U.S. Army Corps
of Engineers

Registered Attendance

Information on this card will be used to notify you of additional information regarding this project and/or this site.

Organization/Agency represented (if applicable)

Name

Address

City, State, Zip

Do you wish to submit an oral statement? ☐ Yes ☐ No

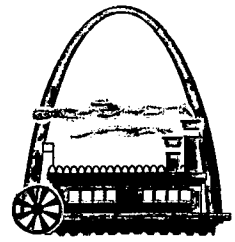
Meeting Agenda
North County FS/PP Public Meeting
May 29, 2003

6:00 – 7:00 p.m.	Poster Session/Informal Q&A
7:00 – 7:10 p.m.	Welcome and Introductions
7:10 – 7:15 p.m.	Discussion of Ground Rules and Hearing Format
7:15 – 7:30 p.m.	North County FS/PP Viewgraph Presentation
7:30 – 8:55 p.m.	Public Comments
8:55 - 9:00 p.m.	Meeting Wrap-up

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

St. Louis Sites Fact Sheet

WHAT IS FUSRAP?



"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.

The FY 1998 Energy and Water Appropriations Bill, in which Congress transferred management of the Formerly Utilized Sites Remedial Action Program (FUSRAP) to the U.S. Army Corps of Engineers (USACE), was signed into law on October 13, 1997. Prior to the signing of this bill, FUSRAP had been managed by the U.S. Department of Energy.

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) 260-3924 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 8945 Latty Avenue, Berkeley, Missouri 63134

The Formerly Utilized Sites Remedial Action Program (FUSRAP) is an environmental remediation program. It addresses radiological contamination generated by activities of the Manhattan Engineer District and the Atomic Energy Commission (MED/AEC) during development of the atomic weapons in the 1940s and 50s.

BACKGROUND

From 1942 to 1957, the Mallinckrodt Chemical Plant extracted uranium and radium from ore at the St. Louis Downtown Site (SLDS) in downtown St. Louis, Missouri. During this time and until 1967, radioactive process byproducts were stored at an area adjacent to the Lambert-St. Louis Airport, which is now referred to as the St. Louis Airport Site (SLAPS).

In 1966, the SLAPS wastes were purchased, moved, and stored at Latty Avenue. Part of this property later became known as the Hazelwood Interim Storage Site (HISS). During this move, handling and transportation of the contamination spread the materials along haul routes and to adjacent vicinity properties forming the St. Louis Airport Site Vicinity Properties (SLAPS VPs).

During the late 1950s and early 1960s, Dow Chemical Company in Madison, Illinois operated as a uranium extrusion and rod-straightening facility. Contamination is now in dust located on roof beams at the Madison Site.

HOW HAZARDOUS ARE FUSRAP SITES?

Even though FUSRAP sites contain levels of radioactivity above current guidelines, none of the sites pose an immediate health risk to the public or environment given current land uses. The contaminated materials have very low concentrations and people are not exposed to them for long periods of time.

Although these materials do not pose an immediate hazard, they will remain radioactive for thousands of years, and health risks could increase if the use of the land were to change. Under FUSRAP, each site is cleaned to levels acceptable for the projected future use of the land such as residential development, industrial operations, or recreational use.

What Are FUSRAP's Objectives?

The objectives of FUSRAP are to:

- Protect human health and the environment.
- Execute the approved alternative for cleaning up radioactive contamination above health-based cleanup guidelines.
- Minimize adverse effects on area business operations.

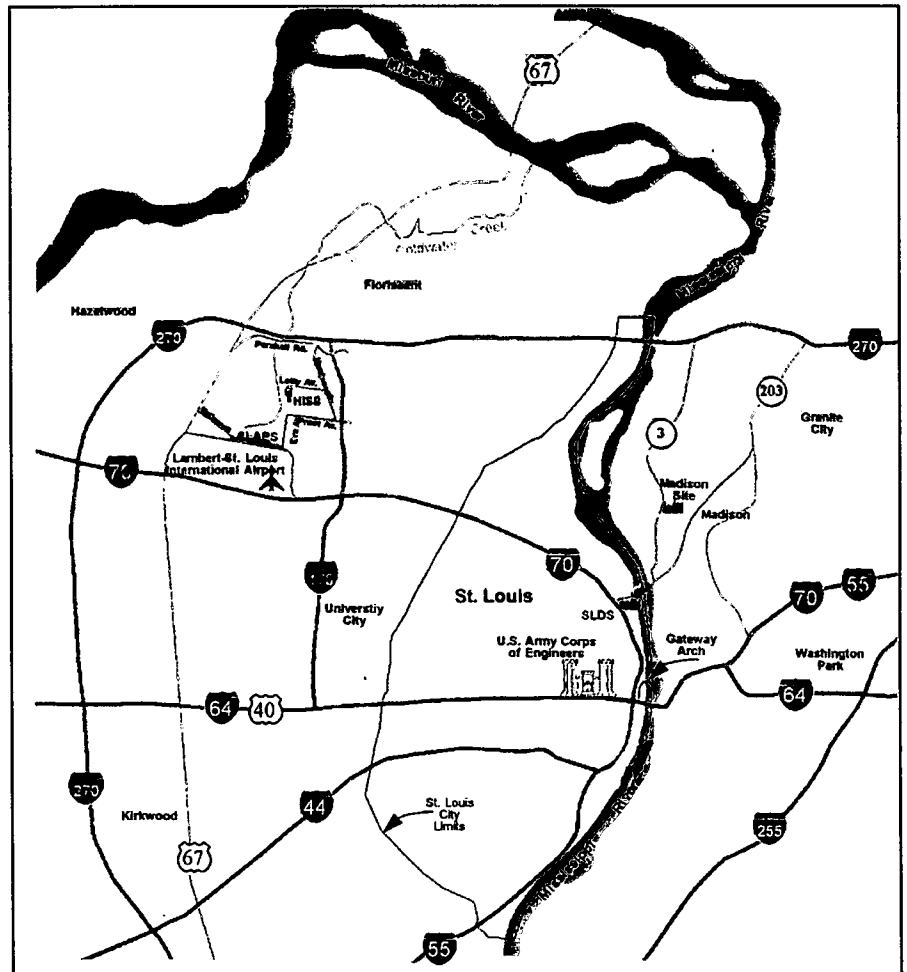
HOW DOES FUSRAP WORK?

FUSRAP sites undergo several steps that lead to cleanup. Information about the site is collected and reviewed. A Remedial Investigation/Feasibility Study (RI/FS) is conducted to develop cleanup alternatives. The Remedial Investigation identifies the type and location of the contamination. The Feasibility Study develops and evaluates cleanup alternatives.

The public is informed about the development of the RI/FS cleanup alternatives through public meetings and the media. Public participation is especially encouraged during the selection of the final remediation, or cleanup, method.

When a cleanup alternative is chosen, a Proposed Plan (PP) is written to explain why it was chosen. Members of the public are asked to comment on all the cleanup options, including the selected alternative. After public comments have been considered, a final decision is made and documented in a Record of Decision (ROD). The Remedial Design follows the ROD and includes technical drawings and specifications that show how the cleanup will be conducted.

Cleanup, or Remedial Action, begins after the Remedial Design is complete. This phase involves site preparation and construction activities. When these remediation activities are completed, verification surveys are conducted to ensure that cleanup objectives for the site have been met and are documented in a Post Remedial Action Report (PRAR).

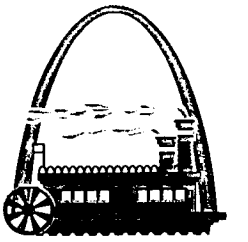


St. Louis District FUSRAP Sites

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

St. Louis Sites Fact Sheet

RADIATION BASICS



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Radiation is energy that travels in the form of waves or particles. Radioactivity is the property of some atoms to spontaneously give off energy. The atoms that make up the radioactive materials are the source of radiation. Ionizing radiation can be found in everything in nature in trace amounts—including people—but in high enough concentrations, it can cause chemical and/or physical changes in human tissue. While it is true that radiation can cause biological damage, it is important to keep the risks in perspective. We cannot eliminate radiation from our environment, but we can reduce our risks by controlling exposure.

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

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WHAT IS RADIATION?

Radiation is energy that travels in the form of waves or particles. Radiation is everywhere - in, around, and above the world we live in. Depending on how much energy it has, radiation is described as either non-ionizing (low energy) or ionizing (high energy). Non-ionizing radiation includes the sun and various electronic devices. Ionizing radiation can be found in everything in nature in trace amounts — including people. Every element such as carbon and potassium, as well as uranium and thorium has a radioactive form. Although ionizing radiation is all around us, in high enough concentrations it can present a health hazard if it is not properly controlled.

WHAT EFFECTS CAN RADIATION HAVE?

Because it can knock electrons from the atoms and molecules in its path, ionizing radiation can cause chemical and/or physical changes in human tissue. The effect of radiation on the body depends on how long the exposure was, how much energy was absorbed, and the type and number of cells that were affected. Most of the time, the cells can repair any damage themselves; however, sometimes they cannot. While there are billions of cells in the body, if enough are damaged, there is a risk of adverse health effects.

IS ALL IONIZING RADIATION THE SAME?

Ionizing radiation may be one of three types (alpha, beta, or gamma). Alpha particles can travel approximately 1-2 inches in air and can be blocked by a sheet of paper. Beta particles can travel 6-10 feet in air but can be blocked by a few millimeters of substance (i.e., clothing, glass, plastic, aluminum). Gamma particles can travel the farthest but may be stopped with lead or concrete.

WHAT IS DOSE? HOW IS RADIATION MEASURED?

The dose is the quantity of radiation or energy received. A basic unit for measuring the amount of energy absorbed from radiation received is the *rad*. To show biological risk and the probability of harmful effect, rads are converted to *rems*. The rem reflects tissue dose and takes into account the type of radiation absorbed into the body and the likelihood of damage. Because exposure to radiation normally occurs in fractions of a rem, the commonly used unit of exposure is the *millirem (mrem)*. One rem equals 1,000 millirem.

It is important to understand doses are averages that span a rather large range of values. For example, individual doses due to radon average about 200 millirem per year per person in the U.S. The actual dose can vary widely, depending on where you live/work.

