This bulletin is for the people of St. Charles County who want to participate in decisions regarding the United States Department of Energy's plans for the cleanup of the Weldon Spring Quarry.
In February of last year the U.S. Department of Energy (DOE) presented a plan to remove and treat contaminated water from the Weldon Spring Quarry. The water treatment plant that will do this work is now being designed and constructed. This bulletin announces the DOE proposal for the next step in the Quarry cleanup process. Documents describing this proposal are now available. Public comment is invited.

WELDON SPRING QUARRY CLEANUP

DOE is responding to the potential threat that contaminated groundwater could reach the St. Charles County Well Field which supplies drinking water to homes and industry throughout the area. Monitoring conducted by the county, the state and DOE assures users that the water is safe. Yet dumping of contaminated debris from national defense operations from 1912 to 1969 has caused pollution that could spread to the St. Charles County wells in the future if nothing is done. So the only assurance of long-term water purity is through continued monitoring and proper cleanup of the area.

The Quarry cleanup is being addressed by the DOE under the oversight of the Environmental Protection Agency Superfund Program and the State of Missouri. DOE has prepared documents that address why and how the Quarry should be cleaned up.

The Missouri Department of Natural Resources and the Environmental Protection Agency (EPA) have reviewed and commented on these documents and they support the need for this cleanup. Now, you the public, have an opportunity to comment. With your input, a final decision document, known as the Record of Decision (ROD) will be published.

Documents available at this time are:

- The REMEDIAL INVESTIGATION REPORT that characterizes the site conditions.
- The BASELINE RISK EVALUATION that describes the risks associated with the site under its current state.
- The FEASIBILITY STUDY that evaluates cleanup alternatives as well as the risks and environmental impacts of taking the action.
- The PROPOSED PLAN that summarizes the preferred alternative selected from the FEASIBILITY STUDY.

This drawing shows the relationship of the Weldon Spring Quarry to the St. Charles County Well Field. The enlarged section depicts the water that must be removed before the bulk waste can be retrieved. Monitoring between the Quarry and the well field assures that contamination from the Quarry has not reached the production wells.
**BACKGROUND**

The Weldon Spring Quarry is located four miles south of the Weldon Spring Chemical Plant on Highway 94 South. The Quarry was originally excavated in 1941-42 to supply limestone aggregate for construction of the plant known during World War II as the U.S. Army Weldon Spring Ordnance Works.

The Quarry was used for waste disposal from 1942 through 1969. Wastes currently present in the Quarry include nitroaromatic residues from the ordnance operations and uranium processing wastes from the post-war period when uranium was processed for the Atomic Energy Commission. The materials disposed of in the Quarry include building debris, process equipment, drummed and unconfined waste and other solid materials.

The major concern is the Quarry’s proximity to the St. Charles County Well Field. The nearest well is one-half mile southeast of the Quarry. The well field produces an average of 13 million gallons of water daily.

**THREE PHASE CLEANUP**

The strategy for cleaning up the Quarry involves three separate steps: 1) Treat the Pond Water, 2) Remove the Bulk Wastes, 3) Clean up any Residual Contamination.

1. *The Pond Water*

An Engineering Evaluation Cost Analysis was developed in early 1989 which recommended that the contaminated water from the Quarry be removed and treated. The operation involves construction of a water treatment plant and a pipeline to discharge treated water into the Missouri River. This action was discussed at public meetings in February, 1989, and work is underway.

2. *The Bulk Waste*

Removal and temporary management of the bulk waste present within the Quarry is discussed in these documents now available: the REMEDIAL INVESTIGATION REPORT, the BASELINE RISK EVALUATION, the FEASIBILITY STUDY and the PROPOSED PLAN. The Feasibility Study looked at several options in detail with regard to the Quarry bulk wastes including 1) no action; 2) expedited removal with temporary storage at the chemical plant; 3) delayed action pending the decision for overall cleanup of the site.

3. *Residual Contaminants*

Any residual material that is left in the Quarry after all the bulk has been removed will be studied. The groundwater and surrounding areas will also be studied to determine what additional cleanup may be required. These decisions will be discussed in future documents.
The FEASIBILITY STUDY concluded that the best approach is to remove bulk waste from the Quarry and transport it along a private haul road to a temporary storage facility at the chemical plant site.

The water level in the Quarry will have been lowered due to operation of the water treatment plant.

The waste material will be removed using conventional excavating equipment. As removal proceeds, the walls of the Quarry will be hosed under high pressure to remove any loose material.

