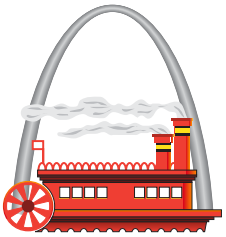
U.S. Army Corps of Engineers
St. Louis District

St. Louis Sites Fact Sheet

ARARs



"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.

Applicable or relevant and appropriate requirements, or ARARs, refer to a federal or more stringent state standard, which is aimed at protecting human health and the environment during the cleanup, that has been found to be legally applicable or relevant and appropriate for the site. ARARs are identified on a site-by-site basis. Factors such as the hazardous substance present, the location, the physical features, and the remedies being considered determine which standards must be met.

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

ARARS AND REMEDIATION GOALS

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requires the selection of a remedial action that is protective of human health and the environment and complies with "applicable or relevant and appropriate requirements" (ARARs). The approach to determining protectiveness involves a risk assessment and consideration of both ARARs and "to-be-considered" materials (TBCs). While the subject of risk assessment is addressed in a separate fact sheet, the following information is furnished to provide a better understanding of the concept of an ARAR and how it influences remediation goals.

WHAT IS AN "ARAR"?

The term "**ARAR**" comes from the phrase "**applicable or relevant and appropriate requirement**" which appears in CERCLA. In additional to being protective of human health and the environment, CERCLA specifically requires remedial actions (or cleanups) to attain federal or more stringent state standards determined to be legally applicable or relevant and appropriate under the circumstances presented by the contaminants at the site, unless a waiver is granted. Put another way, an ARAR is:

- a promulgated federal or more stringent state law or regulation;
- aimed at protecting human health and the environment during the cleanup at a site; and that
- has been evaluated and found to be legally applicable or relevant and appropriate for the site.

The National Oil and Hazardous Substances Contingency Plan (NCP), which explains how CERCLA is to be implemented, provides further guidance by defining the concepts of "applicable" and "relevant and appropriate". A requirement is applicable if the specific terms (or "jurisdictional prerequisites") of the law or regulation directly address the circumstances at a site. If not applicable, a requirement may nevertheless be relevant and appropriate if circumstances at the site are, based on best professional judgment, sufficiently similar to the problems or situations regulated by the requirement.

HOW ARE ARARS IDENTIFIED?

ARARs are identified on a site-by-site basis. It involves a two-part analysis: first, a determination of whether a given requirement is applicable; then, if it is not applicable, a determination of whether it is both relevant and appropriate. Factors such as the contaminants present,

the location, the physical features, and the technologies being considered determine which requirements must be met. The lead agency and support agencies shall identify their specific requirements that are applicable or relevant and appropriate for a particular site.

WHAT ARE THE TYPES OF ARARS?

There are several different types of requirements that clean-up actions may have to satisfy. Generally, there are three types of ARARs:

(1) Ambient or chemical-specific requirements

(2) Action-specific requirements

(3) Location-specific requirements

WHEN ARE ARARS IDENTIFIED?

Different ARARs that may apply to a site and its remedial action are identified at multiple points in the remedy selection process. Generally, during the early stages of the Remedial Investigation and Feasibility Study and the site characterization phase, a list of potential ARARs is initially developed. These focus on chemical- and location-specific ARARs. Later during the development of remedial alternatives in the Feasibility Study, the list is modified and refined to ensure that it addresses action-specific ARARs for each proposed alternative.

Final ARARs and cleanup levels are presented in Feasibility Study (FS). The purpose of the FS is to ensure appropriate remedial alternatives are developed and evaluated. The FS presents relevant information concerning the remedial action alternatives so that decision-makers can select an appropriate remedy in the Record of Decision (ROD). During the development and screening of alternatives in the FS, remedial action objectives specifying contaminants and media of concern, potential exposure pathways, and remediation goals (or cleanup levels), are identified. (Note: preliminary remediation goals are developed in the FS; the final remediation goals are identified in the ROD.)

The signing of the Record of Decision "freezes" ARARs and clean-up standards through construction and five years thereafter. At the five-year review (which is mandated by CERCLA for sites where residual contamination exists), ARARs are re-examined.

HOW ARE ARARS USED?

During the planning process, ARARs are used in conjunction with risk assessments/evaluations to determine the remediation goals for a particular site. They are also used in the evaluation of the proposed alternatives. The proposed or recommended plan must attain ARARs (unless a waiver of an ARAR is justified.) In addition, implementation of the remedial action should also comply with ARARs to protect public health and the environment. Finally, ARARs are examined at the five-year review to ensure that the remedy is still protective of human health and the environment.