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Proposed Plan
Formerly Utilized Sites Remedial
Action Program
Public Meeting
On October 15, 2015 held at 3200 Elmwood
Avenue, Kenmore, New York 14217

[REDACTED] - Commander of
the United States Army Corps of Engineers
Buffalo district

[REDACTED] - Team leader for the
Environmental Project Management Team

[REDACTED] - Tonawanda Landfill Vicinity
Property Project Manager

[REDACTED] - Project Engineer

1 PUBLIC COMMENT PROVIDED PRIOR TO THE
2 PRESENTATION:

3 [REDACTED]

4
5 [REDACTED]: I live on [REDACTED],
6 Tonawanda. So I live in the area near the --
7 near the landfill in terms of City of
8 Tonawanda. I'm running for public office for
9 councilman in that district and I walked along
10 and talked with people who lived along that
11 property and I've heard stories of people who
12 had cancer, I know people that have had cancer
13 and I think -- I know it's not the Corps of
14 Engineer's responsibility to do a health --
15 real health survey of people along that
16 stretch but I think there needs to be some
17 further study done to see is there a higher
18 incidence of cancer for people who live along
19 that area versus people who live in other
20 parts of the city or the county.

21 The other issue I came across was water
22 runoff from that landfill and it was my
23 understanding that how that radioactive

1 material got there, nobody knows how that got
2 there and it seems to have moved over the
3 course of time. If there's runoff from that
4 landfill into people's backyards, I think that
5 should be a concern that would be addressed.

6 There's one gentlemen at the corner of
7 Hackett and Rogers where he has standing water
8 in the winter time that comes along the dead
9 end portion of his street and into his
10 driveway and it freezes over. So he's got
11 decent thickness of it and the city came in
12 and checked and it's not coming from any of
13 the city plumbing. The county, Erie County
14 Water Authority came out and it's not coming
15 from any of their pipes so the only place that
16 water can be coming from is from the landfill
17 and I don't know if the project is going to
18 address keeping any runoff from that landfill
19 from going into people's yards or the water
20 from that landfill seeping into their
21 basements or affecting their property at all
22 because there doesn't seem to be any kind of
23 drainage or trench or anything to stop runoff

1 from that landfill going into people's
2 property.

3 If it was up to me, I would go with the
4 fourth option of removing everything. I think
5 if you were going to ask somebody would they
6 want to live next to that even though the
7 material they would leave is buried
8 significantly deeper, I don't think you would
9 have people wanting that in their backyard. I
10 think that if it's -- if you're looking for
11 what's to do that's in the best interest of
12 the people that live there, I think it's in
13 their best interest to remove it all. I know
14 it may not be cost effective or it may be too
15 expensive, but the best solution would be I
16 think to get rid of it all.

17 [REDACTED] Okay. We'll take that
18 comment under advisement and then once we get
19 all the -- when the comment period is over
20 with, we will address the comments and you'll
21 be able to see the record of decision, the
22 response to the comments.

23 [REDACTED]: So that will be posted

1 on-line?

2 [REDACTED]: Yeah, I believe that will be
3 posted on-line along with the record of
4 decision. That is something I can get
5 clarification for you and if you would like we
6 got your contact information, I can get back
7 to you and let you know.

8 [REDACTED]: Okay.

9 [REDACTED] Are you going to be staying
10 for the presentation?

11 [REDACTED]: I was going to, yes.

12 [REDACTED]: That's good then you can get
13 more information regarding Alternative 3 and
14 Alternative 4. We do have our posters set up
15 and we do have our crew manning the posters so
16 they can explain the Alternative 3 and
17 Alternative 4 and the risk associated with the
18 FUSRAP material. So just feel free, we still
19 have some time before the presentation starts
20 and they can explain the posters and the
21 different alternatives to that.

22 [REDACTED]: I read the material, some
23 of the material and is it my understanding

1 that if you did go for option 4 it would be
2 the entire FUSRAP budget for an entire year
3 for cleanup?

