

1 **MS. KREUSCH:** My name is Arleen
2 Kreusch and I'm the Outreach Program Specialist
3 for the Army Corps of Engineers, Buffalo
4 District. Tonight's meeting, we will be having
5 two parts. The first part is the Corps' IA-06
6 proposed plan presentation for the former
7 Harshaw Chemical Company site, and then the
8 Department of Labor will be speaking on the
9 Energy Employees Occupational Illness
10 Compensation Program.

11 I would like to introduce to you
12 Lieutenant Colonel Daniel Snead, Commander of
13 the Buffalo District.

14 **LT. SNEAD:** Good evening. The
15 district that I cover, it's an interesting
16 boundary to cover the lower Great Lakes, as far
17 west as Toledo and as far east as Massena, doing
18 the Eisenhower Lock of Saint Lawrence Seaway,
19 and we deal with a lot of civil works projects,
20 and one area that we deal with is this FUSRAP
21 program. And this FUSRAP program is called --
22 it stands for the Formerly Used Sites Remedial
23 Action Program. And for those that are involved
24 in it, we understand that that's the
25 radiological cleanup of sites that were used

1 under the Manhattan Engineer District way back
2 when in preparation of developing the atomic
3 bomb, and this is specifically one of those
4 sites that we're looking at.

5 I'd like to thank you all for coming
6 tonight. We had a public meeting at this actual
7 venue reference Cleveland Harbor. Now, I don't
8 know if any of you were there for that. I know
9 that gets a lot of press in The Cleveland Plain
10 Dealer about a new disposal facility, and that's
11 the same district, Buffalo District, that's
12 covering that as well as this project as well.

13 But, again, thank you for being here
14 tonight. What we're going to talk about is this
15 separate parcel from the Harshaw site. It's
16 called the investigative area or IA-06, so
17 that's a term you're going to hear throughout
18 the presentation, IA-06, and the presenters
19 Duane and Andrea will talk more specifics of
20 this location, but it's essentially a separate
21 parcel on the east side of the Cuyahoga separate
22 from the main Harshaw site that we're talking
23 about.

24 The big reason why we're here today
25 is we understand that there is some interest in

1 the community to use this parcel potentially for
2 something. So we expedited our processes and
3 our studies in order to make sure that we gave
4 something back to the community that could
5 potentially be used for something better than
6 what it's being used for right now.

7 I'd like to acknowledge elected
8 officials, but I don't know if we've got anybody
9 here representing any elected officials at this
10 time. But if we do, we'll make sure that
11 they're represented.

12 Also, I read I think it was a local
13 article from, what's it called, The
14 Independence, I think, so I think there's
15 probably some folks here that are concerned
16 about health-related issues in reference to the
17 site when the site was active. So what we did
18 -- even though that's not what we're focused on
19 in reference to the parcel, what we did is we
20 have some folks here from the Department of
21 Labor. I'd like to introduce Saul Berzinskas.
22 I don't know if I said it right, Saul. Forgive
23 me if I did say it incorrectly. And Tina Smith.
24 They're here representing the Department of
25 Labor Energy Employees Occupational Illness

1 Compensation Program. So at the end of this,
2 when you're done providing us comments, there is
3 an opportunity for you to ask them specific
4 questions related to that topic regarding their
5 program.

6 Also, when you came in, hopefully you
7 had an opportunity to fill out and return a
8 sign-in card. And if you haven't, Arleen and
9 Natalie -- Natalie is out there by the desk.
10 Feel free to get with them so you can get signed
11 in to the sign-on table to make sure that we can
12 get your comments. So obviously we'll take
13 questions, or if you have comments that you
14 would like to make tonight, feel free to do that
15 and we'll give you the opportunity to do that as
16 well as written comments. Maybe there's
17 something you think about that you need to
18 absorb after you leave tonight that you might
19 think, geez, this is probably something I'd like
20 to make a comment on, so we give you that
21 opportunity as well and we'll make sure that you
22 have all the information available to do so.

23 Just a reminder also, when we put
24 this out, it was initially released to the
25 public on the 26th of April, and our comment

1 period ends on the 26th of May. So the 26th of
2 May, make sure you do get your comments in
3 before that.

4 Let's see if I can work this thing.
5 In general, this is the agenda that we're going
6 to follow this evening. I'll be followed by
7 Duane Lenhardt, our Project Manager, who will
8 talk more of the overview of the project, and
9 he'll be followed by Andrea Kolhoff, who is the
10 Project Engineer, that will get into more of the
11 technical aspects of the proposed plan. And
12 then at the end we'll have some question and
13 answers opportunity for you all.

14 Also, I want to make sure that I
15 point out some folks. We do have a lot of
16 technical folks here today, so if you do have
17 specific questions, I think we should be able to
18 answer them.

19 First off, Traci Clever. She's our
20 Director of Programs. She's my right-hand
21 person essentially for our overall program for
22 the Buffalo District. Colin Ozanne from our
23 Office of Counsel. Bill Frederick, who is our
24 lead for environmental projects that covers our
25 overall FUSRAP program, not just the Harshaw

1 site. Dave Frothingham from our environmental
2 engineering section. He's the team leader for
3 that. Karen Keil, she's our Risk Assessor, so
4 when we look at technical aspects of it, we
5 assess it based on risk and impacts to the
6 safety of us as well as human health. Hank
7 Spector, he's our Health Physicist. I know he
8 brought some little gizmos as well over there.
9 If there's more specifics on sampling and such
10 that he would be willing to show to you. And as
11 I stated before, Arleen Kreuzsch and Natalie
12 Watson who leads our outreach program for
13 FUSRAP.

14 So with that, I'm going to hand it
15 over to Mr. Lenhardt who will talk about kind of
16 the overall sites and where we went with the
17 proposed plan process. Duane.

18 **MR. LENHARDT:** Thank you, Colonel
19 Sned. We appreciate your presence here tonight
20 and your support of this program. It's a very
21 important program for the Corps of Engineers.

22 Next slide, please. I'd like to
23 describe the site to you. You've read about the
24 site, and I do want to point out some
25 information. On the left-hand side is a roadmap

1 that you'll identify for the Cleveland area, and
2 that big red star is the -- formal name of the
3 site was Former Harshaw Chemical site. That's
4 where it's located, and it's approximately three
5 miles from downtown Cleveland. And it's along
6 an industrialized corridor that is along the
7 Cuyahoga River, which flows north toward the --
8 here's the site, here's the Cuyahoga River, and
9 it flows into Lake Erie. (Indicating.)

10 On the right-hand side is an aerial
11 photo. The aerial photo is a photo as if you
12 were in a plane looking down at the site and
13 this is what you would see. It's relatively
14 recent. It's pretty much what you would see
15 looking down from an airplane. And if you look
16 at that, there are some prominent features there
17 that are found in this area of the Harshaw site.
18 There's the Cuyahoga River that comes in here,
19 meanders around past the site and up out of the
20 top part of the photo toward Cleveland, it's
21 flowing north. In addition to the Cuyahoga
22 River, there's another river body and that's the
23 Big Creek. Big Creek comes into the Cuyahoga
24 River. So these are features you would
25 recognize, waterways in the area.

1 And there are some other features
2 there, bridges. Here is the Harvard/Dennison
3 bridge that you would recognize that, you know,
4 very well elevated, a very large bridge, and it
5 crosses the Cuyahoga River, and Harvard Avenue,
6 it moves east to west, east going to the west,
7 and it also crosses the Cuyahoga River and it
8 passes the site and the site is located at 1000
9 Harvard Avenue and continues on until it crosses
10 and joins up with Jennings Road, which is the
11 north/south road here.

12 Now, the Harvard site is -- you can
13 follow it around starting here and follow the
14 blue line that comes down and around across the
15 road, comes down Jennings Road here way down
16 here to the south, comes across along the river,
17 comes around, and then if you cross the river,
18 there's another portion over here in yellow, and
19 then it comes back over on the blue line. So
20 that's the Harshaw Chemical site. And it's
21 approximately 55 acres. And one thing you may
22 notice is that it's broken up into three
23 distinct areas. There's three distinct areas to
24 this former site. It's broken up by the river,
25 Cuyahoga River flows here so you have this large

1 mass of the site over here. On the other side
2 of the river you have this area here, so it's
3 broken up that way. (Indicating.)