WHAT ARE THE SOURCES OF EXPOSURE TO RADIATION?

While it is true that radiation can cause biological damage, it is important to keep risks in perspective. Each year, we receive about a 300 millirem dose of radiation from natural sources. Natural sources include rocks and soil, which contain naturally occurring radioactive isotopes such as radon, thorium, uranium and radium, or from cosmic sources such as the sun and other sources in space. The average American receives an additional 60 millirem per year from human activities, mostly medical sources (such as x-rays). Thus, in the United States, the average person receives a dose of about 360 millirem per year from all sources.

WHAT IS THE DIFFERENCE BETWEEN RADIATION AND RADIOACTIVITY?

Radiation is the energy or particles that are released during radioactive decay. The radioactivity of a material refers to the rate at which it emits radiation.

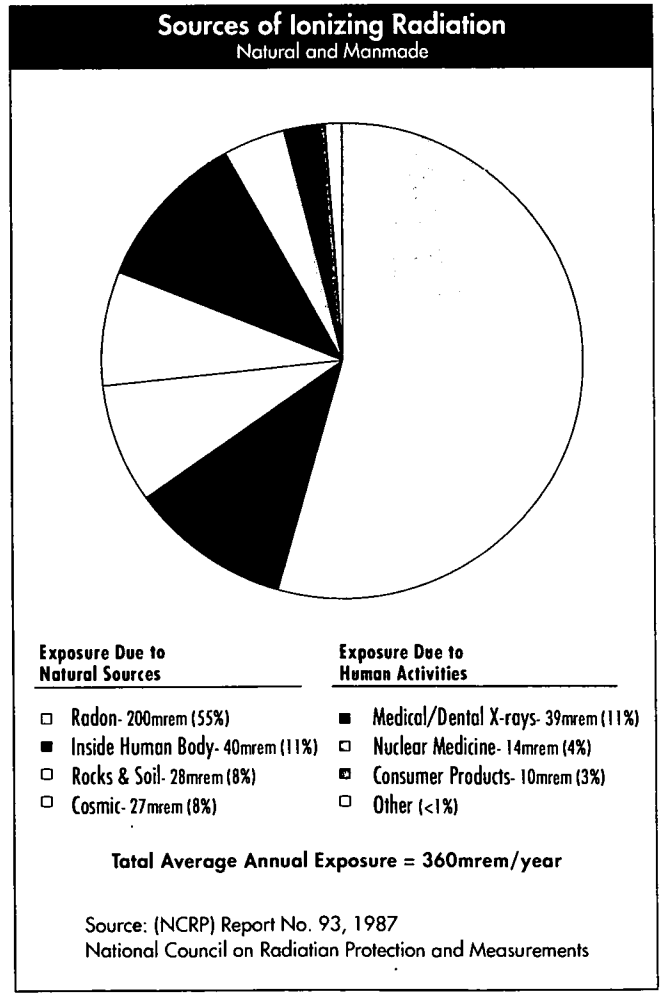
Each decay throws off particles and energy and is referred to as a "disintegration." The number of disintegrations per second, or per minute, is the *activity* of a sample. Activity is expressed in Curies. *One Curie equals 2.2 trillion disintegrations per minute.* At the FUSRAP St. Louis Sites, activity is commonly expressed in picocuries (pCi), which is one 1 trillionth of a Curie. In comparison, 1 picocurie is 22 disintegrations per minute.

HOW ARE PEOPLE EXPOSED TO RADIATION AND HOW CAN THEY PROTECT THEMSELVES?

We can be exposed to ionizing radiation through a number of pathways. We can be exposed through inhalation, ingestion, and direct exposure. The main pathways for most people are exposure to cosmic radiation, exposure to and breathing indoor and outdoor air, exposure to radiation from rocks and soils, and through all of the foods and liquids that we eat and drink.

We can protect ourselves from direct exposure by using time, distance, and shielding to limit our cumulative levels of exposure. A person is safer the farther from the source of radiation, the shorter the time of exposure, and the thicker the shielding. We cannot eliminate radiation from our environment; we can however, reduce our risks by controlling our exposure.

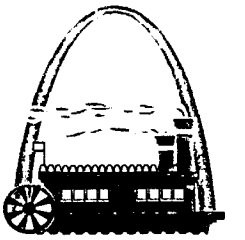
It may also be interesting to note, that the radiation dosage varies depending on where we live. For instance, the dose in Colorado is about 100 millirem/year more than would be present at sea level. This is due mainly to the increased altitude, which brings the person in closer proximity to the sun in a thinner atmosphere, but also due to the geology of the area.



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

St. Louis Sites Fact Sheet

RISK ASSESSMENT



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The risk assessment is a method used to quantify threats to human health and the environment. By examining the potential adverse effects caused by a hazardous substance, the risk assessment can help decide what needs to be cleaned up, where, and to what level. Risk assessments are comprised of two elements: the human health risk assessment and the ecological risk assessment. Together, they help determine the most effective way to clean up a site while reducing the overall risk to human health and the environment.

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) 260-3924 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 8945 Latty Avenue, Berkeley, Missouri 63134.

WHAT IS A RISK ASSESSMENT?

The risk assessment is a method used to quantify threats to human health and the environment. It is performed during the Remedial Investigation / Feasibility Study process required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). By examining the potential adverse effects caused by a hazardous substance, the risk assessment can help decide what needs to be cleaned up, where, and to what level.

HOW ARE RISK ASSESSMENTS PERFORMED?

Risk assessments are comprised of two elements: the human health risk assessment and the ecological risk assessment. Together, they help determine the most effective way to clean up a site while reducing the overall risk to human health and the environment. The following sections describe these two parts of the risk assessment in detail.

HUMAN HEALTH RISK ASSESSMENT

The human health risk assessment determines the risk posed by the contaminants to people who live, work or play at or near the site. Below is a basic explanation of the four main parts of a human health risk assessment.

- **Data collection/evaluation** - determines what chemicals are present at a site, where they are present, what levels they are present in, and whether or not the chemicals are moving off the site.
- **Exposure assessment** - calculates ways people might be exposed to the chemicals identified at the site. People may be exposed to chemicals by breathing, touching, or consuming contaminated air, water, soil, or food. For each "pathway," the quantity of a chemical that someone could take into their lungs, digestive system, or absorb through their skin is estimated for the time the individual is effected by the site given its current and likely future uses. The estimates take into account how long, how often, and how many ways people could be exposed to site chemicals.
- **Toxicity assessment** - evaluates the health effects that exposure to site chemicals could cause. It includes an assessment of the increased risk of *cancerous effects*, and an assessment of toxicological thresholds for *non-cancerous* effects (such as rashes, eye irritation, breathing difficulties, or organ damage).
- **Risk characterization** - combines the results of the three steps above to identify the critical risks posed by the site and determine whether they are great enough to cause health problems for people at or near a site.

ECOLOGICAL RISK ASSESSMENT

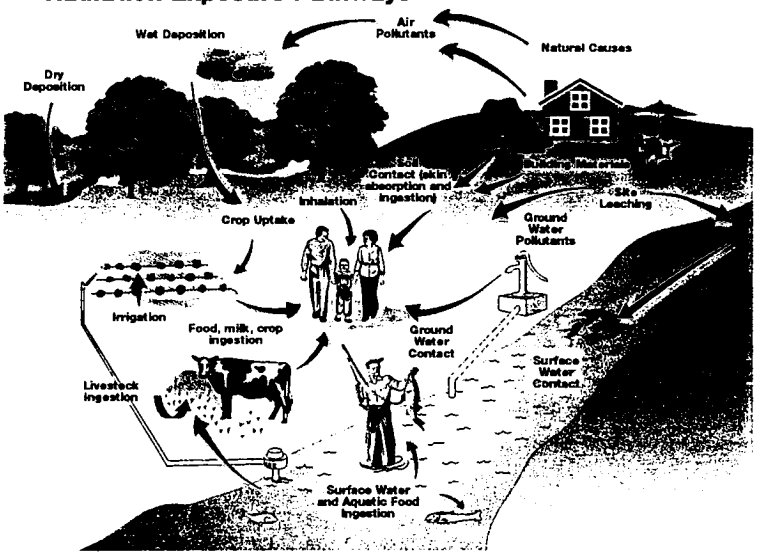
The process for developing the ecological risk assessment is very similar to the human health risk assessment. The ecological risk assessment, however, focuses on the effects that site contamination has or could have on plants and wildlife. A basic explanation of the five major parts of this assessment follows.

- **Problem Formulation** - evaluates what chemicals, animal, and plant species are present at a site; what levels the chemicals are present in; and whether or not the chemicals are moving off the site.
- **Analyses (Characterization of Exposure)** - calculates how animals and plants might be exposed to the chemicals, at what levels, and over how many years this exposure might reasonably be expected to occur. Animals may be exposed to chemicals the same ways that people could be exposed, by breathing, touching, or consuming contaminated air, water, soil, or food. Exposures are calculated for groups of animals like birds, mammals, and fish, and plants like grasses, trees, and aquatic plants. Sometimes these groups are broken down into sub-groups such as birds of prey (eagles, hawks, etc.) and aquatic birds (ducks, geese, etc.).
- **Toxicity Assessment (Characterization of Ecological Effects)** - requires literature reviews, field studies, and toxicity tests to identify what the health effects of the various chemicals would be on each animal and plant group (or sub-group) identified.
- **Risk Characterization** - determines the most critical ecological site risks and whether they are great enough to cause health problems for animals or plants at/near a site. The amount of uncertainty in the risk estimates is also considered. If this step identifies potential unacceptable risks to plants and/or animals, then remedial action is necessary and a Feasibility Study is performed to identify and evaluate remedial alternatives to reduce these risks.
- **Data Acquisition** - includes a number of activities performed throughout the ecological risk assessment process. Activities may include identification of threatened or endangered species/habitats, analyses of wildlife impacts, monitoring abundance of species within the area, and others.

HOW IS A RADIOLOGICAL RISK ASSESSMENT COMPLETED?

