

## MINUTES

St. Louis Site Remediation Task Force  
Priorities Working Group

January 31, 1996 Meeting

Berkeley City Hall  
Berkeley, Missouri

APPROVED

Participants Attending

Lori Batton, City of Berkeley  
Tom Binz, Laclede Gas  
Kay Drey  
Jack Frauenhoffer, Mallinckrodt Chemical  
Dennis Henson, Union Electric  
Donovan Larson, St. Louis County Water  
Co.  
Tom Manning, City of Hazelwood  
Jean Montgomery, City of Berkeley  
Sally Price (by telephone)

Support

Jim Dwyer, Facilitator  
Sarah Snyder, FUSRAP

<u>Agenda Item</u>	<u>Minutes</u>	<u>Determination</u>
<i>Call to Order</i>	<p>Jim Dwyer called the meeting to order at 9:41 a.m.</p> <p>Mr. Dwyer advised that Sally Price would be joining the meeting by phone from 10 to 10:30 a.m. and that neither Dave Adler nor Dave Miller would be attending the meeting, although both would be available by phone if they were needed.</p> <p>He also said that Bob Geller of MDNR would not be at the meeting.</p>	

Kay Drey asked if Mr. Dwyer knew when the Coldwater Creek Panel report would be transmitted to the Task Force. He said he would call David W. Miller (of Geraghty & Miller) to find out. (Mr. Dwyer contacted Mr. Miller immediately following the meeting and was advised that the written report will be sent from Mr. Miller's office during the week of February 12.)

#### *Develop Agenda*

Mr. Dwyer asked the group to identify issues it would like to cover during the meeting. The following agenda was developed:

- Minutes of January 17, 1996 Meeting
- Coldwater Creek Panel report
- Report on liability issues re ballfields
- Comments on the Coldwater Creek Panel presentation
- Call from U.S. Rep. Talent's office to Lori Batton

#### *Approval of Minutes*

Due to health reasons and the Alternative Sites Working Group meetings on January 23 and January 25, the draft minutes from the January 17, 1996 meeting are not yet ready for review.

#### *Report on Liability re the Ballfields*

Mr. Dwyer reported that he had called Jan Titus to inquire about the status of the airport's position with regard to the airport site. She agreed to arrange a conference call to discuss the issue, but that has not yet occurred.

Ms. Drey asked whether the standardized procedures and criteria proposed for use in processing cleanup requests from property

owners had been drafted yet. Mr. Dwyer advised that the document would be prepared and distributed with the minutes of the January 17 meeting.

Donovan Larson asked if there were any outstanding issues related to those procedures or criteria. Mr. Dwyer said he did not recall any and said the proposed process simply needed to be drafted and submitted to the working group for review and final approval.

*Comments on the  
Coldwater Creek  
Panel Report*

Tom Binz made a plea for the group to move ahead and produce the best draft report possible. He said that, for the most part, he agreed with the recommendations and observations presented by the Coldwater Creek Panel. He said that, in his estimation, probably the only thing the Task Force will reach consensus on is that it would like to see the waste materials removed from the airport site and put elsewhere in a controlled manner.

Mr. Binz felt that as a result of the panel's concerns and recommendations, he believed that the Priorities Working Group has come full circle and back to the point in time last fall when the group was engaged in discussions involving the SLAPS contaminant contribution to Coldwater Creek. At that time, other working group members made the following observations:

- a) The contaminant loading to Coldwater Creek was much greater via overland flow in comparison to subsurface contribution. This conclusion is for the most part intuitive, but can be quantified by using the "universal soil loss equation"

- and by reviewing the existing monitoring well data;
- b) The utilization of basic engineering controls would greatly reduce the contribution of contamination to Coldwater Creek via surface flow, and
  - c) That other engineering controls could be incorporated into an interim design plan which could allow continued use of SLAPS (the airport site) to store/containerize/manage materials prior to off-site trans-loading activities.

Mr. Binz said that what he would like to do now is spend time developing solutions to the issues before the Task Force. He said the working group needs to explore solutions that can be presented to the Task Force for consideration and for eventual inclusion in the final report.

He said one of those issues is long-term disposal. He said he feels that long term disposal at SLAPS is not an option he would support. But he said he thought the working group needed to define what it means by interim and long-term, adding that there is the need to address the issue of interim storage.

Ms. Drey asked Sally Price to state her interpretation of the Coldwater Creek Panel's findings about leaving contaminated waste at the SLAPS site. Ms. Price said her interpretation of the findings was that, although the SLAPS waste is in groundwater, it is not moving quickly into Coldwater Creek. She said that she thought the panel is split on whether the waste should be moved or left in place.

Ms. Price said she thought that David Miller had provided the Task Force at the January 16, 1996 meeting with his perspective, given his experience with other Superfund sites and his knowledge of the problems associated with excavation. She added that while she was anxious to get on with the work before the Task Force, she thought the group needed to wait for the written report from the Coldwater Creek Panel before developing its own conclusions and recommendations.

