



St. Louis County
Department of Health

MEMORANDUM

To: Members of the Radioactive and Hazardous
Waste Commission

From: Alpha Fowler Bryan, M.D., Director *AFB*
Chairperson for the Commission

Date: August 31, 1993

Re: September meeting

This memorandum is to remind you that the next meeting of the Radioactive and Hazardous Waste Commission is at 7:30 a.m. on Tuesday, September 14, 1993, at the Administrative Offices of the Department of Health, in the third floor conference room at 111 South Meramec, Clayton, Missouri. The meeting will consist of followup on topics discussed at the previous meeting outlined in the enclosed minutes. We will also revisit the purpose and objectives of the Commission.

Please note that the site visits are cancelled since an inadequate number of members of the Commission are able to attend due to schedule conflicts.

Please contact this office if you have any questions concerning this meeting.

AFB:jal

cc: David Adler (DOE)
Patti Hazel (FUSRAP)
Gerry Palau
Dr. Wayne Black
Chris Byrne
Conn Roden
Lee Brotherton

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MINUTESRadioactive and Hazardous Waste Commission

Meeting of July 6, 1993

Commission Members Present

Karen Acker
Kay Drey
Dave Farquharson (Mayor, Hazelwood)
C. J. Larkin (for Councilwoman Rothman-Serot)

Nancy Lubiewski
Dr. Barry A. Siegel
Dr. Lee Sobotka

Guests

Patty Hazel (Bechtel National)

Staff

Dr. Wayne Black
Chris Byrne
Lee Brotherton
Jean Leadbetter

In Dr. Alpha Fowler Bryan's absence, Lee Brotherton chaired the meeting.

There was discussion about some possible grant funds which were available through the Department of Energy (DOE). Daniel Wall had been suggested as a contact. Kay Drey, in followup, found Mr. Wall was actually EPA, and that EPA does have a technical assistance grant. Mr. Wall does not think our Commission is eligible due to several regulations about the assistance grant. Kay Drey said Dave Adler of DOE said there are still grant funds available through DOE similar to this one.

Dr. Siegel made a correction to the minutes of the previous meeting. On page 2 in the paragraph that talks about the use of Coldwater Creek as drinking water, it should state it is not currently in use for drinking water. Kay Drey pointed out, however, that it flows into the Missouri River upstream from where drinking water is drawn. There was a request that methods of testing and standards used should be discussed as new business in this meeting, although it pertains to concerns about Coldwater Creek and the discussion outlined in the minutes of the previous meeting.

Kay Drey offered a couple of corrections to the minutes including the correct spelling of "allaway" and that it should be "plant", not "plan" on page 3 in the 4th paragraph. On page 3, in the 5th paragraph, it should be "Secretary of Energy", not "State". Kay also pointed out she believed in the 3rd paragraph on page 3 should read "one

FUSRAP site to handle all FUSRAP sites". The word "plan" did not seem to be correct.

Lee Brotherton asked for other corrections to the minutes. There were none and the minutes, with the above corrections, were accepted.

Lee Brotherton stated he had not been advised of an agenda for this meeting. He asked if anyone had had a chance to look over all the documents that had been provided at the last meeting. Kay Drey asked to have the potential impact of Cold Water Creek on drinking water in the vicinity added to this agenda.

Kay Drey asked if there had been any contact yet with the Mayor of the City of St. Louis. Lee Brotherton advised he had talked with someone in the Mayor's office, but got the impression they were still settling into their office and this matter had not been raised. He spoke with Anna Ginsberg, an assistant to the Mayor. She stated they may attempt to come to a future meeting to see what we are doing. A copy of a letter from Dr. Alpha Fowler Bryan to the Mayor, suggesting development of a joint task force, was passed out for everyone to peruse. Lee advised he will try to contact Anna Ginsberg again.

Nancy Lubiewski asked if the DOE or anyone else had information as to whether or not Cold Water Creek is being used for drinking water. She knows there are wells in the vicinity but does not know if they are being used. Dr. Black advised he was not aware of any wells in use there. Dr. Siegel said the report did not indicate wells were any closer than 2 kilometers. Dr. Siegel suggested letting Dave Adler review the minutes and provide a letter of correction if he sees anything out of line.