Overall, the process for assessing radionuclide exposures and radiation risks parallels the process for assessing increased risks from carcinogenic chemical exposures. Both radiological and chemical risk assessments follow the same processes, consider similar exposure scenarios and pathways, determine exposure point concentrations, and provide estimates of risks to humans and the environment. The primary difference is that the radiological risk assessment includes the external "direct exposure" pathway. The "direct exposure" pathway is unique to the radiological risk assessment.

Radiation Exposure Pathways



We are exposed to ionizing radiation by many pathways. The main ones for most people are exposure to cosmic radiation, exposure to and breathing indoor and outdoor air, exposure to radiation from rocks and soils, and drinking and eating foods with naturally occurring radioactive elements.

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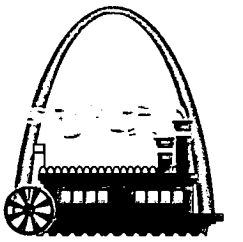
RISK RANGE



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The CERCLA acceptable risk range is defined as the risk of one additional cancer in 10,000 to one additional cancer in 1;000,000 (or in scientific notation 10^{-4} to 10^{-6}). The risk range is used in the CERCLA process in three instances: the baseline risk assessment during the Remedial Investigation, development of remedial goals in the Feasibility Study, and in the documentation of protectiveness of the final site conditions during the Site Closeout.

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

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WHAT IS THE "ACCEPTABLE RISK RANGE" AND WHY IS IT USED?

Under the Comprehensive Environmental Restoration, Compensation, and Liability Act (CERCLA), the acceptable risk range is defined as risk falling somewhere between 1 additional cancer in 10,000 and 1 additional cancer in 1,000,000. It is used in three instances: the baseline risk assessment during the Remedial Investigation, development of remedial goals in the Feasibility Study, and in the documentation of protectiveness of the final site conditions during the Site Closeout. The risk assessment is used to quantify threats posed by a hazardous substance to human health and the environment. The results of the risk assessment are used to establish the basis for taking a remedial action and aid in the development of cleanup alternatives during the Feasibility Study. The condition of the site after cleanup is documented in the Post Remedial Action Report (PRAR), which ultimately becomes part of the final Site Closeout Report.

RISK RANGE IN THE RISK ASSESSMENT

Whether or not a risk is unacceptable is based on a comparison of the total current (and/or future) risks to the acceptable risk range. The acceptable risk range is defined as risk falling somewhere between 1 additional cancer in 10,000 and one additional cancer in 1,000,000. This range is commonly expressed as 10^{-4} to 10^{-6}. When the risk assessment indicates the total risk to an individual exceeds the 10^{-4} end of the risk range, action is generally warranted at the site. For sites where the total site risk to an individual, based on the reasonable maximum exposure or RME for both current and future land use, is less than 10^{-4} (the upper bound of the CERCLA risk range) action generally is not warranted unless there are non-cancer health effects or negative ecological effects that warrant action.

RISK RANGE IN THE FEASIBILITY STUDY

Once a decision has been made to take action, a Feasibility Study is conducted. As part of the Feasibility Study, cleanup levels (or remediation goals) are developed for the site. The first step in developing cleanup levels is to determine whether acceptable or reasonable and appropriate requirements (or ARARs) exist for the site. As a side note, ARARs at their simplest level refer to legal requirements for the cleanup of the site.

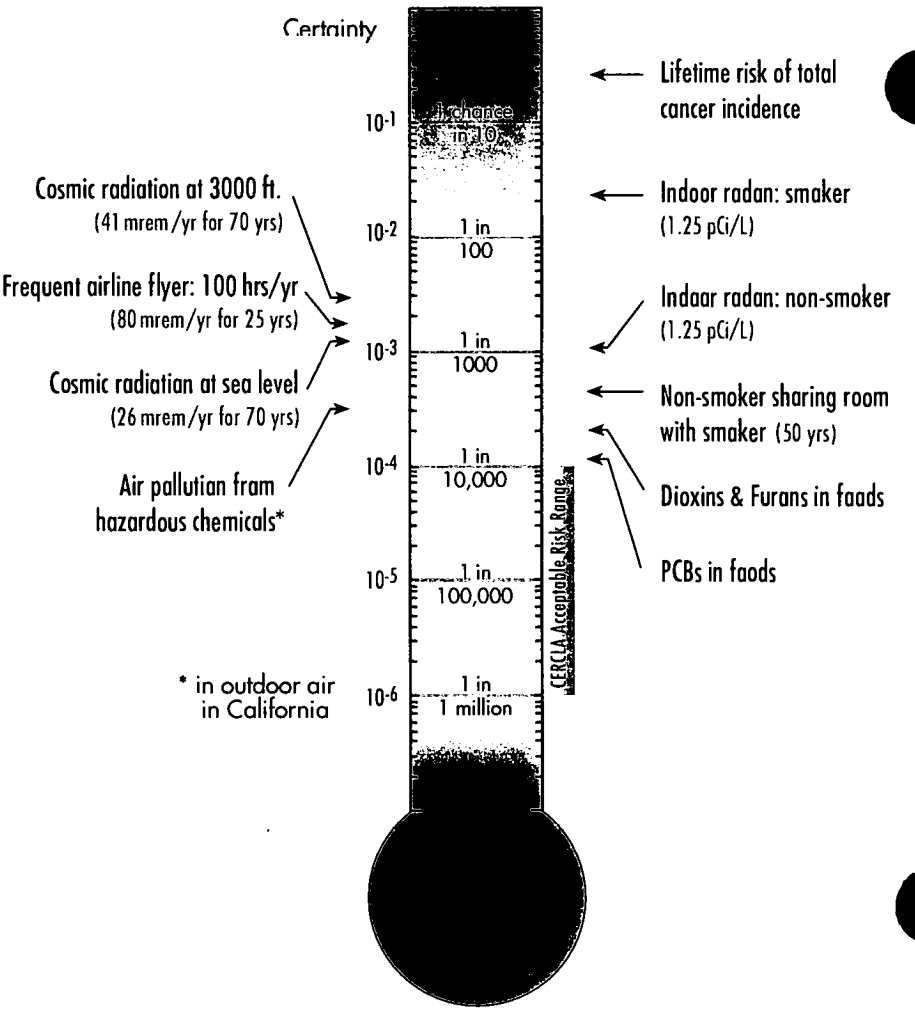
If an ARAR for a specific hazardous substance defines an acceptable level of exposure, compliance with the level in the ARAR will generally be considered protective even if it is outside the risk range. However, if there is the potential for exposure to multiple hazardous substances or pathways of exposure, and the individual ARAR levels for the substances or pathways add up to more than 10^{-4}, then compliance with the levels in the ARARs may not be protective.

The risk range is used to determine the cleanup level when an ARAR level is determined not to be protective. A risk of 10^{-6} is used as the starting point for determining the most appropriate cleanup level for the hazardous substance and is referred to as the "Preliminary Remediation Goal" or PRG. The final cleanup level (or remedial goal) could ultimately be anywhere within the acceptable risk range of 10^{-4} to 10^{-6}, but must have a CERCLA basis to move off the PRG. The final remedial goal is based on the consideration of site-specific exposure factors (which include pathways of exposure, exposure to sensitive persons such as pregnant women), technical factors (such as detection limits, background levels), and uncertainty factors (for example reliability of data, weight of scientific evidence regarding health effects).

The risk range is also used to determine cleanup levels when there are no ARARs to use as cleanup levels. As is done for ARAR levels that are not protective, a risk level of 10^{-6} is used as the starting point for determining the most appropriate cleanup level for a hazardous substance(s) at a site for which ARARs are not available. The final cleanup level without an available ARAR could be anywhere within the acceptable risk range of 10^{-4} to 10^{-6}. The final cleanup level is based on the consideration of the same site-specific exposure factors, technical factors, and uncertainty factors identified above.

RISK RANGE IN THE SITE CLOSEOUT

A residual site risk assessment is performed upon completion of remediation for each portion of the site. The risk of contaminants remaining on site is determined through this assessment and is documented in the Post Remedial Action Report and the Site Closeout Report. (These reports document the protectiveness of the overall site and of specific portions of the site.)



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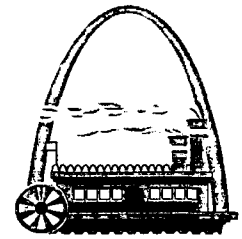
ARARs



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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

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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, and

(3) Location-specific requirements.

WHEN ARE ARARS IDENTIFIED?

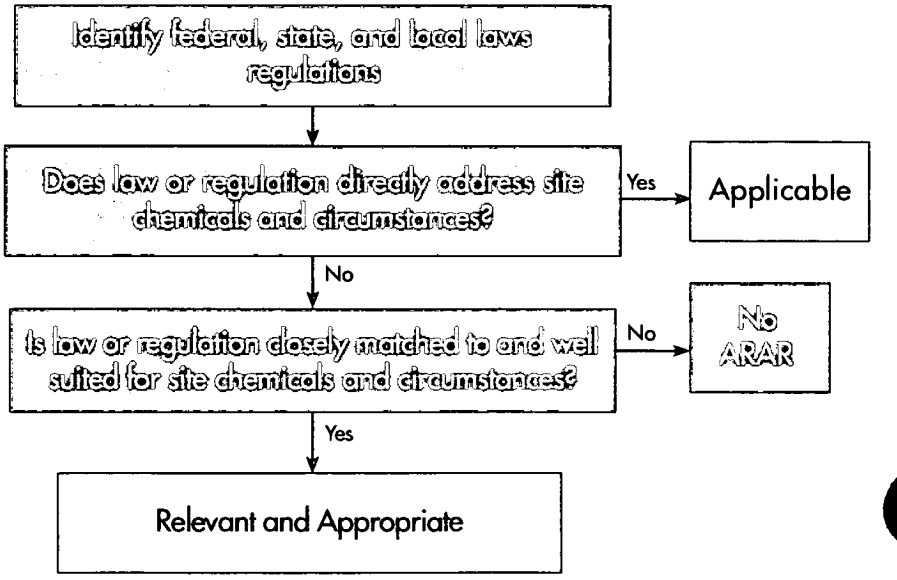
Different ARARs that may apply to a site and its remedial action are identified at multiple points in the remedy selection process. Generally, during the early stages of the Remedial Investigation and Feasibility Study (FS) and the site characterization phase, a list of potential ARARs is initially developed. These focus on chemical- and location-specific ARARs. Later during the development of remedial alternatives in the FS, 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 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 ROD "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.