4 ██████████: Well, the one thing you got
5 to understand is that it's a national program.
6 So there's only so much money in the pot and
7 that pot gets divided between the different
8 districts for FUSRAP program. So we might get
9 \$20 million out of a \$100 million dollar pot
10 and then we got to address other projects that
11 are ongoing.

12 ██████████: But the entire pot is only
13 \$50 million, somewhere around there?

14 ██████████: Well, the Alternative 4 is
15 roughly \$55 million to complete. So then we
16 would have to wait for appropriate funding to
17 actually complete that alternative if we end
18 up going that route.

19 ██████████: And the determining factor
20 in how much funding is put into that pot is
21 congress?

22 ██████████: That is mostly correct. You
23 know and it's one thing that I can get

1 clarification regarding that just to verify.
2 The funding does come from congress with the
3 budget and stuff and then headquarters decides
4 you know how much to divvy up the overall
5 budget. In regards to if they give just
6 hypothetically \$50 million to the Army then
7 the Army will give \$10 million to the Army
8 Corps for FUSRAP, something along those lines.

9 [REDACTED]: My only other suggestion
10 would be is if you were going to hold a
11 hearing like this, it would've been beneficial
12 if there was another hearing in the city of
13 Tonawanda because a lot of people that live
14 along that stretch that are affected they're
15 elderly residents and there is really no
16 residents of the Town of Tonawanda who are
17 within inches of that landfill. So I think to
18 get the message out and to fully inform the
19 people who live there of what they're living
20 next to, it would've been more beneficial to
21 have it in the school that's right down the
22 street right where the residents are and right
23 where the landfill is. I know this is

1 technically in the Town of Tonawanda versus
2 the city but the city I think is -- there's
3 more of a human impact on people in the city.

4 ██████████ That is understandable. We
5 did try to get the venue in the city,
6 unfortunately there was scheduling conflicts
7 for the place that we would use so at the last
8 minute we had to come to Philip Sheridan. Our
9 main goal was to have it in the city but due
10 to scheduling conflicts we had to come here.
11 We have to get the meeting done within the
12 public comment period so you know our best
13 interest was to have it done in the city but
14 unfortunately the scheduling conflicts we had
15 to have it at the Philip Sheridan Building.

16 ██████████: Thank you. I appreciate
17 it.

18 ██████████: Thank you.

19

20 PUBLIC HEARING

21

22 ██████████: Thank you and welcome. My
23 name is ██████████ and I'm the Outreach

1 Program Specialist for the Army Corps for
2 Engineers Buffalo District and I would like to
3 introduce to you [REDACTED]
4 [REDACTED] the Buffalo District Commander of U.S.
5 Army Corps of Engineers.

6 [REDACTED]: Thanks very much and can
7 everybody hear me okay in the back. Great.
8 Good evening, ladies and gentlemen. Thank you
9 very much for joining us here tonight.

10 I offer a special welcome to Mayor Davis
11 and Councilwoman Koch from the City of
12 Tonawanda. Also, our colleagues from the New
13 York State Department of Environmental
14 Conservation, [REDACTED] and [REDACTED].

15 We're here this evening to discuss the
16 Landfill Operable Unit of the Tonawanda
17 Landfill Vicinity Property and our Proposed
18 Remediation Plan. The Buffalo District serves
19 the people and the watersheds of the lower
20 Great Lakes from Massena New York out to the
21 Indiana state line. We have many projects
22 within this large area but this one hits very
23 close to home. Many of our 265 employees are

1 members of this community and we all care
2 deeply about serving our fellow citizens and
3 safeguarding them.

4 As many of you are aware we have been at
5 this point once before. In 2007 we proposed a
6 no action preferred alternative. Careful
7 consideration of the comments you provided
8 steered us in a different direction and
9 prompted additional investigations under the
10 Formerly Used Site Remedial Action Program or
11 FUSRAP for short.