4 Now, the area that's west of -- this
5 is west, west of the Cuyahoga River over here.
6 This area here is also broken up, it's broken up
7 by Big Creek. So you have a northern portion of
8 the site here, which is north of Big Creek,
9 extends almost to the Harvard/Dennison bridge,
10 and this is the former process area. This is
11 where various chemicals were manufactured
12 between 1905 into the 1980s. And in this photo
13 you'll see these features here. These are the
14 buildings that exist today at the site. There
15 were many more buildings in this area when it
16 was in high production and they've been
17 demolished.

18 I'll point out one building. This
19 building right here, this is a building we spent
20 a lot of attention on ourselves. It's called
21 building G-1. This is a building where the
22 Harshaw Chemical processed uranium ores for
23 uranium between the years of 1944 and 1959. So
24 this area here, this building has higher levels
25 of radiological impacts in the area around and

1 it also to the area north of that toward the
2 Harvard/Dennison bridge. This is the area where
3 the highest levels of contamination are found.
4 When you look at the proposals that we have
5 here, you'll see dots which represent the levels
6 of contamination and see there's lots of
7 contamination concentrated in this area,
8 radiological. (Indicating.)

9 So this is a former process area. If
10 you go south of the Big Creek River to the
11 southern portion of the site, this area was not
12 used for production, it was used more for
13 storage and during the operation, and you'll
14 notice that there are features today that are
15 here. These are recent features. They did not
16 exist when the plant was in production. This is
17 a large trucking depot. And if you go further
18 down in this area here, what you see here is an
19 indication of vegetation. It's shrubs and trees
20 in this area here. So this is idle land today.
21 (Indicating.)

22 So this is the main area of the plant
23 site, and if you go across the river, you'll see
24 this parcel here in yellow. And we put it in
25 yellow because this is what we're concentrating

1 on tonight. This is the IA-06 area. As Colonel
2 Snead indicated, IA-06 indicates investigative
3 area 6. It's called that because during the
4 investigations our designation for investigation
5 in this area. Investigative Areas 2, 3, 4, 1
6 and so forth are on this side of the river, so
7 this is investigative area 6 on the east side of
8 the river, and this is our focus of the meeting
9 tonight.

10 And the purpose that we're focusing
11 on this area tonight is to present a plan to
12 you. It's a proposed plan for further action to
13 move this site forward. It's what we call
14 renewal further action. In other words, this
15 particular area, IA-06 is not designated for any
16 remediation from what we call the FUSRAP
17 program, as the Colonel mentioned earlier.

18 As far as the investigations that
19 we've done on site, we can move beyond this
20 stage, move it forward and concentrate on this
21 area, and what we'll be doing is accommodating a
22 request from the community to extend the towpath
23 trail that you may have heard about. Right now
24 I think it comes up from the south and ends
25 right here south of Harvard Avenue. This is

1 Harvard Avenue. And the intent is to extend it
2 further north along the IA-06 property. So by
3 so-called releasing this property from FUSRAP
4 consideration, Corps consideration, it gives the
5 opportunity for the community to extend that
6 towpath further north. (Indicating.)

7 This explains the CERCLA process.
8 The mission of the Corps of Engineers is to
9 investigate and to remediate sites that are
10 impacted during the early days of the atomic
11 energy program.

12 And our process for investigation,
13 for remediation is a process that was not
14 developed by the Corps. We followed the process
15 that was well established and was established by
16 the U.S. Environmental Protection Agency, and
17 they developed this process to investigate
18 hazardous waste sites, not just government
19 sites, not radiological sites, but all hazardous
20 waste sites.

21 And the laws that were enacted back
22 in the '70s, you may have heard of these
23 Superfund laws back in the '70s, 1974.
24 Superfund laws were enacted by Congress to
25 investigate and remediate hazardous waste sites,

1 and part of that process was the CERCLA process
2 and that's what the Corps of Engineers follows.

3 Now, at the time that Congress
4 enacted the Superfund laws back in '74, they
5 also established the program to investigate and
6 remediate radiologically contaminated sites,
7 which is the FUSRAP program, which stands for
8 Formerly Utilized Sites Remedial Action Program.
9 It's got a beat to it, FUSRAP. And this program
10 established back in 1974 originally was managed
11 by the Department of Energy.

12 Now, the Harshaw site, Harshaw
13 Chemical site is a relatively new site to the
14 FUSRAP program. It was brought into the program
15 in 1999, and about that same time in 1999 when
16 Harshaw Chemical became a site on the FUSRAP
17 investigatory list, about the same time that was
18 occurring, the program was being transferred
19 from the Department of Energy to the Corps of
20 Engineers. So the Corps of Engineers has
21 managed this program for approximately the last
22 ten years.

23 Now, the process itself is a series
24 of steps. This chart shows you the steps
25 starting from the preliminary assessment working

1 down to investigations, studies, studying of the
2 options for remediation, down to public comment
3 and receiving public approval to final remedial
4 design and remedial action. This chart also
5 shows where we are for the Harshaw site in terms
6 of the process. When the Harshaw site was
7 entered in 1999, a preliminary assessment was
8 done and it was found that there's contamination
9 that needs to be assessed further. So we moved
10 on to the next step, the investigatory step,
11 remedial investigations.

12 Now, investigations that were
13 conducted at the Harshaw site were conducted by
14 the Corps of Engineers between 2001 and 2007,
15 and samples were taken throughout the area and
16 it was tested and the data that was collected
17 from the samples was put together into a report,
18 compiled into a report, which is the remedial
19 investigation report. And that report was
20 recently released in December 2009 to the
21 public. And many of you were here in January
22 when we had a public session to discuss the
23 report. The remedial investigation report also
24 includes assessment of current and long-term
25 risks. In other words, we collected all this

1 data. Now what are we going to do with this
2 data?

3 We assessed it in terms of what risks
4 were there in terms of health risks, ecological
5 risks. And what we found was basically that the
6 area west of the Cuyahoga River where the
7 processing was occurring, there were issues.
8 There was a need to further study these areas in
9 terms of remedial options. So we went from
10 remedial investigation, which has been completed
11 for the western areas west of the Cuyahoga
12 River, down to feasibility study.

13 We are now in feasibility studies for
14 the area west, which have contamination issues,
15 looking at remediation, and we just begun this
16 process, and eventually in the future you'll be
17 sitting here again in another public meeting
18 discussing the next step down, which is a
19 proposed plan. In other words, we look at the
20 area -- various options for remediating that
21 area for the site and we determine what we best
22 judge to be the remedial option. Then we come
23 here and present it to you and receive your
24 comments. That's the area west of the river.

25 Tonight we're here to discuss IA-06,

1 Investigative Area 6. What we've done is we've
2 gone directly to the proposed plan, so there's
3 no feasibility study. We're doing that because
4 this area, based on the data that we collected
5 as far as FUSRAP-related contaminants, has no
6 significant impact so we can move beyond the
7 feasibility study phase.

8 There's no need to study how this
9 area will be remediated and we will move to a no
10 further action proposed plan. So that's what
11 we're going to present to you tonight, data from
12 the investigations that were conducted in IA-06
13 and our plan, and then we hope to receive your
14 comments tonight as well as over the next
15 several weeks.

16 And once we receive your comments,
17 we'll be able to proceed from the comment phase,
18 respond to your comments, and go to what is
19 called a record of decision, ROD. Here we
20 document, it's a formal document, legal
21 document, where we agree on what is going to be
22 done for IA-06.

23 Now, the area that's west of the
24 river, we're still in the process of studying
25 that. We will also proceed to a proposed plan

1 and record of decision. At some point we'll get
2 to remedial design and remedial action.

3 What I'll do now is turn this over to
4 Andrea who will go over the studies and methods
5 that we use and what we found at the site.

6 **MS. KOLHOFF:** Good evening,
7 everybody, and thank you, Duane. I'm going to
8 start with a brief description of Investigative
9 Area 6. It is a small, approximate six-acre
10 wooded lot on the west side of the Cuyahoga
11 River. Much of this area is low lying and lies
12 within the Cuyahoga River's floodplain. It is
13 regularly inundated with floodwaters. Currently
14 there is no use of this property by the property
15 owner. It's zoned industrial. And after
16 coordination with local community planning
17 groups, such as The Ohio Canal Corridor, we've
18 identified that it's reasonably anticipated
19 future land use that it's going to be for
20 recreational development.