Ms. Drey asked Ms. Price whether there are written guidelines addressing time frames; specifically as to whether there are guidelines concerning postponing remediation of contaminated sites that are determined not to present a danger to the environment for at least 100 years.

Ms. Price said the EMAB FUSRAP Committee (of which she is a member) has been discussing risk assessment guidelines for FUSRAP. These guidelines have been discussed in terms of requiring reliability of results for 100, 200, 500, and 1,000 years. She said the committee is scheduled to meet in Oak Ridge on February 15 and 16, at which time the committee is expected to continue discussing these guidelines. If there is a guideline suggesting that sites with wastes in the groundwater should be excavated, then that could be an impetus for our decision making. She said she would report on the committee's meeting at the February 20 Task Force meeting.

Ms. Drey asked whether the FUSRAP Committee would then have to have any proposed guidelines approved by the full EMAB. Ms. Price said yes, but that she felt that EMAB has confidence in the FUSRAP Committee and is likely to approve what the

committee recommends.

Mr. Larson said he thought that when the working group first conceived of engaging an expert panel, the purpose was to answer questions about the current effect of radioactive material on groundwater and the threat presented by this material on groundwater in the long term. He said he was concerned about the working group's abdicating decision-making to one small group of experts. He said the panel was asked for an assessment of impacts, not for recommendations on what to do. He said the panel should tell us about the threats and the Task Force should then decide whether those are threats that are acceptable or not.

Ms. Price responded that the Coldwater Creek Panel did note that sometimes there was not enough data available to make those decisions. They only were answering the questions based on the information provided. They did not call for any new studies, though.

Ms. Drey said she disagreed with the statement made during the panel's presentation that radionuclides move slowly.

Ms. Price said she sensed skepticism about the panel's findings. She said it would be a shame if the working group did not have confidence in the panel. She said that if the working group questions the integrity of the panel, it will not be able to reach consensus on a set of recommendations. She asked who had confidence in the panel.

Mr. Larson said the panel can tell the working group about its assessment of the impacts of radioactive material at SLAPS on the groundwater, or it can make

recommendations about what it believes should be done with SLAPS. He said he didn't recall asking the panel to make recommendations about future activities.

Ms. Price said the working group can elect to ignore what the panel says, but she pointed out that such action probably would not provide a basis for support with DOE. However, she said the working group continues to talk conceptually about a report it hasn't seen. She said the working group needs to talk instead about various scenarios for recommendations to be made to DOE.

Ms. Drey asked Mr. Dwyer to refresh her memory about how the Coldwater Creek Panel came into existence.

Mr. Larson said the decision to convene a panel of experts to address the question of the impact of SLAPS on Coldwater Creek and related issues came from the working group. He said he was the one who suggested that a panel be convened to focus on these concerns.

Mr. Dwyer said it is his recollection that the working group recognized that the issues surrounding the airport site were the single most important concerns for the working group. He said that Dave Adler agreed that resolution of these issues was of paramount importance, which is why Mr. Adler supported forming a panel of independent experts to resolve them.

Mr. Dwyer said the working group had reviewed the resumes of proposed panel members and had exercised considerable influence over the composition of the panel, including the unanimous agreement that one candidate not be invited and that another be added to the group. He said he had been

alert for comments once the panel was chosen, to make sure there were no reservations about the composition of the group. He said that everyone, without exception or qualification, expressed confidence in the panel throughout the process.

Mr. Larson said that Dave Miller of SAIC acted as the agent of the working group in convening the panel. He said the working group trusted his judgment. Mr. Larson said he doesn't doubt the quality of the panel.

Ms. Drey said she thought DOE got what Mr. Adler asked in his letter and comments provided to the Coldwater Creek Panel at its December 13, 1995 meeting. She said she thought the letter indicated that Mr. Adler was telling the panel what to do. Mr. Dwyer responded by saying that all observers at meetings of the panel had full opportunity to express their thoughts and beliefs, and that several, including Ms. Drey, had done so.

Ms. Drey said she believes that DOE still wants to use the airport site for a disposal cell. Ms. Price pointed out that David Miller never said the airport site was a good location for a cell; in fact, he said the opposite.

Ms. Drey responded that if there were no reason to exhume the waste from the groundwater at the airport site, then there would be no reason not to put a cell on top of the site.

Mr. Dwyer said David Miller clearly stated that additional waste should not be deposited at SLAPS. He said the panel also recommended improving existing site conditions and monitoring of groundwater movement.



Tom Manning said he was so encouraged by the panel's report that he immediately contacted the U.S. Army Corps of Engineers in an effort to get the Coldwater Creek flood control project back on track. He said he was told it will take at least two years to get the project rescheduled and perhaps longer to secure funding for the project.