12 In its current condition the FUSRAP
13 material in the landfill which is low level
14 radioactive residue does not present an
15 unacceptable risk to human health or the
16 environment. However, there is a potential
17 future risk if hundreds of years of natural
18 erosion would expose these residues. So we
19 are proposing an alternative to eliminate this
20 future risk. We call it the targeted shallow
21 removal and offsite disposal and we're going
22 to describe it and the other alternatives we
23 considered this evening. I would like to

1 personally convey to you that we have no
2 reason for a hidden agenda. Our motivation is
3 simple, is public safety and it's following
4 national level guidelines.

5 Just like in 2007, your comments are the
6 most important part of the evening. I request
7 that you save your comments until after the
8 presentation so they can be properly recorded.
9 The presentation lasts around 30 minutes and
10 it includes 32 slides so you can gauge the
11 progress as we go along by looking at the page
12 numbers. If you have a comment that you'd
13 like to be recorded tonight, please make sure
14 you check the box on the card you filled out
15 on the way in and [REDACTED] who introduced me can
16 assist you and can also provide additional
17 cards to you.

18 You're also welcome to submit written
19 comments by November 14 when the public
20 comment period ends. Members of the project
21 team will conduct the presentation tonight.
22 They include [REDACTED]
23 and [REDACTED]. We have other team

1 members in the audience and if you could,
2 please raise your hands. Thank you.

3 After the presentation and comment period
4 all of us will be available at the posters to
5 answer any additional questions that you may
6 have and with that, I would like to turn it
7 over to [REDACTED], thank you.

8 [REDACTED]: Thank you, sir. Before
9 getting into specifics tonight on the
10 Tonawanda Landfill Vicinity Property, I'd just
11 like to take a few moments to explain a little
12 bit about the program under which we are
13 working at the site.

14 The Formerly Utilized Sites Remedial
15 Action Program or FUSRAP was initiated in 1974
16 to identify, investigate and if necessary,
17 clean up or control sites that were
18 contaminated from past activities related to
19 the nation's Early Atomic Energy and Weapons
20 Program.

21 The objectives the Corps of Engineers
22 seeks to address in executing FUSRAP are shown
23 here on this slide. Our number one priority

1 when performing actions to meet these
2 objectives is the safety of the community,
3 site workers and the environment.

4 When implementing FUSRAP, the Corps of
5 Engineers is mandated by law to follow the
6 process in the Comprehensive Environmental
7 Response, Compensation and Liability Act or
8 CERCLA. This slide shows the steps in the
9 process for investigating and cleaning up
10 FUSRAP sites under CERCLA.

11 As [REDACTED] mentioned, tonight we
12 are here at the proposed plan and we've been
13 at this point before in 2007 and that's why
14 your input on proposed plan is so important to
15 us. Last time we were here based on public
16 input it lead us in a different direction to
17 where we are back here again after completing
18 feasibility study and a second proposed plan
19 for the site.

20 The proposed plan is not the final
21 decision on the remedy for the landfill. A
22 final decision on the Tonawanda Landfill
23 Vicinity Property will be made after

1 consideration of public comment on the
2 proposed plan and that final decision will be
3 documented in the record of decision.

4 I'll start getting into some specifics on
5 the site. Tonawanda Landfill Vicinity
6 Property consists of two parcels of property
7 owned by the Town of Tonawanda. One is the
8 Town of Tonawanda Landfill or the Landfill
9 Operable Unit and the second is the Mudflats
10 which is now known as the North Youngmann
11 Commerce Center.

12 Tonight's focus is on the Landfill
13 Operable Unit or OU on the Tonawanda Landfill
14 Vicinity Property. It comprises about 55
15 acres and is bordered by a railroad line on
16 the east, a National Grid corridor on the
17 south and a residential area within the City
18 of Tonawanda to the north and northwest.

19 The landfill is a New York State regulated
20 landfill and the Town of Tonawanda is
21 currently in the process of doing overall
22 closure and capping of the landfill under New
23 York State requirements.

