-Site. Each work plan shall identify each such permit, license or authorization addressed therein by providing the following information:

1. The agency or instrumentality from whom the permit, license or authorization must be sought and the agency or instrumentality which would grant or issue the permit, license or authorization if not the same as the one from which it must be sought;

2. the activity which would be the subject of the

permit, license or authorization; and

3. a description of the procedure to be followed in securing such permit, license or authorization, including the date by which an application must be filed and the anticipated duration of the permit, license or authorization.

C. 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 remedy selected pursuant to this Agreement, DA shall notify EPA and MDNR in writing of its intention to propose modifications to primary documents thereby affected in accordance with Paragraph X.J. of this Agreement. Notification by the DA of its intention to propose modifications shall be submitted within seven (7) calendar days of receipt by the DA of notification that: (1) a permit will not be issued; (2) a permit has been issued or reissued in a manner which is materially inconsistent with a remedy selected pursuant to this Agreement; or (3) a final determination with respect to any appeal related to the issuance or reissuance of such a permit has been entered; whichever is later. Whenever such an appeal is filed, DA shall notify EPA and MDNR of such appeal within seven (7) calendar days. Within thirty (30) days from the date it submits its notice of intention to propose modifications, the DA shall submit to the EPA and MDNR its proposed modifications with an explanation of its reasons in support thereof. Such proposed modifications will be reviewed in accordance with Part X of this Agreement.

D. If DA submits proposed modifications prior to a final



determination of any appeal taken on a permit needed to implement this Agreement, EPA and MDNR may elect to delay review of the proposed modifications until after such final determination is entered.

E. During appeal of any permit required to implement this Agreement or during review of proposed modifications as provided in Subpart D above, the DA 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 this Agreement, under Federal law or doctrine of sovereign immunity, the DA shall comply with applicable State and Federal hazardous waste management requirements at the Site.

#### XXIV. FIVE YEAR REVIEW

If a remedy is selected for the Site which results in any hazardous substances, pollutants or contaminants remaining at the Site, EPA shall, consistent with Section 121(c) of CERCLA, review the remedial action no less often than each five years after the initiation of the final remedial action to assure that human health and the environment are being protected by the remedial action being implemented. If upon such review it is the judgment of EPA and MDNR that additional action or modification of the remedial action is appropriate in accordance with Section 104 or 106 of CERCLA, then EPA and MDNR shall require the DA to implement such additional or modified action.

#### XXV. OTHER CLAIMS

A. Nothing in this Agreement shall constitute or be construed as a bar or release from any claim, cause of action or demand in law or equity by or against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Site.

B. The EPA and MDNR shall not be held as a party to any contract entered into by the DA to implement the requirements of this Agreement.

C. Subject to Part VI, Statutory Compliance, this Agreement shall not restrict EPA or MDNR from taking any legal or response action for any matter not specifically part of the work covered by this Agreement.

#### XXVI. AMENDMENT OF THE AGREEMENT

This Agreement may be amended by the written agreement of all Parties hereto. Each such amendment shall be effective on the date such written agreement is signed by all Parties.

#### XXVII. PUBLIC PARTICIPATION

A. In accordance with Section 117 of CERCLA, 42 U.S.C. § 9617, before adoption of any plan for remedial action pursuant to this Agreement, DA shall:

1. Publish in a local newspaper or newspapers of

general circulation a notice and brief analysis of the proposed plan, including an explanation of the proposed plan and alternatives considered;

2. make such plan available to the public; and

3. provide a reasonable opportunity for a public meeting at or near the facility regarding the proposed plan and any proposed findings under Section 121(d)(4) of CERCLA, 42 U.S.C. § 9621(d)(4).

B. Before commencement of any remedial action, DA shall publish a notice of the final remedial action plan adopted and shall make available to the public the plan, a discussion of any significant changes and the reasons for the changes in the proposed plan, and a response to each significant comment, criticism, and new data submitted during the public comment on the proposed plan.

C. If the remedial action taken differs in any significant respects from the final plan which was adopted, DA shall publish an explanation of the significant differences and the reasons such changes were made.

D. The DA agrees to implement the Community Relations Plan (CRP) in a manner consistent with Section 117 of CERCLA, the NCP, EPA guidelines set forth in EPA's Community Relations Handbook, and any modifications thereto.

E. 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 two (2) business days before the issuance of such press

release and of any subsequent changes prior to release.

F. Within thirty (30) days of the effective date of this Agreement, the DA shall establish and maintain an Administrative Record, which will include an index of all documents contained therein, at or near the Site in accordance with Section 113(k) of CERCLA. The Administrative Record shall be established and maintained in accordance with current and future EPA policy and guidelines. A copy of each document placed in the Administrative Record will be provided to the EPA and MDNR as they are generated. An updated index of the documents in the Administrative Record shall be provided to EPA and MDNR on at least a quarterly basis.

