

FUSRAP
ST. LOUIS DOWNTOWN SITE PROPOSED PLAN
FOR INACCESSIBLE SOILS OPERABLE UNIT
GROUP 1 PROPERTIES

PUBLIC HEARING
JANUARY 30, 2014
CLAY ELEMENTARY SCHOOL
3820 North 14th Street
St. Louis, Missouri 63107

Celeste D. Nicolls, CSR, RPR, CCR
CSR #084-002795

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(No exhibits were marked.)

1 MS. HUCKSTEP: Good evening. Oh, he's
2 taping. Stop. Good evening and welcome to the public
3 hearing for the FUSRAP St. Louis Downtown Site Proposed
4 Plan For Inaccessible Soils Operable Unit Group 1
5 Properties. Glad you could all come. As most of you
6 know, I'm Ramona Huckstep. I'm with the Missouri
7 Department of Natural Resources. I was not scheduled to
8 speak tonight. I am filling in for the regular
9 facilitator who's stuck-in a snowstorm somewhere. But
10 since I like talking to people, they're going to let me
11 do it.

12 Let's see, I wanted to introduce our various
13 groups that are present here tonight. We have some
14 folks from the Missouri Department of Natural Resources.
15 Raise your hand. That would be me, (inaudible) and
16 Jake. Other agencies might be the Army Corps of
17 Engineers. Raise your hands, stand up. Okay. Anybody
18 else? Who am I forgetting? Contractors, citizen folks,
19 all right.

20 Thank you for all coming. I did want to
21 point out there are some cameras around the room. They
22 are not affiliated with the Army Corps of Engineers or
23 the Missouri Department of Natural Resources. They're
24 filming for themselves.

25 If you haven't signed in, please make sure

1 you sign in. And if you are going to make a comment
2 this evening, make sure that you signed in back there
3 also to make a comment. It's at the registration table.
4 If you want to send in written comments after this
5 hearing, you can do that. And there's an address, fact
6 sheets that have the address on it. Or lots of people
7 that will gladly give it to you as well.

8 Exits, I need to point out those -- there,
9 there and there. Restrooms, there's a main one there.
10 There's, a ladies' room is down there. Men's room is
11 down there. Water fountains are right out the door.
12 Also, if you could mute your cell phones, which I don't
13 think I did, but just ignore it. And making sure that
14 you can hear. If at any time point throughout the
15 meeting, you can't hear, just raise your hand or holler
16 or something. Sometimes, if I get soft or Steve, you
17 know, wanders away from the mic, we want to make sure
18 you can hear.

19 The objective of what we're doing today is in
20 a respectful and fair manner, that all participants get
21 their point of view, ask their questions or pose their
22 comments, provide an opportunity for the public to
23 provide comments concerning FUSRAP and this particular
24 project with the Proposed Plan For Inaccessible Soils.
25 I will be facilitating both the spoken and written

1 comments.

2 When you do come up to the mic, and you ask
3 your question or your comment, it will be so noted by
4 Cindy, our transcriptionist, who's been brought out
5 tonight. She may ask you to ask, to spell out your
6 name. Or if she can't hear you, because she's kind of
7 making sure that we get all that information down.

8 The questions you may ask will not be
9 answered tonight. They will go in a Responsiveness
10 Summary if they're substantive and be responded to in
11 writing at that point. So, don't expect, you know,
12 Steve to go, "Oh, well..." He's not supposed to.
13 They're just going to record it for posterity and then,
14 answer it later on.

15 For the agenda that we'll be doing tonight,
16 Mr. Steve Hamm with the Corps of Engineers, will be
17 providing a brief overview briefing of the process used
18 to reach the conclusions at the site for the proposed
19 plan. And then, there'll be the comment, public comment
20 session. Public comments may be spoken or written in
21 writing. Or both if you really want to.

22 All comments, whether spoken or provided in
23 writing throughout the 30 day public comment, which will
24 end on February 13th of this year, and they'll be given
25 equal consideration in defining the Record of Decision.

1 Those giving spoken comments will be called
2 up in the order that they signed in. Speakers are asked
3 to come to the microphone right there. And invited to
4 give your full name, organization or affiliation, if you
5 would like to, for the court reporter.

6 Speaking times are about three minutes. I
7 have my little cards. At about 30 seconds, I hold up a
8 yellow card when you have 30 seconds left. And red
9 means hope you're done soon. I think they have a hook
10 somewhere, but I think that's still optional. No hooks.
11 Just kidding, just kidding. But again, if you could
12 keep it to three minutes, that will be helpful. But if
13 it's a little bit longer, that's okay.