21 To begin our investigation, as Duane
22 showed, there's a process we followed and this
23 is going to be a summary of remedial
24 investigation. A remedial investigation has a
25 few major components. We start by determining

1 the nature and extent of any potential
2 contamination that might be at the site. What
3 we mean by "nature" is we go out and we look for
4 specific radionuclides and chemicals that were
5 used as part of the MED process, Manhattan
6 Engineer District process and then we evaluate
7 its extent, where it is, both lateral, across
8 the site and how deep it goes. So that's what
9 we mean by "nature and extent."

10 We perform groundwater modeling, fate
11 and transport modeling. Groundwater model is a
12 predictive tool that's going to be used to help
13 us evaluate the effectiveness of any remedial
14 alternative. And the fate and transport result
15 is going to serve as an input into the risk
16 assessments to help us determine potential
17 future risks.

18 We perform a human health risk
19 assessment. This is where we take the nature
20 and extent data and the predictive groundwater
21 modeling data, and we determine based on current
22 site conditions because remedial investigation,
23 is a snapshot of what's going on at the site
24 right now. It doesn't look at what was there.
25 The risk assessments don't determine what risks

1 there was, it talks about what risk is there
2 right now and what risks might exist later on
3 down the road to a given population. And then
4 we perform a screening level ecological risk
5 assessment, and this is simply looking to see if
6 there is a potential for a risk to plants and
7 animals as a result of MED activities at the
8 site.

9 To help us determine if radionuclide
10 and chemical contamination is present at the
11 site as a result of government activities that
12 took place there, we first need to determine
13 what is in the area naturally occurring.
14 Uranium, metals and other elements are found
15 naturally in the earth's crust. As a result of
16 this, it can be found in rocks, soil, air and
17 water. So we perform sampling in the vicinity
18 of the site which would help us determine what
19 is natural in the Cleveland area, but it's not
20 there as a result of the activities that
21 occurred at Harshaw.

22 As you can see, these levels, they
23 vary across the country and it's because we have
24 different type of geologic formations. Granite
25 can be high in uranium. What you see here in

1 Ohio, that area over there, because of the Ohio
2 shale and this area was literally formed, so as
3 the glaciers receded, they scoured some of the
4 Ohio shale, which as a result spread some of
5 that naturally occurring uranium across the
6 site.

7 **A VOICE:** What does that say,
8 parts per million under that --

9 **MS. KOLHOFF:** The "U" is for
10 uranium. That's to indicate natural uranium.

11 Bottom line, what we found in
12 Investigative Area 6 is that there are no
13 short-term or long-term risks that are posed to
14 reasonably anticipated future land uses as a
15 result of any activities that might have
16 occurred there. And after sampling the Cuyahoga
17 River and Big Creek, both the water and
18 sediments, we didn't see any significant impact
19 from MED-related activities there either.

20 Now how we got to those conclusions.
21 Just wanted to show a few pictures so you can
22 see the type of activities we perform. Up here,
23 that's the Cuyahoga River from the north area
24 looking south. We did site clearing over here
25 by going out and clearing and grubbing the site.

1 We were able to get large pieces of equipment
2 and people out there to do the investigation.

3 We did civil surveys which helped us
4 map and plot all of our sampling locations. We
5 had survey control lines to help marry up our
6 different methods of doing investigation to each
7 other. And this is an example of a geoprobe.
8 Geoprobe is a type of drilling method. It's
9 nice because it doesn't produce a lot of extra
10 waste, we're collecting a lot of just what we
11 need for the samples.

12 The investigation began with
13 non-intrusive fieldwork. Before we went into
14 the site and started punching holes, we wanted
15 to get a better idea of where we should place
16 those holes, get a good idea of what was going
17 on in the subsurface, things that we couldn't
18 see on the ground.

19 We performed EM-31. That's
20 electromagnetic terrain conductivity. We
21 basically generate an electric current. We
22 measured the conductivity between the two and a
23 lot of times that is performed to help determine
24 where there's fill material in relation to
25 natural occurring -- the natural type of soils

1 and sands and clays that you might find there.
2 And we performed gamma walkover surveys. That's
3 this guy down here. You can see the equipment
4 that we used for that. The large antenna is a
5 GPS so we get X-Y location coordinates for all
6 this data. And that piece down there is the
7 detector itself.

8 Geophysical survey. When we go out
9 with the EM-31, it comes back and we evaluate
10 the data, we color code it and we look for
11 trends. What you're seeing here from the red
12 down to the blue is a relative change in
13 conductivity of soil types. It can see
14 differences in clays, sands. This has nothing
15 to do with chemicals or metals or any type of
16 contamination, this is helping us look for areas
17 to investigate.

18 As you can see, we did identify a few
19 anomalies up here. Anomaly A where you see this
20 red area to a blue area is where we went back to
21 our historical records and we could see this was
22 an area where the natural shore line of IA-06
23 had been eroded, and the different colors is
24 where they came in and placed dredge material to
25 try to reclaim some of that area. (Indicating.)

1 Up here, this is one of the few --
2 the only manmade structure we did notice in
3 IA-06. It's a bit of a sheet pile wall, which
4 best we can tell from historical information
5 that there used to be a shore line closer up
6 here, and we assume that they put those in there
7 to try to help prevent further erosion of the
8 area. Anomalies C and B, I don't think they
9 really had visual characteristics that we could
10 see. And we did investigate them further and we
11 found they had no radiological signature either.
12 (Indicating.)

13 This is the results of the gamma
14 walkover survey. The gray area represents
15 background values; that's this naturally
16 occurring that we're talking about. Since
17 background is an average, when you look at the
18 data you're always going to see half above, half
19 below. What you're looking for are these
20 trends, where we have these red and yellow dots,
21 that told us we might have elevated levels of
22 radioactivity in those areas, so we did target
23 those for intrusive sampling. So the gamma
24 walkover surveys and geophysical surveys, that's
25 what helped us determine where we were going to

1 put holes, in addition to a few random ones to
2 see if there's something there that our
3 instruments didn't pick up.

4 So these are the locations where we
5 collected soil samples. We have 113 soil
6 samples in this little six-acre plot collected
7 from 41 different soil locations. What that
8 means is that for each soil boring we installed,
9 we collected a sample from various depths within
10 it to help give us a better idea of where the
11 contamination might be present vertically.

12 (Indicating.)

13 This area here is the same area on
14 this map where we had that cluster of red and
15 yellow dots. So wherever we did see that, we
16 took numerous samples to make sure we were
17 looking for it, and if it was there, we were
18 going to find it. This area up here is where we
19 investigated this up here to make sure what we
20 were seeing in this change in conductivity
21 wasn't a result of MED activity, and it was not.

22 (Indicating.)

23 Once we had all this data, we
24 performed a baseline risk assessment. There are
25 some major inputs into a baseline risk

1 assessment. First we evaluate the data and we
2 look at the numbers themselves and we determine
3 if that is there as a result of MED, FUSRAP,
4 government-related activities. So we ask
5 ourselves, is it above naturally occurring
6 levels.

7 Then we do an exposure assessment.
8 An exposure assessment asks the questions, who
9 was at the site? Are people at the site because
10 they're riding on a bike path? Are they there
11 because they work there? Do they live there?
12 Do they farm there? These are all different
13 types of land receptors, land uses that we look
14 at in this investigation. How long are people
15 there? How much are they exposed to it? Do
16 they spend eight hours a day there, one hour a
17 day there? Those are the questions we ask
18 ourselves in the exposure.

19 And then we perform a toxicity
20 assessment. Using numbers that the USEPA has
21 generated, we look at how each of the different
22 radionuclides and chemicals might have an impact
23 on the body, and all of these three inputs come
24 together to tell us how much risk is there, how
25 much risk to a population and what potential

1 dose has to do with the radiological input you
2 might have.

3 To help us with the exposure
4 assessment, we develop conceptual site models.
5 This is just an example of a conceptual site
6 model. This is not specific to the Harshaw
7 site, because as you can see we have cows there.
8 We don't have cows in IA-06. But it is a
9 potential way that people could get exposed to
10 contamination at a site. You know, you could
11 have contaminated water where fish grow in and
12 people ingest that. That's an exposure. That's
13 a way you might get contamination in you. So we
14 look at this and we determine specifically for
15 the site what pathways are complete. We cross
16 out the cows. We don't have cows. That's not a
17 complete pathway.