G. DA shall follow the public participation requirements of CERCLA Section 113(k) and comply with any guidance and/or regulations promulgated by EPA with respect to each Section.

#### XXVIII. PUBLIC COMMENT ON AGREEMENT

A. Within fifteen (15) days of the date EPA receives a fully executed copy of this Agreement, EPA shall announce the availability of the Agreement to the public for review and comment and shall accept comments from the public for a period of forty-five (45) days after such announcement. Upon completion of the public comment period, EPA shall promptly provide copies of all comments received to DA and MDNR.

B. Upon completion of the public comment period, each of the Parties shall review the comments and shall determine either that:

1. The Agreement should be made effective in its present form; or

2. modification of the Agreement is necessary.

C. Any Party that determines modification of the Agreement is necessary shall provide a written request for modification to each of the other Parties. This request for modification shall be made within twenty (20) days of the date that Party received copies of the comments from EPA, or, in the event EPA requests modification, within twenty (20) days of the date copies of the comments were provided to the other Parties. The request for modification shall include:

1. A statement of the basis for determining the modification is necessary; and

2. proposed revisions to the Agreement addressing the modification.

D. If no request for modification is made within the time period specified in Paragraph C above, this Agreement shall be made effective in its present form in accordance with Part XXXVI hereof.

E. If any Party requests modification of the Agreement as provided above, the Parties shall meet to discuss the proposed modification. If the Parties agree on the modification, the Agreement shall be revised, in writing, in accordance with the agreed upon modification. The revised Agreement shall be signed by representatives of each Party and shall be made effective in accordance with Part XXXVI hereof. If the Parties are unable to agree upon such modifications, any Party reserves the right to

withdraw from the Agreement. Before any Party exercises its right to withdraw from the Agreement, it shall make its SEC representative, as identified in Paragraph XI.E. hereof, available to meet with the other Parties' SEC representatives to discuss the withdrawal.

F. In the event of significant modification of the Agreement after public comment, notice procedures of Sections 117 of CERCLA and 211 of SARA shall be followed and a responsiveness summary published by the EPA.

#### XXIX. DEADLINES

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

1. Conceptual Program Plan
2. Report on Surface Investigation of Specific Training Areas
3. Remedial Investigation Work Plans, Including Sampling and Analysis Plans and a QAPP
4. Remedial Investigation Reports, including Risk Assessments
5. Pipeline Sampling Report
6. Feasibility Study Work Plans
7. Feasibility Study Reports
8. Proposed Plans
9. Records of Decision
10. Operable Unit Work Plans and Reports

## 11. Community Relations Plan

Within fifteen (15) days of receipt, EPA, in conjunction with MDNR, shall review and provide comments to the DA regarding the proposed deadlines. Within fifteen (15) days following receipt of the comments the DA 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 proposed deadlines, the finalized deadlines shall be incorporated into the appropriate Work Plans. If the Parties fail to agree within thirty (30) days on the proposed deadlines, the matter shall immediately be submitted for dispute resolution pursuant to Part XI of this Agreement.

The final deadlines established pursuant to this Paragraph shall be published by U.S. EPA, in conjunction with MDNR.

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

1. Remedial Design Workplans
2. Final Remedial Designs
3. Remedial Action Work Plans
4. Remedial Action Reports

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

C. The deadlines set forth in this Part, or to be established as set forth in this Part, may be extended pursuant to Part XII 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.

D. Within twenty-one (21) days after the effective date of this Agreement, the DA shall provide target completion dates for secondary documents required pursuant to Part X.D. during the RI and FS processes. Target dates for secondary documents are not subject to Parts XI, XII, XXX and XXXI of this Agreement and may be adjusted by DA after consultation with EPA and MDNR.

### XXX. 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 operable unit or final remedial actions, including corresponding timetables, deadlines or schedules, and all work



associated with the operable unit 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 Part XI of this Agreement which establishes a term, condition, timetable, deadline or schedule shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such term, condition, timetable, deadline or schedule will be subject to civil penalties under Sections 310(c) and 109 of CERCLA.

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

C. Nothing in this Agreement shall be construed as a restriction or waiver of any rights the U.S. EPA or MDNR may have under CERCLA, including but not limited to any rights under Sections 113 and 310, 42 U.S.C. §§ 9613 and 9659. The DOD does not waive any rights it may have under CERCLA Section 120, SARA Section 211 and Executive Order 12580.

D. The Parties agree to exhaust their rights under Part XI, Resolution of Disputes, prior to exercising any rights to judicial review that they may have.

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

#### XXXI. STIPULATED PENALTIES

A. In the event that the DA 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 operable unit or final remedial action, U.S. EPA may assess a stipulated penalty against the DA. 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 DA has failed in a manner set forth in Paragraph A, U.S. EPA shall so notify the DA in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the DA 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 DA 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 DA 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 Part shall be payable to the Hazardous Substances Response Trust Fund only in the manner and to the extent expressly provided for in Acts authorizing funds for, and appropriations to, the DOD.

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

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

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

H. In the event that the Army fails to pay any stipulated penalty as provided hereunder based upon the lack of appropriated

or authorized funds, the Army shall do the following:

1. Inform EPA and MDNR of the specific basis for failure to pay; and,
2. request funding for such stipulated penalties by submitting requests for appropriation and authorization of funds for the payment of the penalties in the first annual budget request following the assessment through the Department of Defense budgetary process.

I. The stipulated penalties, if any, assessed pursuant to this Section against the Army are payable by the Army only to the U.S. EPA. The U.S. EPA and MDNR agree, to the extent permitted by law and the doctrine of Federal Sovereign Immunity, and to the extent the purpose of this Agreement is furthered as determined jointly by the U.S. EPA and MDNR, to share any stipulated penalty paid by the Army pursuant to this Section between the Hazardous Substances Response Trust Fund and the Missouri Hazardous Waste Remedial Fund.

#### XXXII. 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 DA; 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 DA shall have made timely request for such funds as part of the budgetary process as set forth in Part XXXIII (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.

#### XXXIII. FUNDING

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

B. In accordance with Section 120(e)(5)(B) of CERCLA, 42 U.S.C. § 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.

C. Any requirement for the payment or obligation of funds, including stipulated penalties, by the DA established by the

terms of this Agreement shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted.

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

E. Funds authorized and appropriated annually by Congress under the "Environmental Restoration, Defense" appropriation in the Department of Defense Appropriation Act and allocated by the Deputy Assistant Secretary of Defense (Environment) to the DA 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 year to meet the total DA CERCLA implementation requirements, the DOD shall employ and the DA 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.

#### XXXIV. REIMBURSEMENT OF STATE EXPENSES

A. Subject to the conditions and limitations set forth in this Part and Part XXXIII, Funding, the Army agrees to request funding and to reimburse the Missouri Department of Natural Resources (MDNR) for all reasonable costs it incurs in providing services, which are not inconsistent with the National Contingency Plan (NCP) and are in direct support of the Army's environmental restoration activities pursuant to this Agreement at the Weldon Spring Ordnance Works (WSOW).

B. Reimbursable expenses shall include only actual expenditures incurred in providing the following assistance at WSOW.

1. Timely technical review and substantive comment on reports or studies which DA prepares in support of response actions and submits to the MDNR;

2. Identification and explanation of State requirements applicable in performing response actions, especially State applicable or relevant and appropriate requirements (ARARS);

3. Field visits to ensure that cleanup activities are implemented in accordance with appropriate State requirements, or in accordance with conditions agreed upon between MDNR and WSOW.

4. Support and assistance to WSOW in the conduct of public participation activities in accordance with federal and State requirements for public involvement;

5. Participation in the review and comment functions of the WSOW Technical Review Committee.

C. In the event that the State of Missouri or the MDNR contracts for services to be provided at WSOW that are of the same

type performed within MDNR or another State agency, the reimbursable costs for that service shall be limited to the amount that MDNR or such other State agency would have expended if it had performed the service in-house. Neither interest nor profit shall be payable, nor shall costs for any services performed prior to the effective date of this Agreement be reimbursable.

D. The Army shall not be responsible for reimbursing the State for any costs incurred in the implementation of this Agreement in excess of one percent (1%) of the Army's total lifetime Defense Environmental Restoration Account (DERA) eligible project costs incurred through construction of the remedial actions at WSOW. The total lifetime DERA-eligible project costs are currently estimated to be \$26,550,000 over the life of the Agreement. Total reimbursable costs payable during any Federal fiscal year following the effective date of this Agreement shall not exceed twenty-five percent of the total lifetime reimbursable costs. The Army estimate of total DERA eligible project costs provided in this Paragraph shall be reviewed by the Army and MDNR two years after this Agreement takes effect, or more frequently as mutually agreed to by those Parties. The purpose of this review shall be to determine on the basis of significant upward or downward revisions in the Army estimate, whether an adjustment of either the lifetime or annual cost reimbursement ceiling is appropriate for any subsequent year. This review shall in any event not occur more frequently than once annually. The decision to review the project cost estimate prior to the two year point



shall not be subject to any dispute resolution procedures. Other disagreements as to the appropriateness or amount of change in these three figures shall not be subject to the dispute resolution procedures of Section XI, but will be resolved in accordance with the procedures set forth in Paragraph F., below.

E. Within thirty (30) days after the end of each quarter of the Federal fiscal year, the State of Missouri shall submit to the Army through WSOW an accounting of all State costs actually incurred during that quarter in providing services under this Part. Such accounting shall be accompanied by cost summaries which set forth employee hours and other expenses by major type of support service. All costs must be for work directly related to implementation of this Agreement, be supported by documentation which meets federal auditing requirements, and not inconsistent with the requirements described in OMB Circulars A-87 (Cost Principles for State and Local Governments) and A-128 (Audits for State and Local Cooperative Agreements with State and Local Governments) and Standard Forms 424 and 270. The Army has the right to audit cost reports used by the State to develop the cost summaries. Subject to subparagraph F below, the Army will, upon timely receipt of properly presented and documented accountings, pay the allowable portion of such accounting within ninety (90) days of proper presentation.

F. In the event that the Army contends that any costs set forth in the accounting provided pursuant to subparagraph E above are not properly payable, or if the Army and the MDNR have any other dispute concerning cost reimbursement, including any disa-

greement over a cap over future annual or lifetime cost reimbursement, the matter shall be resolved through a bilateral dispute resolution process as follows:

1. The WSOW Project Manager and the MDNR Project Manager shall be the primary points of contact to coordinate resolution of disputes arising under this Part.

2. If the WSOW Project Manager and the MDNR 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 MDNR as soon as practicable, but in any event, within five (5) working days.

3. Should they be unable to agree within ten (10) working days, the matter shall be elevated to the MDNR Director and the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health), Office of the Assistant Secretary of the Army (Installations, Logistics and Environment) (DASA-ESOH).

4. It is the intention of the Army and the State that all disputes shall be resolved in this manner. The use of alternative dispute resolution is encouraged. In the event the MDNR Director and the DASA-ESOH are unable to resolve a dispute, the State retains all of its legal and equitable remedies to recover its costs.

- G. The State agrees to maintain accounting records sufficient to identify and support all claimed expenses for support services provided at WSOW for a period of ten (10) years from the

termination date of this Agreement. The State agrees to provide the Army or its designated representative reasonable access to all such financial records for the purpose of audit for a period of ten (10) years from the termination date of this Agreement.

H. As of April 1 of each year, the State shall submit to the Army a budget estimate for projected costs for activities reimbursable under this Agreement for the following Federal fiscal year in the same level of detail as the billing documents.

I. The State agrees to seek reimbursement for its expenses solely through the mechanisms established in this Part, and reimbursement provided under this Part shall be in settlement of any claims for State response costs relative to the Army's environmental restoration activities at WSOW.

#### XXXV. TERMINATION

The provisions of this Agreement shall be deemed satisfied and terminated upon receipt by the DA of written notice from EPA and the MDNR Director that the DA has demonstrated, to the satisfaction of the EPA and MDNR Director, that all the terms of this Agreement have been completed.

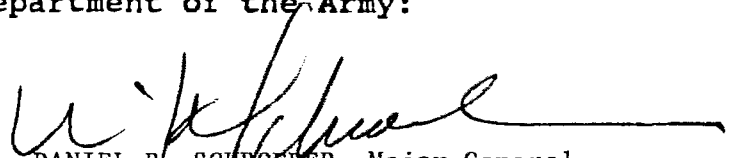
#### XXXVI. EFFECTIVE DATE

This Agreement is effective upon issuance of a notice to the Parties by EPA following implementation of Part XXVIII of this Agreement.

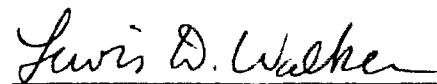
IN WITNESS WHEREOF, the parties have affixed their signatures below:

For the United States Department of the Army:

28 APR 1990  
Date

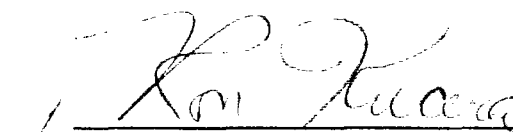
  
DANIEL R. SCHROEDER, Major General  
Commander, U.S. Army Engineer Center  
and Fort Leonard Wood

6/6/90  
Date

  
Deputy Assistant Secretary of the Army  
(Environment, Safety and Occupational  
Health) OASA (I,L,&E)

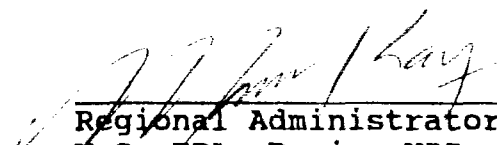
For the Missouri Department of Natural Resources:

7/25/90  
Date

  
Director, Missouri Department of  
Natural Resources

For the U.S. Environmental Protection Agency

8-7-90  
Date

  
Regional Administrator  
U.S. EPA, Region VII