Dr. Sobotka asked if there was a question about wells in the area, should a questionnaire be sent out to people in the area. Nancy asked if we should see what DOE has done, or not done with wells in the area.

Kay Drey asked Dr. Black if the County requires anyone who puts in a well to register that well with the County. Chris Byrne responded that the State now requires certification of wells when they are turned over to the owners after they are dug. However, this requirement has only been in effect for a few years. Any wells from the 1950's, or 1960's, etc., may not be registered.

The Mayor of Hazelwood stated he did not know of any wells currently in operation in Hazelwood. He also does not believe the City of Hazelwood keeps any records on well operations.

Chris Byrne pointed out that there are two levels of water here. One level is very shallow and brackish. The other level is very deep and good water. When a well is dug, they go to the second or lower level for the better water.

Kay Drey asked if there was a method to determine the number of wells in an area and whether any are in operation. Can you send out questionnaires, do a survey, or use some other method? Has the DOE done anything like this? Patti Hazel advised she will ask Dave Adler about this and try to have the information for the next meeting.

Dr. Siegel suggested having Dave Adler do a hypothetical calculation to determine the highest known level of contamination from Cold Water Creek with a lifetime of exposure to an individual drinking the water or eating vegetables that are watered from the creek, assuming there is no rain at all, the contamination is in the dirt and the vegetables, too.

Lengthy discussions followed about conversion into dose levels rather than talking about environmental contamination. There was discussion about movement of contaminated dirt by individuals unaware of the contamination, and the possible need for warning signs. Lee Brotherton suggested asking David Adler of DOE if there is a way to develop risk factor, realistically, using guidelines such as lifetime exposure, no variances in current contamination status over that lifetime, etc. Dr. Sobotka and Dr. Siegel also mentioned the possibility of doing tissue sampling for residents of the area, perhaps working through Christian Northeast Hospital.

The query was made "how clean is clean". There was discussion about the proper forum for policy changes about cleanup. These would be the National Academy of Science, NCRP, and ultimately Congress. This Commission does not make policy, but works within the current policy. Lee Brotherton agreed government has taken a rather conservative approach to cleanup to date. We may not all agree with the established standards, but that is what we must work with. Lee feels the appropriate purpose of this Commission is to develop what will be an appropriate clean-up and disposal plan for the Metropolitan area.

There was discussion about the risk involved in moving the dirt, as opposed to the risk of leaving it where it is. Logistics of protecting workers, controlling dust, etc. were discussed. The best method of clean-up, whether removing or leaving it where it is, has to be considered by the Commission. Hypothetical scenarios and possible results were discussed.

Nancy proposed having the Commission drive by the sites in question so that members will have an understanding of the size of the project. Lee Brotherton agreed something like that could be arranged, and Patti Hazel suggested coordinating the tour with David Adler of DOE who can discuss each location and what is proposed. Patti Hazel will be in contact to make the arrangements.

Discussion ensued about one proposal to move all contamination to a landfill at the airport, on top of contamination already there, and sealing that up. There was

concern over leaching through the bottom if what is already there is not removed and a seal of some kind placed underneath everything.

Nancy read the requirements for a Superfund grant. She asked if the DOE has studied all the alternatives and she asked the Commission to focus on what they have offered as alternatives. She said the first two options cannot be considered because the DOE cannot do them, because of regulations. That leaves only three other options. She wanted to know if there were any other alternatives. Lee advised with government involvement, money was going to be a big factor in what the DOE decides.

There was discussion about the airport site, the amount of contamination, leaching problems, and whether it is getting into ground water. Lee said we would ask the DOE about their evaluations and assessments concerning various sites, including the airport and the risk factor. Kay asked that information such as the "hottest" reading at each site, the types of tests run on air, water and sediment, and other specific data be included in their response. She wants to know the levels of radiation. Dr. Siegel pointed out clean-up is not determined by radiation levels so much as by "dose" levels. There was discussion on formulae whereby dose levels are factored.

Lee Brotherton stated he will contact Mayor Bosley to follow up on a letter sent by Dr. Bryan requesting a meeting to discuss a joint effort on this project.

It was agreed the next meeting will take place on Tuesday, September 14, at 7:30 a.m. Information concerning the tour and the meeting will be forwarded at a later date.