18 So the result of our FUSRAP risk
19 summary, any potential risk that might be at the
20 site from FUSRAP-related materials, for several
21 land-use scenarios. We did look at industrial,
22 the recreational, the residential and the
23 construction workers. Based on that we do not
24 exceed risk limits that have been established by
25 the USEPA and that we don't see a potential for

1 ecological risks. As far as that's concerned,
2 IA-06 falls within a heavily industrialized
3 area. We didn't identify any habitats that
4 would require specific concern and there weren't
5 any threatened or endangered species identified
6 in this area.

7 And with that I'm going to turn it
8 back over to Duane to close it up and present
9 the proposed plan.

10 **MR. LENHARDT:** Thank you, Andrea,
11 for the well prepared and interesting
12 presentation.

13 I'd like to focus back on the fact
14 that we're here tonight to discuss the IA-06
15 proposed plan. And the plan that we're
16 proposing for this area is a no further action
17 plan. And what that means is there is no need
18 for mediation related to -- let me emphasize
19 this, the FUSRAP related chemicals or compounds
20 that may have been associated with the previous
21 operations at the main site. Now, this proposed
22 plan and moving this forward is consistent with
23 the community's request for an early release or
24 an acceleration of release of this area for the
25 towpath trail, extension further northward.

1 Now, what's next? The proposed plan
2 was released on April 26th and there's a 30-day
3 comment period that's required and we solicit
4 your comments on the plan. The plan was handed
5 out in your packets and it was available online
6 from April 26 and 30 days would make the close
7 of the comment period May 26, so we're talking a
8 two-week period from now that we would ask that
9 if you have comments, to provide those comments
10 to us. Now it's up to you to provide your
11 comments and for us to respond to those
12 comments. Once you provide us your comments by
13 May 26th, we will respond to your comments and
14 we'll reach a decision that we can all agree
15 upon for this area.

16 Once we've agreed on the proposed
17 plan, we put together, according to the CERCLA,
18 a record of decision, which is the ROD, and this
19 will include the transcript from tonight and it
20 will also include your comments and our
21 responses, and it will document the final
22 decision. In other words, we're proposing a no
23 further action, let's move forward with this
24 parcel of land, and that's hopefully the final
25 decision. However, before we can reach that

1 decision, we need to have your comments and we
2 need to resolve those comments. We don't just
3 steamroll the decision, we ask for your input.
4 And the record of decision as well as the
5 proposed plan and the earlier report I referred
6 to, remedial investigation report, these are all
7 included in what we call the administrative
8 record file.

9 This is additional information. This
10 is all the information. The administrative
11 record file includes all the documents that we
12 use to arrive at the decision, and, again, we're
13 talking about the IA-06 area at this time. If
14 you want to see the record of decision as well
15 as -- and included in that, the investigation
16 report and all the investigations that Andrea
17 was talking about, then go to the Cuyahoga
18 County Public Library, Brooklyn Branch, Ridge
19 Road in Cleveland.

20 There is additional information you
21 can get online if you want to go online and look
22 up the Buffalo site for the Harshaw site. You
23 can use this web site and you'll find quite a
24 bit of information on there, the proposed plan,
25 investigation report, you can also find other

1 information related to IA-06 as well as the rest
2 of the Harshaw site posted on the web site.

3 How do you submit your comments? You
4 can do it tonight and you can do it by verbal
5 comment. After this formal session is over
6 with, we're going to have a comment session
7 where we'll open it up to comments, and I think
8 on your way in you were asked to provide some
9 indication that you were going to provide a
10 comment to us, so it would be helpful to us to
11 know you were going to provide a comment and
12 would encourage you to do so. So you can
13 comment.

14 Now, everything is being recorded by
15 a court reporter. The transcripts of this
16 meeting, again, they'll be in the administrative
17 record file, and these records -- this
18 transcript will also record your comment. So if
19 you have a comment that you've written down that
20 you're going to present to us, if you've written
21 it down, we would appreciate at the end of the
22 meeting if you would give it to the court
23 reporter here so that she can get exactly what
24 you wanted to say in the transcript.

25 Now, there are different ways that

1 you can provide comment. There is a sheet that
2 was provided to you on the way in. It's a
3 comment sheet and you can write down your
4 comments and you fold up the sheet. On the way
5 out you can put it in the comment box. There's
6 a box that you can submit your comments.
7 However, if you wish to provide comment later,
8 you can do so. At the end of the last page on
9 the proposed plan there's a sheet and that is
10 also a comment sheet. You can tear that off the
11 proposed plan that you've been handed out and
12 put your comments down, fold it up, tape it,
13 staple it somehow so it doesn't come apart and
14 you'll see there's an address for the Corps and
15 you can mail it to us. Make sure you put a
16 stamp on it. You can mail it in that way. Or
17 you can reach us by simply going to our e-mail
18 address that's given here. Again, written
19 comments, please postmark by the 26th of May.
20 That's when the 30-day comment period ends. Or
21 send it to us electronically by the 26th of May.

22 Now, your participation is important
23 to us so we'd like to hear from you, and we've
24 given here information -- again, it gives our
25 e-mail address, our web site, our mailing

1 address and we encourage you to contact us. I
2 know lots of people oftentimes will want to talk
3 to a real person, not just communicate by
4 e-mail. You can do so. We have a telephone
5 number. You can telephone us and that will get
6 you through to our Outreach Specialist, Arleen,
7 that's back there or maybe Natalie and they'll
8 take your question or your concern and they'll
9 channel it to whoever needs to address that
10 comment or concern and we'll get back to you.
11 There's a phone number that you can reach us.
12 Make sure you dial option 4.

13 Now, this concludes our formal
14 presentation at this point. However, there is
15 the comment session, but Arleen will be
16 facilitating. And as Colonel Snead indicated,
17 after that the court reporter will stop
18 recording and the representatives from the
19 Department of Labor, Saul and Tina, they will
20 present information on the Energy Employees
21 Compensation Program that some of you may be
22 interested in. And once they're through, we'll
23 break up. And you can see we have these banners
24 around with information on it. We welcome you
25 to go around and look at information. The

1 members of the Corps that are here encourage you
2 to come up and talk to us, whatever you'd like
3 to talk about, questions or you just want to
4 talk to us and see -- get to know us, you're
5 welcome to come up and talk to us after the
6 meeting.

7 In addition, Hank Spector, our Health
8 Physicist, has brought some equipment over
9 there, and the purpose is to show you how the
10 equipment works for one thing, but also to show
11 you that there are substances that we use every
12 day that have natural radioactivity associated
13 with them. And he'll show you, for instance,
14 there's salt over there, and this is emphasized
15 that background levels do have natural
16 concentrations of radioactivity. So at this
17 point, Arleen, I'll turn the meeting over to
18 you.

19 **MS. KREUSCH:** Thank you. Just a
20 few ground rules for the comments part of the
21 meeting. As Duane mentioned, there's a court
22 reporter here tonight to record your comments.
23 Please one person speaking at a time. Please
24 try to make your comments pertain to the
25 proposed plan for IA-06. And as you can see,

1 you need to state your name and where you live
2 when you start speaking. Dave Frothingham will
3 be bringing a microphone to you, so I have
4 people that signed up to comment, and then we
5 will be taking comments from the rest of you if
6 you've decided that you want to say something.

7 First I would like to introduce Marty
8 Gelfand, and he is from Congressman Dennis
9 Kucinich's office.

10 **MR. GELFAND:** Thank you.
11 Lieutenant Colonel Snead, Duane, Andrea and
12 everybody else from the Army Corps of Engineers
13 who are here and members of the public and
14 Councilman Frank Pignatelli, whose I believe new
15 ward includes this area that we're talking about
16 at the Harshaw Chemical. And this is my
17 daughter, Eden. She was here at the last
18 meeting. She was a little younger. And welcome
19 to the Tenth Congressional District, which is
20 where we're sitting right now and where the
21 Harshaw Chemical site is.

22 I appreciate your being here, Colonel
23 Snead. It says a lot that, you know, being the
24 commander of the entire Buffalo District that
25 you came out for this public meeting, and I

1 believe it's an important meeting. I do have a
2 letter from the Congressman about where we are
3 right now in the process and where he thinks
4 that we need to direct this, and I'll just read
5 it as quickly as I can.

