MINUTES

St. Louis Site Remediation Task Force
Local Priorities Working Group

August 2, 1995 Meeting

Berkeley City Hall
Berkeley, Missouri

Participants Attending

Dave Adler, DOE-FUSRAP
Lori Batton, City of Berkeley
Tom Binz, Laclede Gas
Bob Boland, Mallinckrodt Chemical
Dave Braun, Union Electric
Kay Drey
Donovan Larson, St. Louis County Water Co.
Jean Montgomery, City of Berkeley
Eileen O'Connor, Union Electric
Josh Richardson, City of Berkeley
Jan Titus, Lambert Airport

Support

Jim Dwyer, Facilitator
Sarah Snyder, FUSRAP

Agenda Item	Minutes	Determination
Call to Order	Jim Dwyer called the meeting to order at 9:40 a.m.	
Approval of Minutes	Mr. Dwyer distributed draft minutes from the July 12 and July 26 meetings of the Local Priorities Working Group for review and comment.	**The minutes were approved without amendment.**
Work to be Done	Mr. Dwyer then distributed the current version of the matrix and advised that he would like to distribute the matrix (in final form including attachments) and the approved minutes to the full Task Force by early next week.	

He explained that the working group needed to focus on developing proposed priorities, especially for the short-term in order to enable DOE to plan how to spend the $30 million expected for FY 96 and FY 97. Mr. Dwyer also suggested that the short-term priorities should be consistent with the group's sense of a long-term strategy for remediation of the St. Louis Site.

The principal factors affecting the development of short-term priorities include budget limitations and schedule. In addition, he proposed that other objectives for consideration should include equity, in that any strategy ought to devote some resources to each of the major constituent groups; effectiveness, in terms of getting the most remediation for the money, and consistency with overall long-term objectives.

He asked members of the working group if they would prefer to proceed by first developing a long-term strategy and working backwards to near-term priorities, or by identifying near-term activities first and proceeding to an overall long-term strategy.

Kay Drey asked several questions about the matrix. She questioned the methods for calculating the degree of contamination and disposal. She said the numbers don't really mean anything to her and that she was surprised to see the airport site categorized as having "medium" contamination.

Mr. Dwyer explained that the matrix is simply a tool for organizing information. He said the "medium" classification for the airport did not suggest that there were no "hot spots" of radioactivity at SLAPS, but rather that the "mean" level of contamination over the entire site fell into the "medium" category as defined by the working group. He further explained

that the working group came up with the designations for the matrix using information provided by DOE and its contractors based on characterization studies of the site.

Ms. Drey also asked for an explanation of the sum of the ratios concept, which Mr. Dwyer explained. He advised that the working group used the sum of the ratios method of quantifying contamination in order to include all isotopes. He said a written explanation was being developed so it could be included as an attachment to the matrix.

Ms. Drey said she doesn't like averaging numbers. Dave Adler explained that the figures used by the working group to create the matrix represent "means," and not averages. He explained that a "22" indicates that contamination levels are roughly 22 times the cleanup threshold. Any value greater than one (1) exceeds cleanup standards.

Mr. Dwyer then reviewed the work from the previous meeting which suggested that the following be included as part of the definitions and explanations attachments to the matrix:

1. Source(s) of data
2. Logic behind the categories
3. Cleanup cost (based on the assumption of disposal at Envirocare at $1,100 per cubic yard)
4. Cleanup volumes (with explanation that the statistics for the railroads include only those materials within the rights-of-way of the railroads)
5. Sites identified on the matrix (not all properties are listed individually, although all volumes are included)
6. Disposal categories (based on the assumption of disposing of FUSRAP materials at existing commercial landfill currently handling materials exhibiting

similar levels of radioactivity, *e.g.*, flyash)
7. Explain that the sum-of-the-ratios figures represent (x) times cleanup standards and describe extremes (high, low, mean) for thorium 230, uranium 238, and radium 226; include number of samples analyzed for each isotope
8. Explain definitions of "interim storage" and "permanent disposal"

The working group also decided that the attachments to the matrix should include:

1. Organization chart (showing sites)
2. Sum-of-the-ratios and depth data

Ms. Drey asked that the matrix also include a reference to the high readings from the sample taken from SLAPS by Clemson researchers. The working group agreed.

Setting Priorities

Lori Batton suggested that the working group start by identifying short-term needs. Members of the working group agreed to this approach.

Mr. Dwyer asked each member of the group to list his or her top priority, which he then recorded on a flip chart. The preferred priorities include:

- Identify alternative storage or disposal site(s) in Missouri
- Cleanup of smaller industrial and commercial sites
- Identification of local/regional Sub Title Class "D" commercial landfill that could accept relatively low levels of radioactive waste
- Surgical removal of high levels of contamination and disposal in Utah
- Ballfields cleaned up and returned to use

- Mallinckrodt -- 1) Protect public health and 2) Clean up contamination at 50 series or K series buildings
- Roadway and utility corridors (to address worker safety)
- Public acceptance/buy-in of remediation plan
- Evaluation by independent panel of existing data re groundwater and surface water impact on Coldwater Creek

Mr. Dwyer then asked each member to identify his or her top 3 priorities from this list and to "vote" using color stickers that were assigned these values:

First choice, red, 3 points
Second choice, blue, 2 points
Third choice, silver, 1 point

After the voting was complete, the top choices were ranked by calculating the number of points each received.