Roles and Responsibilities of the Agencies and Parties Involved at the St. Louis FUSRAP North County Site

The roles and responsibilities of federal and state agencies and private parties at federal facilities like FUSRAP are defined in Section 120 of Superfund, as amended in the Superfund Amendments Reauthorization Act (SARA), and Executive Order Number 12580.

The agencies and parties involved in the Superfund cleanup activities at the St. Louis FUSRAP North County Site are described below.

U. S. Army Corps of Engineers (USACE) - A federal agency, which assumed responsibility for FUSRAP from the U.S. Department of Energy (DOE) as directed by Congress. USACE was directed by Congress in the Energy and Water Resources Appropriations Act of 1997 to conduct and execute remedial actions at the FUSRAP sites. USACE functions as the lead agency for FUSRAP actions, but EPA continues to monitor the progress of work at these sites.

The U. S. Environmental Protection Agency (EPA) - A federal agency with responsibility delegated by the President to implement the Superfund law and its regulations. EPA is involved in the initiation, development, selection, and implementation of the remedial actions to be taken at FUSRAP. Under a Federal Facilities Agreement (FFA) negotiated with EPA Region VII, the St. Louis District USACE has been designated the lead agency for each of the Missouri St. Louis Sites, with EPA playing a consultative role and providing project oversight to ensure that compliance requirements and schedules are achieved.

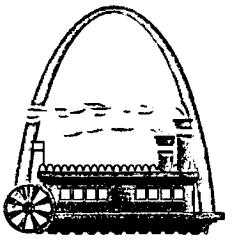
Missouri Department of Natural Resources (MDNR) - The designated state agency whose responsibilities are to evaluate proposals, recommendations, and plans submitted by USACE in accordance with state or federal laws, regulations, policies, and guidance. MDNR is also providing independent field oversight of remedial activities carried out at Missouri FUSRAP sites. MDNR's participation ensures Missouri citizens that compliance requirements and schedules are achieved and remedial actions are of a high quality standard.

Oversight Committee - A group of community leaders, which serves in a consultative and participatory role with the cleanup of the St. Louis FUSRAP Sites. As a consultant, the Committee provides comments, recommendations, and constructive criticism for the USACE in its efforts to clean up the FUSRAP sites. As participants, members of the Committee are actively involved in their neighborhoods, businesses, and governmental units. They assist the USACE by clarifying community concerns and conveying information to other members of the community to assure that residents are fully informed about cleanup activities. The Oversight Committee ensures that residents' questions are answered to the fullest extent possible.

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

St. Louis Sites Fact Sheet

CLEANUP



"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.

There are basic actions required to carry out a cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): sampling, remedy design, implementation, release, and ultimately final closeout. This fact sheet explains each of these actions and its purpose in the process.

While specific cleanup activities vary depending upon the final remedy selected, the basic process required to carry out a cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is similar. Unless the "no further action" remedy is selected for a site, the cleanup process typically includes sampling (or Pre-Design Investigation), design (or Remedial Design), implementation (or Remedial Action), release (or Post Remedial Action Report), and ultimately final closeout/five year reviews. Many of the actions described herein are typical of cleanup activities for the cleanup of the St. Louis FUSRAP Sites under CERCLA. Let's look at each of these in turn.

SAMPLING (PRE-DESIGN INVESTIGATION)

The cleanup process begins with sampling (referred to as the Pre-Design Investigation) to identify the potential problem areas. The Corps collects data, conducts interviews and researches the historical use of the site to identify these areas. Potentially impacted areas could be the result of material storage, waste processing activities, or migration via wind or storm-water runoff.

A radiological walkover, using an instrument that detects radioactivity, is then conducted. A technician scans the site to determine whether areas of elevated radiological activity exist. Based on the results from the walkover, soil samples are collected to define the concentration and limits of contamination within any elevated areas located during the walkover. Systematic samples are collected to document concentrations within portions of the area that do not have elevated levels of contamination. The results of these activities are documented in the Preliminary Design Investigation Report.

DESIGN (REMEDIAL DESIGN)

Based on the Pre-Design Investigation Report, the remedial design develops the engineering approach and procedures required to safely carry out the selected remedy presented in the Record of Decision. Draft copies of the remedial design are provided to the Environmental Protection Agency (EPA) and Missouri Department of Natural Resources (MDNR) for review and comment. Once their comments have been addressed, the document is finalized and cleanup work can begin.

IMPLEMENTATION (REMEDIAL ACTION)

The remedial action implements the remedial design. The final remedy carried out at the site (for example capping, on-site disposal cell, treatment, or partial/complete excavation) is the one identified in the Record of Decision. Because each of these remedies may include excavation either as the remedy or a component of the remedy, this section will discuss the requirements of excavation as an example of how a remedial action is carried out.

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) 260-3924 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 8945 Latty Avenue, Berkeley, Missouri 63134

The actual removal or excavation is composed of two parts: gross excavation and guided or "precision" excavation. Gross excavation uses a bulldozer or excavator to remove large volumes of contaminated soil to a predetermined depth. A radiation technician then walks over the hole with radiological detection equipment to identify hot spots (or isolated areas where contaminated soils remain). Any hotspots are marked and excavated. This is referred to as "guided excavation" since limited portions of the work area require excavation to a deeper elevation to achieve the selected remedy. Precision excavation minimizes the potential for cross-contamination of clean areas.

RELEASE (POST REMEDIAL ACTION REPORT)

To ensure the site meets remediation goals established in the Record of Decision, a final status survey is performed. Continuing the example provided in the previous section, let's look at how an excavated site is released. (Note, however, that other activities might be required to evaluate the success of other remedies.) After the site contractor believes the remedial goals have been achieved, the Corps sends an independent contractor to the site to conduct a radiological walkover and collect samples to verify that the remediation goals have been achieved. The Corps reviews the sample data to determine whether the area meets the Record of Decision goals and can be backfilled with clean material, or additional soil removal is necessary.

The effectiveness of the cleanup, and compliance with the Record of Decision are documented in the Post Remedial Action Report (or PRAR). Further, the PRAR also documents the condition of the site after the cleanup, and whether any restrictions for future land use (such as deed restrictions, or restrictions on the installation of wells) are necessary. Copies of the draft report are given to the property owner, the EPA , and the MDNR for review and comment prior to being issued in final form. The PRAR should be maintained with property information in a secure location since this information is useful should the landowner decide to sell the property, make property improvements or undertake actions that disturb the ground surface, such as grading.

CLOSE OUT / 5-YEAR REVIEWS

It should be noted that while these activities (that is sampling, remedy design, and implementation) occur in a step-by-step process in each area, they may occur simultaneously in various portions of the site. The close out process is the only activity that must wait until all the areas comprising a site have been cleaned up. Due to the size and complexity of some sites, along with budget constraints, it becomes necessary to split the site into manageable areas. The cleanup status of each area will be defined in a PRAR. Once the all of the areas comprising the site meet the remedial goals set in the Record of Decision, the site can be closed out. The PRARs are then compiled into a single document called a Final Closeout Report. If a property meets the "unrestricted use and unlimited exposure" requirement, no further action is necessary. If a property does not meet this scenario (that is, contaminants remain above levels that allow for unlimited use and unrestricted exposure), 5-year reviews are required to determine whether the remedy identified in the Record of Decision is still protective of human health and the environment.

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

St. Louis Sites Fact Sheet

RELEASE

"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.

When a property is "released", it means that the cleanup of the property has met the goals identified in the Record of Decision. Two key terms are important when the USACE makes a determination of release for a property in the Post Remedial Action Report. These terms are restricted use and unrestricted use. This fact sheet explains these terms and the circumstances under which each is assigned.

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) 260-3924 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 8945 Latty Avenue, Berkeley, Missouri 63134

When a property is "released", it means that the cleanup of the property has met the goals identified in the Record of Decision. The property's release status is documented in a Post Remedial Action Report (PRAR) prepared by the U.S. Army Corps of Engineers. This report documents the effectiveness of the cleanup, demonstrates compliance with the Record of Decision, and any restrictions placed on the future use of the property.

Before finalizing the PRAR, the U.S. Environmental Protection Agency (EPA), the Missouri Department of Natural Resources (MDNR) and the property owner receive copies of the document for review and comment. The Corps then addresses those comments, incorporates changes as required, and distributes the final document.

Two key phrases are important when the Corps makes a determination of release at a property in the PRAR. These phrases are "restricted use," and "unrestricted use and unlimited exposure".

RESTRICTED USE

"Restricted use" refers to any remedial action that does not allow for unlimited use and an unrestricted exposure. Institutional controls (such as deed restrictions) or engineering controls (such as fences) are necessary to prevent an unanticipated land use change that could result in

unacceptable exposure to human health and the environment from the remaining contamination. Simplified, the controls ensure that the cleanup remains effective.

Institutional controls or engineering controls are relied upon for the period during which the radioactivity could present a threat to human health and the environment. These controls would be maintained until the material was removed or an assessment showed that the residual contamination met unrestricted use standards.

After the completion of the cleanup, a review of the site is conducted once every 5 years to evaluate the performance of the remedy and determine whether the remedy is/will continue to be protective of human health and the environment. The 5-year review typically includes document review, site inspection, monitoring results and documentation of the effectiveness of the institutional or engineered controls. The 5-year reviews continue until the area meets the unrestricted use and unlimited exposure standard.

UNRESTRICTED USE AND UNLIMITED EXPOSURE

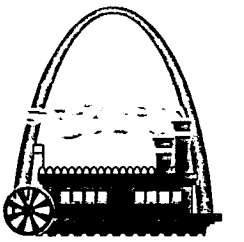
"Unrestricted use and unlimited exposure" means that the property owner can use the land for any purpose with no institutional or engineering controls. Cleanup to "unrestricted use" is not always practical. Areas where contamination is present under permanent structures (such as roads, buildings, railroads or bridges) and poses little to no risk to human health or the environment in its current state. Areas where efforts to cleanup to "unrestricted use" would present a significant safety risk or where such cleanup would be prohibitively costly are best addressed by using institutional and/or engineering controls until access can be granted to the government.

