

IAG COVER SHEET

FILE NAME: **Aberdeen.pdf**

Title: **Aberdeen Proving Ground, APG, (Edgewood Area + Michaelsville Landfill)**

Subject: **Region 3, III**

Author: **Army, DoD, Maryland, MD**

Keywords: **3/27/90, 1990, FY90**

AGREEMENT

ABERDEEN PROVING GROUND



FEDERAL FACILITY



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guidance and policy, and applicable federal and state laws and regulations;

1.1.3 Ensure integration and consolidation of requirements and activities delineated by this Agreement and the Corrective Action portion of APG's RCRA permit; and

1.1.4 Facilitate cooperation, exchange of information, and participation of the Parties in such actions.

1.2 Specifically, the purposes of this Agreement are to:

1.2.1 Identify Accelerated Operable Unit (AOU) alternatives which are appropriate at the Site prior to the implementation of final remedial action(s) for the Site. AOU alternatives shall be identified and proposed to the other Party as early as possible prior to formal proposal of AOU's, Section 20. This process is designed to promote cooperation among the Parties in identifying AOU alternatives prior to selection of final remedial actions;

1.2.2 Establish requirements for the performance of Remedial Investigations (RIs) 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 Feasibility Studies (FSs) for the Site to identify, evaluate, and select alternatives for the appropriate remedial actions(s) to prevent, mitigate, or abate the release or threatened release of hazardous substances, pollutants, or contaminants at the Site in accordance with CERCLA and applicable state law;

1.2.3 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 and applicable state law;

1.2.4 Implement the selected response action(s) in accordance with CERCLA and applicable state law and meet the requirements of CERCLA Section 120(e)(2), 42 U.S.C. §9620(e)(2), for an interagency agreement between the Parties;

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

1.2.6 Coordinate response actions at the Site with the mission and support activities at Aberdeen Proving Ground;

1.2.7 Expedite the cleanup process to the extent consistent with protection of human health and the environment;

1.2.8 Afford the State of Maryland the opportunity to participate in the planning and selection of the remedial actions including, but not limited to, reviewing all applicable data, studies, reports, and action plans prepared pursuant to this Agreement, in accordance with CERCLA Section 121, 42 U.S.C. §9621; and

1.2.9 Provide for operation and maintenance of the response actions selected and implemented pursuant to this Agreement.

2. DEFINITIONS

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

2.1 "Accelerated Operable Unit" or "AOU" shall mean a Remedial Action which prevents, controls, or responds to a release or threatened release of hazardous substances, pollutants, and contaminants where prompt action is necessary but a response under removal authorities is not appropriate or desirable. The purpose of an AOU is to allow the Parties to proceed with a remedial action for that Operable Unit, portion of a Study Area, or other similar part of a total remedial action prior to completion of the ROD for the total remedial action. AOU's are particularly appropriate where the size and complexity of the total remedial action would seriously delay implementation of independent parts of the action. AOU's will only proceed after complying with applicable procedures in the NCP, but in identifying the AOU's the Parties will be committing to make every effort to expedite those procedures. It is not intended for AOU's to diminish the requirements for or to delay the conduct of a total remedial action.

2.2 "Agreement" shall mean this document and shall include all attachments to this document referred to herein. All such attachments shall be appended to and made an integral and enforceable part of this Agreement.

2.3 "APG" shall mean Aberdeen Proving Ground, Department of the Army, its successors and assigns. Included within this definition are tenant activities located on the Post as well as lessees of Post property. This definition is not intended to limit the liability of any lessee not an agency of the Department

of the Army who is a potentially responsible party under CERCLA, Section 107(a).

2.4 "ARARs" shall mean "legally applicable" or "relevant and appropriate" standards, requirements, criteria, or limitations as those terms are used in CERCLA Section 121(d)(2), 42 U.S.C. §9621(d)(2), and the NCP.

2.5 "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499, and any amendment thereto.

2.6 "Corrective Action Permit" shall mean the Corrective Action portion of the RCRA Permit (MD3 21 002 1355 and any modifications) issued to the Department of the Army for APG by the EPA on September 26, 1986, and reissued on September 26, 1988.

2.7 "Days" shall mean calendar days, unless business days are specified. Any submittal that under the terms of this Agreement would be due on a Saturday, Sunday, or federal holiday, shall be due on the following business day.

2.8 "EPA" shall mean the United States Environmental Protection Agency, its successors and assigns.

2.9 "Focused Feasibility Study" or "FFS" shall mean a comparison of alternatives which concentrates on a particular contaminated media or a discrete portion of the Site which does not need added investigation in order to progress forward in the remedial process.

2.10 "Guidance" shall mean any requirements or policy directives published by EPA which are of general application to environmental matters and which are otherwise applicable to APG's work under this Agreement.

2.11 "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300, and any amendment thereto.

2.12 "National Priorities List Areas" or "NPL Areas" shall mean those areas of the Site included on the National Priorities List, 40 C.F.R. Part 300, App. B, as further described in the Hazard Ranking Packages used to support the listing of such Site to the NPL.

2.13 "Operable Unit" or "OU" shall mean a discrete part of the entire response action that decreases a release, threat of release, or pathway of exposure. The Operable Unit concept is flexible, and can refer to geographical or functional subdivisions of the entire response and is intended to be consistent with any definition of OU in the NCP. The term is not intended to refer to the term "operating unit" as used in RCRA.

2.14 "Parties" shall mean APG and EPA.

2.15 "Post" shall mean Aberdeen Proving Ground, including the Edgewood Arsenal area, located in Harford and Baltimore Counties, Maryland, and including all areas identified in Attachment 1. This definition is for the purpose of describing a geographical area and not a governmental entity.

2.16 "RCRA" shall mean 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, and any amendment thereto.

2.17 "Site" shall include the Post and any other area where a hazardous substance, hazardous waste, hazardous constituent, pollutant, or contaminant from the Post has been deposited, stored, disposed of, or placed, or otherwise come to be located. This definition is not intended to include hazardous substances or wastes intentionally transported from the Post by motor vehicle.

2.18 "Solid Waste Management Unit (SWMU)" shall mean any discernible unit at the facility from which hazardous wastes or hazardous constituents might migrate, irrespective of whether the unit was intended for the management of solid and/or hazardous waste.

2.19 "Study Area" shall mean those geographical areas listed in Section 6, and any additional Study Areas agreed to by the Parties in the future. When the Parties agree, Study Areas may expand or contract in size as information becomes available indicating the extent of contamination and the geographical area needed to be studied. A Study Area may contain more than one Operable Unit.

2.20 "To Be Considered" or "TBC" is any nonpromulgated advisory, criteria, or guidance developed by EPA, other Federal Agencies, or states that can be consulted along with or in addition to ARARs.

2.21 "Transmit" shall mean the following: any document or notice to be transmitted by a certain date will be considered as transmitted on time if: (1) it is provided to the carrier on a next day mail basis no later than the day before it is due to be delivered according to the requirements of this Agreement; (2) it

is hand-delivered by the due date; or (3) it is sent by certified mail return receipt requested no later than four days before it is due to be delivered according to the requirements of this Agreement. Any other means of transmission must arrive on the due date to be considered as timely delivered.

3. PARTIES BOUND

3.1 This Agreement shall apply to and be binding upon EPA and the Department of the Army through APG and upon all subsequent owners, operators, and lessees of the Post. APG will notify EPA of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection. This Section shall not be construed as an agreement to indemnify any person. APG shall provide copies of this Agreement to all contractors performing any work called for by this Agreement and condition performance of all such contracts on compliance with this Agreement.

3.2 Nothing in this Agreement shall limit the discretion of APG and EPA to enter into an agreement with any other potentially responsible party for the performance of a remedial investigation, feasibility study, or remedial action at or in the vicinity of the Post if APG and EPA agree that such party is qualified to do the work and remedial investigation, feasibility study, or remedial action activities will be done properly by such other party under the provisions of Section 120(e)(6) of CERCLA, 42 U.S.C. §9620(e)(6).

4. SCOPE OF AGREEMENT

4.1 This Agreement is intended to cover the investigation, development, selection, and implementation of response actions for all releases or threatened releases of hazardous substances, contaminants, hazardous wastes, hazardous constituents, or pollutants from the Site except as described in Subsection 4.2. This Agreement covers all phases of remediation for these releases, bringing together into one agreement the requirements for remediation as well as the system the Parties will use to determine and accomplish remediation, ensuring the necessary and proper level of participation by each Party. Although not all such releases at the Site are currently known, the Parties will establish the system for dealing with those undiscovered releases in this Agreement. To accommodate remediation of those undiscovered releases, the Parties will establish timetables and deadlines as necessary and as information becomes available and, if required, amend this Agreement as needed. For purposes of this Agreement, it is intended that all Study Areas listed in the Corrective Action Permit will be addressed by this Agreement.

4.2 This Agreement is intended to address APG's RCRA Corrective Action obligations which relate to the release(s) of hazardous substances, hazardous wastes, hazardous constituents, pollutants, or contaminants for all NPL Areas and all areas addressed as SWMUs and Study Areas under the Corrective Action Permit. This Agreement is not intended to limit any requirements under RCRA or any other law or regulation to obtain permits, and is not intended to affect the treatment, storage, or disposal by APG of accumulations of hazardous waste, or the substances subject to the Chemical Demilitarization Program Statute, 50 U.S.C. §1521. This Agreement is not intended to encompass response to spills of

hazardous substances from on-going operations unless those spills occur in conjunction with CERCLA removal actions or remedial actions pursuant to this Agreement.

5. JURISDICTION

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

5.1 EPA enters into those portions of this Agreement that relate to the remedial investigations/feasibility studies (RI/FSs) pursuant to Section 120(e)(1) of CERCLA, 42 U.S.C. §9620(e)(1), and Sections 6001, 3008(h), and 3004(u) and (v) of RCRA, 42 U.S.C. §6961, 6928(h), and 6924(u) and (v), and Executive Order 12580;

5.2 EPA enters into those portions of this Agreement that relate to remedial actions pursuant to CERCLA Section 120(e)(2), 42 U.S.C. §9620(e)(2), RCRA Section 6001, 3008(h), and 3004(u) and (v), 42 U.S.C. §6961, 6928(h), 6924(u) and (v), and Executive Order 12580;

5.3 APG enters into those portions of this Agreement that relate to the RI/FS pursuant to CERCLA Section 120(e)(1), 42 U.S.C. §9620(e)(1), RCRA Sections 3004(u) and (v), 3008(h), and 6001, 42 U.S.C. §6924(u) and (v), 6928(h), and 6961, Executive Order 12580, the National Environmental Policy Act (NEPA), 42 U.S.C. §4321, and, the Defense Environmental Restoration Program (DERP), 10 U.S.C. §2701, et. seq.; and

5.4 APG enters into those portions of this Agreement that relate to remedial actions pursuant to CERCLA Section 120(e)(2), 42 U.S.C. §9620(e)(2), RCRA Sections 6001, 3004(u) and (v), and

3008(h), 42 U.S.C. §6961, 6928(h), 6924(u) and (v), Executive Order 12580, and the DERP.