Transcribed by J. Leadbetter
August 3, 1993

MINUTES

Radioactive and Hazardous Waste Commission

Meeting of May 10, 1993

(Corrections made August 10, 1993)

Commission Members Present

Alpha Fowler Bryan, M.D., Chair

Kay Drey

Jose Hernandez (representing Hazelwood)

C. J. Larkin (for Councilwoman Rothman-Serot)

Sally Price

Karen Acker

Dr. Barry A. Siegel

Dr. Lee Sobotka

Guests

Gerry Palau (FUSRAP)

David Adler (DOE)

Patti Hazel (FUSRAP)

Staff

Dr. Wayne Black

Chris Byrne

Conn Roden

Lee Drötherton

Jean Leadbetter

Dr. Bryan opened the meeting. She congratulated Kay Drey on being honored with the Woman of Achievement award.

Dr. Bryan introduced David Adler of the Department of Energy who spoke on FUSRAP radioactive waste sites and covered administrative matters. Dave Adler advised he had received a call from Nancy Lubiewski with several questions, including what type of funding has DOE been able to provide for oversight groups of this type. He stated they do have a mechanism to help oversight groups obtain outside help. They have something similar to technical assistance grants of the EPA. For a site of this size it may be a range of \$50,000 spent over the life of the site. He gave an example of a site in Niagara Falls which used this. No lobbying efforts will be funded. He is not sure about duplication of sampling. It is usually set up to provide funding for technical expertise and assistance.

After this explanation, Mr. Adler began his presentation concerning cost of remediation. He stated the site has been studied for a long time, and they are getting close to the time for a decision on how best to proceed with remediation. He said the feasibility study is an evaluation of all the alternatives that were retained following the initial screening of alternatives. DOE has also drafted a proposed plan which contains their recommendation for cleanup. This will lead up to the submittal of the proposal to the public, which is expected to be done next February. Karen Acker asked who

the State representative was for this project. Mr. Adler advised David Bedan is the contact for the State.

Mr. Adler passed out a document that outlined several conceptual alternatives which have been developed through the study. These alternatives are all listed so costs can be compared with effectiveness of the remedy.

The first one is a "No Action" plan, at an implementation cost of \$2.7 million dollars. This is included for comparison purposes and to meet NEPA/CERCLA requirements. This provides a baseline to compare with other alternatives. Dr. Siegel asked if this is looking at potential risk and resultant deaths? Mr. Adler advised they looked at worst case scenario, i.e. if an area gets developed and did predictions of radiation dose and risk.

The second alternative is called "Institutional Controls and Site Maintenance". This would involve very little engineering or processing. It involves implementing land use restraints on the deeds for the property. You would work through local authorities to insert riders on deeds, etc. It would cost money to pay people to be sure the land is used within those restrictions, but it would be cheaper than the engineering and construction costs for remediation. This alternative does comply with DOE standards. Their objective is not to release a site for free use. There would be a few spots where they would leave contaminated soil, under permanent structures, for instance, where it would be very costly to remove the structure, remove the contamination, and replace the structure. Some spots, such as under roadways, may be questionable. Some spots may be left alone now, but removed later on.

Alternative No. 3 is "Consolidation and Capping". This means pulling waste in from all the different locations to just one location, depositing it on top of already contaminated land, and then putting a cap on that, with a subsurface wall to control disbursement. This is not as perfect as lifting everything up and sealing it. Ground water is contaminated already above drinking standards. Sealing or capping would keep rain water from leaching additional contaminants into the ground water.

Mr. Adler noted the waste has been at SLAPS for 40 or 50 years. No effort has been made to control ground water. He stated contamination has not moved off the site via groundwater transport in the soils. It has stayed there through all of that time. That upper ground water system is a shallow one. It is not expected to be used as a water supply system. Water from this system runs into Coldwater Creek. Movement is in very small quantities. The creek actually dilutes it to the point that uranium is not detectable in the water in the creek. Dr. Siegel asked if the creek is used for anything. It is not in use currently for drinking water. Children play in it and it floods into backyards occasionally. There is contamination in the sediment of the creek.