1 The primary FUSRAP investigative area is
2 this area highlighted in white. I'll talk a
3 little bit about the history of the Landfill
4 Operable Unit and the FUSRAP investigations
5 there before I turn the presentation over to
6 our next presenter.

7 The landfill was operated as a landfill by
8 the Town of Tonawanda in the 1930s until its
9 closure in 1989. From 1942 to 1946 at the
10 Linde Air Products site in Tonawanda, the
11 federal government had contracts to conduct
12 uranium ore refinery work. In the early 1990s
13 the Department of Energy as part of the FUSRAP
14 program performed some preliminary
15 investigations at the Town of Tonawanda
16 Landfill as part of their overall
17 investigations at the former Linde property.

18 These investigations culminated and the
19 Department of Energy designated this site as a
20 Vicinity Property in FUSRAP to the Linde Site
21 in Tonawanda.

22 Following transfer of the FUSRAP program
23 from the Department of Energy to the Corps of

1 Engineers, the Corps conducted initial
2 investigations in the Landfill and Mudflats to
3 build upon what DOE had already done. These
4 culminated a completion of a remedial
5 investigation in 2005 and the risk assessment
6 that was part of that initial remedial
7 investigation concluded that risks from FUSRAP
8 related material to human health were within
9 the established guidelines established by
10 USEPA. That led to us the issuing of a 2007
11 proposed plan which has been mentioned
12 recommending no action for both the Town of
13 Tonawanda Landfill and the Mudflats.

14 Based on the public input and public
15 comment received, Corps of Engineers decided
16 to split the path on those two parcels. In
17 2008 issued a no action record of decision for
18 the Mudflats Operable Unit.

19 We decided to conduct additional
20 investigations of the Landfill Operable Unit
21 which was done from 2009 to 2011 and those
22 were to further refine our knowledge on the
23 extent of FUSRAP related material within the

1 Landfill Operable Unit.

2 We use that information and some of the
3 information we received as part of the public
4 comment period under the first proposed plan
5 to update the baseline risk assessment in 2012
6 which was released to the public at that time
7 and we'll be talking a little bit more about
8 the results of the assessment in the following
9 slides.

10 Finally where we are today is that we
11 recently released first a feasibility study
12 which developed and evaluated several
13 alternatives to address the FUSRAP related
14 material in the Landfill. And following that
15 and released at the same time actually was the
16 proposed plan which presents Corps of
17 Engineers preferred alternative to address
18 those materials and is what we are presenting
19 tonight.

20 I will now turn the meeting over to [REDACTED]
21 [REDACTED], the project manager for the
22 site, talk a little bit about the baseline
23 risk assessment.

1 [REDACTED]: Thank you, [REDACTED]. The
2 purpose of this slide is to help convey the
3 potential risk associated with FUSRAP related
4 material buried in the Landfill Operable Unit.

5 First, so everyone is aware a millirem is
6 a measurement of radiation dose to humans.
7 The first green bars on this graph represent
8 background sources that I was -- the first
9 four green bars represent background radiation
10 sources that I was exposed to like radon and
11 cosmic radiation. In addition to background
12 sources I also received a chest X-ray which
13 was 10 millirems and one dental X-ray which
14 was 1.5 millirems.

15 If we were to add up all the green bars we
16 would get my overall annual radiation dose for
17 the year which was 321.5 which is less than
18 the national average which was 620 millirem.

19 Based on the data we collected for our
20 updated risk assessment, under current
21 conditions a youth spending time regularly on
22 the landfill for a year would receive an
23 additional dose of 1.8 millirem to his or her

1 overall annual dose which is shown on this
2 blue bar right here. This is slightly more
3 than the dose I received when I had my dental
4 X-ray.

5 If no action were taken to prevent erosion
6 of soil over the areas that are contaminated
7 with FUSRAP related material, 600 years into
8 the future a youth spending time regularly on
9 the landfill for a year would receive an
10 additional dose of 38 millirem which is this
11 blue bar right here. Which almost equates to
12 the cosmic radiation.