6. FINDINGS

6.0 For the purposes of this Agreement, the following constitutes a summary of the facts upon which this Agreement is based. The findings in this Section are based on knowledge and belief of facts that are known as of the time of entering into this Agreement. Investigations are ongoing, and information obtained as a result of such investigations may impact these facts as stated. None of the facts related herein shall be considered admissions by any Party. This Section shall not be admissible as evidence in any proceeding by any person, for any purpose, except a proceeding to enforce the terms of this Agreement.

6.1 Facility Description:

6.1.1 General: APG is a U.S. Army Test and Evaluation Command (USATECOM) installation within the U.S. Army Materiel Command (AMC). APG's missions and functions include weapons systems, rockets and missile systems, munitions and components. In addition, the U.S. Army's Chemical Research, Development, and Engineering Command (CRDEC), a tenant of APG at the Post, is involved in research of materials such as vesicants (blister agents), riot control agents (tear gas), and nerve agents. In addition to research, development, testing, and evaluation functions, the installation manages hazardous wastes generated by the various operating activities.

The Post is located on the shores of the upper Chesapeake Bay, west side, and is located in Southern Harford and Northeastern Baltimore Counties. The Post is situated on a 79,000 acre site,

over half of which is covered by water. Major water bodies within APG include Bush River, the Gunpowder River, and upper Chesapeake Bay. The installation is made up of the Aberdeen Area (AA) (north end) and Edgewood Area (EA) (south end), with Bush River separating the two (see Attachment 1). The AA was established as Aberdeen Ordnance Proving Ground in 1918. The Area contains primarily firing ranges, impact areas, and vehicle test tracks. Edgewood Arsenal was established in 1917 and soon became the site of the Chemical Warfare School. Later, Edgewood was designated the Chemical Warfare Center. In addition to ranges and impact areas, the EA has been the site of research programs, extensive chemical warfare manufacturing operations (particularly during World Wars I and II), and related test and disposal operations. Many of these are no longer in operation. The greater portion of the Post (80-85%) is composed of vehicular testing and ballistic test and impact areas.

6.1.2 Impact of the Past Mission and Disposal Actions:

The types of activities listed above, and the various operations needed to support these activities (including disposal operations), have yielded a number of SWMUs at the Post. Some of the SWMUs contain materials which are releasing pollutants, hazardous constituents, or hazardous substances to the environment. Releases may be occurring at additional SWMUs at sites such as construction debris/sanitary landfills, incinerators, wastewater treatment plants, white phosphorous disposal areas, former burn areas, ordnance or chemical agent disposal sites, range areas, or former chemical munitions manufacturing sites. Subsections 6.1.2.1 through 6.1.2.2 list and describe the major known areas of concern at the Post.

6.1.2.1 Edgewood Area (See Attachment 1 for locations on the Peninsula.) Study Areas in this area are

described below. Each Study Area may be the site of multiple Operable Units.

6.1.2.1.1 Canal Creek: This area (approximately 700 acres) is defined as the area surrounding both branches of Canal Creek. In the past, manufacturing operations were conducted here which produced chloropicrin, phosgene, levenstein mustard, and chlorine containing chemical warfare agents. Phosgy water evaporation ponds were located in this area. The area was also used for the production (filling) of white phosphorous. Excavation activities indicate white phosphorous remains underground where the filling plants were once located. Numerous land disposal units are known to exist in the area. A landfill is also known to be present in the area; the volume and types of materials placed into the disposal units and landfill area have not been determined. Although the precise boundaries of the disposal units and landfill have not been established, the general locations of some are known. The Canal Creek Area also includes the location of the recently closed pilot plant (Bldg #E-5625).

6.1.2.1.2 Old O-Field: This is a former disposal area where large quantities of allied and enemy munitions were buried, burned, and detonated after World War II. Major agents include mustard, lewesite, CN (tear agent), and adamsite. Large quantities of white phosphorous were also placed in the field. Locations of six separate pits where munitions were buried have been identified. Most of the material buried here is considered unstable. Ground and surface water contamination have been found in the area.

6.1.2.1.3 J-Field: J-Field was used for the disposal of many types of chemical agents and chemical-filled munitions. Agents and munitions disposed of include 250 kilogram

bombs, white phosphorous-filled munitions, adamsite, napalm, and mustard-filled ton containers. The Field may also contain explosive, incendiary, and chemical filled munitions due to its proximity to firing range impact areas and its use as a chemical agent rocket test site during the Korean and Vietnam conflicts. Four separate disposal site/burn pits have been identified at this location.

6.1.2.1.4 Carroll Island: Carroll Island covers an area of approximately 850 acres and was used for open air testing of chemical agents from 1951 through 1972. The tests were conducted at a number of sites on the eastern portion of the Island. The test sites include several test grids, a wind tunnel, spray grids, and small buildings. Burning pits and small dump areas were used for disposal of wastes from testing operations. These sites are believed not to have been used for bulk disposal of chemical material. The major types of chemical agents involved in the tests were anticholinesterase agents, incapacitating agents, riot control agents, and signaling smoke. Eight of the units are land disposal units (surface and subsurface); the other is believed to have been a test chamber located near the tip of Carroll Point.

6.1.2.1.5 Graces Quarters: This area is a peninsula which covers approximately 890 acres and was the site of chemical agent and biological stimulant testing from World War II through 1969. In addition, it may have been used as a site for chemical agent disposal during the 1940s. To date only limited information has been found which describes testing activities and location and operation of suspected burial pits. Monitoring wells have been installed in the area. At least five types of chemical agents are believed to have been tested in Graces Quarters, including nerve agents, mustard gas, incapacitating agents, experimental lethal agents, and blister agents. Previous analyses

indicate that some surface residuals may be present and that some subsurface contamination may have occurred. Recent site investigations identified isolated areas having minor amounts of solid wastes on the surface, and an area of vegetative growth indicating an area once disturbed, but now in the process of recovery.

6.1.2.1.6 Westwood Area: The Westwood Area, which covers an area of approximately 523 acres, is located at the northernmost portion of Gunpowder Neck in the Edgewood Area of APG. The area was formerly the site of bomb drop-test target areas and a static test area for white phosphorous bombs and grenades. The materials known to have been tested include napalm, pyrotechnics, blister agents, and white phosphorous. A spill of radioactive tantalum is reported to have occurred and subsequently was cleaned up. An active solid waste landfill covering approximately 40 acres is permitted to receive only rubble and asbestos wastes. The Westwood Area is part of the Reardon Inlet drainage basin. Past surface water monitoring in Reardon Inlet indicated concentrations of some contaminants in excess of existing regulatory standards.

6.1.2.1.7 Bush River: Established in 1931, the Bush River Area has been used for chemical storage, including storage of lethal, riot control, and incapacitating agents, as well as associated disposal, handling, remanufacture, and maintenance for those materials. The area consists mostly of open storage yards, warehouses, and igloos. Additionally, since the late 1950s, a dedicated facility has been used for radioactive waste material handling. The radioactive waste material is processed, packaged, and temporarily stored prior to disposal at off-Site locations. Currently, the area is used to store chemical materials and waste to include methylphosphonic dichloride, drummed contaminated soil, and decontamination liquids from ton

container clean outs. The area is part of the King and Lauderick Creeks and Bush River drainage basins. SWMUs associated with the area include munitions disposal pits, open burning pits, drum disposal sites, landfills, incinerators, and septic tanks. The area was also the main receiving area for liberated chemical-filled munitions from the two world wars. Reportedly, leaking mustard and GA-filled bombs were off-loaded from the U.S.S. Francis L. Lee after World War II and stored in a grassy area adjacent to 26th Street. It is believed that all spilled leaking materials would have been decontaminated during this time.

6.1.2.1.8 Nike Site: The U.S. Army Chemical School was located at the Nike Site from 1920-1951. It served as the primary field training area used by the Chemical School. Various portions were designated as school fields. As school fields, training involved a wide variety of chemical warfare training which included use and firing of chemical ordnance and grenades, identification of chemical agents, decontamination of personnel and equipment, clothing impregnating and laundering, and handling and service of chemical warfare containers (e.g. bulk ton containers). Also, instruction may have been given on disposal of chemical agent, ordnance, and contaminated material. A Nike missile battery was constructed at the site during the 1950s. A large number of unexploded ordnance were uncovered during the construction including liquid-filled projectiles and smoke pots. The Nike Site consisted of the battery control area, the launch area, and the barracks area. The site was active until 1973. Each area had its own sanitary waste water disposal system which consisted mainly of a sand filter bed and septic tank. Currently, the Maryland National Guard uses the area for helicopter flying, parachute drops, headquarters building, and obstacle course. Current ground water monitoring has detected the presence of low levels of volatile organic contaminants.

6.1.2.1.9 Other Edgewood Areas: This Study Area includes all SWMUs in the Edgewood Area not included in Subsections 6.1.2.1.1 through 6.1.2.1.8. It is currently believed that some potential units may not have been identified or that documentation is incomplete. The identified SWMUs and areas include but are not limited to storage and treatment tanks, New O-Field, Lauderick Creek Area, Fire Department hot drill site, silent glow incinerator, and the animal carcass and classified waste incinerators.

6.1.2.2 Aberdeen Area (See Attachment 1 for specific locations.) Study Areas in this area are described below. Each Study Area may be the site of multiple Operable Units.

6.1.2.2.1 Michaelsville Landfill: This sanitary landfill, which is located in the Romney Creek drainage area, was in operation during the 1970's and closed December 31, 1980. During its active period, the landfill received household garbage and refuse from the installation. In addition, there are reports of pesticide containers, animal manure, sewage sludge, swimming pool paint, asbestos shingles, solvents, waste oil, grease, and PCB transformer oil possibly being disposed of at this unit. The landfill was a trench and fill operation with daily cover. Originally, the trenches were excavated to approximately 16 feet below grade; however, it was discovered that the bottom of the trench was below the water table and the excavation depth was subsequently raised.

6.1.2.2.2 Phillips Field Disposal Area: The Phillips Field disposal area consists of the active Phillips Field Landfill, Disposal Areas 1 through 4, and two grease pits. These seven disposal areas are located in the upper portion of the Romney Creek drainage basin and are adjacent to each other. The

Phillips Field disposal area is considered a single solid waste management unit at this time because some of the disposal area's boundaries overlap or are within close proximity to other areas, and because the exact location of some cannot be determined. The following describes the assumed location of the disposal areas in relation to the existing Phillips Field Landfill. Disposal Area 1 is located to the east southeast. Disposal Area 2 is to the east. Disposal Area 3 is also east but is near the Hunting Check Station (Building 560). Disposal Area 4 is located north northeast. The two grease-pits are located adjacent to Phillips Field Landfill. The active Phillips Field Landfill is a construction debris landfill. The landfill is on top of an older landfill. The older landfill, which may contain general refuse, is reported to be approximately 16 feet deep. The older landfill is unlined and contains approximately 260,000 cubic yards of material. The amount of material contained in the active landfill is unknown. Disposal Area 1 is a closed landfill. Disposal Area 2 is an old borrow pit that has been intermittently filled since the 1950s. Disposal Area 3 contains refuse burning pits that were used from the 1960s to 1970. The residue from burning the refuse was reportedly buried nearby. Disposal Area 4 is a landfill that was used from approximately 1951 to 1967. The two grease-pit areas were used until mid-1980. Their intended use was for the collection and disposal of oil and fats from the installation kitchens. These pits were reportedly used for any type of oily waste which might have included solvents and transformer oil. The pits were originally 13 feet deep and in an attempt to close the pits, a waste material was added to the pits to absorb the grease. The pits were pumped out in mid 1980 as grease and oil, then covered over. The Phillips Field disposal area is closer to Aberdeen's well field than is the Michaelsville Landfill.