The next step is the site closeout and deletion from the National Priorities List (NPL), if applicable. The site closeout is a stand-alone document that provides a consolidated record of all removal activities for the site. The document made available for public review before it is finalized.

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

St. Louis Sites Fact Sheet

LONG-TERM STEWARDSHIP



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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) 260-3924 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 be 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.

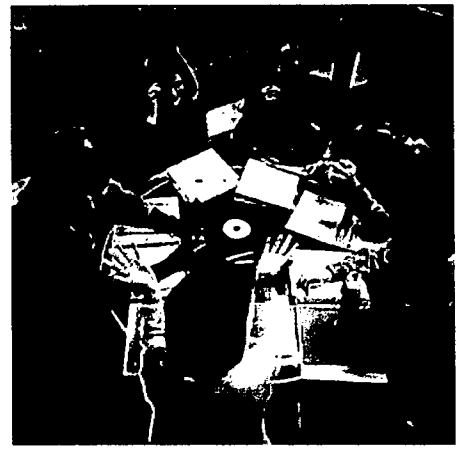
The primary function of long-term stewardship is to ensure protection of human health and the environment until the managed waste materials are no longer hazardous. The following four tools of stewardship will be used to accomplish this at the St. Louis FUSRAP Sites.

- 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 conrols 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 maintain 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 the 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.

FUSRAP ADMINISTRATIVE RECORD FILE

US Army Corps of Engineers

St. Louis Downtown Site Fact Sheet

The United States Army Corps of Engineers (USACE), St. Louis District is conducting a radiological cleanup program for the St. Louis Downtown Site (SLDS). The site contains soils contaminated with radium, thorium, and uranium as a result of federal defense activities performed under contracts with the Manhattan Engineer District and the Atomic Energy Commission (MED/AEC) in the 1940s and 50s.

The U. S. Environmental Protection Agency (EPA) and USACE have signed the Record of Decision (ROD) that outlines the final cleanup remedy for SLDS. As required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the USACE is announcing the availability of the Administrative Record for SLDS.

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

To learn more about SLDS or to inquire about public involvement opportunities, contact the FUSRAP Project Office at (314) 524-4083 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 9170 Latty Avenue, Berkeley, Missouri 63134.

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability act (CERCLA), commonly known as Superfund, to provide a federal authority to directly respond to real or potential releases of hazardous substances that may endanger public health or the environment.

CERCLA has specific reporting requirements and requires that an Administrative Record be collected. This legal file must include documents used to help select a cleanup method, including documents on site activities, general information about the Superfund program, and site-specific information. Until all required documents have been developed or gathered, a complete Administrative Record for a given site cannot exist. A temporary file, an Administrative Record File or simply Record File, is maintained with all available information. This Record File documents current progress and provides the public with current data for the St. Louis Sites. Record Files for each site will be available for review at the FUSRAP Project Office and at the St. Louis Public Library during normal business hours.

At the local community's request, the United States Army Corps of Engineers has also established a location at the Henry Clay Elementary School Library to place a limited number of documents regarding SLDS. Questions regarding these documents should be directed to the FUSRAP Project Office.

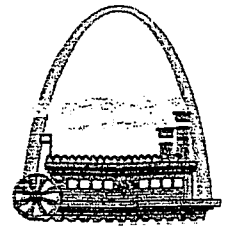
Individuals may photocopy any documents contained in the record, according to photocopying procedures at the local repository.

The USACE welcomes comments at any time on documents contained in the Administrative Record File. Comments should be directed to the FUSRAP Project Office, 9170 Latty Avenue, Berkeley, Missouri 63134.

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

St. Louis Sites

ADMINISTATIVE RECORD LOCATIONS



"Gateway to Excellence"

Copies of the FS and PP are with the site Administrative Record File and may be reviewed at the following locations:

U.S. Army Corps of Engineers, St. Louis District
FUSRAP Project Office
8945 Latty Avenue
Berkeley, MO
8:00 a.m. - 4:30 p.m., Monday thru Friday

St. Louis Public Library
Government Information Room
1302 Olive Street
St. Louis, MO 63103
during normal business hours

Copies of the documents are also available for public review at the following locations during normal business hours:

St. Louis Public Library – Central
1301 Olive Street
St. Louis, MO 63103
Contact: Barbara L. Rehkop

St. Louis Public Library – Julia Davis Branch
4415 Natural Bridge Road
St. Louis, MO 63115
Contact: Jeannette Smith

Washington University
Department of Earth & Planetary Sciences
One Brookings Road
St. Louis, MO 63130
Contact: Clara McLeod

St. Louis County Library –
Prairie Commons Branch
915 Utz lane
St. Louis, MO 63042
Contact: Lee Kiesling

St. Louis County Library – Headquarters
1640 S. Lindbergh Boulevard
St. louis, MO 63131
Contact: Bonnie Hiltibrand or Christel Massen

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

Summary of Activities at the

ST LOUIS NORTH COUNTY SITE OVERVIEW

"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program for the St. Louis North County Site. The Site contains soils primarily contaminated with radium, thorium, and uranium as a result of federal defense activities performed under contract with the Manhattan Engineering District and the Atomic Energy Commission during the nation's early atomic energy program in the 1940s and 50s.

The USACE issued a Feasibility Study identifying and evaluating alternatives for cleaning up the North County Site as well as a Proposed Plan detailing the preferred cleanup alternative on May 1, 2003. The Plan identifies Alternative 5, **Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures,** as the USACE's preferred remedy for the North County Site. Public comment and regulatory review will help determine the remedy selected for the site. The USACE will respond to all significant comments in the North County Record of Decision, which will identify the final remedy for the site based in part upon public comments received during the 30-day review period.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the St. Louis North County Site or to inquire about public involvement opportunities, contact

Jacqueline Mattingly at (314) 260-3924

Or write

St. Louis District, Corps of Engineers
FUSRAP Project Office
8945 Latty Avenue, Berkeley, MO 63134

BACKGROUND

Under contracts with the Manhattan Engineer District and Atomic Energy Commission (MED/AEC), the Mallinckrodt Chemical Plant extracted uranium from ore at the St. Louis Downtown Site (SLDS) in St. Louis, Missouri from 1942 to 1957. The processing of uranium left radioactive contamination at the site. A Record of Decision (ROD), which was developed to address the contamination in accessible soils and groundwater at SLDS based upon public input, was signed in 1998.

From 1946 until 1967, radioactive process byproducts were stored on 21.7-acres of property adjacent to the Lambert-St. Louis International Airport, which is now referred to as the St. Louis Airport Site (SLAPS). In 1966, the SLAPS wastes were purchased, moved, and stored at a property on Latty Avenue. The eastern part of this property later became known as the Hazelwood Interim Storage Site (HISS), while the western part became known as Futura. During this move, improper handling, transport and storage of the contamination spread the materials along haul routes and to adjacent properties forming the SLAPS and Latty Avenue Vicinity Properties (VPs). Today these sites, including impacted areas along Coldwater Creek, make up the North County Site.

The North County Site is part of the Formerly Utilized Sites Remedial Action Program (FUSRAP), a program managed by the U.S. Department of Energy (DOE) until 1997. On October 4, 1989, Congress added SLAPS, HISS and Futura to the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL). In 1990, the EPA and DOE negotiated a Federal Facilities Agreement, which described the process that would be used to cleanup MED/AEC contamination in St. Louis. At the direction of Congress, the U.S. Army Corps of Engineers (USACE) became responsible for the cleanup of FUSRAP sites in 1997.

In accordance with the Comprehensive Environmental Response, Compensation and Liability Act, the USACE has based their approach to cleaning up the North County Site on data and findings contained within six key documents: the Remedial Investigation, the Baseline Risk Assessment, the Ecological Risk Assessment, SLAPS & HISS Engineering Evaluation/ Cost Analyses (EE/CAs), and the Feasibility Study. These documents are available to the public through the North County Administrative Record File, which is maintained at both the FUSRAP Project Office and the City of St. Louis Public Library. A Proposed Plan identifying the USACE's preferred

Alternative 1

No Action

Leave site as is with periodic environmental monitoring.

Cost: $1.5 million

Alternative 2

Partial Excavation and Capping at SLAPS and HISS

Excavate soil from the VPs and dispose out-of-state. Cap SLAPS and HISS and use institutional controls to limit access to contaminated areas.

Cost: $205 million

Alternative 3

Partial Excavation and Treatment

Excavate impacted soils from VPs and HISS, then consolidate and treat at SLAPS. Use institutional controls to limit access to contaminated areas.

Cost: $284 million

Alternative 4

Institutional Controls

Use institutional controls such as deed notices, land use restrictions, and zoning restrictions to limit future land use at SLAPS, HISS, and the VPs.

Cost: $129 million

Alternative 5

Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures

Remove contamination to allow unrestricted use at all sites. Control access under roads, bridges, railroads, and other permanent structures.

Cost: $223 million

Alternative 6

Excavation at all Properties

Excavate impacted soils from all locations, regardless of accessibility, for out-of-state disposal.

Cost: $286 million

remedy for site cleanup is also available for review at both locations. The final cleanup remedy will be outlined in the Record of Decision, which will be submitted to the EPA and Missouri Department of Natural Resources later this year.

EARLY REMOVAL ACTIVITIES

While developing a comprehensive cleanup strategy for the North County Site, DOE developed interim actions to minimize exposure to contaminated materials. The first of these actions took place in 1985 when DOE built a retaining wall at SLAPS along the bank of Coldwater Creek to combat erosion. In 1997, the DOE removed approximately 5,100 cubic yards of contaminated material from the west end of SLAPS next to the retaining wall and shipped it to an out-of-state disposal facility.

Under the 1998 SLAPS EE/CA, the USACE began efforts to stabilize SLAPS and constructed a sedimentation basin to limit the migration of contamination from SLAPS via stormwater runoff. A rail spur was also installed on SLAPS in 1998 to provide for shipment of contaminated materials removed. Since 1998, an estimated 280,000 cubic yards of contaminated soils from the northern and eastern portions of SLAPS have been removed. Additional removals are ongoing. To date, all material has been shipped to out-of-state disposal facilities.