13 This potential future exposure exceeds
14 federal regulations which is why we are
15 addressing the site.

16 We updated the human health risk
17 assessment based upon public input to include
18 the risk of people spending some time on the
19 landfill. Soil, surface water, ground water
20 are the media that a person on the site could
21 potentially come into contact with that were
22 evaluated.

23 For the current use of the Landfill OU,

1 the risks to human health from potential
2 exposures to FUSRAP related material are
3 within the acceptable limits established by
4 the USEPA.

5 Surface water, which is found in the
6 northern drainage ditch within the FUSRAP
7 investigation area is temporary in nature and
8 is not a source of drinking water, potential
9 drinking water, nor an ecological habitat.
10 Incidental ingestion of surface water is
11 within regulatory risk limits. Surface water
12 is not a media of concern.

13 As you can see, surface water has been
14 removed from this slide. I'd like to talk
15 next about groundwater. The groundwater is
16 currently not a drinking water source and it
17 is not likely that it would be in the future
18 due to the availability of fresh drinking
19 water from offsite sources like the Niagara
20 River. The groundwater at the site is not
21 considered a media of concern.

22 As you can see groundwater has been
23 removed from the slide. Next I would like to

1 talk about soil. FUSRAP related constituents
2 are primarily buried under more than 2 feet of
3 soil. If the soil covering the FUSRAP related
4 material is not maintained and allowed to
5 naturally erode, over time the FUSRAP related
6 material will slowly become exposed after
7 approximately 600 years. At that time it will
8 produce an unacceptable risk to the people who
9 spent time directly on the landfill surface.
10 As you recall on the bar graph that was shown
11 earlier, this was 38 millirem per year. This
12 additional exposure would be to a youth that
13 spends two hours a day every day on a landfill
14 for a year.

15 This is a closer look at the investigative
16 area. The light purple circles show the test
17 point locations completed within the Landfill
18 Operable Unit. The detailed information on
19 these borings is available in the reports in
20 administrative record file. Soil samples were
21 collected from each test point location and
22 the white circles indicate sample results were
23 below the cleanup goals. As you can see, we

1 performed test borings along the fence line of
2 the property. Those results are all below the
3 cleanup goals. The purple circles indicate
4 sample results that are above the cleanup
5 goals and if no action is taken there is the
6 potential that someone could receive an
7 unallowable exposure in 600 years because of
8 erosion of the top two feet of soil.

9 This slide shows the nine CERCLA criteria
10 that are used to move from the alternatives in
11 the feasibility study to a selected remedy.

12 First both threshold criteria must be met
13 by any remedial alternative for it to be
14 considered a viable remedy. Then the five
15 balancing criteria are used to weigh major
16 tradeoffs among the alternatives and represent
17 the primary criteria upon which detailed
18 analysis were based.

19 Remaining two CERCLA criteria referred to
20 as modifying criteria are typically evaluated
21 following the public commentary on a proposed
22 plan and will be addressed during preparation
23 of the record of decision.

1 Next I'd like to turn the presentation
2 over to [REDACTED] our project engineer who will
3 discuss feasibility study and the
4 alternatives.

5 [REDACTED]: Thank you, [REDACTED] This
6 first slide that I'm going to go over covers
7 the remedial alternatives that were developed
8 and evaluated during the feasibility study and
9 considered during the proposed plan.

10 No action alternative, is required under
11 the CERCLA process provide a baseline to
12 evaluate the other alternatives against. As
13 you can see it has been screened out as it was
14 not protective of human health in the
15 environment.

16 I'm going to go over these next couple of
17 remedial alternatives in more detail over the
18 next slides. They consist of single layer
19 capping, the Corps' preferred alternative of
20 the targeted shallow removal and the deep
21 excavation.

22 Over the next couple of slides we'll have
23 visual representations of all the

1 alternatives. It will all consist of a cross
2 section from point 1 to point 2.