Dr. Sobotka asked about the amounts of contamination we are seeing in this creek. Mr. Adler advised back in the 1940's, 1950's, and 1960's, before controls were imposed, contamination was high. With the controls that have been imposed, we are actually finding clean sediment on top of contaminated sediment.

Alternative No. 4 is "Partial Excavation". They would excavate all accessible soil, meaning not under permanent structures. SLAPS locations and various costs for disposal were listed on the form. One alternative would involve removing the contamination, putting down a pad, putting the contamination back in, and capping it. Another alternative recognizes that the airport needs both a storm water basin and fill dirt. Mr. Adler advised that when he realized what the airport was contemplating regarding renovations, they got together to discuss the possibility of using contaminated dirt as fill, with clay below, and a cover over it. The airport would then build over this fill, and it would be inaccessible for human exposure.

Mr. Adler mentioned a disposal option at the DOE reservation in Hartford, Washington. They are closing and are evaluating the possibility of burying the reactors. FUSRAP could take dirt there for use as fill. He said they have also looked at the possibility of making one FUSRAP disposal site to handle all FUSRAP sites. There are a lot of assumptions with this option because of the numerous FUSRAP sites and the large number of states and EPA regions involved.

Another disposal option is to take it to the only disposal facility that is currently seeking a permit to receive this type of waste. Envirocare currently receives some types of contaminated waste, but does not have a permit to handle uranium waste. This alternative is extremely expensive. Miss C. J. Larkin asked about the possibility of instate disposal, rather than hauling to an out-of-state disposal organization. He stated the figures in the handout were based on the assumption that there would be a facility within the state, that it would be within 200 miles, and that it would be suitable. The expense outlined is based on trucking versus trains. Kay Drey asked how far it would be by train to the Callaway plant, but Mr. Adler did not know.

Dr. Bryan asked Mr. Adler about the years involved for each plan, the time frame. She asked which one of these proposals would be minimum and which would be maximum. Mr. Adler advised with the budget priorities of the new Administration, he is not sure if we will be able to keep the time plan set up by the previous Administration. Kay said St. Louis is unique since it is a large metropolitan area and should receive a higher budget priority.

Mr. Adler stated the last item was what would be done if inaccessible dirt became available. The DOE will come in and remove the contaminated dirt. This is restrictive as to in-house disposal. We may have to do this in conjunction with commercial disposal.

Mr. Adler advised that DOE has proposed the Consolidate and Cap alternative to the EPA. This is a first proposal and they have not had a response yet. This proposal could be done in, perhaps, four or five years, including the actual time involved in the consolidation and capping, if sufficient funding was available and if logistics with property owners can be arranged.

Jerry Palau stated some of the restrictions would be working with sites that have operating business so that we would not disturb their operation.

There was discussion about what the standards for exposure are, how they are determined and how standards and methods of testing have changed. Kay Drey voiced concern over having a waste site here and one at Callaway. She felt there could be just one. C. J. Larkin also asked whether this had been considered.

Mr. Adler advised they had looked into other in-state alternatives, but were reluctant to single out one community. There was some discussion about various sites being considered and potential of each site. Karen Acker asked if airport remodeling would adversely affect any consolidation and capping we would do previous to their remodeling. Mr. Adler did not believe it would have any effect.

Kay Drey voiced her concern that the Commission did not share equal concern about the subject. Dr. Siegel expressed concern over spending large sums of money to possibly save a few lives, when current economy is dictating that we ration health care. He said we have to keep the perspective and consider the entire picture, not just one small corner. Dr. Bryan pointed out that the group is diverse and will not agree on all things. The purpose of the committee is to make recommendations.

It was decided we needed to review the literature provided in this meeting. Mr. Adler pointed out that without a representative from the City, which is involved with some of these sites, it would be difficult to provide a DOE financial grant to the Commission. He stated he would pursue the possibility of a grant if we could provide a representative with the City that he could contact. Kay Drey advised the City had authorized a group similar to this Commission, but they have not appointed anyone to it yet. Dr. Bryan will contact the Mayor's office to see what could be arranged.

After discussion, it was agreed the next meeting of the Commission would take place on July 6, 1993, at 7:30 a.m. at the offices of the Department of Health.

There being no further business, the meeting adjourned.

Transcribed by J. Leadbetter
June 22, 1993

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Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri



U.S. Department of Energy

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