6 "Dear Lieutenant Colonel Snead:
7 Thank you for sending me the most recent report
8 about IA-06. I appreciate this opportunity to
9 comment on the report. I support the U.S. Corps
10 of Engineers and its Formerly Utilized Sites
11 Remedial Action Plan or FUSRAP at the Harshaw
12 Chemical site in the City of Cleveland in Ohio's
13 10th Congressional District. The FUSRAP is
14 designed to clean up radioactive contamination
15 at sites formerly used in the development of
16 nuclear weapons as part of our nation's defense
17 system. Today, sites like Harshaw need to be
18 decontaminated and cleaned up to a safe and
19 appropriate standard for reuse.

20 "Recognizing that IA-06 is a small
21 part of the larger area under FUSRAP
22 jurisdiction, this section has had little use in
23 the development of nuclear weapons. However,
24 the Army Corps has determined that certain
25 ground disturbance on the site constitutes

1 evidence of construction-debris fill activities.
2 Furthermore, there were some elevated radiation
3 levels on the site. The Army Corps concluded
4 that there is no unacceptable risk to current or
5 reasonably anticipated future land users. Among
6 such users would be recreational users along the
7 Towpath Trail.

8 "The report is not explicit and in
9 plain language about what those risks are.
10 While the report discusses cancer and non-cancer
11 risks from the chemicals and radionuclides at
12 the site, it does not go far enough in
13 explaining what these risks mean to the people
14 who would be reasonably expected to use the
15 Towpath Trail, such as hikers, bikers, and other
16 recreational users. Rather, the report might be
17 more useful to individuals with a background in
18 radiation health physics. Plain language about
19 the risks will be even more important as the
20 Army Corps goes on to study the other areas at
21 the Harshaw site where higher radiation levels
22 are expected.

23 "The Army Corps is working with
24 community groups, including the Ohio Canal
25 Corridor, which advocates for future use of the

1 site as part of our region's recreational
2 infrastructure. I applaud this outreach and
3 seek that the Army Corps continue to work with
4 this and other similarly situated organizations.

5 "I would also like to see more
6 outreach to other community organizations with
7 knowledge about radioactive contamination risks,
8 such as the Earth Day Coalition, which has
9 specifically sought such participation. It
10 would be important to get such input as part of
11 the Army Corps outreach and the FUSRAP process.

12 "I appreciate that the Army Corps is
13 seeking to remediate and dispose of the less
14 work-intensive sections of the Harshaw site
15 first. IA-06 may be the least contaminated
16 parcel of the site, and it makes sense for the
17 Army Corps to complete its work here first?

18 "I would also suggest that other
19 areas, which may or may not be the easiest to
20 complete but for which there is a greater demand
21 for reuse, be segmented, investigated and
22 remediated sooner rather than later.

23 "Specifically, if the sections of
24 IA-03 and IA-04, from the northern fence line to
25 the southern railroad property line, could be

1 the next area studied and remediated,
2 construction of the Towpath Trail will be
3 completed sooner. Taking this approach, the
4 people can benefit from the outcomes of the
5 FUSRAP program sooner while the Army Corps
6 continues to study and clean up other sections
7 of the Harshaw property.

8 "I remain quite concerned about the
9 possible adverse effects to health and the
10 environment from the elevated levels and await
11 your reassurance and action.

12 "Sincerely, Dennis J. Kucinich,
13 Member of Congress."

14 So this is the letter that I handed
15 the Colonel just a few minutes after I walked
16 in, and we will be following up on this. And,
17 again, the Congressman appreciates all the
18 public participation in this process and will
19 continue to follow up with both the public and
20 the Army Corps.

21 **MS. KREUSCH:** The next person
22 speaking Mr. Claude Cornett.

23 **MR. CORNETT:** I reviewed the
24 documents that were mailed to people in the
25 community and went to the library to see if I

1 could get the more detailed documents, and found
2 that the only documents available were the 2006
3 remedial investigation reports and related
4 documents, which crippled my ability to get into
5 the underlying assumptions behind your summary.
6 I believe that as part of your responsibilities
7 to the public, you need to make the hard copy
8 available somewhere in Cleveland. I understand
9 it may have gotten hung up at the library, but
10 it needs to be available because it's clumsy to
11 work with the Internet.

12 **MS. KREUSCH:** We were told by the
13 library that it was in place in the library.

14 **MR. CORNETT:** Go there and check
15 it out. All they had was 2006 available at that
16 branch.

17 **LT. SNEAD:** We'll make sure we
18 get the right one.

19 **MR. CORNETT:** Now, there's a
20 number of limitations to the FUSRAP study.
21 You're only addressing the contaminants
22 associated with the nuclear programs that FUSRAP
23 has a mission to address. And the analysis that
24 was provided addresses those contaminants, but
25 the summary as presented is as if it's a

1 complete circle of study. And there are many
2 other potential contaminants that could be
3 present at the site that weren't addressed by
4 the FUSRAP study, and at least a phase 1 and
5 phase 2 investigation under the Ohio brownfields
6 laws are needed in order to ensure that there
7 aren't other chemical contaminants on the site
8 that could present a hazard for recreational and
9 other use.

10 Now, personally, I go to the Towpath
11 Trail and I would love to see the pathway
12 completed through IA-06, but I want to make sure
13 it's safe. Yesterday I visited the Towpath
14 Trail area south of IA-06 as usual and took a
15 look at IA-06 across the street and saw that the
16 formerly vegetated area had been bulldozed and a
17 British Petroleum pipeline installed through the
18 upper western portions of IA-06. I have
19 photographs on my camera, I haven't printed them
20 out, that I took yesterday to show that. So
21 your characterization of the site is a bit out
22 of date, as often happens between writing and
23 publication. I have many more technical
24 comments that I could read into the record, but
25 I don't want to bore people with a lot of

1 details about some of the points.

2 I'd say that your write-off of
3 applicable, relevant and appropriate
4 requirements because the risk levels under
5 FUSRAP weren't exceeded was inadequate under the
6 CERCLA program. At least you need to address
7 that there are other requirements and not try to
8 use just the risks for the FUSRAP to act like
9 you've done what's necessary or what needs to be
10 done has been done. I realize the FUSRAP
11 program has a limited mission and you're
12 operating within your mission. But you have to
13 adequately cover the limitations of your mission
14 and make sure that's sufficiently prominent in
15 your summary so that your reports are not
16 misused to give the impression that all the
17 possible chemical contamination problems were
18 addressed. You've only addressed part of them.
19 And that's the most important comments I have
20 and the rest I have in written comments.

21 **MS. KREUSCH:** Thank you very
22 much, Mr. Cornett. The next person I have is
23 Ann Kuula, and forgive me if I pronounced it
24 wrong. Could you give the court reporter your
25 address?

1 **MS. KUULA:** It's on the form
2 that I filled out and I'm on the mailing list,
3 which I'm very happy because I was able to take
4 the time to read the report.

5 My name is Ann Kuula. I live in Old
6 Brooklyn, which is just up the hill. I've been
7 in the area for about eight years. I'm very
8 involved and see some very familiar faces in the
9 audience. I am involved in an environmental
10 group, Friends of Big Creek, as well as the
11 Canal Way Trail plan. And I'm very excited
12 having read the report to see that the IA-06 can
13 be used for the continuation of the Canal Way
14 Trail.

15 I do not have a degree in chemistry
16 or physics. My degree is in psychology and art,
17 but my late father was a geologist, a registered
18 geologist, so I figure I know a little bit, and
19 his expertise was in geothermal steam. And if
20 he were alive, he would be 92 and he would be
21 really on top of what's going on for us in the
22 green world.

23 I'm very impressed by what I read.
24 And, also, I couldn't quite find what page it
25 was on, but I read that two feet down would be

1 safe, that the above two feet, the ground is
2 very safe. So for a trail to be made with the
3 regulations of what the Metroparks require for
4 their trails for biking and walking would
5 certainly seem to be appropriate per all the
6 different things that I identified in the
7 excellent report. That's all I have to say.

8 **MS. KREUSCH:** Thank you very
9 much.

10 Is there anyone else that did not
11 sign up to speak that would like to speak?
12 Chris Trepal.

13 **MS. TREPAL:** I just had a number
14 of questions and I'll rattle them off.

15 **MS. KREUSCH:** Can you do one at a
16 time?