6.1.2.2.3 White Phosphorous Burial Sites:

This unit consists of approximately 15 acres located in the

Chesapeake Bay between the Mulberry Point Dock and Black Point, near Mosquito Creek. It has been reported that munitions were buried under two feet of soil; currently the depth of water (exclusive of tidal and storm effects) is approximately three feet deep. The area is within the restricted water boundary of APG. There have been no reports of releases or adverse impacts associated with the unit to date.

6.1.2.2.4 Other Aberdeen Areas: These areas include all SWMUs in the Aberdeen Area not included in Subsections 6.1.2.2.1 through 6.1.2.2.3. The identified SWMUs include but are not limited to the Fire Fighting Training Area, Kirk Incinerator, Shell Washout Facility, settling tanks, Disposal Areas 5, 6, 7, 8, 9, 10, and 11, and Melt Load Facility. Because of the current lack of details, additional information is being gathered concerning the above and any other SWMUs in the AA thus far identified.

6.2 History of Related Actions:

6.2.1 U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) Action: The Installation Restoration Program (IRP) was developed by the Department of Defense (DOD) as a means to identify the locations and contents of past disposal sites and to eliminate the hazards to public health in an environmentally responsible manner at DOD facilities. The IRP is a four phase program including: (a) problem identification, (b) confirmation, (c) technology development, and (d) planning and implementation of appropriate control measures. The IRP closely parallels the CERCLA program. Prior to 1983 the key agency in executing these actions at APG was USATHAMA. Some of the principal reports completed by USATHAMA under the IRP are identified below:

1. Installation Assessment of Aberdeen Proving Ground -
Records Evaluation Report No. 101, September 1976, Department of
the Army, Chemical Demilitarization and Installation Restoration
Program

2. Installation Assessment of Aberdeen Proving Ground -
Aberdeen Area Report No. 301, February 1981, U.S. Army Toxic and
Hazardous Materials Agency

3. Environmental Survey of the Edgewood Area of
Aberdeen Proving Ground, MD, January 1983, U.S. Army Toxic and
Hazardous Materials Agency, Aberdeen Proving Ground, MD

In 1983, APG took over management of IRP projects from USATHAMA.
At that time, APG initiated detailed ground water investigations
at several sites under interagency agreements with the U.S.
Geological Survey (USGS) and the U.S. Army Corps of Engineers
(COE). APG continues to manage the IRP.

6.2.2 CERCLA/RCRA Corrective Action Status: APG was
evaluated as a potential CERCLA (Superfund) NPL site during
1984-85. Michaelsville Landfill at the Aberdeen Area, and the
Edgewood Area were evaluated separately. In April 1985, EPA
published a Federal Register notice which proposed the Edgewood
Area and Michaelsville Landfill for inclusion on the National
Priorities List (NPL). EPA Region III regulates past releases
from SWMUs at APG through a RCRA corrective action permit issued
in September 1986, and renewed in September of 1988. The
Michaelsville Landfill was listed on the NPL on October 4, 1989.
The Edgewood Area was listed on the NPL on February 21, 1990.

7. EPA DETERMINATIONS

7.0 EPA has made the following determinations necessary to establish the jurisdictional basis of this Agreement and the authorities herein. None of the determinations herein shall be considered admissions by any Party. This Section shall not be admissible as evidence in any proceeding by any person, for any purpose, except a proceeding to enforce the terms of this Agreement.

7.1 There have been releases and a substantial threat of release of hazardous substances and hazardous waste and constituents at the Post.

7.2 The actions provided for in this Agreement are consistent with the NCP.

7.3 The actions provided for in this Agreement are necessary to protect the public health or welfare or the environment.

7.4 This Agreement provides for the expeditious completion of all necessary remedial actions.

7.5 APG is a Facility as defined by Section 101(9) of CERCLA, 42 U.S.C. §9601(9).

7.6 APG is a federal facility within the meaning of 42 U.S.C. §9620 and is subject to all guidelines, rules, regulations, and criteria in the same manner and to the same extent as other facilities, as specified in 42 U.S.C. §9620(a).

7.7 The United States is a person as defined by Section 101(21) of CERCLA, 42 U.S.C. §9601(21). The United States through the Department of the Army is the owner and operator of APG as

defined in Sections 101(20) and 107(a)(1) of CERCLA, 42 U.S.C. §9601(20) and 9607(a)(1). The Department of the Army is the agency of the United States charged with fulfilling the obligations of the owner/operator under CERCLA at APG.

8. CONSULTATION

Review and Comment Process for Draft and Final Documents

8.1 **Applicability:** The provisions of this Section establish the procedures that shall be used by the Parties to provide each other with appropriate notice, review, comment, and response to comments regarding documents (also referred to as reports) specified herein as either primary or secondary documents. In accordance with CERCLA Section 120, 42 U.S.C. §9620, and 10 U.S.C. §2705, APG will normally be responsible for issuing primary and secondary documents to EPA. 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 Subsections 8.2 through 8.10. The designation of a document as "draft" or "final" is solely for purposes of consultation with EPA in accordance with this Section. Such designation does not affect the obligation of the Parties to issue documents, which may be referred to herein as "final", to the public for review and comment as appropriate and as required by law.

8.2 General Process for Document Review:

8.2.1 Primary documents include those reports that are major, discrete portions of Remedial Investigation and Feasibility Study (RI/FS) and/or Remedial Design Remedial Action (RD/RA) activities. Primary documents are initially issued by APG in

draft subject to review and comment by EPA. Following receipt of comments on a particular draft Primary Document, APG will respond to the comments received and issue a draft final Primary Document subject to dispute resolution. The draft final Primary Document will become the final Primary Document either thirty (30) days after issuance if dispute resolution is not invoked or as modified by decision of the dispute resolution process.

8.2.2 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 APG in draft subject to review and comment by EPA. EPA shall submit its written comments to APG. Although APG will respond to comments received, the draft secondary documents may be finalized in the corresponding Primary Documents. A secondary document may be disputed at the time the corresponding draft final Primary Document is issued.

8.3 Primary Documents:

8.3.1 All Primary Documents shall be prepared in accordance with the NCP and applicable EPA guidance. APG shall complete and transmit draft reports for the following Primary Documents to EPA for review and comment in accordance with the provisions of this Section:

- (1) Statements of Work
- (2) RI/FS Work Plan, including Sampling and Analysis Plan, Quality Assurance Program Plan (QAPP), and plan for obtaining Site access agreements where applicable
- (3) Baseline Risk Assessment Work Plan

- (4) RI Reports
- (5) FS Reports including Focused FSs
- (6) Proposed Plans
- (7) Remedial Designs (Approximately 95% stage)
- (8) Remedial Action Work Plans
- (9) Baseline Risk Assessment
- (10) Community Relations Plan
- (11) Periodic Review Assessment Report
- (12) Supplemental Response Action Work Plans

8.3.2 For the Primary Documents identified above, only the draft final reports shall be subject to dispute resolution. APG shall complete and transmit draft Primary Documents in accordance with the timetable and deadlines established in Section 17, Deadlines.

8.4 Secondary Documents:

8.4.1 All secondary documents shall be prepared in accordance with the NCP and applicable EPA guidance. APG shall complete and transmit draft reports for the following secondary documents to EPA for review and comment in accordance with the provisions of this Section:

- (1) Detailed Analysis of Alternatives

- (2) Post-screening Investigation Work Plan
- (3) Treatability Studies
- (4) Sampling and Data Results
- (5) Design Documents (Approximately 30% and 60% stages)
- (6) Health and Safety Plans
- (7) Data Quality Objectives
- (8) Site Characterization Summary(ies)

8.4.2 Although EPA 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 Subsection 8.2. Target dates shall be established by mutual agreement of the Parties for the completion and transmission of draft secondary reports.

8.5 Meetings of the Project Managers on Development of Reports: The Project Managers shall be available to confer at least once each month. Any Party may request additional Project Manager conferences to review and discuss the progress of work being performed at the Site. Agreement to such additional meetings shall not be unreasonably withheld by either Party. Prior to preparing any draft report described above, the Project Managers shall meet to discuss the results to be presented in the report in an effort to reach a common understanding, to the maximum extent practicable, with respect to such results.

8.6 Identification and Determination of Potential ARARs:

8.6.1 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 confer to identify and propose, to the best of their ability, all potential ARARs pertinent to the report being addressed. The State is required to identify all potential State ARARs and To Be Considereds (TBCs) of which it is then aware, as required by CERCLA Section 121(d)(2)(A)(ii) and the NCP, which are pertinent to the report being considered. Draft ARAR determinations shall be prepared by APG in accordance with CERCLA Section 121(d)(2), 42 U.S.C. §9621(d)(2), the NCP, and pertinent guidance issued by EPA which is consistent with CERCLA and the NCP.

8.6.2 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 Record of Decision (ROD) is issued.

8.7 Review and Comment on Draft Reports:

8.7.1 APG shall complete and transmit each draft primary report to EPA on or before the corresponding deadline established for the issuance of the report. APG shall complete and transmit the draft secondary document in accordance with the target dates established for the issuance of such reports pursuant to Section 17, Deadlines. Upon request of EPA, APG shall provide a copy of any Army technical publication or other source referred to in the draft primary report.

8.7.2 Unless the Parties mutually agree in writing to another time period, all draft reports shall be subject to a sixty (60) day period for review and comment. Review of any document by EPA may concern all aspects of the report (including completeness) and should include, but not be limited to, technical evaluation of any aspect of the document, and consistency with CERCLA, the NCP, any pertinent guidance or policy issued by EPA, and with applicable state law. Comments shall be sufficiently specific to enable APG to 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 APG, EPA shall provide a copy of the cited authority or reference. In cases of complex or unusually lengthy reports, EPA may extend the sixty (60) day comment period for an additional thirty (30) days by written notice to APG prior to the end of the sixty (60) day period. On or before the close of the comment period, EPA shall transmit its written comments to APG.

8.7.3 Representatives of APG shall make themselves readily available to EPA 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 APG on the close of the comment period.

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

8.7.5 Following the close of the comment period for a draft report, APG shall give full consideration to all written comments on the draft report submitted during the comment period. Within sixty (60) days of the close of the comment period on a draft secondary report, APG shall transmit to EPA its written response to comments received within the comment period. Within sixty (60) days of the close of the comment period on a draft primary report, APG shall transmit to EPA a draft final primary report, which shall include APG's response to all written comments received within the comment period. While the resulting draft final report shall be the responsibility of APG, it shall be the product of consensus to the maximum extent possible.