Summary

15 points	Roadway and utility corridors (to address worker safety)
10 points	Cleanup of smaller industrial and commercial sites
10 points	Ballfields cleaned up and returned to use
8 points	Identification of local/regional Sub Title Class "D" commercial landfill that could accept relatively low levels of radioactive waste and remediation of sites that could be disposed of at an existing commercial landfill
6 points	Identify alternative storage or disposal site(s) in Missouri
6 points	Surgical removal of high levels of contamination

Mallinckrodt (SLDS) was later added to the list.

Mr. Adler explained that there would be about $13 million to be allocated between downtown and North County each year, because about $2 million is necessary for required monitoring, reporting, and community relations activities. He encouraged members of the working group to think about what kinds of projects in downtown and North County they could "buy" for approximately $13 million in fiscal year 1996 and 1997.

Ms. Drey said she believed it should be a high priority to search for a disposal or storage site in Missouri and to prove to DOE that SLAPS is contaminating Coldwater Creek.

Mr. Adler said it could cost millions to search for another site that is acceptable for environmental, political, and other reasons. Ms. Drey asked about condemnation to secure the land. Mr. Adler replied that the DOE still would have to do years of studies to prove that site is acceptable. He said any recommendation involving a disposal site that doesn't currently exist will take time and money.

Tom Binz asked about disposal at an existing commercial landfill. Mr. Adler said it could be done if DOE decides that such a site would be sufficiently protective of human health and the environment. He added that such a proposal would require regulatory approval because of flood plains and other concerns. As a practical matter, he said he is skeptical that DOE could take advantage of a landfill option in the next year.

Mr. Adler said the DOE is taking the first steps toward identifying local landfills that could be viable options. He said he has sent a letter to

the state (MDNR) to see if it will permit the DOE to dispose of low-level radioactive material with similar characteristics to flyash in a commercial landfill. The state has to accept this solution.

Ms. Drey said it may be necessary to look at interim storage in order to accomplish some projects that would benefit the communities while a permanent disposal located is identified.

Jan Titus asked about the next steps in developing priorities. Mr. Dwyer said the working group was waiting for some information about the cost of these projects. He said having cost estimates will help refine priorities even more.

Impact of SLAPS on Coldwater Creek

Mr. Dwyer reminded the working group that it had agreed to the creation of an independent expert panel to evaluate the impact of SLAPS on Coldwater Creek. Mr. Adler said that the available information indicates that most of the gross loading of contamination in Coldwater Creek occurred via surface water runoff and soil erosion before the gabion wall was built. However, he said there is still some stormwater runoff going into the creek, which contributes to contamination of the creek. He also said it appears that the surface water and sediment loading is more significant than the subsurface loading.

Donovan Larson said he would like to have more information on the subsurface contamination because of the water mains that run along the creek. Recently a 6-inch water main ruptured along the creek and caused some erosion of the bank. Mr. Larson said there also is a 30-inch water main along Coldwater Creek at the west end of Latty

Avenue that, if it ruptured, could result in a significant amount of contamination entering the creek.

Mr. Adler said that, although he originally proposed a blue-ribbon panel, he doesn't think that will work now. He said he would prefer a working group comprised of several experts and some Task Force members to address this issue. A working group approach will be faster, he said.

Mr. Dwyer said that when the Task Force has the panel's information, it will be better able to develop a recommendation concerning cleanup priorities.

Ms. Drey cited a 1979 report, "Environmental Impact Assessment of the Former Airport Storage Site of the Atomic Energy Commission, St. Louis County, Missouri," which concluded that subsurface water flowing through the contamination on SLAPS goes into Coldwater Creek. That report was prepared by Weston Environmental Consultants for the Oak Ridge National Laboratory. She also referred to an April 9, 1985, report prepared by Tom Aley, director of the Ozark Underground Laboratory, for the Missouri Coalition for the Environment. She said she doesn't know why there needs to be more studies.

Ms. Batton asked if surgical extraction of hot spots could solve some of this problem with the groundwater. Ms. Drey said she didn't believe it would and asked where else surgical removal has been accomplished successfully.

Mr. Adler said some surgical removal is being done at FUSRAP sites in New Jersey. He said engineers use characterization data to identify hot spots and then excavate and set aside the

clean soil to reach the hot spot in order to remove the contamination. Then the clean soil is put back. Bob Boland stated that surgical removal was in fact possible and is being done throughout the United States, including Mallinckrodt.

Mr. Larson said he would like a 3-4 page briefing paper or a brief presentation on groundwater movement for the next Task Force meeting.

Mr. Binz moved that the DOE proceed with securing an impartial panel of outside expert(s) to review and evaluate the data on ground and surface water contamination loading from SLAPS to Coldwater Creek. Ms. Batton seconded the motion. All agreed.

SLAPS Options

Mr. Adler advised that he had participated in a conference call with Col. Leonard Griggs, Jan Titus, Anna Ginsburg, and Mr. Dwyer concerning various short-term options at the airport site. One of the options discussed involved disposal of some contaminated material at a commercial landfill, which Mr. Adler said Col. Griggs thought unlikely. The callers also discussed moving the ballfield soil to SLAPS. Mr. Adler reported that Col. Griggs said that option would not be acceptable if there were a significant change in the elevation or contour of land.

Before adjourning, Ms. Batton asked that the working group address the issue of contamination on the Fleischer property. She said this is a priority because he is economically impacted because of the contamination there.

The next meeting of the Local Priorities Working Group is scheduled for August 9, 1995. The meeting adjourned at 12:55 p.m.

Approved August 9, 1995

Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri

U.S. Department of Energy