14 For those who did not sign up to speak,
15 you're still welcome to speak after those who signed up.
16 Sometimes, you think of something afterwards. You're
17 welcome to come up and ask your questions. We do, will
18 be here and have this room till about 7 o'clock.

19 Public comments on the proposed plan will be
20 recorded and become a, a part of the hearing record. To
21 be more helpful with your comments, if possible, you can
22 be specific. It helps to state the particular reason
23 for the concern rather than making a broad statement.
24 And also, if it can be focused on particular human or
25 environmental concerns that you have with the St. Louis

1 Downtown Site Inaccessible Soils Operable Unit Group 1
2 Properties since that's why we're here tonight.

3 So, we'll go ahead and get underway. First
4 up, we have Steve Hamm. He's the project manager with
5 the US Army Corps of Engineers. And he'll be giving us
6 his update.

7 MR. HAMM: Thank you very much, Ramona.
8 Thank you, ladies and gentlemen, for coming to our
9 public hearing for the proposed plan for the St. Louis
10 Downtown Site Group 1 Properties associated with the
11 Inaccessible Soils Operable Unit. My name, of course,
12 is Steve Hamm. I work for the US Army Corps of
13 Engineers FUSRAP Project Office.

14 This presentation will cover the following
15 topics: The purpose of this public hearing, what is
16 FUSRAP, the background and history of the St. Louis
17 Downtown Site, the different operable units at the St.
18 Louis Downtown Site, as well as the Inaccessible Soils
19 Operable Unit, the remedial investigation and baseline
20 risk assessment for the Inaccessible Soils Operable
21 Unit, a discussion of what is risk, different receptor
22 scenarios utilized in this risk assessment, the
23 different property groups within the Inaccessible Soils
24 Operable Unit, the proposed plan for Group 1 properties,
25 a conclusion of these topics, as well as a description

1 of where we are now in the CERCLA process. I will then
2 describe how your comments will be addressed in the
3 Record of Decision. We will finish by discussing
4 community involvement at the St. Louis Downtown Site.

5 There are two objectives to this public
6 hearing tonight. The first is to present the proposed
7 plans for the Group 1 properties associated with the
8 Inaccessible Soils Operable Unit at the St. Louis
9 Downtown Site. This proposed plan identifies the
10 preferred remedy for these properties. The next is to
11 receive comments on this proposed plan.

12 For those of you who are not familiar, FUSRAP
13 is an acronym for the Formerly Utilized Sites Remedial
14 Action Program. This program was initially managed by
15 the Department of Energy. In October of 1997, Congress
16 transferred FUSRAP execution from the Department of
17 Energy to the US Army Corps of Engineers. FUSRAP is
18 legally required to follow the CERCLA process, which is
19 an extensive method for identifying and addressing
20 contamination. In FUSRAP's case, investigations
21 identify and address contamination resulting from the
22 nation's early atomic weapons programs.

23 This next slide will provide you with a brief
24 summary of the background and history of the St. Louis
25 Downtown Site. From 1942 to 1957, under contract with

1 the Manhattan Engineer Districts and the Atomic Energy
2 Commission, Mallinckrodt processed uranium feed
3 materials in support of the nation's early atomic
4 weapons program. This work that was conducted by
5 Mallinckrodt including, included the development of
6 uranium processing techniques and the production of
7 uranium metal. As a result, process residues, including
8 radium, thorium and uranium, as well as their decay
9 products were inadvertently, inadvertently released in
10 the environment. Shutdown of the remaining Manhattan
11 Engineering District projects and Atomic Energy
12 Commission operations at Mallinckrodt began in 1958.
13 The St. Louis Downtown Site consists of land owned by
14 Mallinckrodt. And the surrounding land is owned by
15 various private and government entities. The properties
16 that are not owned by Mallinckrodt are referred to as
17 the St. Louis Downtown Site Vicinity Properties.