17 **MS. TREPAL:** You mentioned that
18 the site entered the FUSRAP program in 1999. I
19 thought I had read somewhere that it had been in
20 the FUSRAP program and then was out of the
21 FUSRAP program. I'm not sure if that was
22 correct, so I'd like to check on that.

23 In your summary of results, there are
24 a couple of spots for uranium-234 and 238 that
25 have a relatively high range of detected

1 results, 36 parts versus background of 2.4. So
2 I wondered if on the site if somebody could
3 point out where these testings were identified,
4 especially since 238 has, I think, a billion for
5 the half. So it would be good to know where on
6 IA-06 these elevated levels are for uranium.

7 I was a little disappointed to hear
8 that there were no groundwater samplings. I
9 thought that was interesting. I did have a
10 question. If the risk results were based on the
11 average over the entire six-acre site, if that's
12 how the assessment is done, will there be a deed
13 restriction or a note on the deed that there are
14 residual radionuclide contamination? And to our
15 standards in 2010 they might be acceptable, but
16 in 100 years maybe things may be different and
17 that site might be used for other purposes.

18 Under our brownfield laws, the
19 ecological risk is actually somewhat stricter
20 than the human exposure, and I didn't know if
21 that was the same for the FUSRAP program, so
22 that would be another question.

23 And then my final one was looking at
24 the summary from the assessment. Found were
25 some soil cutting trails where there were

1 readings of 500 counts per minute versus 50
2 gross counts per minute, and that was taken on
3 the upper banks of the Cuyahoga River and Big
4 Creek. So I assume that is not near the site,
5 but I didn't know that, so that's another
6 question I'd like to have answered, if those
7 elevated readings from Eco, were they in IA-06?
8 I couldn't tell.

9 **MS. KREUSCH:** We might have to
10 ask you to repeat some of those so we can take
11 them one at a time.

12 **LT. SNEAD:** Can we answer some
13 of those now? We may need you to ask the
14 question again.

15 **MS. KOLHOFF:** As far as Harshaw
16 coming in and out of the FUSRAP program, that
17 didn't happen. Those areas in IA-06 where you
18 saw elevated levels of 234 and uranium-238 are
19 right here in the same area where we saw that on
20 the gamma walkover survey. The total uranium
21 level was 109 micrograms per gram, and that is
22 about one-third of the residential cleanup
23 values. So though 100 might sound high, it is
24 significantly lower than what we were seeing in
25 the order of like 2,000 up here in this area.

1 (Indicating.)

2 No, we did not collect groundwater
3 data in IA-06. Because of the strong hydraulic
4 connectivity between the river and the
5 groundwater here, we weren't confident what we
6 would pull out of the groundwater wells would
7 actually be indicative of the groundwater at the
8 site, that we could be pulling groundwater from
9 the Cuyahoga and actually have diluted results.
10 So what we did was we used kind of like an
11 analogy of the groundwater results we had here,
12 so we used all the same parameters and
13 assumptions that went into the groundwater model
14 here and we used our soil data here to model
15 what type of contamination we would see in
16 groundwater in IA-06, and that's what we used as
17 our input to the risk assessment. We felt we
18 were more conservative in that manner because it
19 would assume a worst case scenario, not the
20 dilution effect that we might see from pulling
21 river water.

22 As far as performing the risk
23 assessment, we did not take an average of all of
24 our samples.

25 MS. KEIL: We did.

1 **MS. KOLHOFF:** But it was the
2 exposure point concentration.

3 **MS. KEIL:** Which is the
4 average. Upper estimate of an average, so
5 it's basically an average over the -- because
6 future venues, recreational, we try to use the
7 area that's representative of what the activity
8 might be. And it's conceivable that somebody
9 might be hiking, or bird watching, or biking
10 across the entire area, so we looked at the
11 estimated that someone might spend four hours a
12 week during the six warmer months of the year
13 and spend that much time on the parcel as a
14 whole, so we did average over the area of the
15 parcel.

16 You asked a question about ecological
17 risk, how the human health assessment compared
18 to the ecological assessment. I mean, the
19 general premise for potential of ecological risk
20 is that for radionuclides, if you protect
21 against human health, you're going to be
22 protected for ecological receptors, except in
23 the case where you have a threatened major
24 species, and we have neither in IA-06.

25 But we did do a separate

1 comprehensive screening level of ecological
2 assessment on IA-06 and we used the standards
3 that were available and we used the same dose
4 limit criteria that the International Atomic
5 Energy Commission uses -- International Atomic
6 Energy uses for protection of ecological
7 receptors, we use their same criteria in IA-06
8 and we did not find any issues. The levels of
9 radioactivity on the site we found in that
10 little spot, it's just barely above background.
11 It's not like what Andrea said where the
12 processing happened and near G-1, there's much
13 greater levels of contamination there. We
14 really didn't find very much at all in IA-06.

15 I think you also asked a question
16 about deed restrictions. Although the site is
17 being released under a recreational land use
18 because that's the identified future land use,
19 we did look at also comparing standards that
20 would be appropriate for a more conservative
21 land use, residential or agricultural land use
22 if the land would be suitable for that, which it
23 really isn't because it's in a floodplain, but
24 we saw that the levels are so low that it would
25 not preclude other activities on the site,

1 construction, commercial activity, long-term
2 worker exposure or even residential or
3 potentially gardening or farming.

4 **MS. KOLHOFF:** And then the last
5 question, Big Creek, Cuyahoga River, that would
6 be Investigative Area 5 where you read the 500
7 count per minute report, so we're up here.

8 **MS. KREUSCH:** For the court
9 reporter, the person from our team in the back
10 was Karen Keil. She's a Risk Assessor.

11 Jim Cox.

12 **MR. COX:** Hi. I'm Jim Cox.
13 I represent the Flats Industry Association.

14 Can you tell me who owns the property
15 now?

16 **MR. LENHARDT:** The property is
17 owned by Chevron Oil.

18 **MR. COX:** Will the property
19 be sold to the Ohio Canal Corridor or
20 transferred to the Ohio Canal Corridor or
21 another non-profit organization?

22 **MS. KREUSCH:** We really can't
23 speak toward what will happen to the property.

24 **LT. SNEAD:** That's probably a
25 question for the Ohio Canal Corridor. We don't

1 involve ourselves in that decision.

2 **MR. COX:** Whoever the
3 property is transferred to, will the deed
4 include liability -- acceptance of liability for
5 future health issues or contamination issues?

6 **MS. KEIL:** We are only
7 releasing the site relative to the FUSRAP main
8 constituents that we've investigated and
9 evaluated. So, you know, the uranium, other
10 chemicals related to the FUSRAP process. That's
11 all that we are doing. So anything else on the
12 site is outside of our purview.

13 **MR. FROTHINGHAM:** If there is a
14 transfer of property, that's business between
15 the property owner and who is receiving the
16 property.

17 **MS. KEIL:** We are not the
18 property owner.

19 **MR. COX:** Well, as part of
20 public responsibility and government, will
21 government require that Chevron and whoever gets
22 the deed to the property will assume the same
23 liability issues that Chevron has now?

24 **MS. KREUSCH:** Colin, is there an
25 answer that you want to provide?

1 **MR. COX:** Well, there has to
2 be a public guaranty I would guess that if there
3 are liability issues or health issues or
4 contamination issues that are discovered later,
5 that the person or entity accepting the property
6 assumes the liability that Chevron has right
7 now.

8 **MR. OZANNE:** Since we're not an
9 owner of the property and we're not a regulator
10 in the State of Ohio, the Corps of Engineers did
11 not require that based on our findings.

12 **MR. COX:** I would suggest
13 that any draft agreement between Chevron or
14 whoever owns the property before it is
15 transferred and the entity taking the property,
16 that the draft deed or sale document be reviewed
17 by the public just as we're here today listening
18 to the work that -- the research work that
19 you've done.

20 **MS. KREUSCH:** Thank you. Anyone
21 else that has additional comment? Kurt Kollar
22 from the Ohio EPA.

23 **MR. KOLLAR:** Thank you. Kurt
24 Kollar with the Ohio Environmental Protection
25 Agency. I'm also Site Coordinator with this

1 project.

2 A couple points. Number one, I do
3 thank the Corps of Engineers for moving forward
4 on this proposed plan. The Ohio EPA does
5 encourage proper redevelopment of areas
6 throughout Ohio, especially in the Cleveland
7 area for beneficial use for its citizens.