At HISS, the USACE removed storage piles under the 1998 HISS EE/CA. Before the pile removal began, a rail spur was built along the eastern boundary of HISS to allow shipment directly from the site. Removal of the storage piles began in March 2000 and was completed about 18 months later. Nearly 58,000 cubic yards were removed.

Removal actions have also been conducted at SLAPS and Latty Avenue VPs. Between 1995 and 1997, DOE excavated contaminated soils from the frontages of 30 properties along Hazelwood Boulevard, Latty Avenue and Frost Avenue.

PUBLIC PARTICIPATION

The USACE encourages public input to ensure the remedy selected for the North County Site meets the needs of the local community and is an effective solution to the problem.

Comments on the proposed alternatives will be accepted by the USACE for 30 days after the Feasibility Study and Proposed Plan are issued, unless a request for an extension is received. Verbal comments will be recorded during the May 29, 2003 public meeting at the Hazelwood Civic Center – East. Written comments may be submitted at anytime during the 30-day comment period, which currently ends May 30, 2003. The USACE will respond to all significant comments in the North County Record of Decision and will consider these comments when working with EPA to make a final decision. Interested parties should regularly check the FUSRAP website for current information at www.mvs.usace.army.mil/engr/fusrap/home2.htm.

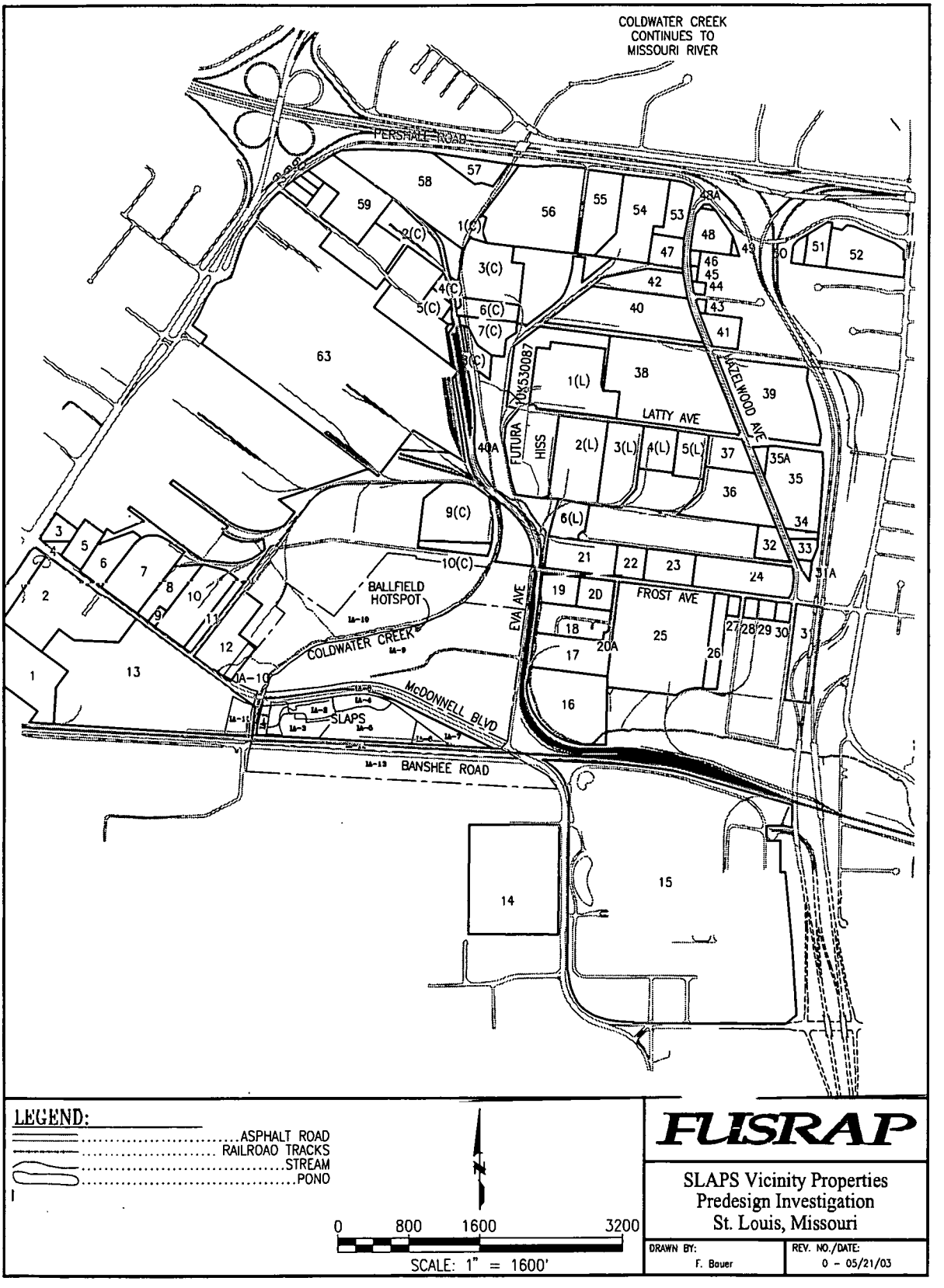


Figure 2-1. Locations of the North County Vicinity Properties

FUSRAP PROPERTY IDENTIFIERS

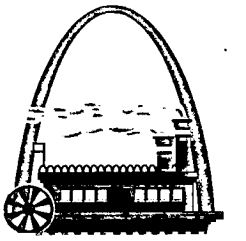
ID	LOCATOR	ADDRESS	LOCALITY
1L	10K530087 & 10K530098	9151 LATTY AVE	BERKELEY
2L	10K510012	9150 LATTY AVE	HAZELWOOD
3L	10K520022	9060 LATTY AVE	BERKELEY
4L	10K520033, 10K520044, 10K520165	8942 & 8966 LATTY AVE	BERKELEY
5L	10K520033, 10K520044, 10K520165	8942 & 8966 LATTY AVE	BERKELEY
6L	10K510067	999 SEEGER IND. DR.	BERKELEY
FUTURA	10K510023	9200 LATTY AVE	BERKELEY
HISS	10K510090	9170 LATTY AVE	BERKELEY
1	10L220893	5800 N Lindbergh Blvd	HAZELWOOD
2	10L240093	32 Jas S McDonnell Blvd	HAZELWOOD
3	10L330123	5900 N Lindbergh Blvd	HAZELWOOD
4	10L330114	183 Jas S McDonnell Blvd	HAZELWOOD
5	10L330114	183 Jas S McDonnell Blvd	HAZELWOOD
6	10L330040	163 Jas S McDonnell Blvd	HAZELWOOD
7	10L330031	153 Jas S McDonnell Blvd	HAZELWOOD
8	10L330022	143 Jas S McDonnell Blvd	HAZELWOOD
9	10L330073	141 MCDONNELL BLVD.	HAZELWOOD
10,11	10L340151	133 McDONNELL BLVD,	HAZELWOOD
12	10L340142	123 McDONNELL BLVD.	HAZELWOOD
13	10L310011	5290 Banshee Rd.	HAZELWOOD
BALLFIELDS	10K11-0021, 10K130014	McDonnell Blvd & Eva Ave	
14	11K510035	6367 Jas S McDonnell Blvd	HAZELWOOD
15	11K520056	8901 Airport Road	BERKELEY
16	10K210064	6685 Frost Industrial Lane	BERKELEY
17	10K210053	6709 Frost Industrial Lane	BERKELEY
18	10K230051	6745 Frost Industrial Lane	BERKELEY
19	10K230031	9080 Frost Avenue	BERKELEY
20-A	10K210031	9060 Frost Ave	BERKELEY
20	10K230040	9040 Frost Avenue	BERKELEY
21,23	10K230073, 10K240094	9043 & 8921 Frost Avenue	BERKELEY
22	10K240106	9015 Frost Avenue	BERKELEY
24	10K330360	8801 Frost Ave	BERKELEY
24 – partial	10K330360	8875 Frost Ave	BERKELEY
25	10K210031, 10K220195	8900 & 9060 Frost Ave.	BERKELEY
26	10K240207	8870 FROST AVE,	BERKELEY
27,28	10K330030, 10K330351	8838 Frost Ave	BERKELEY
29	10K330223	8822 FROST AVE	BERKELEY
30	10K330232	8810 FROST AVE	BERKELEY
31	SE CORNER JONAS PLACE & FROST		BERKELEY
31-A	10K330342, 10K330131	6822 & 6824 HAZELWOOD AVE	BERKELEY
32	10K330241	8801 SEEGER IND. DRIVE	BERKELEY

33, etal	10K330333 (6826 Haz)VP33 10K330324 (6830 Haz)VP34 10K610178(6850H		
	VP35&35A 10K540097 (7101 Haz)VP38 10K630363 (7100 Haz)VP39		
	09K210228 (8880 Pershall Rd.) -VP-55pt		
36	10K520198	6857 Hazelwood Ave	BERKELEY
37	10K520066	8920 LATTY AVE	BERKELEY
38	10k510097	8945 LATTY AVE	BERKELEY
40,40-A	09K220140	7275 HAZELWOOD AVE	HAZELWOOD
41	10K540031	8827 NYFLOT	STL
42	09K220041	7301 HAZELWOOD AVE.	HAZELWOOD
43	10K540075	8834 HEATHER LANE, STE A	HAZELWOOD
44	09K220030	8841 HEATHER LANE	HAZELWOOD
45	09K220195	7310 HAZELWOOD AVE	HAZELWOOD
46	09K220074	7314 HAZELWOOD AVE	HAZELWOOD
47	09K220085	7351 HAZELWOOD AVE	HAZELWOOD
48,48-A	09K220184 & 09K220173	7320 HAZELWOOD AVE.	HAZELWOOD
49	09K220195	7310 HAZELWOOD AVE	HAZELWOOD
50,51	09K310197	8784 PERSHALL ROAD	HAZELWOOD
52	09K324475	8780 PERSHALL ROAD	HAZELWOOD
52	09K324486	8700 PERSHALL ROAD	HAZELWOOD
53	09K220162	7373 HAZELWOOD AVE	HAZELWOOD
54	09K220205	8840 PERSHALL ROAD	HAZELWOOD
55	09K210217	8900 PERSHALL RD.	HAZELWOOD
55	09K210228	8880 PERSHALL RD.	HAZELWOOD
56	09K210064	8950 PERSHALL RD.	HAZELWOOD
57,58	09K140015 & 09K140026	9050 PERSHALL Rd.	HAZELWOOD
59	09K110304	9124 PERSHALL ROAD	HAZELWOOD
60	09K130104	161 FORD LANE	HAZELWOOD
61	09K130104	161 FORD LANE	HAZELWOOD
62	09K130038	9150 PERSHALL ROAD	HAZELWOOD
63	10K430042	6250 N. LINDBERGH BLVD	HAZELWOOD
1-C	09K210064	8950 PERSHALL RD.	HAZELWOOD
2-C	10L340041	6011 Byasse Drive	HAZELWOOD
3-C	09K120040	7225 POLSON LANE	HAZELWOOD
4-C	09K120127	93 FORD LANE	HAZELWOOD
5-C	09K120116	93 FORD LANE	HAZELWOOD
6-C partial	10K440113	6011 Byasse Drive	HAZELWOOD
6-C partial	10K440104	7201 POLSON LANE	HAZELWOOD
7-C	10K440096	7225 POLSON LANE	HAZELWOOD
8-C	10K440074	7213 POLSON LANE	HAZELWOOD
9-C	10K420010	105 Byassee Drive	HAZELWOOD
10-C	10K140024	105 Byassee Drive	HAZELWOOD
CWC	07J520900	1475 Carla Drive	FLORISSANT