18 The St. Louis Downtown Site is made up of two
19 operable units. Once the execution of the FUSRAP
20 program was transferred, transferred from the US Army
21 Corps of Engineers to the Department of Energy, the
22 accessible portions of the St. Louis Downtown Site were
23 carried through the Record of Decision process
24 immediately in order to accelerate the start, the start
25 of the removal of the contaminated materials at the

1 site. This is the reason why there are two different
2 operable units at the St. Louis Downtown Site. The
3 Accessible Soil and Groundwater Operable Unit Record of
4 Decision was signed in 1998. The Inaccessible Soils
5 Operable Unit is divided into two subgroups, Group 1 and
6 Group 2. The Group 1 properties are the subject of
7 tonight's public hearing. The Group 2 Properties will
8 be addressed in the future in a feasibility study.

9 The Inaccessible Soils Operable Unit
10 addresses all inaccessible soil not covered by the
11 Accessible Soils and Groundwater Operable Unit. The
12 Inaccessible Soils Operable Unit includes soil that is
13 inaccessible due to the presence of buildings or
14 permanent structures, soil located under active roadways
15 and rail lines, soil on the exteriors or interiors of
16 buildings or permanent structures as well as soil
17 adjacent to sewers and interior sediments.

18 The main purpose of the remedial
19 investigation and baseline risk assessment is to define
20 the extent of Manhattan Engineer District and the Atomic
21 Energy Commission soil contamination present in the
22 Inaccessible Soils Operable Unit and assess the
23 associated risk to human health and the environment.
24 This remedial investigation sampling began in June of
25 2009 and ended in August of 2010. A total of 8,000

1 samples were collected during the remedial investigation
2 sampling campaign. The data, combined with other data
3 from US Army Corps of Engineers investigations, were
4 used to evaluate the nature and extent of Manhattan
5 Engineer District and Atomic Energy Commission
6 contamination in the Inaccessible Soils Operable Unit in
7 the baseline risk assessment. This baseline risk
8 assessment was performed to estimate the potential risk
9 to human and ecological receptors from the Inaccessible
10 Soils Operable Unit. This remedial investigation and
11 baseline risk assessment report for the Inaccessible
12 Soils Operable Unit at the St. Louis Downtown Site is
13 available for, for review on the FUSRAP website, under
14 the St. Louis Downtown Site's document section and in
15 the administrative record file for the St. Louis
16 Downtown Site Inaccessible Soils Operable Unit.

17 The potential contaminants of concern
18 selected as the starting point in the remedial
19 investigation were the same radionuclides identified as
20 contaminants of concern in 1998 Record of Decision. The
21 potential contaminants of concern includes specific
22 isotopes of actinium, protactinium, radium, thorium and
23 uranium.

24 Risk is determined as an increase in lifetime
25 probability of one additional cancer case occurring over

1 the baseline cancer rate for a specific population. The
2 Environmental Protection Agency methods and a Department
3 of Energy model are used to calculate radiological
4 cancer risk at the St. Louis Downtown Site.
5 Radiological risks are modeled over a 1,000 year period
6 of evaluation. The risk model requires the input of
7 certain pieces of information. That information is
8 based on numerous assumptions regarding the site, such
9 as future land use.

10 There is a vast amount of information that
11 goes into the risk model. One example is the level of
12 specific contaminants found at the site. Another
13 example is the toxicological factors associated with
14 these contaminants. These factors are based on
15 published standards and data. Some more risk model
16 parameters include identification of potential receptors
17 and identification of exposure pathways. An exposure
18 pathway is the course that a contaminant takes from a
19 source to an exposed person or animal. Exposure
20 scenarios combine the levels of contaminants, their
21 effects, the specific receptors involved and the way in
22 which they would be exposed to create the hypothetical
23 exposure situation and to calculate a risk value for
24 those conditions.

25 Exposure pathways evaluated for radioactive

1 contamination at the St. Louis Downtown Site are
2 accidental ingestion of contaminated soil, inhalation of
3 contaminated soil particles in the air and external
4 radiation from contaminated soil. Land use scenarios
5 evaluated in the human health risk assessment include
6 industrial, recreational and residential land uses. The
7 risk reported for each receptor at a property is the
8 maximum risk level modeled over a 1,000 year period.

9 Here are some different examples of receptor
10 scenarios. In the industrial worker scenario, an
11 individual works full-time for 25 years at the property
12 and is assumed to be exposed directly to soil and
13 interior building surfaces.

