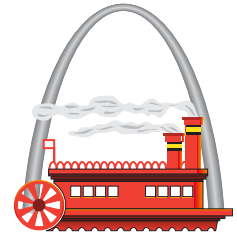




U.S. Army Corps of Engineers  
St. Louis District

## St. Louis Sites Fact Sheet

# LONG-TERM STEWARDSHIP



"Gateway to Excellence"

The United States Army Corps of Engineers (USACE), St. Louis District, is conducting a radiological cleanup program for four Missouri sites (SLDS, SLAPS, SLAPS VPs, HISS). These sites contain soils contaminated with radium, thorium, and uranium as a result of activities associated with the Manhattan Engineer District/Atomic Energy Commission during the nation's early atomic program in the 1940s and 50s.

"Long-term Stewardship" includes all activities necessary to protect human health and the environment at sites that have residual contamination present after "cleanup" is complete. Long-term stewardship includes all engineered and institutional controls designed to contain or prevent exposure to residual contamination, such as surveillance activities, record-keeping activities, inspections, site monitoring, maintenance of barriers and contaminant structures, access control and posting signs.

The Long-term Stewardship Plan is being developed for the FUSRAP St. Louis Sites now to allow plenty of time for technical, managerial and financial planning.

The Corps of Engineers encourages private citizens to participate fully in the cleanup program.

To learn more about FUSRAP or to inquire about public involvement opportunities, contact the FUSRAP Project Office at (314) 260-3905 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 8945 Latty Avenue, Berkeley, Missouri 63134

### WHAT IS LONG-TERM STEWARDSHIP?

"Long-term Stewardship" includes all activities necessary to protect human health and the environment at sites that have residual contamination present after "cleanup" is complete. Long-term stewardship includes all engineered and institutional controls designed to contain or prevent exposure to residual contamination, such as surveillance activities, record-keeping activities, inspections, site monitoring, maintenance of barriers and contaminant structures, access control and posting signs.

### WHY IS A LONG-TERM STEWARDSHIP PROGRAM NEEDED?

The U.S. Army Corps of Engineers has made significant progress in cleaning up contamination left behind in St. Louis from the nation's early atomic program. However, some areas cannot be remediated to levels that allow for unrestricted use because of prohibitive costs, and worker safety issues. Long-term stewardship will be required to ensure that remedies remain effective because of the nature of the contaminants involved. Long-term stewardship is being addressed as a discrete program to maximize the effectiveness of its implementation and to enable the measurement of performance.

### HOW WILL THE LONG-TERM STEWARDSHIP PROGRAM BE IMPLEMENTED?

Long-term stewardship will be implemented as described in the Long-term Stewardship Plan. This plan is currently being developed and coordinated by representatives of the Corps, U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), Missouri Department of Natural Resources (MDNR), local municipalities, utility companies, and the Oversight Committee. The community is also strongly encouraged to participate in the development of the long-term stewardship plan. In order to be effective, the Long-term Stewardship Plan will require community awareness of the exposure threat and assistance in establishing and maintaining the necessary controls. The long-term stewardship plan will identify activities necessary to ensure the continued protection of human health and the environment where residual hazards remain.

## WHAT WILL THE LONG-TERM STEWARDSHIP PROGRAM ENTAIL?

Fundamentally, long-term stewardship programs require three attributes to be successful: responsibility, adaptability, and long-term effectiveness. Stewardship of contaminated sites requires that society (federal, state, local government agencies, and individuals) be willing to accept responsibility for ensuring a safe environment for current and future generations for the lifespan of the contaminants. Long-term stewardship programs must be adaptable to ensure the continued protectiveness of a remedy despite potentially changing physical and sociological demands. To maximize its long-term effectiveness, a layered and flexible system of controls must be employed and appropriate contingency plans developed to address unanticipated adverse events.

The primary function of long-term stewardship is to ensure protection of human health and the environment until the managed waste materials are no longer hazardous. The following four tools of stewardship will be used to accomplish this at the St. Louis FUSRAP Sites.

- **Site Monitoring, Maintenance, and Reporting** – Site monitoring includes periodic inspections to verify that engineered structures and barriers constructed to isolate hazards from the environment are intact. Maintenance activities could consist of repair of structures, replacement of signs and markers, and routine maintenance of security features such as fencing. All site activities must be documented for the archives.
- **Institutional Controls** – Institutional controls are administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. Institutional controls include zoning restrictions, use permits, well-drilling restrictions, and other restrictions administered under local government authority (such as deed restrictions, and easements to control land use).
- **Information and Records Management** – Information and records management consists of storing, preserving, and providing access to background and design information and to activity reports for long-term stewardship sites. This information is available for use by the general public, and other stakeholders. It must be maintained for the use of future generations long after the initial custodians are gone.
- **Environmental Monitoring** – Environmental monitoring is conducted for any area in which hazardous material remains on site in excess of the cleanup criteria after completion of the remedial action as part of the 5-year review process required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Environmental monitoring is performed to verify continued remedy performance and to provide an early indication of any problems that develop. Environmental monitoring can include air monitoring, surface water and groundwater monitoring, vegetation monitoring, soil and sediment sampling and monitoring, and wildlife assessments. It should be noted, however, that if a property meets the “unrestricted use and unlimited exposure” requirement (that is property can be used for any purpose), no further action is necessary.

Ultimately, all of these elements must work together to maintain the protectiveness of the site.

## WHO WILL IMPLEMENT THE LONG-TERM STEWARDSHIP PROGRAM?

The process of establishing a reliable Long-term Stewardship program requires a collaborative team effort between property owners, local municipalities, state and federal agencies. At the federal level, responsibility for the long-term stewardship program is split between the USACE and the DOE. Under the Memorandum of Understanding between these two federal agencies, the DOE will become responsible for implementing the program two years after the USACE completes the site remedy. Until the 2-year period is up, the Corps will be responsible for long-term stewardship responsibilities.



*Implementation of the Long Term Stewardship Program will be a team effort involving property owners, local municipalities, and state and federal agencies.*