Mr. Dwyer said the working group might consider developing specific recommendations for each component of the St. Louis Site, such as Coldwater Creek. He said that, for example, the working group might want to recommend a program calling for site improvements and additional monitoring of SLAPS, coupled with cleanup of the contamination in Coldwater Creek. Such a recommendation could also describe the benefits that would result from the proposed activity, such as the ability of the Corps of Engineers to move ahead with its flood control project.

Mr. Binz volunteered, with the assistance of Mr. Larson and Jack Frauenhoffer, to develop some specific actions that could be considered by the working group. He said that would allow the working group to focus on engineering solutions to the cleanup.

Mr. Larson said he didn't want to propose engineering solutions until basic questions about Task Force direction were answered. He said it is important to make sure that there aren't any more questions before we begin to consider engineering solutions.

Mr. Dwyer said the working group also should consider long-term objectives, specific remedial actions, and perhaps ongoing monitoring concerns, as well as engineering solutions. He said the working group also could indicate to DOE what

options it considers to be inadvisable or unacceptable.

Ms. Drey asked the working group to remember two facts:

- 1) the level of uranium in the groundwater at SLAPS is almost 1 million times background; 0.7 picocuries per liter of uranium is background for groundwater in Missouri. At SLAPS, one well had a reading of 8671 picocuries per liter.
- 2) the curie estimate for the St. Louis Site is 518.5, according to a memo from Dave Miller (ATTACHMENT A)

Ms. Drey said that her highest priority is to clean up the airport site first.

*Call from U.S. Rep.  
Talent's Office*

Ms. Batton said she had received a call from a staffer in U.S. Rep. James Talent's Office. The caller discussed the Coldwater Creek Panel presentation and the fact that Dawn Mining Co. might present a significant cost savings for disposal of wastes compared to Envirocare. The caller also solicited her ideas and thoughts about the Task Force. Ms. Batton said she said the experience was a positive one.

Ms. Batton added that U.S. Rep. Talent's staff seems very interested in what the public wants.

The meeting adjourned at 11:40 a.m.

The next meeting of the Priorities Working Group is scheduled for February 7, 1996.

Approved February 7, 1996

TO: Jim Dwyer

FROM: David Miller DSM

PRELIMINARY DRAFT

DATE: January 31, 1995

SUBJECT: CURIE CONTENT OF THE SOILS AT THE ST. LOUIS SITE

In February 1993, an estimate of the total Curie content of the soils at the St. Louis site was performed by Bechtel National Inc. It should be emphasized that only a rough estimate was required at that time. Although the results were recorded, no record was kept of the method used to calculate the Curie content.

With that proviso, the results are:

Isotope	Curies	Volume of pure isotope (m <sup>3</sup> )	Corresponding mass of pure isotope
Radium-226	34.8	0.000007	35 g
Thorium-230	291	0.0013	15 kg
Thorium-232	4.4	3.5	40,300 kg
Uranium-238	188.5	30.3	566,100 kg
Total	518.5	33.8	606,415 kg

m<sup>3</sup> = cubic meter

g = grams

kg = kilogram (equal to 1,000 grams)

In November 1994, SAIC, in a separate effort, estimated the Curie content of the haul road soils. The haul roads include Pershall Road, Hazelwood Avenue, Latty Avenue, Frost Avenue, Eva Avenue, and Seeger Industrial Drive. Briefly, all of the soil that was determined to exceed the sum of the ratios criterion was geometrically bounded and the activity within those bounds was calculated. The estimated Curie content of the haul roads is:

Isotope	Curies	Volume of pure isotope	Corresponding mass of pure isotope
Radium-226	0.2	0.03 cc	0.2 g
Thorium-230	4.4	20 cc m <sup>3</sup>	227 g
Thorium-232	0.07	0.057 m <sup>3</sup>	636 kg
Uranium-238	0.4	0.065 m <sup>3</sup>	1,212 kg
Total	5	0.122 m <sup>3</sup>	1,848 kg

cc = cubic centimeter (which is equal to one millionth of a cubic meter)

It should be recognized that the contaminants are not distributed in a homogeneous manner making large scale Curie content estimates subject to several generalizing assumptions. Such assumptions restrict the above estimates to "order of magnitude" estimates accurate to plus or minus 50 percent. (Note the totals were carried to extra significant digits to reflect the contribution of all of the isotopes to the totals). To date, similar calculations have not been performed for any other subsets of the St. Louis site. While it is possible to perform additional estimates for smaller portions of the St. Louis site, the time required and cost of such efforts must be balanced against the utility of the product. Please contact me at (615) 481-2156 if you require additional information or if you have any questions regarding these estimates.

00-1883

Formerly Utilized Sites Remedial Action Program (FUSRAP)

# ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri



U.S. Department of Energy