FACT SHEET

- 1. PROJECT. Hazardous and toxic waste cleanup at Crab Orchard National Wildlife Refuge in southern Illinois. Technical assistance is being requested by the U.S. Fish and Wildlife Service.
- 2. NATURE OF THE WORK. Part of the refuge lands were used by the U.S. Department of Defense during World War II. Following the war, Federal laws mandated a continued use of industrial facilities to help the local economy. Private use of buildings and facilities was administered first by the War Assets Administration and then the Fish and Wildlife Service.

Studies of potential hazardous and toxic waste sites at the refuge have been conducted since the late 1970's. USEPA included the refuge on the National Priorities List in 1987. The Department of Interior and Sangamo Weston, Inc. jointly funded a Remedial Investigation/Feasibility Study (RI/FS). The RI evaluated 33 sites and of these seven were recommended for consideration by the Feasibility Study, three were recommended for further evaluation by the Department of Defense, eight were recommended for periodic monitoring, and 15 were found to pose a negligible risk.

Of the seven sites considered in the Feasibility Study, the U.S. Fish and Wildlife Service has asked the St. Louis District for technical assistance on three sites where heavy metals are the hazardous waste. The Feasibility Study examines several cleanup alternatives. The preferred alternative for all three sites includes excavation of contaminated soils and materials, stabilization by chemical fixation, and disposal in an industrial landfill on the refuge. In addition, for one site the solution includes low-permeability capping of an area of lower-level contamination. The final selection of the alternative to be implemented at each site will be made and documented in the Record of Decision which is expected to be signed in March 1990. The Fish and Wildlife Service has requested funding to initiate cleanup of the three sites, and cleanup must commence within 15 months of the signing of the Record of Decision.

3. USACE ROLE IN THE WORK. The Fish and Wildlife Service is interested in having the St. Louis District complete additional studies to better define the extent of contamination at the three heavy metals sites, analyze the suitability of two facilities at the refuge that may be usable as industrial landfills, possibly consider an additional location for an industrial landfill, coordinate with appropriate agencies, complete additional design work, prepare plans and specifications, and manage the construction effort. The plan is to establish an overall agreement and then negotiate individual task orders for specific work to be accomplished by the District.

It should be noted that HQUSACE has approved the St Louis District as a design agency for low level hazardous and toxic waste projects. Also, the District has experience managing construction work for Region Three of the Fish and Wildlife Service. In 1987 we completed some repair work on Devil's Kitchen Dam in the Crab Orchard National Wildlife Refuge. Both Region Three and the Refuge Management Office were pleased with the job done by the St. Louis District.



FACT SHEET (CONTINUED)

4. BENEFITS TO USACE AND CUSTOMER AGENCY. The benefits to the U.S. Fish and Wildlife Service will be quality engineering and construction management assistance from the St. Louis District. The District Office is only two hours from Crab Orchard National Wildlife Refuge, and experienced personnel are enthusiastic about working on this project.

The benefits to the Corps of Engineers include the opportunity to assist in the design and construction of a worthwhile project that will benefit the nation, the opportunity to gain additional experience in the field of hazardous and toxic waste cleanup, and the opportunity to gain experience working as "environmental engineers" for the U.S. Fish and Wildlife Service.

- 5. PROJECTED RESOURCE REQUIREMENTS. This is a relatively small project with construction estimated to cost less than \$2 million. We anticipate that technical assistance by the St. Louis District would utilize up to 4 FTEs in FY 1990 and 4 FTEs in FY 1991.
 - 6. FOA IMPLEMENTATION PLANS. The District would accomplish the required work through the use of in-house personnel and contracts. The contracts to be utilized would be for surveying and mapping, geotechnical exploration and testing at proposed storage sites, and chemical laboratory services. The District has contracts in effect that can be used for this work. Also, we would anticipate using the Waterways Experiment Station Laboratory or the Missouri River Division Laboratory for any required quality assurance/quality control testing. The Missouri River Division has indicated a willingness to assist the St. Louis District in any endeavors of this nature.