3 Sorry, I skipped a slide there.

4 Alternative 2 is a single layer capping of
5 FUSRAP related material. As you can see, we
6 have the fence line and the drainage ditch
7 represented on this cross section. The blue
8 shaded area represents the saturated fill zone
9 with the top of the blue area representing the
10 ground water level into the landfill. You
11 have the gray shaded area here which is fill.
12 Purple rectangles represent samples that were
13 taken that were above our cleanup goals with
14 the white rectangles representing samples that
15 were below our cleanup levels.

16 Alternative 2 consists of a clay layer
17 over the FUSRAP related material within the
18 landfill. The clay would be approximately 2
19 feet thick and covered by a soil vegetative
20 layer.

21 Alternative 2 eliminates potential future
22 exposure by preventing exposure to the
23 material within the landfill.

1 Land-use controls and long-term monitoring
2 and maintenance would be required under this
3 alternative over the thousand year time frame
4 and it would be reviewed every five years to
5 ensure that protectiveness of being
6 maintained.

7 This alternative would take approximately
8 18 months to implement from the award of the
9 contract.

10 Alternative 3 is targeted shallow removal
11 and off-site disposal of FUSRAP related
12 material. As you can see we again have
13 saturated fill and ground water level, the
14 fill within the landfill. We've added this
15 time the orange shaded area which represents
16 material that would be excavated out of the
17 landfill. The dark purple rectangles are
18 samples above our cleanup goals that would be
19 removed and the light purple rectangles
20 represent samples above the cleanup goals that
21 would however remain in the landfill.

22 All soils above cleanup levels within the
23 top 5 feet below ground surface of the

1 landfill would be removed and disposed of
2 off-site. This equates to approximately 1500
3 cubic yards of material that would be removed
4 from the landfill which is the equivalent of
5 about 115 truck loads of material. Any
6 groundwater encountered during the remedial
7 action would be managed, treated and disposed
8 of.

9 Now, you may be wondering why we selected
10 5 feet for the depth of excavation. This is
11 because this is the depth that eliminates all
12 potential exposure from the landfill due to
13 natural erosion over the thousand year time
14 frame that was considered.

15 After excavation is complete, clean
16 backfill would be placed within the excavated
17 areas. Land-use controls and long-term site
18 inspections would -- like those Alternative 2
19 would be required along with reviews every
20 five years to ensure that protectiveness is
21 being maintained.

22 Implementability of this alternative would
23 be approximately 17 months after the award of

1 contract.

2 Alternative 4 is deep excavation and
3 off-site disposal of FUSRAP related materials
4 within the landfill. Again, we have the
5 saturated zone, groundwater level to go within
6 the landfill. The dark purple rectangles are
7 samples above our cleanup goals that would be
8 removed. White is again samples below the
9 cleanup goals. The orange shaded area again
10 is material that would be removed from the
11 landfill. However, this green shaded area is
12 unimpacted soils that would be stockpiled
13 within the landfill.

14 The stockpiled material and the excavated
15 material are both approximately ten times the
16 volume that would be removed from Alternative
17 3. This alternative eliminates all potential
18 future exposure by removing the FUSRAP
19 contaminated soils above the cleanup goals
20 within the landfill. So therefore, no
21 land-use controls or long-term monitoring
22 would be required with this alternative.

23 Because the excavation is greater than 5

1 feet deep, the sides of the excavation would
2 need to be sloped to ensure safety for the
3 workers. This would increase the amount of
4 material stockpiled within the landfill.
5 Again, water encountered during the excavation
6 would need to be managed, treated and disposed
7 of.

8 Stockpiled material could potentially be
9 used as backfill within the excavation or it
10 will be left for disposition, future
11 disposition by the site owner. This decision
12 would be left for the site owner based on
13 discussions with the New York State Department
14 of Environmental Conservation. The excavation
15 regardless will be backfilled with clean soils
16 and reseeded.

17 This alternative would take approximately
18 28 months after the award of contract. While
19 it is a viable alternative, there are
20 increased challenges and risks posed with this
21 alternative due to the depth of the excavation
22 and imposes no greater protectiveness than
23 Alternative 3.