8.7.6 APG may extend the sixty (60) day period for either responding to comments on a draft report or for issuing the draft final primary report for an additional thirty (30) days by providing written notice to EPA. In appropriate circumstances, this time period may be further extended in accordance with Section 18, Extensions.

8.8 Availability of Dispute Resolution for Draft Final Primary Documents:

8.8.1 Dispute resolution shall be available to the Parties for draft final primary reports as set forth in Section 16, Dispute Resolution.

8.8.2 When dispute resolution is invoked on a draft final primary report, work may be stopped in accordance with the procedures set forth in Section 16, Dispute Resolution.

8.9 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 the

completion of the dispute resolution process should APG's position be sustained. If APG's position is not sustained in the dispute resolution process, APG shall prepare, within forty-five (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 Section 18, Extensions.

8.10 Subsequent Modifications of Final Reports:

8.10.1 Following finalization of any primary report pursuant to Subsection 8.9, any 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 Subsections 8.10.2 and 8.10.3.

8.10.2 A Party may seek to modify a report after finalization if it determines, based on new information (i.e., information that became available, or conditions that became known, after the report was finalized) that the requested modification is necessary. A Party may seek such a modification by submitting a detailed written request to the Project Manager of the other Party. The request shall specify the nature of the requested modification and how the request is based on new information.

8.10.3 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.

8.10.4 Nothing in this Subsection shall alter EPA's ability to request the performance of additional work which was not contemplated by this Agreement. APG's obligation to perform such work must be established by either a modification of a report or document or by amendment of this Agreement.

8.11 APG intends to provide copies of all primary and secondary documents to the State of Maryland at the same time such documents are transmitted to EPA to allow for State opportunity to comment. EPA intends to confer with the State of Maryland with respect to those documents and during the implementation of this Agreement.

9. PROJECT MANAGERS

9.1 On or before the effective date of this Agreement, each of the Parties shall designate a Project Manager. The Project Manager shall be responsible on a daily basis for representing his Party in assuring proper implementation of all work performed under the terms of the Agreement. In addition to the formal notice provisions set forth in Section 13, Notice, communications among the Parties on all documents, including reports, comments, and other correspondence concerning the activities performed pursuant to this Agreement, shall, to the maximum extent practicable, be directed through the Project Managers.

9.2 The Parties may change their respective Project Managers. A Project Manager may designate a representative to act, on a temporary basis, in his stead. Such change or designation shall be accomplished by notifying the other Party, in writing, within five (5) days of the change or designation, and prior to the new Project Manager or representative exercising his authority.

9.3 Each Project Manager may designate up to five Deputy Project Managers from his agency to represent the Project Manager for specific projects. A Deputy Project Manager shall have responsibilities as detailed in Subsection 9.5, which will apply only to the specific projects to which he is assigned. The Deputy Project Manager shall also be responsible on a daily basis for representing his respective Project Manager in assuring proper implementation of work performed at the specifically assigned projects. The appointment of a Deputy Project Manager does not relieve the Project Manager of his responsibilities.

9.4 The Project Managers shall confer informally at least once each month. Any Party may request additional Project Manager conferences. Such request will not be unreasonably refused. Although APG has ultimate responsibility for meeting its deadlines or schedules, the Project Managers shall assist in this effort by scheduling meetings to review documents and reports, and to oversee the performance of all environmental monitoring at the Site, review RI/FS or RD/RA progress, attempt to resolve disputes informally, and make necessary and appropriate adjustments to deadlines or schedules in accordance with Sections 18 and 33.

9.5 The authority of the Project Managers, or their designated representatives, shall include, but is not limited to:

9.5.1 Taking samples and ensuring the types, quantities, and locations of the samples taken by APG are in accordance with the terms of any final Work Plan;

9.5.2 Observing, and taking photographs and making other reports on the progress of the work subject to the limitations set forth in Section 11, Access; and,

9.5.3 Reviewing records, files, and documents relevant to the work being performed, subject to Section 32, Preservation of Records.

9.6 Each Project Manager shall be responsible for assuring that all communications received from the other Project Manager are appropriately disseminated to and processed by the Party that each Project Manager represents.

10. QUALITY ASSURANCE

10.1 APG shall use quality assurance, quality control, and chain of custody procedures throughout all field investigation, sample collection, and laboratory analysis activities. A QAPP shall be submitted as a component of each Work Plan. QAPPs shall be prepared in accordance with applicable EPA guidance.

10.2 In order to demonstrate quality assurance and maintain quality control regarding all samples collected pursuant to this Agreement, APG shall submit with each RI/FS Work Plan all protocols to be used for sampling and analysis to EPA for review and comment. APG shall also ensure that any laboratory used for analysis is a participant in a quality assurance/quality control program that is consistent with EPA guidance.

10.3 APG shall also ensure that appropriate EPA personnel or their authorized representatives will be allowed access to any laboratory used by APG 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.

11. ACCESS

11.1 Without limitation on any authority conferred on EPA by statute or regulation, EPA, or its authorized representatives, shall have the authority to enter the Post at all reasonable times for purposes consistent with the provisions of this Agreement. Such authority shall include, but not be limited to: inspecting records, operating logs, or contracts related to the investigative and response work at APG, subject to Section 32, Preservation of Records; reviewing the progress of APG in carrying out the terms of this Agreement; conducting such tests as the Project Managers deem necessary; and verifying the data submitted to EPA. Such authority shall include EPA sampling and monitoring of any substances at any location on the Post, subject to Subsection 12.3. APG shall provide an escort whenever EPA requires access to restricted areas of APG for purposes consistent with the provisions of this Agreement. EPA shall provide reasonable notice to APG's Project Manager to request any necessary escorts. Before using any camera, sound, or other electronic recording device on APG, EPA shall notify its escort to make appropriate arrangements for their use.

11.2 The rights to access by EPA granted in Subsection 11.1 shall be subject to those regulations as may be necessary to protect national security. APG shall impose no greater or stricter restrictions upon EPA than are imposed upon contractors

performing work under this Agreement. Upon denying any aspect of access, APG shall provide an immediate explanation of the reason for the denial and, where possible, provide a recommendation for accommodating the requested access in an alternate manner. Within forty-eight (48) hours, APG shall also provide a written explanation for the denial if alternate access had not been provided at the time of the request. The Parties also agree that this Agreement is subject to CERCLA Section 120(j), 42 U.S.C. §9620(j), regarding the issuance of Site Specific Presidential Orders as may be necessary to protect national security.

11.3 All Parties with access to the Post pursuant to this Section shall comply with all health and safety related provisions of all applicable Health and Safety Plans for APG in accordance with Subsection 12.3.

11.4 To the extent that activities pursuant to this Agreement must be carried out on property not owned or controlled by APG, APG shall use its best efforts to obtain access agreements from the person(s) who owns or controls such other property. These agreements shall provide reasonable access for all Parties for the purposes of effectuating this Agreement. In the event that APG is unable to obtain such access agreements, APG shall notify EPA within five (5) days of access denial.

11.5 APG shall request the assistance of EPA where access problems arise. If requested, EPA will take reasonable steps to assist APG in gaining site access.

12. SAMPLING AND DATA AVAILABILITY

12.1 The Parties shall make all sampling results, test results, or other data, including computer modeling information

not subject to claims of trade secret or otherwise protected from disclosure by law or court order, generated through the implementation of this Agreement available to the other Party.

12.2 At the request of any Party, the other Party shall allow, to the extent practicable, split or duplicate samples to be taken by the requesting Party, or its authorized representatives, of any samples collected pursuant to the implementation of this Agreement. Each Party shall notify the other Party no fewer than fourteen (14) days in advance of any scheduled sample collection activity unless otherwise agreed upon by the Parties.

12.3 All sampling will be done in accordance with existing APG health and safety requirements and regulations. If sampling is required in an area without an appropriate site safety plan, EPA will develop the appropriate plan before conducting the sampling. APG's Safety Officer will review the plan within thirtyfive (35) days of its receipt and comment upon the plan. EPA and APG will jointly approve the plan. Any disputes regarding plan approval will be resolved in accordance with Section 16, Dispute Resolution.

13. NOTICE

13.1 Unless otherwise specified in writing, documents and notices shall be provided under this Agreement to the following addresses:

13.1.1 For APG: Commander
U.S. Army Aberdeen Proving Ground
Support Activity
ATTN: STEAP-SH-E (Mr. Stachiw)
Aberdeen Proving Ground, MD 21005

13.1.2 For EPA: U.S. EPA Region III
Attn: APG Project Manager (3HW26)
841 Chestnut Building
Philadelphia, PA 19107

14. PERMITS

14.1 The Parties recognize that under CERCLA Section 121(e)(1), 42 U.S.C. §9621(e)(1), no Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely within the Site, where such action is selected and carried out in compliance with CERCLA Section 121, 42 U.S.C. §9621. However, APG must satisfy all ARARs which would have been included in any such permit pursuant to Section 121(d) of CERCLA. This Section does not apply to activities outside the Scope of this Agreement.

14.2 When APG proposes a response action, other than an emergency removal action, to be conducted entirely on Site which in the absence of the permit waiver described in Subsection 14.1 would require a Federal, State, or local permit, APG shall include in a submittal to EPA:

14.2.1 Identification of each permit which would otherwise be required;

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

14.2.3 Explanation of how the response action proposed will meet the standards, requirements, criteria, or limitations identified in Subsection 14.2.2.

Upon request of APG, EPA will provide a written response with respect to Subsections 14.2.2 and 14.2.3, in accordance with Section 8.

14.3 This Section is not intended to relieve APG from any regulatory requirements, including but not limited to any requirements to obtain manifests or requirements to ship to a permitted facility, whenever APG proposes a response action involving the off-Site shipment of a hazardous substance or waste.

14.4 APG shall notify EPA in writing of any permits or other authorizations required for off-Site activities as soon as it becomes aware of the requirement. Upon request, APG shall provide EPA copies of all such permit applications and other documents related to the permit or authorization process.

14.5 Nothing in this Agreement shall be construed to affect APG's obligation to comply with its RCRA permit (MD3 21 002 1355 and its modifications) for RCRA operating or interim status units at the Post.

15. EMERGENCY RESPONSE ACTIONS

15.1 Notwithstanding any other provision of this Agreement, APG and EPA retain their respective rights, consistent with E.O. 12580, to conduct such emergency actions as may be necessary to alleviate immediate threats to human health or the environment from the release or threat of release of hazardous substances, pollutants, or contaminants at or from the Post. Such actions may be conducted at any time, either before or after the issuance of a ROD.

15.2 A Party conducting an emergency response action shall provide the other Party with oral notice as soon as possible after determining that an emergency action is necessary. In addition, within seven (7) days of such determination, the Party conducting the response shall provide written notice to the other Party explaining why such action is or was necessary. Promptly thereafter, the responding Party shall provide the other Party with the written bases (factual, technical, and scientific) for such action and any available documents supporting such action. Upon completion of an emergency action, the responding Party shall notify the other Party in writing that the emergency action has been implemented. Such notice shall state whether, and to what extent, the emergency action varied from the description of the action in the written notice provided pursuant to the second sentence of this Subsection. When appropriate, EPA will respond on Site to monitor response activities and to provide technical and material assistance where necessary.

16. DISPUTE RESOLUTION

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

16.2 Within thirty (30) days after: (1) issuance of a draft final Primary Document pursuant to Section 8, Consultation, or (2) any action which leads to or generates a dispute, the disputing Party shall submit to the other Party and the designated Dispute Resolution Committee (DRC) members 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.

16.3 Prior to any Party's issuance of a written statement of dispute, the disputing Party shall engage the other Party in informal dispute resolution among the Project Managers and/or their immediate supervisors. During this informal dispute resolution period the Parties shall meet as many times as are necessary to discuss and attempt resolution of the dispute.

16.4 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. EPA's representative on the DRC is the Associate Director, Office of Superfund, EPA's Region III. APG's designated member is the Commander, U.S. Army Test and Evaluation Command. Written notice of any delegation of authority from a Party's designated representative on the DRC shall be provided to the other Party pursuant to the procedures of Section 13, Notice.

16.5 The DRC shall have twenty-one (21) days after elevation of the dispute to unanimously resolve the dispute and issue a written decision. Elevation of a dispute occurs upon receipt by the Parties of a written statement of dispute. 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.

16.6 The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. EPA's representative on the SEC is the Administrator of EPA's Region III. APG's representative on the SEC is the Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health. The SEC members shall, as appropriate, confer, meet, and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, the written statement of dispute shall be forwarded to the EPA Administrator for resolution. At the same time, each Party may submit its written position on the dispute to the EPA Administrator.

16.7 Upon elevation of a dispute to the Administrator of EPA pursuant to Subsection 16.6, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the EPA Administrator shall meet and confer with APG's Secretariat Representative or his designated representative to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide APG with a written final decision setting forth resolution of the dispute. The duties of the Administrator set forth in this Section shall not be delegated.

16.8 The pendency of any dispute under this Section shall not affect any Party's responsibility for timely performance of the work required by this Agreement, except that the time period for completion of work affected by such dispute shall be extended for a period of time usually not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by

this Agreement which are not affected by the dispute shall continue and be completed in accordance with the applicable schedule.

16.9 When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Hazardous Waste Division Director for EPA's Region III requests, in writing, that work related to the dispute be stopped because, in EPA's opinion, such work is inadequate or defective, and such inadequacy or defect is likely to yield an adverse effect on human health or the environment, or is likely to have a substantial adverse effect on the remedy selection or implementation process. To the extent possible, EPA shall consult with APG prior to initiation of a work stoppage request. After stoppage of work, if APG believes that the work stoppage is inappropriate or may have potential significant adverse impacts, APG may meet with EPA to discuss the work stoppage. Following this meeting, and further consideration of the issues, the EPA Hazardous Waste Management Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the 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.

16.10 Within forty-five (45) days of resolution of a dispute pursuant to the procedures specified in this Section, APG 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.

16.11 Resolution of a dispute pursuant to this Section of the Agreement constitutes a final resolution of any dispute

arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section of the Agreement.

17. DEADLINES

17.1 The following deadlines have been established by the Parties for the submittal of draft Primary Documents pursuant to this Agreement:

17.1.1 Statement of Work: Within thirty (30) days of receipt of EPA's comments on initial documents which are identified in Attachment 2 or proposed AOU's, APG shall submit a draft Statement of Work (SOW). Each SOW will contain a deadline for submittal of an associated Work Plan or other appropriate Primary Document.

17.1.2 RI/FS Work Plans: APG shall submit a Work Plan, including a Sampling and Analysis Plan, QAPP, and, where necessary, a plan for obtaining access for each Operable Unit or AOU in accordance with the deadlines established in the SOW or the Work Plan.

17.1.3 Baseline Risk Assessment: Within thirty (30) days of the effective date of this Agreement APG shall submit to EPA a SOW for the Site-wide Baseline Risk Assessment.

17.2 In each Work Plan APG shall propose deadlines for completion of the following documents:

17.2.1 RI Reports

17.2.2 FS Reports including Focused Feasibility Studies

17.2.3 Proposed Plans

17.2.4 Community Relations Plan

17.2.5 Baseline Risk Assessment (for the Study Area)

EPA in conjunction with the State shall publish the finalized deadlines in accordance with CERCLA Section 120(e)(1), 42 U.S.C. §9620(e)(1).

17.3 Within thirty (30) days after the close of the public comment period on the Proposed Plan and consideration of comments received, APG shall submit a Draft ROD for review by EPA.

17.4 Within thirty (30) days of issuance of any ROD, APG shall submit a SOW which contains proposed deadlines for completion of the following documents:

17.4.1 Remedial Design

17.4.2 Remedial Action

17.4.3 Periodic Review Assessment Report (if appropriate)

EPA, in conjunction with the State, shall publish the finalized deadlines in accordance with CERCLA Section 120(e)(1), 42 U.S.C. §9620(e)(1).

17.5 The deadlines set forth in this Section, or to be established as set forth in this Section, may be extended pursuant

to Section 18, Extensions. The Parties recognize that one possible basis for extension of the deadlines for completion of the RI/FS Reports is the identification of significant new conditions during the performance of the remedial investigation.

18. EXTENSIONS

18.1 Either a timetable and deadline or a schedule shall be extended by either Party upon receipt of a request for an extension which occurs prior to the expiration of the affected timetable, deadline, or schedule and when good cause exists for the requested extension. Any request for extension by any Party shall be a notice submitted in writing and shall include:

18.1.1 The timetable and deadline or the schedule that is sought to be extended;

18.1.2 The length of the extension sought;

18.1.3 The good cause(s) for the extension and steps taken by that Party to mitigate, limit, or remedy the delay;

18.1.4 Relevant documentation including third party correspondence; and,

18.1.5 Any related timetable and deadline or schedule that would be affected if the extension were granted.

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

18.2.1 An event of force majeure;

18.2.2 A delay caused by another Party's failure to meet any requirement of this Agreement;

18.2.3 A delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;

18.2.4 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,

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

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

18.4 Within twelve (12) days of receipt of a request for an extension of a timetable and deadline or a schedule, the other Party shall advise the requesting Party, in writing, of its position on the request. Any failure by the other Party to respond within the twelve (12) day period shall be deemed to constitute concurrence in the request for extension. If a Party does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

18.5 If there is consensus among the Parties that the requested extension is warranted, APG 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.

18.6 Within seven (7) days of receipt of a statement of nonconcurrency with the requested extension, the requesting Party may invoke dispute resolution.

18.7 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.

18.8 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 Departments of Defense or the Army; delays caused by compliance with applicable

statutes or regulations governing contracting, procurement, or acquisition procedures, despite the exercise of reasonable diligence; and insufficient availability of appropriated funds, if the Army shall have made timely request for such funds as part of the budgetary process as set forth in Section 29, Funding. 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.

19. NATURAL RESOURCE DAMAGE CLAIMS

19.0 APG shall notify the appropriate federal and state natural resource trustees as required by Section 104(b)(2) of CERCLA, 42 U.S.C. §9604(b)(2), and Section 2(e)(2) of Executive Order 12580. Except as provided herein, APG is not released from any liability which it may have pursuant to state and federal law, including any claim for damages for destruction of, or loss of, natural resources.

20. WORK TO BE PERFORMED

20.1 The Parties recognize that a significant amount of background information exists, and must be reviewed prior to developing the SOWs and Work Plans required by this Agreement. APG need not halt currently ongoing work but may be obligated to modify or supplement work previously done to produce a final product which meets the requirements of this Agreement. It is the intent of the Parties to this Agreement that work done and data generated prior to the effective date of this Agreement be retained and utilized as elements of the RI/FS to the maximum

extent feasible without violating ARARs or guidelines and without risking significant technical errors.

Initial Review of Existing Documents by EPA

20.2 APG will provide EPA with copies of all existing studies and reports which have been finalized prior to the effective date of this Agreement within fourteen (14) days following the effective date of this Agreement. For on-going studies and reports (i.e, initial documents) which were required by APG's Corrective Action permit, submittal dates are listed in Attachment 2 to this Agreement.

20.2.1 Within one hundred and twenty (120) days following receipt of the studies and reports, EPA will provide comments to APG identifying data gaps and quality control problems in the studies and reports and identify the next step in the CERCLA process for each discrete Operable Unit or Study Area.

20.2.2 During the one hundred and twenty (120) day period, the Project Managers shall make themselves available to meet and confer as necessary to facilitate this process.

Statement of Work

20.3 APG shall develop and submit to EPA in accordance with Subsection 17.1.1, a SOW for the completion of an RI/FS for each Operable Unit selected by EPA or proposed by APG and approved by EPA, or Study Area as identified in Section 6, unless the Parties agree, after review of initial documents in accordance with Subsection 20.2, that a SOW is not required. Each SOW shall describe an RI/FS which meets the requirements of all relevant laws and requirements and EPA RI/FS guidance and contains enough specificity for EPA to determine that all major elements of an

RI/FS are provided for. Each SOW shall be a Primary Document as described in Section 8, Consultation.

Work Plans

20.4 APG shall develop and submit to EPA a Work Plan for the completion of an RI/FS for each Operable Unit selected by EPA or proposed by APG and approved by EPA, or Study Area as identified in Section 6, in accordance with the deadline from the approved SOW. Each Work Plan shall provide for the performance of an RI/FS which meets the requirements of all relevant laws and requirements including EPA RI/FS guidance documents and shall contain enough specificity for EPA to determine that the subject RI/FS will be adequately performed. Each Work Plan shall contain a schedule and target dates for the completion of the RI/FS and include identification of possible alternatives for remediation. Each Work Plan shall be a Primary Document as described in Section 8, Consultation.

Remedial Investigation

20.5 For each Operable Unit selected by EPA or proposed by APG and approved by EPA, or Study Area as identified in Section 6, APG shall develop, implement, and report upon an RI which is in accordance with the requirements and time schedules set forth in the approved Work Plan. Each RI report shall be a Primary Document as described in Section 8, Consultation.

20.6 The Parties specifically agree that all criteria contained in the approved Work Plans relate solely to the scope of the RIs and do not reflect a predetermination of the Site cleanup level criteria. The Parties further agree that final Site

clean-up level criteria will only be determined following completion of the Baseline Risk Assessment for that Study Area or Operable Unit.

Feasibility Study

20.7 For each Operable Unit or Study Area at the Site, APG shall design, propose, undertake, and report upon an FS which is in accordance with the requirements and time schedules set forth in the approved Work Plan. Each FS shall be a Primary Document as described in Section 8, Consultation.

Remedial Action Selection

20.8 Following finalization of the RI and the FS for each Operable Unit or Study Area, and in accordance with the deadline as approved in the Work Plan, APG shall, after consultation with EPA, publish its proposed plan for forty-five (45) days of public review and comment. APG shall submit its draft ROD to EPA within thirty (30) days following the close of the public comment period on the proposed plan. The EPA Administrator, in consultation with APG, shall make the final selection of the remedial action(s) for each Operable Unit. The selection of remedial action(s) by the EPA Administrator shall be final and not subject to dispute by APG. Within thirty (30) days following EPA's issuance of the ROD, APG shall submit a SOW in accordance with Subsection 17.4. A dispute arising under this Subsection on any matter other than EPA's final selection of a remedial action shall be resolved pursuant to Section 16, Dispute Resolution. Nothing in this Agreement shall limit EPA's discretion to delegate final selection authority to the Regional Administrator.

Solid Waste Management Units

20.9 The RCRA Facility Assessments (RFAs) of the Post identified numerous Solid Waste Management Units (SWMUs) in the Aberdeen and Edgewood Areas of the Post which are not included in ongoing studies. APG will initiate studies to determine if there have been releases of pollutants, contaminants, hazardous wastes or constituents, or hazardous substances to the environment from the SWMUs. If the Parties agree, APG may proceed directly with an RI/FS at a particular SWMU without conducting any additional studies or take no further action.

20.9.1 APG will conduct the required studies for the remaining SWMUs in accordance with current CERCLA guidance for conducting Site Investigations (SIs). The SWMUs to be studied are identified in the RFAs scheduled for submission to EPA in accordance with Attachment 2 of this Agreement. Based on the review of the studies, EPA will, within forty-five (45) days following receipt of the studies, determine which (if any) of the SWMUs will progress into the RI/FS process. If APG disagrees with EPA's determination, APG may dispute the determination in accordance with Section 16. If a new RI/FS is required, APG shall submit to EPA a SOW which will contain a deadline for submission of a Work Plan for an RI/FS, within thirty (30) days of notification by EPA of the requirement.

Remedial Designs and Remedial Actions (RD/RA)

20.10 Thirty (30) days following finalization of any ROD, APG shall submit a SOW with the schedule for the Remedial Design to EPA in accordance with Section 17, Deadlines.

Design of Remedial Actions

20.11 APG shall develop the design SOW, the conceptual design documents (at approximately 30 and 60 percent completion of the design work), and the final design document (at approximately 95 percent completion of the design work) for the remedial action.

20.12 APG shall submit a draft design SOW to EPA for review and comment. The design SOW shall be a Primary Document as described in Section 8, Consultation.

20.13 Upon finalization of the design SOW, the APG Project Manager shall begin the process of developing, or having developed under contract, the design documents. APG shall submit the design documents to EPA for review and comment. The 30% and 60% design documents shall be secondary documents as described in Section 8, Consultation.

20.14 Following receipt of EPA's comments on the 60% design document, APG shall prepare a final design document. The final design document shall be a Primary Document as described in Section 8, Consultation.

20.15 Thirty (30) days after the final design document is approved, APG shall submit a draft Remedial Action SOW for implementation of the remedial action addressed in the final design document containing a deadline for submission of a Remedial Action Work Plan in accordance with Section 17, Deadlines. The Remedial Action Work Plan shall be a Primary Document as described in Section 8, Consultation, and shall provide a schedule and target dates for completion of the Remedial Action. APG shall perform the Remedial Action in accordance with the approved Work Plan.

Implementation of Remedial Actions

20.16 At the monthly conference, the Project Managers shall report on their progress in implementing remedial actions. During such conferences, it shall be the responsibility of EPA to raise any objections it may have with respect to the manner in which a remedial action is being implemented. In raising such an objection, EPA shall indicate whether, and to what extent, it believes the activity is not being implemented in accordance with the applicable ROD, the final design document, or this Agreement. APG shall be available to respond to such objections.

20.17 The Project Managers shall attempt to resolve informally any dispute with respect to the manner in which a remedial action is being implemented or whether extension of the implementation schedule should be granted. Any Party may invoke dispute resolution to resolve a disagreement with respect to the implementation of a remedial action that cannot be resolved at the Project Manager level. It shall be each Party's responsibility to communicate any concerns they have regarding implementation of a remedial action promptly upon becoming aware of those concerns.

Removal Actions

20.18 Removal actions will be taken at APG if:

20.18.1 APG determines that a removal is appropriate; or

20.18.2 EPA requests that a removal be conducted; and either:

20.18.2.1 APG agrees to perform such removal; or

20.18.2.2 It is determined through dispute resolution that a removal is appropriate.

20.19 Except as otherwise provided by this Section, prior to initiating removal actions, APG shall notify EPA in writing by next day mail or hand delivery of its proposed removal action, and allow EPA five (5) days to respond, or longer for unusually large or complex removals. The APG notification shall contain adequate specificity to permit meaningful review and comment. If EPA proposes an overlapping or inconsistent Accelerated Operable Unit, the review and comment period on the removal action shall last at least until any disputes over the need for the overlapping or inconsistent AOU are resolved in accordance with Section 16, Dispute Resolution. An emergency removal action taken because of imminent and substantial endangerment to human health or the environment may be taken by APG without following the notice and comment procedures of this Subsection only if consultation would be impractical; however, APG will provide notice to EPA at the earliest time possible. APG agrees to only exercise its removal authority in a manner which is consistent with the purposes of this Agreement and the NCP. Section 8 on Consultation shall not apply to notices under this Subsection.

Accelerated Operable Units

20.20 AOU's, defined in Subsection 2.1, will follow a streamlined remedial process as set forth below. Areas of the Site which are the subject of AOU's ordinarily will need to be evaluated in a subsequent ROD to determine whether or not the AOU meets final clean up standards.

20.21 Within thirty (30) days following the effective date of this Agreement, APG shall submit a SOW containing a schedule for completion of a draft Focused Feasibility Study (FFS), draft

Proposed Plan, and draft Operable Unit ROD for each of the following AOU's: (1) Beech Point Groundwater Treatment

(2) Old "O" Field Groundwater Treatment

20.22 Additional AOU's may be proposed in writing by any Party during the course of this Agreement as technical data becomes available. APG shall evaluate all proposed AOU's unless it is decided, by agreement of the Parties or through dispute resolution as provided in Section 16, that the proposed AOU should not be considered. Within thirty (30) days following proposal of an AOU by any Party, or following resolution of any dispute regarding the need to evaluate a proposed AOU, APG shall submit a SOW containing a schedule for completion of the draft FFS, draft Proposed Plan, and draft Operable Unit ROD. The Parties shall consider and approve or modify the proposed schedule. Once approved or modified by agreement of the Parties or through dispute resolution, the schedule shall become a requirement of this Agreement.

20.23 For each AOU to be evaluated, APG shall develop a draft FFS, draft Proposed Plan, and Operable Unit ROD. The FFS shall be a Primary Document. Following finalization of the FFS as provided in Section 8, Consultation, the FFS and Proposed Plan shall be published for public review and comment. APG shall submit its draft ROD to EPA within thirty (30) days following the close of the public comment period. The EPA Administrator, in consultation with APG, shall make the selection of the remedial action(s) for each AOU. The selection of the remedial action(s) by the EPA Administrator shall be final and not subject to dispute by APG. Within thirty (30) days following issuance of the ROD by EPA, APG shall propose a remedial design due date for approval by EPA. If EPA disagrees with this date, the date will be established through dispute resolution. A dispute arising under

this Subsection on any matter other than EPA's final selection of a remedial action shall be resolved pursuant to Section 16, Dispute Resolution. Nothing in this Agreement shall limit EPA's discretion to delegate final selection authority to the Regional Administrator. Thirty (30) days after the final design document is approved, APG shall submit a draft Remedial Action SOW for implementation of the remedial action addressed in the final design document containing a deadline for submission of a Remedial Action Work Plan in accordance with Section 17, Deadlines. The Remedial Action Work Plan shall be a Primary Document as described in Section 8, Consultation, and shall provide a schedule and target dates for completion of the Remedial Action. APG shall perform the Remedial Action in accordance with the approved Work Plan.

Certification

20.24 When APG determines that any final, or supplemental remedial action, or AOU, has been completed in accordance with the requirements of this Agreement, it shall so advise EPA in writing, and shall request from EPA certification that the remedial action has been completed in accordance with the requirements of this Agreement. Within ninety (90) days of the receipt of a request for Certification, EPA shall advise APG in writing that:

1. EPA certifies that the remedial action has been completed in accordance with this Agreement; or
2. EPA denies APG's request for certification, stating in full the basis of its denial.

20.25 If EPA denies APG's request for certification that a remedial action has been completed in accordance with this Agreement, APG may invoke dispute resolution to review EPA's

determination. If a denial of certification is upheld in dispute resolution, EPA shall provide to APG a written description of the additional work needed to bring the remedial action into compliance with the requirements of this Agreement. APG shall, within thirty (30) days, provide to EPA a schedule for completion of the additional work. After performing such additional work, APG may resubmit a request for certification to EPA. EPA shall then grant or deny certification pursuant to the process set forth in this and the previous Subsection.

21. STATUTORY COMPLIANCE/RCRA-CERCLA INTEGRATION

21.1 The Parties intend to integrate APG's CERCLA response obligations and RCRA corrective action obligations which relate to the release(s) of hazardous substances, hazardous wastes or constituents, pollutants, or contaminants covered by this Agreement for all NPL Areas and all areas addressed as SWMUs and Study Areas under the Corrective Action Permit into this comprehensive Agreement. Therefore, the Parties intend that activities covered by this Agreement will achieve compliance with CERCLA; satisfy the corrective action requirements of RCRA Section 3004(u) and (v), 42 U.S.C. §6924 (u) and (v), for a RCRA permit, and RCRA Section 3008(h), 42 U.S.C. §6928(h), for interim status facilities; and meet or exceed all Federal and State ARARs to the extent required by CERCLA Section 121, 42 U.S.C. §9621.

21.2 Based upon the foregoing, the Parties intend that any remedial action selected, implemented, and completed under this Agreement shall 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 for those releases. The Parties agree that with respect to releases of hazardous wastes and constituents, hazardous substances,

pollutants, or contaminants covered by this Agreement that are associated with the NPL Areas of the Site, RCRA shall be considered an ARAR pursuant to CERCLA Section 121, 42 U.S.C. §9621. Releases or other hazardous waste activities not covered by this Agreement remain subject to all applicable state and federal environmental requirements.

21.3 The Parties recognize that the requirements 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 ongoing hazardous waste management activities at APG are subject to existing permits and may require the issuance of additional 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 APG for ongoing hazardous waste management activities at the Site, EPA shall reference and incorporate any appropriate provisions, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit.

21.4 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.

21.5 EPA shall propose amendments to the Corrective Action Permit to conform the Permit to the requirements of this Agreement. Any conflict between the requirements of this Agreement and the Corrective Action Permit shall be considered as good cause for an extension by APG of the affected timetable and deadline or schedule in accordance with Section 18, Extensions.

22. PERIODIC REVIEW

22.1 Subject to Subsection 22.2, APG shall conduct a periodic review of any final and supplemental response action taken at the Site to determine whether and to what extent any additional remedial action is necessary. The periodic review shall be conducted in accordance with CERCLA Section 121(c), 42 U.S.C. §9621(c), and any applicable law, regulation, or guidance issued by EPA that is not inconsistent with CERCLA and the NCP. Upon completion, APG shall provide the Periodic Review Assessment Report to EPA. This report shall be a Primary Document as described in Section 8, Consultation.