The contaminated wastes will be trucked to temporary storage along a dedicated haul road which will be constructed on an existing DOE railroad easement. Haul trucks will be washed at both ends of the trip. Only clean trucks will be allowed to return to the Quarry via Highway 94.
The layout of the temporary storage area will consist of a receiving/sorting pad with separate sub-areas for different categories of materials. The facility includes an asphalt pad over a compacted clay liner. A surface water collection system will be provided for leachate to drain into double-lined retention ponds. The wastes will be formed into piles and those waste materials that could potentially be carried offsite by water infiltration, wind, or erosion will be progressively sealed with special membrane liner materials.

**HOW HEALTH AND SAFETY WILL BE ASSURED**

Studies which have been reviewed by EPA and the State of Missouri demonstrate that the proposed actions will not endanger the environment, workers or the public. To support these studies, comprehensive programs for monitoring air and water, worker protection and emergency response will be implemented.

Reliable equipment will be used to monitor any possible release of contaminants. The best available air samplers will be operated in all work areas and at Frances Howell High School.

There are three levels of protection:

- Good engineering and safe operations to prevent problems.
- Extensive monitoring to detect unexpected problems.
- Emergency planning and training to correct problems if they occur.

Opportunity for public involvement in the decision is provided by a 45-day Public Comment Period which begins in early March. The exact time and place for the Public Meeting will be announced through the local news media. The Public Meeting will describe, define and summarize the conclusions reached in the various documents discussed in this bulletin. Most important, however, the Public Meeting will be an opportunity for you to ask questions and to express your opinions in an open forum.

COPIES OF THE DOCUMENTS DESCRIBED IN THIS BULLETIN ARE AVAILABLE AT PUBLIC LIBRARIES IN ST. CHARLES COUNTY, AND AT THE COMMUNITY RELATIONS OFFICE, WELDON SPRING SITE REMEDIAL ACTION PROJECT — 7295 HIGHWAY 94 SOUTH, ST. CHARLES, MO 63303. Telephone Jim McKee or Metha Sizemore, Community Relations Department at (314) 441-8086. Other points of contact are Mr. Alan Wehmeyer, U.S. Environmental Protection Agency, Region VII, 726 Minnesota Avenue, Kansas City, Kansas 66101 (913) 236-2856, and Dr. David E. Bedan, Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, Missouri 65102 (314) 751-4422.
No. During waste removal, pumping associated with the Quarry water treatment plant will result in water flowing only into the Quarry, not out of the Quarry. All water that flows into the Quarry will be processed to meet water treatment standards before discharging. This will protect the drinking water supply. As an additional safeguard, monitoring programs during waste removal operations will be expanded to assure protection of the St. Charles County Well Field.

No. Contamination will not reach the school, therefore the students and staff will not be in any danger.

Minimum impact. Loaded haul trucks will travel to the chemical plant site along a private haul road being constructed specifically for this action. Only empty trucks will use Highway 94 to return to the Quarry.

A permanent waste disposal decision is a very complex issue and will not be made for a few years. Therefore, the only alternatives at this time are to temporarily store the Quarry waste or not begin the Quarry cleanup until later.

For a number of reasons (most important being the potential threat to the St. Charles County Well Field) the Quarry cleanup should begin as soon as possible. If you agree that we should get on with the Quarry cleanup, then the question becomes one of where to temporarily store the waste.

In addition to the fact that there is simply no other available place to temporarily store the waste, there are other good reasons to store it on-site. On-site storage is the best place for safe management of the waste. We have extensive monitoring capability on-site. Close proximity to our site staff assures continuous oversight.

The temporary storage facility will not be designed to meet permanent disposal requirements nor is there any thought that it would ever be upgraded to meet permanent disposal requirements. Permanent disposal will require separate processes of environmental compliance, regulatory concurrence, and public involvement. This is not to say that a future decision will not recommend construction of a permanent on-site disposal cell, however, it does mean that temporary storage will not influence that decision.

The documents which describe the bulk waste remedial action are available at:

- Cobbs Hall Library, Lindenwood College
- Spencer Creek Branch Library, St. Peters
- Kathryn Linneman Branch Library, St. Charles
- Francis Howell High School Library
- Weldon Spring Site Remedial Action Project Public Reading Room

The Community Relations office at WSSRAP will also have copies and can answer specific questions. DOE encourages interested citizens to use these resources in formulating questions and opinions regarding activities at the site.