WSSRAP

UPDATE

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Reporting to the Community

- Quarry Cleanup Begins
- Dismantling Buildings
- Partners in Education
- Geosciences Workshop
- HAZMAT Safety Training

QUARRY WASTE CLEANUP BEGINS

The U.S. Department of Energy (DOE) announced March 20 that the Record of Decision (ROD) for management of bulk wastes in the Weldon Spring Quarry has been approved and cleanup will begin this year.

The ROD specifies the cleanup actions (often referred to as remedial actions) for the quarry bulk waste removal and related activities in accordance with Environmental Protection Agency (EPA) and state regulations. The ROD's declaration was signed by the Regional Administrator of EPA, Region VII and Oak Ridge Operations Office Manager, DOE. Its approval clears the way for detailed design and subsequent subcontracting of the many construction-related activities that will be required.

AN IMPORTANT DECISION

Stephen H. McCracken, DOE Project Manager at the Weldon Spring Site Remedial Action Project, says this is an important cleanup decision and is one of the first RODs under the Comprehensive Environmental Response, Compensation and Liability Act signed by EPA for a DOE facility in the nation. The ROD is based on information regarding the wastes in the quarry and their potential for contaminating nearby groundwater. The ROD considers technical analyses, potential health risks, public comments and community concerns expressed in connection with DOE's public meeting on March 29, 1990, and other public input. In 1989, the Secretary of Energy identified a number of environmental initiatives to protect public health and safety. The quarry cleanup is an example of this increased emphasis.

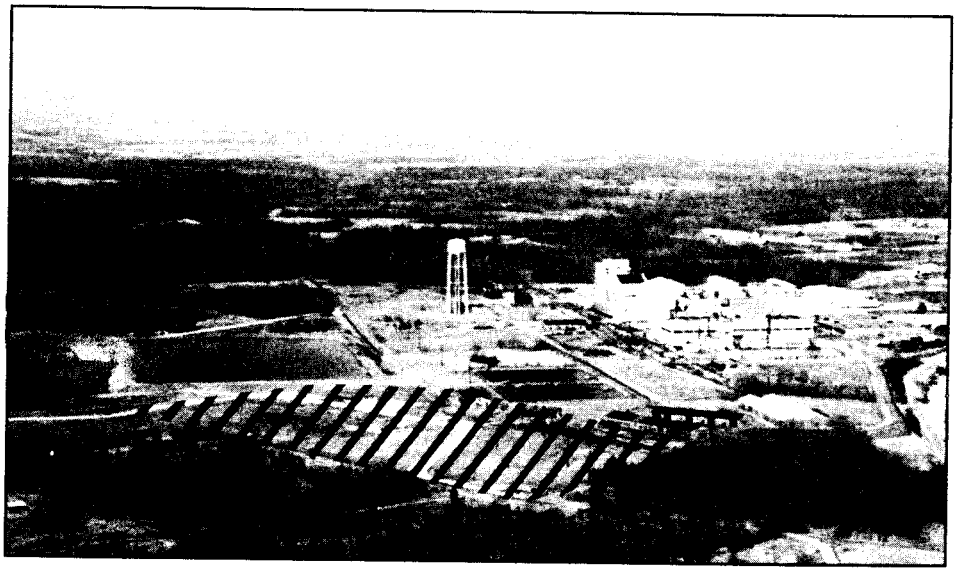
The activities associated with this important cleanup include the construction of a water treatment plant to facilitate access to the bulk wastes; removal of bulk wastes from the quarry with transport along a dedicated haul road (without impacting traffic on Highway 94) to the Weldon Spring chemical plant; and placement of bulk wastes in a specially engineered temporary storage area.

The Highway relocation will eliminate a hazardous section of Route 94 South: 1500 feet of a hilly S-turn. The highway overpass will enable haul road traffic to pass beneath. Originally, empty waste-hauling vehicles were to use the highway, but modified plans will keep these trucks off Route 94. The Quarry and water treatment plant ponds are visible at the top of the picture.

RELOCATE HIGHWAY 94

Work is already underway to install, test and operate the water treatment plant. The relocation of a portion of Highway 94 will be accomplished by the Missouri Highway Department this spring and construction of the haul road is scheduled to begin in the summer. Construction of the engineered temporary storage area at the plant site will begin this fall. Quarry materials are scheduled to be transported to the storage area beginning in 1992, and continuing through 1994. DOE has budgeted $16 million in FY 1992 for this action.