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

Summary of Activities at the

ST LOUIS NORTH COUNTY SITE FEASIBILITY STUDY



"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program for the St. Louis North County Site. The Site contains soils primarily contaminated with radium, thorium, and uranium as a result of federal defense activities performed under contract with the Manhattan Engineering District and the Atomic Energy Commission during the nation's early atomic energy program in the 1940s and 50s.

On May 1, 2003, The USACE issued a Feasibility Study identifying and evaluating six alternatives for the North County Site. Public comment and regulatory review will help determine the remedy selected for the site. The USACE will respond to all significant comments in the North County Record of Decision, which will identify the final remedy for the site based in part upon public comments received during the 30-day review period.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the St. Louis North County Site or to inquire about public involvement opportunities, contact

Jacqueline Mattingly at (314) 260-3924

Or write

St. Louis District, Corps of Engineers
FUSRAP Project Office
8945 Latty Avenue, Berkeley, MO 63134

BACKGROUND

Under contracts with the Manhattan Engineer District and Atomic Energy Commission (MED/AEC), the Mallinckrodt Chemical Plant extracted uranium from ore at the St. Louis Downtown Site (SLDS) in St. Louis, Missouri from 1942 to 1957. During this time and until 1967, radioactive process byproducts were stored at a property adjacent to the Lambert-St. Louis International Airport, which is now referred to as the St. Louis Airport Site (SLAPS). In 1966, the SLAPS wastes were purchased, moved, and stored at a property on Latty Avenue, which became known as the Hazelwood Interim Storage Site (HISS) and Futura property. During this move, improper handling, transport and storage of the contamination spread the materials along haul routes and to adjacent properties forming the SLAPS and Latty Avenue Vicinity Properties (VPs). Today these sites, including impacted areas along Coldwater Creek, make up the North County Site.

On October 4, 1989, SLAPS, HISS and Futura were added to the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL). In 1997, Congress directed the U.S. Army Corps of Engineers (USACE) to oversee the cleanup of all areas within the North County Site under the Formerly Utilized Sites Remedial Action Program (FUSRAP).

CONTAMINANTS OF CONCERN

The radioactive contaminants of concern at the North County Site consist primarily of radium, thorium, and uranium. Investigations conducted to date indicate that these contaminants exist at levels requiring action for soils and sediments at the North County Site. Usable groundwater does not appear to be impacted.

SUMMARY OF ALTERNATIVES

Alternative 1 – No Action
This alternative includes no further excavation for the North County Site. It is required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to act as a baseline alternative for comparison with other alternatives. The cost of Alternative 1 is $1.5 million over a 30-year period because of the cost to conduct recurrent 5-year reviews.

Alternative 2 – Partial Excavation and Capping at SLAPS and HISS/Futura
Alternative 2 includes excavation of impacted soils from the VPs for out-of-state disposal. SLAPS and HISS/Futura would be capped with stone and clean

Alternative 1

No Action

Leave site as is with periodic environmental monitoring.

Cost: $1.5 million

Alternative 2

Partial Excavation and Capping at SLAPS and HISS

Excavate soil from the VPs and dispose out-of-state. Cap SLAPS and HISS and use institutional controls to limit access to contaminated areas.

Cost: $205 million

Alternative 3

Partial Excavation and Treatment

Excavate impacted soils from VPs and HISS, then consolidate and treat at SLAPS. Use institutional controls to limit access to contaminated areas.

Cost: $284 million

Alternative 4

Institutional Controls

Use institutional controls such as deed notices, land use restrictions, and zoning restrictions to limit future land use at SLAPS, HISS, and the VPs.

Cost: $129 million

Alternative 5

Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures

Remove contamination to allow unrestricted use at all sites. Control access under roads, bridges, railroads, and other permanent structures.

Cost: $223 million

Alternative 6

Excavation at all Properties

Excavate impacted soils from all locations, regardless of accessibility, for out-of-state disposal.

Cost: $286 million

soil. Institutional controls (e.g. zoning restrictions, etc.) would be used to restrict future land use at SLAPS, HISS/Futura and Coldwater Creek and to control soils beneath roads, bridges, railroads, and other permanent structures. The total cost is $205 million.

Alternative 3 – Partial Excavation and Treatment at SLAPS
This alternative includes excavation of impacted soils and sediments from HISS/ Futura, the VPs and Coldwater Creek. The excavated soils would be consolidated at SLAPS for treatment (soil sorting and washing). Soils that meet supplemental standards would be used as backfill at SLAPS then covered with clean soils. Soils not meeting supplemental standards would be disposed of out-of-state. Institutional controls (e.g. zoning restrictions, etc.) would be used to restrict future land use at SLAPS and to control soils beneath roads, bridges, railroads, and other permanent structures. The total cost is $284 million.

Alternative 4 – Institutional Controls (No Further Excavation)
Alternative 4 consists of limiting the future land use at SLAPS, HISS/Futura, VPs, Coldwater Creek and controlling soils beneath roads, bridges, railroads, and other permanent structures using institutional controls (e.g. deed notices, land use restrictions, and zoning restrictions). Institutional controls and site maintenance would be implemented to prevent unacceptable exposures to site contamination. The total cost is $129 million.

Alternative 5 – Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures
This alternative uses a combination of excavation with out-of-state disposal for accessible soils. Institutional controls (e.g. zoning restrictions, etc.) would be implemented to control soils under roads, bridges, railroads, and other permanent structures. The total cost is $223 million.

Alternative 6 – Excavation at all Properties
Alternative 6 includes excavation of impacted soils from all locations, regardless of accessibility, for out-of-state disposal so that no institutional controls are required. All difficult-to-access soils under roads, bridges, railroads, and other permanent structures would be excavated under this alternative. The total cost is $286 million.

PUBLIC PARTICIPATION

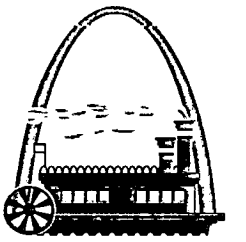
The USACE encourages public input to ensure the remedy selected for the St. Louis North County Site meets the needs of the local community and is an effective solution to the problem. Based on available information, the Corps of Engineers' preferred alternative is Alternative 5, Excavation with Institutional Controls Under Roads, Bridges, Railroads and Other Permanent Structures. Although Alternative 5 is preferred at the present time, public comments are welcome on all alternatives.

Written comments may be submitted to the USACE, at any time during the 30-day period. Oral comments will be recorded during the May 29, 2003 public meeting. The USACE will respond to all significant comments and will consider these comments when working with the U.S. Environmental Protection Agency (EPA) to select a final remedy. The final remedy will be outlined in the Record of Decision, which will be submitted to EPA later in 2003.

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

Summary of Activities at the

ST LOUIS NORTH COUNTY SITE PROPOSED PLAN



"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program for the St. Louis North County Site. The Site contains soils primarily contaminated with radium, thorium, and uranium as a result of federal defense activities performed under contract with the Manhattan Engineering District and the Atomic Energy Commission during the nation's early atomic energy program in the 1940s and 50s.

The USACE issued a Proposed Plan detailing its preferred cleanup alternative for cleaning up the North County Site on May 1, 2003. The Plan identifies Alternative 5, **Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures,** as the USACE's preferred remedy for the North County Site. Public comment and regulatory review will help determine the final remedy selected for the site. The USACE will respond to all significant comments in the North County Record of Decision, which will identify the final remedy for the site based in part upon public comments received during the 30-day review period.

The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the St. Louis North County Site or to inquire about public involvement opportunities, contact

Jacqueline Mattingly at (314) 260-3924

Or write

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FUSRAP Project Office
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BACKGROUND

Under contracts with the Manhattan Engineer District and Atomic Energy Commission (MED/AEC), the Mallinckrodt Chemical Plant extracted uranium from ore at the St. Louis Downtown Site (SLDS) in St. Louis, Missouri from 1942 to 1957. During this time and until 1967, radioactive process byproducts were stored at a property adjacent to the Lambert-St. Louis International Airport, which is now referred to as the St. Louis Airport Site (SLAPS). In 1966, the SLAPS wastes were purchased, moved, and stored at a property on Latty Avenue. Part of this property became known as the Hazelwood Interim Storage Site (HISS), while the other part became known as the Futura property. During this move, improper handling, transport and storage of the contamination spread the materials along haul routes and to adjacent properties forming the SLAPS and Latty Avenue Vicinity Properties (VPs). Today these sites, including impacted areas along Coldwater Creek, make up the North County Site.

On October 4, 1989, SLAPS, HISS and Futura were added to the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL). In 1997, Congress directed the U.S. Army Corps of Engineers (USACE) to oversee the cleanup of all areas within the North County Site under the Formerly Utilized Sites Remedial Action Program.