8 The one thing we do and have
9 expressed concern with over in the FUSRAP
10 project, we agree in this proposed plan in
11 moving forward with IA-06. We do have concerns
12 and disagreements with the Corps for the overall
13 project, as we have our mechanisms as we review
14 documents to ensure the public and the
15 environmental health is protected.

16 One thing we want to note on this
17 issue is the Corps has stressed that they are
18 dealing with FUSRAP contaminants and that the
19 risk base is solely dealing with FUSRAP
20 contaminants. There is a high potential for
21 other contamination present from private
22 industries at that property on both sides of the
23 river. One thing in a risk and a re-use area of
24 that either through brownfield mechanism or
25 private cleanup through potential enforcement

1 action with the current property owners or past
2 is that the overall risk, both from FUSRAP and
3 non-FUSRAP related contamination is addressed so
4 that it would be safe for whatever intended and
5 designated use. So that's something we will be
6 looking into as well.

7 **MR. COX:** Jim Cox with the
8 Flats Industry Association. From your tests,
9 does it show that a human of any age could exist
10 on that property 24/7 for a year?

11 **MS. KEIL:** That's close to the
12 residential. We pretty much look at a full-time
13 scenario. We looked at adults and children in a
14 residential setting and the risk levels were not
15 unacceptable.

16 **MR. COX:** As it is now
17 without any --

18 **MS. KEIL:** For the
19 FUSRAP-related chemicals being utilized, things
20 that we evaluated, we did not see that imposing
21 a risk in a residential setting.

22 **MR. COX:** That's not my
23 question. As the property is now undisturbed or
24 whatever you want to call it, could someone sit
25 on it, someone of any age 24/7 for a year and be

1 guaranteed that there are no health issues?

2 **MR. FROTHINGHAM:** If you're talking
3 about with respect to the constituents that we
4 looked at, then she's saying the answer is no.
5 But there are other things to consider.

6 **MR. COX:** Thank you.

7 **MS. EWAZEN:** Are any of the
8 other buildings going to be destroyed or taken
9 away that are on that area?

10 **MS. KREUSCH:** We need you to
11 state your name first, if you could, please.

12 **MS. EWAZEN:** Ewazen. I just
13 wanted to know if any of the other buildings --
14 because when you ride by there, because I live
15 near there, there's so many building on that
16 property, are those buildings going to be gone
17 or is it just IA-06 is going to be used and the
18 rest of them are going to be standing there?
19 There is enough buildings there. You can't deny
20 that. If you take a ride down Jennings Road,
21 anybody can see that there's so much old
22 buildings it isn't funny.

23 **MS. KOLHOFF:** The next phase of
24 the project is a feasibility study. During that
25 phase, we're going to look at all of the

1 buildings and any contamination that's in them,
2 and we're going to determine the best way to
3 address that contamination. There are different
4 ways we could do that. We could deconstruct the
5 building, take it apart, take it away. Or
6 sometimes if the contamination is on the
7 surface, we can scrape away at it and just
8 remove the contaminated portions. We're not
9 there yet, so I can't tell you what the ultimate
10 disposition of those buildings is going to be,
11 but we are going address the buildings on the
12 site.

13 **MS. EWAZEN:** That one building
14 that you've got there that's supposed to be so
15 contaminated, 1-A --

16 **MS. KOLHOFF:** Building G-1, Plant
17 C.

18 **MS. EWAZEN:** What are they going
19 to do with that building?

20 **MS. KOLHOFF:** We haven't
21 determined that yet. We haven't gotten far
22 enough into that study yet. We have to do
23 what's most appropriate, what falls within our
24 authority.

25 **MS. EWAZEN:** The building where

1 the garage is, that's going to be gone, too?

2 **MS. KOLHOFF:** I can't say that
3 right now.

4 **MS. EWAZEN:** That's close to
5 where you were working at. So I was wondering
6 what are they going to do with that?

7 **MS. KOLHOFF:** We're not sure. We
8 have to look at where the contamination is in
9 it. If we can leave the building there and just
10 remove the portions of the building that are
11 contaminated but leave it there, that's what
12 we're going to do. If it doesn't make sense to
13 do that, if we would remove so much of the
14 building that it would be building bones left,
15 then we'll take away the building as well. But
16 we won't get to that determination until the end
17 of the feasibility study, which will probably be
18 about two years from now.

19 **MR. FROTHINGHAM:** Tonight we're just
20 talking about that area across the river.

21 **MS. EWAZEN:** I know. But I was
22 just wondering if in the future those other
23 buildings are going to be gone or if they're
24 going to be standing there for the next 20
25 years.

1 **MR. FROTHINGHAM:** We're evaluating
2 that in the next phase of the feasibility study.

3 **MS. KREUSCH:** Additional input?
4 Kurt again.

5 **MR. KOLLAR:** Again, Kurt Kollar,
6 Ohio EPA.

7 One thing, again, the statement to
8 bring forth is that the Army Corps of Engineers
9 is here to address government-related
10 contamination. That does not leave, again, the
11 property owners both current and past from their
12 obligations from environmental liabilities. So
13 even though as it's being brought up buildings
14 could be torn down or not, it's not the Corps'
15 sole responsibility in this instance. There's
16 other entities involved, there's other laws that
17 will apply to them, maybe more stringent than
18 would apply to the Corps.

19 **MS. KREUSCH:** There is a
20 gentleman over here that wanted to speak.

21 **MR. BULARZ:** Jerry Bularz, Tri-C
22 student.

23 I understand that the Corps was given
24 this because of the Superfund, correct? It was
25 your jurisdiction to come in and do these

1 assessments?

2 **MR. LENHARDT:** The problem
3 originally was with the Department of Energy
4 back -- in the year that the Superfund law was
5 passed in '74, Congress also considered
6 radiological sites that needed to be addressed,
7 and they set up this separate program, which is
8 called FUSRAP, and the FUSRAP program --

9 **MR. BULARZ:** You stated that.
10 Because I guess what I was getting at, I was
11 wondering, as the gentleman from the Ohio EPA
12 why the USEPA didn't step in first. You said
13 that the Ohio EPA will be doing further study on
14 this?

15 **MR. KOLLAR:** Do you want an
16 active exchange?

17 It is public knowledge, or at least
18 public record that there is potential
19 enforcement action due to the federal government
20 USEPA's hazardous waste against one of the
21 companies. So as that falls out, we'll see
22 whether or not the state will take further
23 enforcement action for residual contamination.

24 **MR. FROTHINGHAM:** And, sir, just for
25 further clarification, this is not a Superfund

1 site. We follow the same process as they do in
2 the Superfund, which is the CERCLA process, but
3 it's not a Superfund site, though.

4 **MR. BULARZ:** It was listed that
5 way on your site.

6 **MR. FROTHINGHAM:** We'll have to
7 verify that, but it is not a Superfund site.

8 **MR. BULARZ:** Interesting.
9 When you guys did the soil sampling
10 and stuff, to me it looked like you were doing a
11 pretty darn good representative take of the soil
12 samples. Were you using some of the OSHA or
13 Ohio EPA standards for exposure limits like the
14 young lady was talking about?

15 **MS. KOLHOFF:** To protect worker
16 health and safety?

17 **MR. BULARZ:** Not only for
18 workers, but the proposed recreational. Like
19 the gentleman said, if someone is going to sit
20 there for 24/7, God bless you if you want to,
21 but --

22 **MS. KOLHOFF:** For worker health
23 and safety, we do comply with OSHA regs. Army
24 Corps, we have our own set of regulations also.
25 And as far as the standards, we compare this

1 against established risk limits from the U.S.
2 Environmental Protection Agency.

3 **MR. BULARZ:** It sounded
4 familiar. That's why -- thank you.

5 **MS. KREUSCH:** Does anyone else
6 have comments for the IA-06 proposed plan?

7 **MS. TREPAL:** I have one more
8 question. Is the lifetime cancer risk one in
9 10,000 or one in a million or what is it?

10 **MS. KREUSCH:** That will be a
11 Karen Keil question.

12 **MS. KEIL:** This is off the top
13 of my head, but in the proposed plan there's a
14 table that outlines what the lifetime cancer
15 risks are from different receptors that we
16 looked at, and also the same -- same risk if you
17 were being exposed to background or naturally
18 occurring levels in the area. And for most
19 receptors the levels are pretty much consistent
20 with the background. I would have to check the
21 table exactly, but I think for the recreational
22 land use it's on the order of one in a million.
23 Residential is closer to one in 10,000. Again,
24 I would refer back to the tables in the proposed
25 plan.