Mr. McCracken states that, "The DOE will move aggressively to carry out this work while at the same time assuring that protection of human health and the environment has the highest priority. We are constantly seeking ways to improve the safety of our designs."



The Temporary Storage Area for the Quarry bulk waste will be constructed at the southern boundary of the Chemical Plant site in the approximate location indicated by the stripes. In line with DOE policy to improve on plans wherever possible, the design of the Temporary Storage Area has been enhanced to contend with strong winds.

MORE IMPROVEMENTS

"For example, we have modified plans for the Quarry haul road to accomodate two-way traffic so that empty vehicles will not return to the Quarry on Route 94."

Another improvement, Mr. McCracken points out, is a change in the Temporary Storage Area design that better addresses possible strong winds.

For the cleanup of the Weldon Spring Quarry and Chemical Plant, DOE expects to spend $75 million at Weldon Spring, $25 million of which is contributed by the Department of the Army. One hundred sixty-three federal and private employees work at the site.

AVAILABLE TO PUBLIC

The ROD and other project documents are available for inspection and copying at the following branches of the St. Charles City-County Library District: Spencer Road, Kathryn M. Linneman and Kisker Road. They are also available at the Francis Howell High School Library and the Public Reading Room at the Weldon Spring Site Remedial Action Project, 7295 Highway 94 South.

The haul road will use sections of the old railroad line that ran between the Quarry area and the Chemical Plant. But to avoid crossing Route 94 as the rail line did, the haul road in some cases will enter new areas. WSSRAP has retained Archeologist Gary Rex Walters, Ph.D., to examine the new route. Government regulations require an archeological survey before land can be used for construction purposes. Dr. Walters excavates sections along the proposed route in his search for artifacts that could indicate old grave sites or early communities.

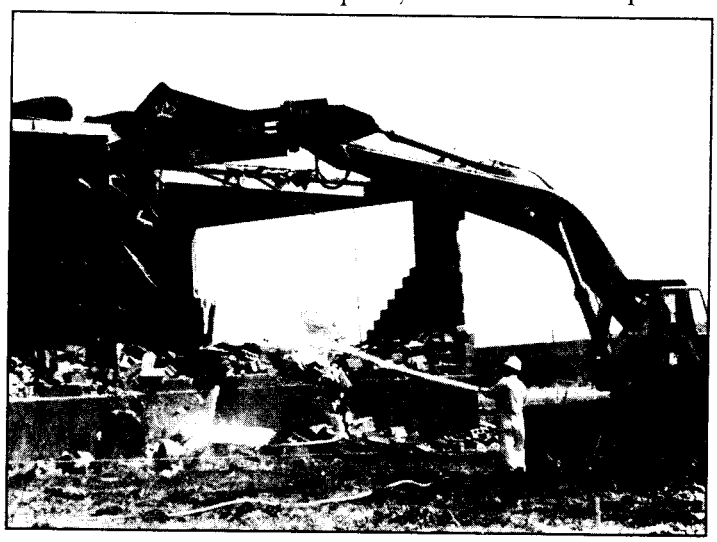
DISMANTLING OF BUILDINGS WILL CHANGE WSSRAP SKYLINE

The skyline of the Weldon Spring Site Remedial Action project will change considerably over the next few years as the U.S. Department of Energy dismantles over 40 buildings.

Four non-process buildings will be the first to go. Ken M. Greenwell, Construction/Operations Manager, is overseeing the dismantling project. He says although portions of these four buildings have been found to be slightly contaminated with asbestos and radioactive material, there will be no environmental impact, nor any offsite release of contaminants. Some of the cleared space will be used for the Temporary Storage Area for the bulk waste removed from the Weldon Spring Quarry.

"The work includes removal of materials within the buildings scattered debris and abandoned equipment which is outside of some buildings," Greenwell says.

Contaminated materials from dismantled buildings will be safely stored until the decision for ultimate disposition is addressed with the public in late 1991.



Building 302, used for magnesium storage and grinding, was one of the first non-process structures to be dismantled. Water spray applied before and during the dismantling process controlled dust dispersion. Airborne concentrations were maintained well below established exposure criteria.

SITE ACTIVITIES SCHEDULED FOR 1991

- **Relocate the St. Charles County Water Tower**
- **Relocate a 1500 ft section of Hwy 94 in the Quarry Area**
- **Complete Quarry Water Treatment Plant construction and begin operations**
- **Begin construction of Quarry Bulk Waste Haul Road**
- **Issue request for bids for construction of the Quarry Bulk Waste Temporary Storage Area**
- **Award contract for design and construction of a Site Water Treatment Plant**
- **Construct a Material Staging Area for storage of contaminated or potentially contaminated demolition debris**
- **Dismantle four non-process buildings 435,436,437, and 438 to allow construction of the Temporary Storage Area**
- **Begin construction of support facilities, office space, warehousing, and Access Control**

(Right) The Blood Donor Opportunity on March 26 was the Site's second such event in as many years.

MANY VOLUNTEERS FOR PARTNERS IN EDUCATION

Weldon Spring Site personnel volunteered assistance to the Francis Howell School District through the "Partners In Education" (PIE) Program.

The school district has set up the PIE program as a means of utilizing resources of local businesses to supplement classroom needs. Linda Nash , Executive Director of Business Partnerships for the district, says this program, which has been in place for two years, has cultivated 100 area business partners. These partners participate by donating dollars, offering the use of surplus equipment, providing speakers and extending to the district the use of personnel as consultants.

Although WSSRAP cannot donate dollars, there is a wealth of expertise to draw upon. Projects in which the WSSRAP personnel have participated include classroom presentations, advising, "Shadowing," class tours, and career days. The most ambitious PIE project WSSRAP has taken to date, is assisting a group of 21 high school students with their Science Fair entries.

Pictured here are some of the the student participants and a few of the volunteers who offered scientific guidance. Left to right, front row: Michelle Mack, Jennifer Tucker, Lana Fahrner, Dianna Aubuschon, Susan Johns, Laura West, Shannon Bartch, Christy Redenbaugh and Eric Breitenbach. Back row: Ken Meyer, Dave Fleming, Charles Reith, Raj Sundram, Riasp Medora, Linda Meyer and Roger Nelson.

SCIENCE FAIR PROJECTS

Students conducted Science Fair experiments dealing with a wide variety of topics including: environmental issues, air monitoring, geology, hydrology, stress monitoring, meteorology, and genetics.

In addition to advising, volunteers from the Site have spoken to a variety of classes and student organizations in the district. In addition to speaking to senior high students studying radiation and environmental issues, the volunteers from WSSRAP have also made presentations for grade schoolers. One site PIE volunteer was asked to be a guest speaker for a fourth grade class to talk about bridge building.

Roger Nelson, Jacobs Engineering Group Project Director says, "Over 25 Project employees have involved themselves in the PIE program, and they are excited about the opportunity to have an impact on the minds of the next generation, and to direct them to careers in Science, Engineering and Environmental fields."

The Department of Energy strongly supports the PIE project, and both PMC corporations, Jacobs Engineering Group and MK-Ferguson, stand fully behind the program.

HIGH INTEREST IN GEOSCIENCES WORKSHOP AND GEOLOGY TOUR

The meeting room at the Ramada Inn in Wentzville was filled to capacity for most of the workshop and approximately 1,000 square feet of floor space in an adjoining room was devoted to poster displays and exhibits provided by the Site, the Missouri Department of Natural Resources, and the United States Geological Survey.

A broad cross-section of citizens, public officials, the Corps of Engineers, Bureau of Mines, high school and college students, interested neighbors, special interest groups and scientists attended the WSSRAP Geosciences Workshop on February 21.

The purpose of the all-day workshop (and the Geology Tour conducted the afternoon before) was to discuss the work done in the past three years in characterizing the geology of the Weldon Spring site.

DOE Project Manager Stephen H. McCracken says that later in the year, DOE will present a proposal to the public for final cleanup of the Chemical Plant.

"In looking at the things we could do between now and then to ease the burden of reading the tremendous volume of information that will be coming out at the time," Mr. McCracken says, "we decided to have the workshop since geology is an important aspect of the cleanup decision-making process."

