



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

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OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

Honorable Thomas P. Grumbly  
Assistant Secretary for Environmental Restoration  
and Waste Management  
United States Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585

Dear Mr. Grumbly:

This letter is in response to your request at the March 15, 1994, Environmental Management Advisory Board meeting that the U.S. Environmental Protection Agency (EPA) provide you with suggestions for near-term actions at the St. Louis Airport Site (SLAPS). In considering your request, I have conferred with the EPA Environmental Response Team, the Office of Radiation and Indoor Air, Region VII's remedial response staff, and the Agency for Toxic Substances and Disease Registry.

As a starting point, we conducted an informal survey of EPA Regional radiation staff in several Regions to determine what types of interim public health measures have been taken at radioactive waste sites that did not qualify for Superfund emergency removals. An important distinction to make in addressing this question is to separate on-site measures from off-site measures. In general, exposure to on-site contamination is controlled through site access restrictions. As examples, the Kerr-McGee/West Chicago rare earth processing facility, the Maywood, N.J. interim storage site (a FUSRAP/NPL site), and the Bayside Landfill at the Hunters Point Annex in San Francisco (a site contaminated with radium dials) all have fences around them. The Stepan Chemical Company site, which is beside the Maywood site, has the contaminated areas roped-off and posted, but the surrounding property is access-controlled for other security reasons. Under Superfund guidance, access control is always required when radiation levels exceed 1 millirem per hour. Access control measures are consistent with those that EPA has carried-out during Superfund removal actions.

The most common off-site interim measures are posting (i.e., radiation warning signs), fencing, and dust control. For areas



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that are contaminated at 2 to 3 times natural background, the tendency has been not to provide posting or fencing. There are several practical reasons for this:

- o Fencing and posting might attract more people than it discourages;
- o People like to steal radiation warning signs (a common complaint at the BOMARC and West Chicago sites); and
- o Often, the short term risks are not sufficient to warrant interim action.

Based on our informal survey of EPA Regional staff, fencing and/or posting would be considered prudent if there are hot spots above background levels by a significant degree. There are instances, however, where such hot spots have been covered with clean soil to lower the external radiation to background levels. (Presumably, these locations are clearly identified on site maps for future remediation.) It should be noted that simply recording external gamma levels is not sufficient to determine that interim measures are not required. Plausible exposure pathways must be determined and appropriate soil, water, and air samples analyzed to assure, through standard risk assessment methodology, that the interim risk really is negligible.

In addition to the above survey of the Regions, representatives from the Environmental Response Team, the Region VII Remedial Response Branch, and the State toured the St. Louis Airport Sites on March 22, 1994. The purpose was to familiarize the group with the sites, and gain site-specific input for the development of a near-term strategy for addressing site remediation, focusing on those response actions that could be carried out in an expedited manner. After reviewing background information, obtaining input from EPA Superfund and radiation experts, and touring the site, the following site-specific recommendations are proposed:

1. The St. Louis area FUSRAP sites should be separated into two operable units. The first operable unit should be carried out on an interim basis and focus on expedited response actions, including the removal of contaminated materials at all accessible, uncontrolled vicinity properties, e.g., the ditches and roadway areas near the SLAPS and along the haul routes, and contaminated areas interfering with the rights of private land owners. Cleanup of these areas should employ dust control.

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measures and be prioritized based on contaminant levels, public accessibility, and the potential for further dispersion of the contaminated soils. If feasible, we strongly suggest that materials removed be placed in a facility designed for permanent disposal in accordance with applicable regulations. In light of our recommendations for removal of material, we are not making a recommendation for blanket fencing and posting of the properties.

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2. On-site interim measures should also include the immediate re-institution of regular site maintenance to ensure the current level of containment does not deteriorate. Items to be maintained include the fence, the vegetative cover, the gabion wall at the creek bank, and vegetative control at the fence line. In addition, DOE should consider extending fencing and posting to limit public access to hot spot areas that will not be addressed in the first recommendation.

SLAPS

3. In addition, storm water runoff from the SLAPS should be periodically monitored to ensure contamination is not migrating off-site via surface water pathways. If it is determined that there is significant off-site migration, actions should be taken to minimize this occurrence.

4. The second operable unit should be designed to address more long-term concerns and focus primarily on final disposition of the remainder of the site, i.e., inaccessible vicinity properties, and those materials contained at the Hazelwood Interim Storage Site (HISS), the SLAPS, and the downtown site (SLDS).

5. Included in this phase should be periodic ground water monitoring to ensure that contamination is not migrating off-site, and fugitive dust studies to ensure that materials in these areas do not present an inhalation risk to the public over the long-term. The Environmental Response Team has performed radiation fugitive dust studies and can be contacted for information and assistance on these procedures. The work plan for the fugitive dust studies should be submitted to the Region and the Environmental Response Team for review, to ensure that quality assurance objectives are properly addressed.

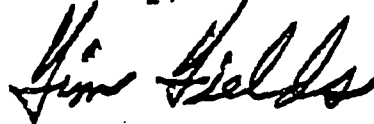
We look forward to working with you and the Department of Energy at this site. Please call me at 260-4039 if you wish to discuss these recommendations, or if you have other ideas you would like our input on. For additional technical explanation of the recommendations, your staff may call the EPA remedial project

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manager, Dan Wall, at (913) 551-7710 or JoAnn Camacho of the Environmental Response Team at (908) 906-6916.

Sincerely,



Timothy Fields, Jr., Director  
Superfund Revitalization Office

cc: Elliott Laws, OSWER  
Steve Herman, OE  
Margo Oge, ORIA  
Mike Sanderson, Region VII  
Barry Breen, OE  
Barry Johnson, ATSDR

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Formerly Utilized Sites Remedial Action Program (FUSRAP)

# ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri



U.S. Department of Energy