1 **MS. KUULA:** On page 10.

2 **MS. TREPAL:** What is the number?

3 **MS. KEIL:** It's a scientific
4 notation, 1E minus 4 is the same as 1 in 10,000.

5 **MS. TREPAL:** I got that, but
6 what is the lifetime cancer risk for the IA-06,
7 six-acre site?

8 **MS. KEIL:** That's in the table
9 on page 10. For the recreational land use, it's
10 on the order of one in a million. For
11 residential, it's on the order of one in 10,000.
12 I'm quoting from the table. I didn't check the
13 table for the exact numbers. Is that clear?

14 **MS. TREPAL:** I think so.

15 **MS. KREUSCH:** We will be turning
16 this over to the Department of Labor shortly,
17 but I want to make sure that there are no more
18 questions on the IA-06 proposed plan. It sounds
19 like Karen wants to say something additional.

20 **MS. KEIL:** We never addressed
21 the first gentleman's question. If I could take
22 an opportunity to address his question right
23 now. One of the questions you had asked was
24 similar to the question, that we were only
25 addressing FUSRAP constituents.

1 It's unfortunate that the library
2 didn't have the latest version of the remedial
3 investigation report that was updated and should
4 have been out there in the last few months. If
5 you look at that version you'll see that we took
6 some more time to explain in there that there
7 are other constituents out there, and in more
8 recent phases of the investigation, we used
9 screening level detection methods to look at
10 uranium that also detects metals, for example.
11 So we started compiling data we gathered, and we
12 also looked at historical data from the site
13 that we have in our database and provided an
14 appendix with the summary of that other
15 information.

16 So although we didn't quantify risks
17 to everything on the site, we focussed on what
18 we are responsible under the FUSRAP. We do, I
19 think, acknowledge that there are other things
20 that may be on the site and we try to provide
21 some of that information in the appendix form.
22 We're going to be evaluating the metals further
23 in the feasibility study.

24 **MR. CORNETT:** Well, my concern
25 would concern the adequacy of the analysis for

1 the broad range of chemical constituents in the
2 target compound list under CERCLA or that Ohio
3 requires to be assessed as part of its
4 brownfield program. That is more than just
5 metals. And I did see some total petroleum
6 hydrocarbon and kerosene data, but I certainly
7 didn't see an adequate characterization under
8 the Ohio brownfield laws for the other chemical
9 constituents that may or may not be present, and
10 so that's a concern that I have. It goes a
11 little bit beyond the FUSRAP program, but I just
12 wish that they had taken a few samples of that
13 to save the cost of such sampling to address
14 those chemical constituents for the Towpath
15 Trail. Otherwise, I'll talk to Ohio EPA about
16 what's going on.

17 **MS. KREUSCH:** Thank you.
18 Additional comments or questions on the IA-06
19 proposed plan?

20 **MS. KUULA:** I was going to say
21 to answer also to contribute on page 11 of the
22 second paragraph about the human health risk,
23 the last sentence, "The hazard index for a
24 teenager who might visit IA-06 in the future for
25 recreational purposes was estimated to be 0.005.

1 These results show that there are no
2 unacceptable non-cancer risks for IA-06."

3 Does that answer?

4 **MS. KEIL:** What you said was
5 not a cancer risk. Cancer risk is measured --
6 quantified in terms of a probability of
7 obtaining cancer. Other risks -- other health
8 facts that are not a cause of cancer, for
9 example, uranium can cause kidney damage. There
10 is assumed to be a threshold below which the
11 exposure will not cause any harm, so that
12 threshold is quantified as level 1. So anything
13 below 1 is considered not harmful. So the value
14 you quoted was level 1, 0.005, so there's no
15 harm of getting kidney disease from exposure to
16 uranium.

17 **MS. KUULA:** And IA-06 as a
18 future continual use for the trail, the already
19 established trail is mainly used by people who
20 are walking or biking. So no one is going to
21 set up a tent, no one is going to sit on the
22 property. We grab our water bottles and our
23 bikes and we walk or bird watch, checking things
24 out, and so if no one is sleeping there 24/7,
25 it's mainly for a trail.

1 **MR. CORNETT:** Well, I and some
2 friends commonly go off the trail itself and
3 into some of the vegetation to commune with
4 nature, and we sometimes are there appreciable
5 amounts of time during park hours. Beyond that,
6 it's really important that you understand,
7 everybody understand when they're giving these
8 hazard indices, that's for the FUSRAP-related
9 contaminants only. And the summaries and the
10 body of the report often makes blanket
11 statements about risks and hazard indices
12 without stating very explicitly and repeating it
13 so it doesn't get misunderstood and misused that
14 it's only the FUSRAP-related contaminants that
15 those statements cover.

16 There could be all kinds of other
17 substances that could present an imminent hazard
18 that were not addressed in the FUSRAP studies,
19 and it's important that those chemicals or
20 potential chemicals be looked for to determine
21 whether or not they're present in sufficient
22 quantities to cause any problems, and that, I
23 believe, is a job between Ohio EPA and the
24 Towpath Trail people. But people should not
25 point to this FUSRAP study as conclusive

1 regarding the safety of that site IA-06 for the
2 Towpath Trail; it only addresses part of the
3 problem.

4 **MS. KREUSCH:** Thank you.
5 Additional comments or questions on the IA-06
6 proposed plan?

7 **MR. BROWN:** My name is Bill
8 Brown. I work up in Valley View. And all this
9 concern about cancer risk and so forth, have we
10 been able to put that in perspective with the
11 risks that we face every day in our lives:
12 automobile traffic, accidents, et cetera? I
13 would guess that your biggest concern on the
14 towpath for contamination would be from fecal
15 matter from our family pets if the towpath down
16 here is any indication of what we can expect.
17 So go ahead and build that towpath, would you,
18 please?

19 **MS. KREUSCH:** Additional comments
20 or questions?

21 **MR. BULARZ:** Jerry Bularz. It's
22 my understanding that the course that -- because
23 there's going to be construction going on, so to
24 answer your questions, ma'am, somebody might --
25 I don't know why, but I'm sure there's going to

1 be somebody that might want to sit there and
2 fish.

3 **MS. KUULA:** There's fishing
4 already being done.

5 **MR. BULARZ:** I don't think them
6 staying for one night fishing is going to give
7 them cancer. I just don't. Because I've
8 studied environmental health and safety field
9 for three years. I'm no expert at it, but I've
10 got a pretty darn good background on what Andrea
11 said about the testing that they've done, and it
12 seems like it's right in gear with what we were
13 told in the classrooms. So as far as I think,
14 you know, you may have a good comment there
15 about the Ohio EPA stepping in, but, again, I
16 don't think that's the Corps' job. That should
17 be taken up with Ohio EPA and Ohio Erie Canal or
18 Metroparks. Thank you.

19 **MS. KREUSCH:** Going, going, gone.
20 Is there anybody else that would like to comment
21 on the IA-06 proposed plan? Thank you. As you
22 know, you can fill out a comment card in the
23 back of the proposed plan and mail it to us.
24 You can fill it out tonight and put it in the
25 comment box or you can send it in or e-mail it

1 to us.

2 The Department of Labor is now going
3 to come up. You're welcome to stay because the
4 team will be available to answer questions
5 one-on-one with the panel. I would like to now
6 introduce Saul Berzinskas and Tina Smith.

7 (Thereupon, a discussion was held off
8 the record.)

9 **LT. SNEAD:** In closing, I would
10 like to thank Marty Gelfand. He stepped in
11 right after my introduction, so I wasn't able to
12 welcome him here and his lovely daughter as
13 well. And thanks for all of your participation,
14 and I think there's some good comments. What I
15 want to let you know is that we will respond to
16 all of those comments as part of this record of
17 decision.

18 So all comments, we see them as
19 equals. I mean, we had over 179 pages of
20 comments about the new potential disposal
21 facility out in Cleveland Harbor and we
22 responded to every single one of those, so we
23 will do the same here as well. So, again, thank
24 you for being here. As has Arleen stated, our
25 staff will remain. So if you've got any

1 specific questions that you would like to ask
2 them, feel free, and, again, have a good
3 evening. Thank you.

4 (Thereupon, the proceedings were
5 concluded at 8:10 o'clock p.m.)

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