He adds that even though issues surrounding decisions on how to deal with the site's waste are complex, he has the responsibility to give the public an opportunity to understand and comment on the decisions.

The Geology Tour attracted three bus loads of interested visitors who were shown examples of various geologic formations in the area that are similar to the structure beneath the Chemical Plant.

Following is a list of papers and presenters:

History of Geologic Investigations at the Weldon Spring Site, Ken Meyer.

Role of Missouri Department of Natural Resources-Department of Geology and Land Survey at the Site, James Williams.

Introduction to Geology at the Weldon Spring Site, Mary Gilbert.

United States Geological Survey's Hydrostratigraphy and Groundwater Model, Mike Kleeschulte.

Groundwater Quality, James Meier.

United States Geological Survey Geochemistry Study, John Schumacher.

Missouri Department of Natural Resources-Department of Geology and Land Survey Shallow Groundwater Investigations, Peter Price.

Aquifer Characteristics of the Burlington-Keokuk Limestone, Jeff Carmen.

Groundwater Modeling, Lisa Durham, Argonne National Laboratory.

Geotechnical Investigations, Serban Grozescu.

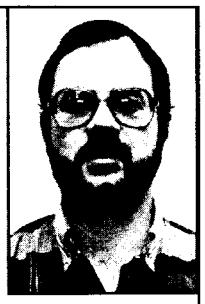
Catastropic Collapse Potential, Mimi Garstang, MDNR.

Possible Earthquake Effects at the Weldon Spring Area, Dr. Brian Mitchell, St. Louis University.

Seismic Stability Analysis, Jack A. Caldwell.

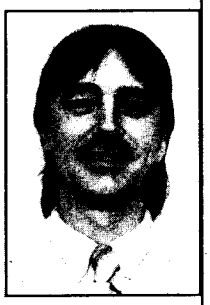
Mr. McCracken introduced the speakers and served as moderator for the question periods which followed each of the main discussion sections.

Mr. Steffen



Mr. Nelson

Mr. Bowers



Mr. Ferguson

Mr. Green

MANAGEMENT CHANGES

Several important management changes have taken place at the Site recently.

Doug Steffen has become a Deputy Project Director, sharing that title with incumbent Deputy Project Director Rob Tucker. Mr. Steffen's areas of responsibilty include Environmental Safety & Health and Environmental Compliance. Functions reporting to Mr. Tucker are Environmental Documentation & Conceptual Design, Engineering, Procurement and Construction & Operations.

Marc Nelson has succeeded Mr. Steffen as Environmental Compliance Manager.

Charles Bowers has become Communications Services Manager, a new department that includes the functions of Project Support, Productivity Improvement, Document Control, Technical Publications, Computer Systems, Computer Graphics and Reception.

Rick Ferguson has become Manager of the newly created Environmental Documentation & Conceptual Design Department.

Steve Green has become Deputy Manager of the Environmental Safety and Health Department.

NEW SITE LOGO

The Weldon Spring Site Remedial Action Project's new logo on page one is a composite of five drawings submitted from individuals at the Site. The project's search for a central logo to focus our team's efforts was the goal, and the synthesis of drawings has accomplished this task.

The new logo will be used on document covers and reports.

Dr. Charles Reith (Center), Environmental Health and Safety Manager at WSSRAP, was honored at the White House on Oct. 22 as a recipient of the 1990 Theodore Roosevelt Conservation Award for his contributions to a number of environmental projects in New Mexico. Dr. Reith was among 50 or so awardees . They were addressed by President George Bush who praised the recipients and applauded their environmental activism. Also pictured with Dr. Reith is Congressman Steve Schiff of New Mexico (left) and Environmental Protection Agency Administrator William Riley.