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, the USACE issued a Proposed Plan (PP) describing the preferred remedy for the North County Site. The PP provides background information on the North County Site, summarizes the six alternatives under consideration, and presents the USACE's rationale for its preferred remedy. The Plan also outlines the public's role in final decision-making.

THE PREFERRED ALTERNATIVE

The six site-wide alternatives are discussed at length in the Feasibility Study (FS) for the North County Site. The Proposed Plan provides a summary of each alternative, identifies the preferred alternative, and provides the rationale for the selection of this alternative. Based on currently available information, the USACE prefers **Alternative 5, Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other**

Alternative 1

No Action

Leave site as is with periodic environmental monitoring.

Cost: $1.5 million

Alternative 2

Partial Excavation and Capping at SLAPS and HISS

Excavate soil from the VPs and dispose out-of-state. Cap SLAPS and HISS and use institutional controls to limit access to contaminated areas.

Cost: $205 million

Alternative 3

Partial Excavation and Treatment

Excavate impacted soils from VPs and HISS, then consolidate and treat at SLAPS. Use institutional controls to limit access to contaminated areas.

Cost: $284 million

Alternative 4

Institutional Controls

Use institutional controls such as deed notices, land use restrictions, and zoning restrictions to limit future land use at SLAPS, HISS, and the VPs.

Cost: $129 million

Alternative 5

Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures

Remove contamination to allow unrestricted use at all sites. Control access under roads, bridges, railroads, and other permanent structures.

Cost: $223 million

Alternative 6

Excavation at all Properties

Excavate impacted soils from all locations, regardless of accessibility, for out-of-state disposal.

Cost: $286 million

Permanent Structures. This alternative protects human health and the environment and provides the best balance of effectiveness, cost, and implementability.

Alternative 5 uses a combination of excavation and off site disposal of accessible soils and sediments along with institutional controls (e.g. zoning restrictions) to manage soils under roads, bridges, railroads and other permanent structures. More specifically, Alternative 5 includes the following activities:

- Excavate surface soil (0-6 inches) with radionuclide concentrations above background of 5 pCi/g of Ra-226, 14 pCi/g of Th-230, and 50 pCi/g of U-238 by the sum of the ratios (SOR). Excavate subsurface soil (in subsequent layers) with radionuclide concentrations above background of 15 pCi/g of Ra-226, 15 pCi/g of Th-230, and 50 pCi/g of U-238 by SOR.
- Remove sediment below the mean water gradient of Coldwater Creek with radionuclide concentrations above background of 15 pCi of Ra-226, 43 pCi/g of Th-230, or 150 pCi/g of U-238; sediment above the mean water gradient would be addressed to surface and subsurface soil standard listed above.
- Excavation to these criteria allow unrestricted use at all properties except for inaccessible areas under roads, bridges, railroads, and other permanent structures. Institutional Controls (e.g. land use or zoning restrictions) would be placed on soils under roads, bridges, railroads and other permanent structures to ensure these areas are not excavated without appropriate oversight and safety procedures. A Long Term Stewardship Plan would be developed by USACE, in cooperation with site stakeholders, to address the specifics of the institutional controls.
- Dispose excavated soil and sediment at properly permitted disposal sites out-of-state.

In general, the long-term protectiveness of this alternative is high. The total cost is $223 million.

PUBLIC PARTICIPATION

The USACE encourages public input to ensure the remedy selected for the St. Louis North County Site meets the needs of the local community and is an effective solution to the problem. Based on available information, the Corps of Engineers' preferred alternative is Alternative 5, Excavation with Institutional Controls Under Roads, Bridges, Railroads and Other Permanent Structures. Although Alternative 5 is preferred at the present time, public comments are welcome on all alternatives.

Written comments may be submitted to the USACE, at any time during the 30-day period. Oral comments will be recorded during the May 29, 2003 public meeting. The USACE will respond to all significant comments and will consider these comments when working with the U.S. Environmental Protection Agency (EPA) to select a final remedy. The final remedy will be outlined in the Record of Decision, which will be submitted to EPA later in 2003.

Written Comments

Written comments and/or questions may be submitted at this Public Meeting or by mail to the following address:

St. Louis District, Corps of Engineers
FUSRAP Project Office
8945 Latty Avenue
Berkeley, MO 63134

Points of Contact for Other Areas of Interest

Westlake Landfill

United States Environmental Protection Agency, Region VII
Mr. Dan Wall, 913-551-7710
Missouri Department of Natural Resources
Jill Bruss, 573-751-1990

Weldon Spring

Department of Energy
Community Relations Department 636-441-8086
Missouri Department of Natural Resources
Ben Moore, 636-441-8030

DOE Former Workers Program

Energy Employees Occupational Illness Compensation Program
866-534-0599

Hematite

Nuclear Regulatory Commission, Region III
Mike McCann, 630-829-9856
Missouri Department of Natural Resources
Ben Moore, 636-441-9030 and Julieann Warren, 573-751-1087

Yucca Mountain

Department of Energy
1-800-225-6972 for obtaining Public Information or www.ymp.gov

Tyson Valley

United States Army Corps of Engineers, Kansas City District
Mirek Towster, 816-983-3886
Missouri Department of Natural Resources
Branden Doster, (573) 751-3907

F U S R A P U P D A T E

The St. Louis Site

Formerly Utilized Sites Remedial Action Program • Spring 2003

(314) 260-3905 www.mvs.usace.army.mil

ST. LOUIS SITES

5-Year Review Initiated

A 5-year review of radiological cleanup actions is underway for local sites that are being addressed by the Formerly Utilized Sites Remedial Action Program (FUSRAP).

FUSRAP activities follow the guidelines established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), more commonly known as Superfund.

Superfund establishes the process to identify, investigate, and clean up hazardous waste sites. It requires a review at least every five years following the selection of a final site remedy. The purpose of the review is to determine whether the cleanup continues to be protective of human health and the environment.

The five-year review will assess cleanups underway at the St. Louis Downtown Site in northern St. Louis City, and the North County Site in St. Louis County. The North County Site includes: the St. Louis Airport Site (SLAPS), the SLAPS Vicinity Properties, the Hazelwood Interim Storage Site/Latty Avenue Vicinity Properties, and the Futura Coatings Property.

The cleanups at these sites consist of excavating radioactively contaminated soils. The soils are then loaded into rail cars, covered and shipped to an out-of-state licensed facility for disposal.

A five-year review will assess cleanup underway at the St. Louis Sites. Workers here take soil samples to monitor conditions as cleanup progresses.

A team will inspect each site. The team will be led by the U.S. Army Corps of Engineers (USACE) and will include representatives from the U.S. Environmental Protection Agency and the Missouri Department of Natural Resources. The team will document the conditions of the sites and the surrounding area.

As part of the review process, members of the community will be contacted for their views about the cleanup. Their responses will help the team to better understand the impacts of the work on the local community.

The results of the five-year review will be made available to the public in the *Five-Year Review Report for the St. Louis FUSRAP Sites*. Any problems found at the sites and recommendations to address them will also be documented in the report.

For more information or to participate in the review, please visit our web site at www.mvs.usace.army.mil/engr/fusrap/home2.htm or call (314) 260-3905.

What's Next?

Site inspections and interviews will continue until the end of May. In August, the community will be notified of the availability of the Five-Year Review Report and comments on the review will be accepted for 30 days following the release of the document.

Upcoming Events

Information Releases:
Summer Newsletter - July 2003
Draft Five Year Review Report - August 2003

Upcoming Meetings (Please come if you are available!):
St. Louis North County Site Feasibility Study/ Proposed Plan Public Meeting at the Hazelwood Civic Center - East at 6:00 p.m. on May 29, 2003.

St. Louis Oversight Committee Meetings at the FUSRAP Project Office at 11:30 a.m. on May 9, June 13, and July 11.

US Army Corps of Engineers
St. Louis District

North County Public Review Period

The North County Feasibility Study (FS) and Proposed Plan (PP) are available for public review and comment now through May 30th! Public comments on cleanup alternatives presented in these documents will aid in the selection of the final remedy for the North County Site. Copies of the FS and PP have been placed with the site Administrative Record File and may be reviewed during normal business hours at the following locations:

St. Louis District, Corps of Engineers
FUSRAP Project Office
8945 Latty Avenue, Berkeley, MO

St. Louis Public Library
Government Information Section
1302 Olive Street, St. Louis, MO

Additional copies of the FS and PP only are also available for review at select St. Louis City and County Libraries during normal business hours. These libraries include:

- Julia Davis Branch at 4415 Natural Bridge Road in St. Louis, MO
- Prairie Commons Branch at 915 Utz Lane in Hazelwood, MO
- St. Louis County Library Headquarters at 1640 S. Lindbergh Boulevard in St. Louis, MO
- Washington University - Earth & Planetary Sciences Library at One Brookings Drive in St. Louis, MO

Electronic copies of these documents are also available at: www.mvs.usace.army.mil/engr/fusrap/home2.htm. All comments are due to the U.S. Army Corps of Engineers, St. Louis District, FUSRAP Project Office at 8945 Latty Avenue in Berkeley, Missouri by June 1st.

U.S. Army Corps of Engineers - St. Louis District
FUSRAP Project Office
8945 Latty Avenue
Berkeley, Missouri 63134

NOTICE: The public review period for the St. Louis North County Site Feasibility Study and Proposed Plan has been extended. Comments on these documents must be submitted to the USACE by July 14, 2003.

This newsletter is printed on recyclable paper

FUSRAP Document Management System

Year: 00 | ID: 3535

Further Info? ☐

Operating Unit: North County | Site: | Area: | MARKS Number: FN:1110-1-8100g

Primary Document Type: Public Affairs/Community Relation | Secondary Document Type: Fact Sheets/Newsletters

Subject or Title: North County Public Meeting Handouts (Fact Sheets, Recent Newsletter, Agenda, Registration Form)

Author/Originator: | Company: CEMVS | Date: 5/29/2003

Recipient (s): Distribution | Company (-ies): | Version: Final

Original's Location: Central Files | Document Format: Paper | Confidential File? ☐

Include in which AR(s)?

- ☑ North County
- ☐ Madison
- ☐ Downtown
- ☐ Iowa

Comments: | ETL: 8.11

SAIC number: | Filed in Volume: 8

Bechtel ID: