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Action Description Memorandum

for the

FY 1989 Line Item:

Environmental, Safety and Health Upgrades, Phase II

March 1989

By: Frank S. Adams
Michael R. Hunter
Carol R. Anderson

EG&G Mound Applied Technologies
Miamisburg, Ohio 45343

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1.0 CONCISE DESCRIPTION OF THE PROPOSED ACTION

This ADM documents the evaluation of the potential environmental impact hazards from the Environmental, Safety and Health Upgrades, Phase II, project.

1.1 DESCRIPTION AND SCOPE OF PROJECT

Environmental, Safety and Health Upgrades, Phase II, project is a \$6,500,000 Line Item project for FY 1989. The project is identified in the FY 1989 Budget Submission documents as Project No. 89-DA-01.

ES&H Phase II, is a portion of a continuing effort to protect the environment, our neighbors and our employees from any adverse effects caused by the development and production missions of EG&G Mound Applied Technologies.

The three parts of ES&H Phase II include:

- A) New piping to separate potable water from domestic and process water.
- B) Improvements in explosive storage facilities.
- C) Upgrades of the fuel oil storage systems, including a new tank; the containment basin, and dike.

1.2 SPECIFIC COMPONENTS OF THE PROJECT

Specific components of Part A of the project are as follows:

- a) New water distribution systems will be installed in each building.
- b) Within each building the process water system will be separated from the potable water system by an OSHA approved back flow preventer.
- c) New connections will be made to existing drinking fountains, lavatories, eyewashes and showers.

Specific components of Part B of the project are as follows:

- a) Six new magazine bays will be provided.
- b) Provide new barricades at three buildings and at three magazines.
- c) Lightning protection.
- d) Loading and unloading facilities for transported explosives materials.

Specific components of Part C of the project are as follows:

- a. A new 450,000 gallon vertical fuel oil storage tank built inside a diked spill containment area.
- b. Spill monitoring instrumentation will be provided.
- c. The day tanks at the Power House and the transfer system (pumps and piping) from the storage tanks to the day-tanks will be replaced.

2.0 LOCATION OF THE ACTION

The 306-acre Mound site is located adjacent to the southern boundary of Miamisburg, Montgomery County, Ohio. Mound is approximately 10 miles south of metropolitan Dayton, Ohio.

3.0 POTENTIAL ISSUES

3.1 MOUND'S FINAL ENVIRONMENTAL IMPACT STATEMENT (EIS)

There are no program/project elements known to be in conflict with Mound's site EIS. Mound's final EIS is formally documented in DOE/EIS-0014, dated June 1979.

3.2 HISTORIC AND NATIONAL LANDMARKS

The only historic landmark in the vicinity of Mound is the Miamisburg Mound, an ancient Indian mound located 120 m (380 ft.) east-southeast of the Mound facility in the Mound State Memorial Park. No activity associated with this project will adversely impact this landmark.

Compliance by the Mound facility with the National Historic Preservation Act (Public Law 89-665) was assured by an archaeological survey. This survey is documented as "Public Archaeology Report No. 18," Laboratory of Anthropology, Wright State University, Dayton, Ohio, December 1987.

3.3 FLOODPLAIN/WETLANDS

No facilities associated with this project are located on a floodplain or in areas considered as wetlands as defined in 10 CFR Part 1022. Detailed hydrology information can be found in Section 2.3.5 of the Mound's EIS (DOE/EIS-0014, June 1979). The estimated elevation of the adjacent Great Miami River during a maximum flood is 710 F.S.L. All parts of this project are above this elevation.

3.4 ENDANGERED AND THREATENED SPECIES

The Federal and the State of Ohio lists of endangered and threatened species have been reviewed, and personnel of the regional office of the U.S. Fish and Wildlife Service have been consulted on this matter. In consideration of the nature and habitats of those few species listed for the southwest Ohio area, the probability of endangered or threatened species occurring on-site is extremely remote. The 306-acre site has been greatly altered through construction and use, and does not provide such species an ideal habitat. There are no known records of endangered or threatened species for the site.

3.5 CONSTRUCTION AND OPERATIONS

Construction activities will be controlled, as required, to conform with Mound's Loss Prevention and Environmental Control (LP&EC) System requirements. Controls could include, for example, appropriate OSHA-approved construction practices and safeguards, seeding and sodding of disturbed earth for erosion control and grading to control drainage. Soil will be tested for radioactive contamination. If the materials exceed the contamination limits, they will be removed and boxed by a Mound dedicated crew and shipped to the Nevada Test Site for disposal. All applicable DOT regulations will be followed.

3.6 THE PROJECT'S MAJOR ENVIRONMENTAL ISSUES

There are no major environmental issues. The new Potable Water System will provide safe water for employee consumption on site. The present Potable Water System has been used for supplying water to process equipment as well as for human consumption. Efforts to keep the system safe, free from possible contamination have not been successful. The present system will be separated within each building by OSHA approved back flow preventer. This new measure will provide safe water use for employees by separating the potable water from the process cooling system. Some 500 connections of the potable system to process equipment will be eliminated.

New magazines will be built to recover storage capacity needed at Mound. These magazines will meet safety standards set forth in "Ammunition Explosive Safety Standards", DOD 6055.9. New barricades will be provided to minimize any risk of injury or property damage on site from missiles and overpressure. Previous magazine ratings are to be reduced so that missile arcs are reduced. This will keep off site housing out of missile arcs.

The new fuel oil storage tank and containment area will reduce the environmental consequences of a serious accident. The containment area capacity will be 110 percent the fuel oil storage capacity and will meet EPA and NFPA requirements. These provisions will markedly increase our assurance that any accidental release will be contained and not flow down the adjacent main storm water drainage channel to the Great Miami River. This automatically provides greater protection for the Buried Valley Aquifer from any accidental spills.