HAZMAT SAFETY TRAINING HELD AT WSSRAP

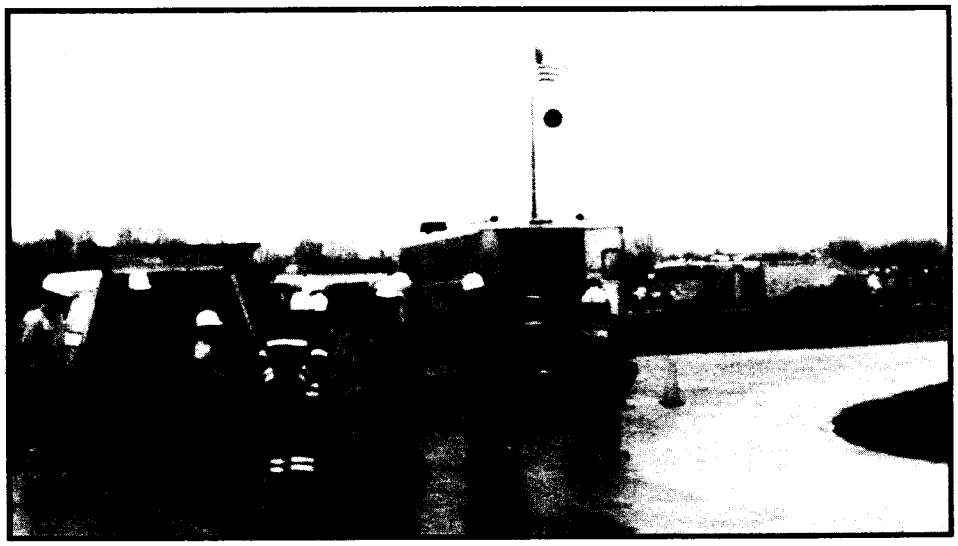
A two-day safety seminar that included 10 area emergency response teams and concluded with a mock hazardous waste accident and rescue was held at the Site under the sponsorship of the Environmental Protection Agency (EPA).

Among those participating in the HAZMAT Training were members of the Cottleville Fire Protection District, the St. Charles Hazardous Materials Team, St. Charles County Sheriff's Department, the Missouri Highway Patrol and members of the WSSRAP Emergency Response Team. The seminar was conducted by EPA trainers. Lecture topics included detection and identification of hazardous materials and proper protective clothing and equipment.

The drill, involving a mock hazardous material accident, was "sprung" on the class at the close of the second day session. The attendees expected a drill, but had no idea what the nature of the emergency might be.

Tom Heuer, WSSRAP Emergency Response Coordinator, describes the drill: "The mock incident involved a truck carrying hazardous waste. A barrel containing an unidentified substance had tipped over. As the barrel fell from the truck and spilled onto a gravel road, the driver became faint from the fumes."

Mr. Heuer adds it was a coordinated effort to test the abilities of different agencies working together in a common emergency. "It was especially important to test the ability of the Cottleville District and the WSSRAP Emergency Response Team to work together in the event of an emergency," he says. "The seminar training helped to reinforce the extensive knowledge of all the attending agencies, and then to put that knowledge to the test in the drill."



Area emergency response units including fire departments and public safety teams observed the rescue drill. Pouring rain and cold winds increased the effectiveness of the exercise. The mock accident involved an unknown substance suspected of being hazardous and the rescue of the truck driver.

Safety Department Manager Ken Jenkins says that practice drills are an important part of the Site's emergency pre-planning and response preparation.

"Drills such as this one will be conducted throughout the life of the project," he says.

Joe Enright, DOE Safety Engineer who oversaw the seminar, says the program did what it was designed to do. That was to point out strenghts and weaknesses. "The drill determined that direct communication is needed with the local fire department members while they are en route to the Site so firefighters arriving on the scene will know where to set up and what exactly they should be prepared to handle," Mr. Enright points out. "The drill proceeded despite chilling temperatures and heavy rain, This, too, pointed out areas we can improve. Because of the wet weather we realized a need to have a dry area at the scene to dress out in protective equipment. This need is now being addressed."

Bill Keffer, EPA Senior Engineering Advisor, Region VII, was in charge of the two-day training. "The mock drill was especially challenging and very enlightening, " Mr. Enright says.

WSSRAP Update

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Address all inquiries to:
WSSRAP Update
Community Relations Department
7295 Highway 94 South
St. Charles, Missouri 63303

Telephone (314) 441-8086

DOE Project Manager Stephen H. McCracken
PMC Project Director James R. Powers
Community Relations Department Jim McKee
Metha Sizemore
Linda Meyer
Graphic Artist Gregg Nadler

Air Photos by Louis Bopp