14 The recreational user scenario evaluates an
15 adolescent who walks, jogs or bikes along the St. Louis
16 Riverfront Trail. The recreational user is evaluated
17 for external radiation exposures to soil beneath the
18 levee of 1 hour per day, 75 days per year. The levee is
19 assumed to be ground cover in this current situation.
20 The hypothetical residential gardener scenario was
21 evaluated as the worst case scenario to determine the
22 need for no action at the Group 1 properties. This
23 scenario considers a young child and adults living on a
24 property for 350 days per year for 30 years. In this
25 scenario, there are exposures from soil with no ground

1 cover, from eating fruits and vegetables grown in a
2 garden on this property.

3 The St. Louis Downtown Site is divided into
4 the Accessible Soils and Groundwater Operable Unit and
5 the Inaccessible Soils Operable Unit. The Inaccessible
6 Soils Operable Unit is divided into two subgroups. The
7 first group of properties is the Group 1 properties.
8 These properties are the subject of tonight's public
9 hearing. The proposed plan for the inaccessible soils
10 on the Group 1 properties was issued in January 2014.
11 The Group 1 properties pose no unacceptable risk to
12 human health and the environment. Proceeding with our
13 recommendation for no further action on Group 1
14 properties is consistent with CERCLA and will follow us
15 to focus future resources on evaluating appropriate
16 remedies for Group 2 properties. The Group 2 properties
17 include all the remaining inaccessible areas not
18 addressed in this proposed plan for the Group 1
19 properties. The Group 2 properties are currently being
20 addressed in a separate feasibility study, which will be
21 addressed in the future.

22 This slide shows a map of the St. Louis
23 Downtown Site. The gold property areas on this map are
24 the Group 1 properties. If you're having a hard time
25 seeing this map, there's a large poster that shows all

1 these areas in detail. This map can also be found on
2 the proposed plan fact sheet as well as the proposed
3 plan document as Figure 4.

4 The proposed plan for the Group 1 properties
5 associated with the Inaccessible Soils Operable Unit
6 recommends no further action. The inaccessible soils on
7 these properties qualify for no further action for
8 either one of two conditions. The first condition is
9 that the inaccessible soils on these properties were
10 determined to be nonimpacted because the structures were
11 in place prior to Manhattan Engineer District and the
12 Atomic Energy Commission operations, and the surrounding
13 accessible soils were not contaminated.

14 The second condition is that the inaccessible
15 soils on these properties have no complete exposure
16 pathways and/or do not pose an unacceptable risk to
17 human health or the environment. This recommendation
18 was based on the results of remedial investigation and
19 baseline risk assessment that indicate the risk due to
20 Manhattan Engineer District and the Atomic Energy
21 Commission contamination did not exceed the
22 Environmental Protection Agency's acceptable risk range
23 at the Group 1 properties. Under CERCLA, the
24 Environmental Protection Agency acceptable cancer risk
25 range is identical, is defined as risk falling somewhere

1 between one additional cancer in 10,000 and one
2 additional cancer in 1,000,000.

3 As a conclusion, the US Army Corps of
4 Engineers proposes no further action for the
5 inaccessible soils on the Group 1 properties. Another
6 point to take away from this evening is that the public
7 comment period will end on February 13th, 2014. Please,
8 please, feel free to mail written comments to the US
9 Army Corps of Engineers until the end of the public
10 comment period. We will be recording oral comments in
11 the next portion of this public hearing.

12 The public comment period will conclude on
13 February 13th, 2014. The Record of Decision for the
14 Inaccessible Soils Operable Unit is expected to be
15 completed in 2014 as well. The US Army Corps of
16 Engineers will respond to comments received during this
17 review period. The comments and responses will be
18 captured in the Responsiveness Summary. After
19 consideration of these comments, the U.S. Army Corps of
20 Engineers, in coordination with the Environmental
21 Protection Agency, will make a final decision on the
22 Group 1 properties associated with the Inaccessible
23 Soils Operable Unit. The Responsiveness Summary will be
24 included in the Record of Decision for the St. Louis
25 Downtown Site Inaccessible Soils Operable Unit Group 1

1 properties. We anticipate that the Responsiveness
2 Summary will be available to the public in 2014.

3 The US Army Corps of Engineers welcomes your
4 input. One of the first things that you can do is visit
5 our website to learn more about the FUSRAP sites. On
6 this website, you can view an electronic copy of this
7 proposed plan under the St. Louis Downtown Site document
8 section. Paper copies of this proposed plan are located
9 in the administrative record file locations for you to
10 review along with the administrative record file. You
11 still have time to review the proposed plan and send us
12 your written comments.