22.2 The periodic review for each Operable Unit shall be conducted as required by CERCLA § 121(c), 42 U.S.C. §9621(c), no less often than each five (5) years after initiation of the final response action for that Operable Unit, as long as hazardous substances, pollutants, or contaminants remain within the area covered by that Operable Unit to assure that human health and the environment are being protected by the remedial actions being implemented.

22.3 The assessment and selection of any additional response action determined necessary in the course of a periodic review shall be in accordance with Section 23, Supplemental Response Actions. Except for emergency response actions, which shall be governed by Section 15, Emergency Response Actions, such response action shall be implemented as a supplemental response action in accordance with Section 23, Supplemental Response Actions.

23. SUPPLEMENTAL RESPONSE ACTIONS

23.1 The Parties recognize that subsequent to finalization of a ROD, a need may arise for one or more supplemental response actions to remedy continuing or additional releases or threats of releases of hazardous substances, pollutants, or contaminants at or from the Site. If such a release or threat of release presents an immediate threat to human health or the environment, it shall be addressed pursuant to Section 15, Emergency Response Actions. If such release or threat of release does not present an immediate threat to human health or the environment, it shall be addressed pursuant to Subsections 23.2 through 23.6, regardless of whether the determination of the need for such supplemental response action is based on a Periodic Review conducted pursuant to Section 22, Periodic Review, or on some other source of information.

23.2 A supplemental response action shall be undertaken only when:

23.2.1 A determination is made that:

23.2.1.1 As a result of the release or threat of release of a hazardous substance, pollutant, or contaminant at or from the Site, an additional response action is necessary and appropriate to assure the protection of human health and the environment; or

23.2.1.2 There is or has been a release of hazardous wastes or constituents into the environment and corrective action is necessary to protect human health or the environment; and,

23.2.2 Either of the following conditions is met for any determination made pursuant to Subsection 23.2.1:

23.2.2.1 For supplemental response actions proposed after finalization of the ROD, but prior to Certification, the determination must be based upon conditions that were unknown at the time of finalization of the ROD or based upon information received in whole or in part following finalization of the ROD; or

23.2.2.2 For supplemental response actions proposed after Certification, the determination must be based upon conditions that were unknown at the time of Certification or based upon information received in whole or in part following Certification.

23.3 If, after completion of the remedial action, any Party concludes that a supplemental response action is necessary, based on the criteria set forth in Subsection 23.2, such Party shall promptly notify the other Party of its conclusion in writing. The Project Managers shall confer and attempt to reach consensus on the need for such an action within forty-five (45) days of the receipt of such notice. If within that forty-five (45) day period, the Project Managers have failed to reach consensus, any Party may notify the other Party in writing that it intends to invoke dispute resolution. If the Project Managers are still unable to reach consensus within fourteen (14) days of the issuance of such notice of dispute, the question of the need for the supplemental response action shall be resolved through dispute resolution.

23.4 If the Project Managers agree or if it is determined through dispute resolution that a supplemental response action is needed based on the criteria set forth in Subsection 23.2, APG shall, within thirty (30) days, provide a SOW containing a proposed deadline for the Supplemental Response Action Work Plan.

23.5 APG shall submit the Supplemental Response Action Work Plan in accordance with the approved deadline in the SOW.

23.6 After finalization of a Supplemental Response Action Work Plan, APG shall conduct a Supplemental Response Action RI/FS. Following finalization of the Supplemental Response Action RI/FS, APG shall, after consultation with EPA, publish its Proposed Plan for forty-five (45) days of public review and comment in accordance with CERCLA §117(a), 42 U.S.C. §9617(a), and the NCP. APG shall prepare and submit a draft Supplemental Response Action ROD to EPA within thirty (30) days following the close of the public comment period. The EPA Administrator, in consultation with APG, shall make the final selection of the remedial action(s) for each Supplemental Response Action. The selection of remedial action(s) by the EPA Administrator shall be final and not subject to dispute by APG. Within thirty (30) days following approval of the ROD, APG shall propose a remedial design due date. If EPA disagrees with this date, the date will be established through dispute resolution. A dispute arising under this Subsection on any matter other than EPA's final selection of a remedial action shall be resolved pursuant to Section 16, Dispute Resolution. Nothing in this Agreement shall limit EPA's discretion to delegate final selection authority to the Regional Administrator. Thirty (30) days after the final design document is approved, APG shall submit a draft Remedial Action SOW for implementation of the remedial action addressed in the final design document containing a deadline for submission of a Remedial Action Work Plan in accordance with Section 17, Deadlines. The Remedial Action Work Plan shall be a Primary Document as described in Section 8, Consultation, and shall provide a schedule and target dates for completion of the Remedial Action. APG shall perform the Remedial Action in accordance with the approved Work Plan.

23.7 Following issuance of the Supplemental Response Action ROD, the Supplemental Response Action shall be implemented pursuant to that ROD in accordance with Subsections 20.10 through 20.17.

24. ENFORCEABILITY

24.1 The Parties agree that:

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

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

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

24.1.4 Any final resolution of a dispute pursuant to Section 16, Dispute Resolution, which establishes a term, condition, timetable, deadline, or schedule shall be enforceable by any person pursuant to CERCLA Section 310, and any violation of such term, condition, timetable, deadline, or schedule will be subject to civil penalties under CERCLA Sections 310(c) and 109.

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

24.3 The Parties agree that each Party shall have the right to enforce the terms of this Agreement.

25. STIPULATED PENALTIES

25.1 In the event that APG fails to submit a Primary Document (as listed in Subsection 8.3) to 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 a remedial action, EPA may assess a stipulated penalty against APG. A stipulated penalty may be assessed in an amount not to exceed \$5,000 for the first week (or part thereof), and \$10,000 for each additional week (or part thereof) for which a failure set forth in this Subsection occurs.

25.2 Upon determining that APG has failed in a manner set forth in Subsection 25.1, EPA shall so notify APG in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, APG 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. APG shall not be liable for the stipulated penalty assessed by EPA if the failure is determined, through the dispute resolution procedures, 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.

25.3 The annual reports required by CERCLA Section 120(e)(5), 42 U.S.C. §9620(e)(5), shall include, with respect to each final assessment of a stipulated penalty against APG 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.

25.4 Stipulated penalties assessed pursuant to this Section shall be payable to the Hazardous Substance Superfund and only in the manner and to the extent expressly provided for in Acts authorizing funds for, and appropriations to, the Department of Defense.

25.5 In no event shall this Section give rise to a stipulated penalty in excess of the amount set forth in CERCLA Section 109, 42 U.S.C. §9609.

25.6 This Section shall not affect APG's ability to obtain an extension of a timetable, deadline, or schedule pursuant to Section 18, Extensions.

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

26. OTHER CLAIMS

26.0 Nothing in this Agreement shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity 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.

27. RESERVATION OF RIGHTS

27.1 The Parties agree to exhaust their rights under this Agreement, including Section 16, Dispute Resolution, prior to exercising any rights to judicial review that they may have under CERCLA.

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

27.3 The Parties reserve any and all rights they may have under any other law where those rights are not inconsistent with the provisions of this Agreement.

28. TERMINATION AND SATISFACTION

28.0 The provisions of this Agreement shall be deemed satisfied upon a consensus of the Parties that APG has completed its obligations under the terms of this Agreement. If the Parties do not reach consensus, the issue shall be resolved through the dispute resolution process, Section 16.

29. FUNDING

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

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

29.3 Any requirement for the payment or obligation of funds, including stipulated penalties, by APG 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 in accordance with Section 18, Extensions. Nothing in this Subsection shall be interpreted as excusing performance by APG under this Agreement; this Subsection only allows delay of performance due to unavailability of funds, and then only after compliance with the requirements of Section 18.

29.4 If appropriated funds are not available to fulfill APG's obligations under this Agreement, EPA reserves the right to initiate an action against any other person, or to take any response action, which would be appropriate absent this Agreement.

29.5 Funds authorized and appropriated annually by Congress under the "Environmental Restoration, Defense" (DERA) appropriation in the Department of Defense Appropriation Act and allocated by the Deputy Assistant Secretary of Defense (Environment) to APG will be the source of funds for obligations 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 Army CERCLA implementation requirements, the DOD shall employ and APG 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 EPA and the states. Nothing

in this Subsection shall prohibit APG from using funds from sources other than DERA, if they are available. Although APG shall have no obligation to use non-DEIRA funds to meet its obligations under this Agreement, if sufficient DERA funds are not available, APG shall make a good faith effort to seek non-DEIRA funds sufficient to meet its obligations under this Agreement.

30. COMMUNITY RELATIONS

30.1 The Parties shall coordinate any statements to the press with respect to this Agreement or any aspect of the processes set forth in this Agreement. Except in case of an emergency requiring the release of necessary information, any Party issuing a press release with reference to any of the work required by this Agreement shall advise the other Party of such press release, and the contents thereof, at least 48 hours prior to issuance.

30.2 The Parties agree to comply with all relevant EPA policy and guidance on community relations programs which are in accordance with CERCLA and consistent with the NCP.

30.3 APG shall develop and implement a Community Relations Plan (CRP) within sixty (60) days after the effective date of this Agreement which responds to the need for an interactive relationship with all interested community elements, both on Post and off, regarding environmental activities conducted pursuant to this Agreement by APG. The CRP shall comply with CERCLA and the Superfund Community Relations Handbook.

30.4 In accordance with Sections 113(k) and 117(d) of CERCLA, 42 U.S.C. §9613(k) and 9617(d), APG shall establish and maintain identical Administrative Records at two (2) locations,

one on the Post and the other at a location near the Post and convenient to the public. A copy of each document placed in the Administrative Record will be provided to EPA. APG shall periodically update the Administrative Record and supply new indices to EPA. APG shall include in the Administrative Record any document which EPA provides to APG and requests to have included in the Administrative Record. If information which forms the basis for the selection of a response action is included only in a document containing classified, confidential, or privileged information and is not otherwise available to the public, the information, to the extent feasible, shall be summarized in such a way as to make it disclosable and placed in the publicly available portion of the Administrative Record. The confidential or privileged document itself shall be placed in the confidential portion of the Administrative Record. If information, such as confidential business information, cannot be summarized in a disclosable manner, the information shall be placed only in the confidential portion of the Administrative Record. All documents contained in the confidential portion of the Administrative Record shall be listed in the index to the file.

30.5 The CRP shall include provisions for a technical review committee (TRC) in accordance with 10 U.S.C. §2705(c). The TRC shall consist of representatives from the Parties and representatives of local political jurisdictions. The APG representative shall act as chairman of the TRC. The TRC shall meet at scheduled times or as otherwise provided in the CRP. The purpose of the TRC shall be to keep the local citizenry informed as to the status of the environmental remediation conducted under this Agreement and allow a means of comment on APG's proposed actions under the Agreement.

31. PUBLIC COMMENT

31.0 Public comment on this Agreement shall be conducted in accordance with this Section.

31.1 Within fifteen (15) days after the execution of this Agreement, or as soon thereafter as possible to conform with RCRA permit modification requirements, EPA shall publish notice in at least one major local newspaper of general circulation that this Agreement is available for a forty-five (45) day period of public review and comment.

31.2 Promptly upon completion of the public comment period, EPA shall transmit to APG copies of all comments received within the comment period.

31.3. The Parties shall review the comments and shall either:

31.3.1 Determine that the Agreement should be made effective in its present form, in which case EPA shall notify APG in writing, and this Agreement shall become effective on the date APG receives such notification; or,

31.3.2 Determine that modification of the Agreement is necessary, in which case the Parties shall meet to discuss and agree upon any proposed changes. Upon agreement of any proposed changes, the Agreement, as modified, shall be re-executed by the Parties, with EPA signing last, and shall become effective on the date that it is signed by EPA. If agreement is not obtained within ten (10) days, the matter shall be referred to the persons representing the Parties on the Senior Executive Committee who shall attempt to reach a consensus.

31.4 In the event of a significant revision or public comment under Subsection 31.1, notice procedures of Section 117 of CERCLA, 42 U.S.C. §9617, shall be followed and a responsiveness summary shall be published by EPA.

31.5 Existing records maintained by APG which will be included in the Administrative Record such as reports, plans, and schedules shall be made available by APG for public review during the public comment period. The public notices announcing the public comment period shall include information advising the public as to the availability and location of these records.

32. PRESERVATION OF RECORDS

32.1 Despite any document retention policy to the contrary, the Parties shall preserve, during the pendency of this Agreement, and for a minimum of seven (7) years after its termination, all records and documents in their possession which relate to the actions carried out pursuant to this Agreement. After this seven (7) year period, each Party shall notify the other Party at least thirty (30) days prior to destruction of any such documents.

32.2 Upon request by any Party, the requested Party shall make available such records or copies of any such records, unless withholding is authorized and determined appropriate by law. The Party withholding such records shall identify any documents withheld and the legal basis for withholding such records. No records withheld shall be destroyed until thirty (30) days after the final decision by the highest court or administrative body requested to review the matter.

33. AMENDMENT OR MODIFICATION OF AGREEMENT

33.1 This Agreement shall only be amended or modified upon written consent of all Parties. Such amendments or modifications which have been signed by APG, shall have as the effective date that date on which they are signed by EPA and notice thereof is provided to APG pursuant to Section 13, Notice.

33.2 During the course of activities under this Agreement, the Parties anticipate that statutes, regulations, guidance, and other rules will change. Those changed statutes, regulations, guidance, and other rules will be applied to the activities under this Agreement in the following manner:

33.2.1 Applicable statutes and regulations shall be applied as amended or changed regardless of the time of amendment or change. However, the Parties shall endeavor to apply them in such a way as to avoid as much as possible the need for repeating work already accomplished.

33.2.2 Other rules such as applicable policy or guidance shall be applied as they exist at the time of initiation of the work in issue.

33.2.3 Other rules such as applicable policy or guidance which are changed after the initiation of the work in issue or after its completion shall be applied subject to Section 16, Dispute Resolution. The Party proposing application of such changed rules shall have the burden of proving the appropriateness of their application. In any case, the Parties shall endeavor to apply any changed rules in such a way as to avoid as much as possible the need for repeating work already accomplished.

34. PROPERTY TRANSFER

34.0 No change or transfer in real property interest of any part of the Post shall in any way alter the status of responsibility of the Parties under this Agreement. To the extent practicable, APG agrees to give EPA sixty (60) days notice prior to the sale or transfer by the United States of any title, easement, or other interest in the real property affected by this Agreement. In addition, APG shall include notice of this Agreement in any document transferring ownership or operation of the Post to any subsequent owner and/or operator of any portion of the Post.

35. PROGRESS REPORTS

35.0 APG shall submit to EPA quarterly written progress reports which describe the actions which APG has taken during the previous quarter to implement the requirements of this Agreement. Progress reports shall also describe the activities scheduled to be taken during the upcoming quarter. Progress reports shall be submitted by the tenth (10th) day of each calendar year quarter. The progress reports shall include a statement of the manner and extent to which the requirements and time schedules set out in this Agreement and approved Work Plans are being met. In addition, the progress reports shall identify any anticipated delays in meeting time schedules, the reason(s) for the delay, and actions taken to mitigate the delay.

36. RECOVERY OF EPA EXPENSES

36.0 The Parties agree to amend this Agreement at a later date in accordance with any subsequent national resolution of the

issue of EPA cost reimbursement for CERCLA response costs incurred by EPA.

37. PROTECTION OF THE PUBLIC

37.0 In the event that EPA determines that activities conducted pursuant to this Agreement are creating an imminent and substantial endangerment to the public health or welfare or to the environment, EPA may order APG to halt further activity for such period of time as needed to take appropriate action. APG shall arrange to have individuals with Emergency Response Training, Hazardous Materials Handling Training, and Contracting Officer's powers reasonably available at any time that work pursuant to this Agreement is being carried out by APG contractors at the Site.

38. EFFECTIVE DATE

38.0 This Agreement is effective between the Parties immediately upon fulfillment of the requirements of Section 31, Public Comment.

//////////////////////////////////Signature Page Follows//////////////////////////////////

IT IS SO AGREED:

By: George H. Akin
Major General George H. Akin, Commander
Aberdeen Proving Ground

Date 27 MAR 90






By: Lewis D. Walker
Lewis D. Walker
Deputy Assistant Secretary of the Army for Environment,
Safety, and Occupational Health
Department of the Army

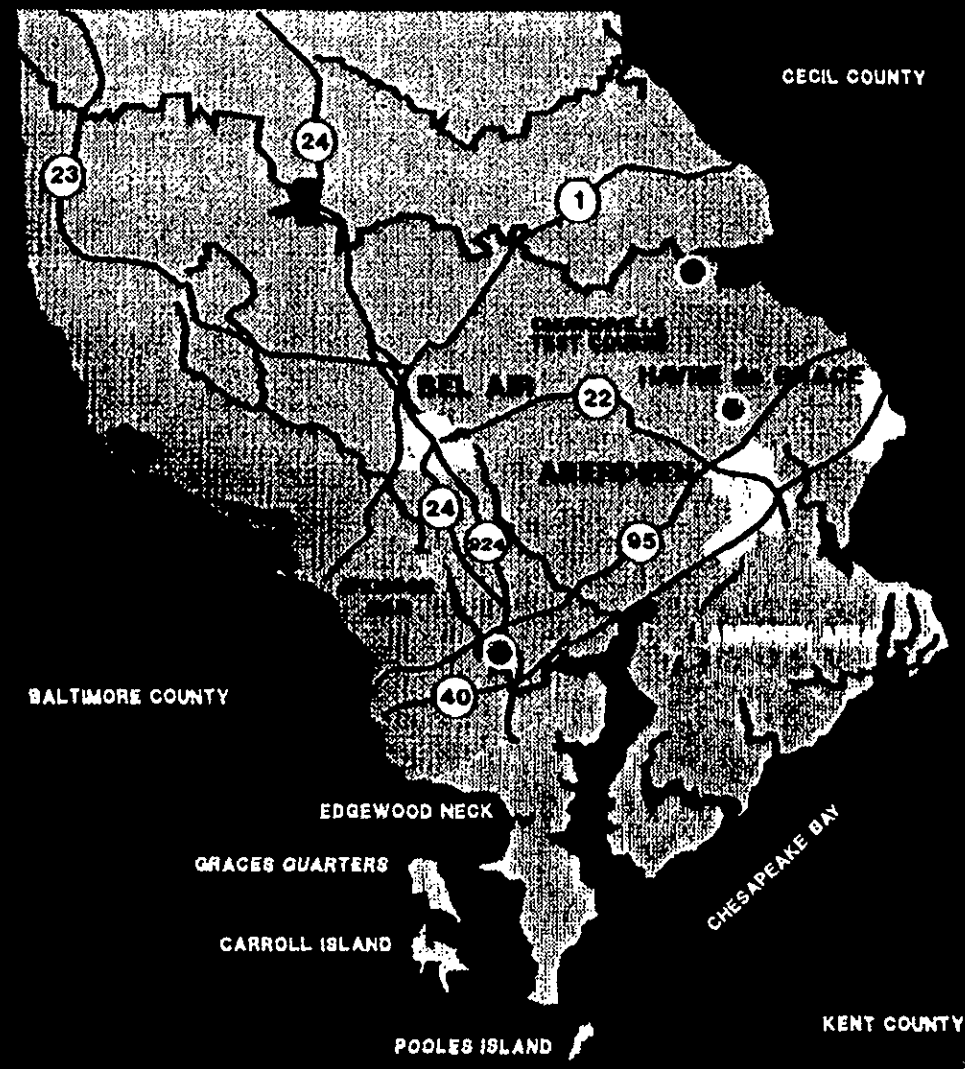
Date 3/23/90

By: Edwin B. Erickson
Edwin B. Erickson
Regional Administrator
U.S. Environmental Protection Agency

Date 3/27/90

HARFORD COUNTY

- MAJOR ROADS**
-  INCORPORATED TOWNS
 -  HARFORD COUNTY
 -  ABERDEEN PROVING GROUND
 -  STATE PARK
 -  WATER PLANTS
1. DEER CREEK PUMPING STATION
 2. CHAPEL HILL TREATMENT PLANT
 3. VAN BIBBER TREATMENT PLANT



HARMAP03

ABERDEEN PROVING GROUND

Gunpowder River

Gunpowder Neck

Bush River



Aberdeen Area

Chesapeake Bay



ABERDEEN PROVING GROUND

AREAS OF INTEREST



ATTACHMENT 2

TABLE OF INITIAL DOCUMENTS

<u>STUDY AREA</u>	<u>INITIAL DOCUMENT (ID)</u>	<u>DUE DATE</u>
J- Field	J-Field HGA Work Plan Data and Status Report	ED+14
Old O-Field	Draft HGA	ED+14
	HGA Data Report	ED+14
	Focused Feasibility (Source)	ED+14
	Final HGA	ED+14
Canal Creek	Draft Organic/Inorganic Chemistry	ED+14
	Draft Interim Report	
	Groundwater Hydrogeology	ED+14
	Final Hydrogeology Data	ED+14
	Work Proposal	ED+14
Westwood Area	EA RFA	ED+14
	RIFS Work Plan	Nov 90
Nike Site	EA RFA	ED+14
	HGA	ED+14
EA SWMU	EA RFA	ED+14
	RIFS Work Plan	Nov 90
Bush River	EA RFA	ED+14
	USGS Study Plan	ED+14
	RIFS Work Plan	Nov 90
Carroll Island	Work Plan/Sampling Plan	ED+14
	Interim Draft Hydrogeologic Data Report	ED+14
Graces Quarters	Work Plan/Sampling Plan	ED+14
	Interim Draft Hydrogeologic Data Report	ED+14
Michaelsville Landfill	Work Plan	ED+14
	Draft RFI	ED+14
Phillips Landfill	Work Plan	ED+14
	Draft HGA	ED+14
AA SWMU	Draft RFA	July 90
WP Site	RFA	ED+14