13 Written comments are due to US Army Corps of
14 Engineers by February 13th, 2014. Written comments can
15 be mailed to the FUSRAP Project Office at 8945 Latty
16 Avenue, Berkeley, Missouri 63134. This address is also
17 provided on the proposed plan fact sheet, which is
18 available at our table. Written comments can also be
19 turned in to the comment table on the, inside of the
20 comment collection box. The US Army Corps of Engineers
21 will be available to answer any questions after this
22 public hearing. And we will now begin the oral
23 commenting portion of this public hearing. Thank you
24 very much.

25

1 PUBLIC COMMENT SESSION

2 MS. HUCKSTEP: Now, it's time to begin -- oh,
3 he's taller than I am. Now, it's time to begin the
4 public comment session. And as I mentioned earlier,
5 it's not really a question and answer. You can ask your
6 question, and it will be so recorded.

7 So far, I believe we have two people who have
8 signed up to speak. And I'll call them in the order
9 that they signed up. And again, if you can, speak
10 within three minutes and give, if there's other folks
11 that would like to speak, you'll be welcome to at that
12 time as well. Beth Pross, would you like to --

13 MS. PROSS: I concede my time.

14 MS. HUCKSTEP: You concede your time? Susan
15 Folle, would you like to speak? Ask your question? So
16 note a comment?

17 MS. FOLLE: Susan Folle.

18 MS. HUCKSTEP: Are you affiliated with anyone
19 or --

20 MS. FOLLE: Oversight Committee for FUSRAP.
21 But I have two questions is all. DT22, the resident was
22 grandfathered in, but future, future residential use is
23 prohibited. I would like to know how that conclusion
24 was reached.

25 And there are long term plans that are to

1 encourage a wholesale produce district. And I would
2 like to know how safe that's going to be, beings that
3 thorium is just a little bit of, little bitty critter.

4 Another question real quick -- it's dealing
5 with Section 5.2.1.13. FUSRAP has decided that
6 residences and gardens will not be constructed for the
7 foreseeable future, and that existing buildings will be
8 razed before construction. I would like to know what is
9 the basis for this decision. That's it.

10 MS. HUCKSTEP: Thank you, Susan. At this
11 time, I would like to call up anyone else who might have
12 of questions. Lots of time. Anybody? Going once.
13 Beth, would you like to? Beth Pross?

14 MS. PROSS: Good evening. And thank you. My
15 name is Beth Pross, P-R-O-S-S. And I'm with the St.
16 Louis Oversight Committee for FUSRAP. And I guess I'm
17 wanting to know, I recently discovered that there is a
18 redevelopment group here on the near north side on the
19 other side of the highway from here, I believe, is where
20 their area starts. And they've invested a lot of time
21 and a lot of capital and certainly in the communities to
22 redevelop this area into commercial, I don't think
23 residential, per se, but mostly commercial areas. And I
24 don't know if they're aware of this area and how this
25 may impact them. I would be concerned if anybody here

1 has been in contact with them outside of me. Just
2 curious.

3 MS. HUCKSTEP: Thank you very much. At this
4 time, I'll take any other comments, questions. The mic
5 is open. Going once, going twice. Then, I will
6 officially close this comment period if that's okay with
7 everybody. No objections? All righty. And thank you
8 for those comments and for your interest.

9 This meeting's recorded oral comment session
10 is now closed. Remember, you still have an opportunity
11 to submit any comments in writing. There's forms in the
12 back table back there and lots of things that have the
13 address on it that you can mail in questions or concerns
14 or comments that you may have.

15 I would like to thank you for your time for
16 coming tonight. I know it's kind of chilly, maybe far
17 from your homes, so again, thank you very much for
18 coming. And we'll be around to answer any other
19 questions at the posters back here from the Corps, from
20 the Department of Natural Resources. So, we'll stay
21 around and chat with you. Thank you.

22

23 (At this point in the proceeding, the Public
24 Meeting was concluded.)

25

CERTIFICATE

I, CELESTE D. NICOLLS, a Certified Shorthand Reporter, Registered Professional Reporter and Certified Court Reporter, within and for the City of St. Louis, State of Missouri, do hereby certify that this Public Hearing took place before me at the Clay Elementary School, 3820 North 14th Street, St. Louis, Missouri 63107.

I further certify that I am neither attorney nor counsel for nor related nor employed by any of the parties to the action in which this deposition is taken; further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto or financially interested in this action.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 4th day of February, 2014.

CELESTE D. NICOLLS, CSR, RPR, CCR

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