1 This table is very similar to the table on
2 page 4 of the handout you received earlier and
3 shows a comparison of the alternatives based
4 upon the balancing criteria. The alternatives
5 are rated from high to low with high being the
6 best. Based upon the comparison, the
7 preferred alternative in the feasibility
8 study, Alternative 3 is the best overall
9 choice. It is protective of human health and
10 the environment, meets all applicable federal
11 regulations and is highly implementable.

12 Again, alternative 3 is the preferred
13 alternative of the Corps. Some key features
14 of this alternative is that all soils in the
15 top 5 feet below ground surface above cleanup
16 goals will be removed from the landfill.
17 Clean backfill will then be placed within the
18 excavation. The federal government will
19 implement and maintain land-use controls on
20 the site as necessary. Annual site
21 inspections and reviews will be conducted to
22 ensure protectiveness. The total cost for
23 this alternative is approximately \$12.2

1 million dollars.

2 Some advantages of Alternative 3 is that
3 it's protective of human health and the
4 environment along with workers and the
5 community during the remedial action. Again,
6 it complies with all applicable and federal
7 regulations and is implementable within 17
8 months after contract award. It doesn't pose
9 the risk of deep excavation and it is cost
10 effective in addressing future risks.

11 The public comment period for the proposed
12 plan started on September 14 of this year and
13 will continue through November 14. After
14 considering the comments received, the Corps
15 of Engineers will select a final remedy for
16 the FUSRAP related material within the
17 Landfill Operable Unit. This preferred
18 remedy, this final remedy will be documented
19 in the record of decision which is slated for
20 release currently in 2017.

21 The start of remedial action is based upon
22 completion of sites currently within the
23 program undergoing cleanup and the

1 availability of funds within the national
2 program.

3 ██████████ will now come back up to
4 start the comment period.

5 ██████████: Thank you, ██████████ We'll now
6 prepare to open the meeting for formal
7 comments to be entered into the public record.

8 When you came in you received a sign in
9 card with a box on it that indicates you wish
10 to speak. ██████████ has just collected those.
11 We'll begin with elected officials and then
12 we'll call up those people who indicated on
13 the sign in card that they wanted to make a
14 comment and then time permitting we'll open
15 the floor to others who wish to make a
16 comment. And in general, we are here until
17 people make their comments so if you want to
18 speak we're going to hear you.

19 I just want to reiterate the operating
20 principals we have on the screen. One person
21 speaking at a time. Please use the microphone
22 that we have in the center of the room so that
23 we can accurately record your comment and

1 please state your name and affiliation before
2 providing your comment. To allow everyone
3 that wishes the opportunity to speak, please
4 limit your comments to five minutes. We have
5 a timekeeper and we'll just be monitoring
6 that.

7 With that I would like to call to the
8 microphone Mayor Davis.

9 [REDACTED]: Thank you, colonel. Mayor
10 Davis, with the City of Tonawanda. Take a
11 little walk down memory lane, it was the early
12 1990s I was still in high school, many people
13 in this room were a lot younger and less gray
14 than we are and that's when the federal
15 government first became aware of the
16 radioactive contamination at the Tonawanda
17 Landfill. It's been 25 years worth of
18 haggling over there not being any
19 documentation of the disposal of Uranium,
20 Radium and Thorium at the landfill. 25 years
21 worth of contamination being labeled MED like
22 when we all knew where it came from. 25 years
23 ago it would've cost a hell of a lot less to

1 cleanup than it will in today's world but
2 let's talk about the now and the future.
3 Thank you to the Army Corps for finally coming
4 to the realization that this material came
5 from Linde, was a byproduct of the atomic bomb
6 and some how was illegally dumped there.

7 The Army Corps has presented us with three
8 quality options moving forward, each has their
9 pros and cons. While I would love to stand up
10 here tonight and demand a full clean up of all
11 contaminating material, I'm also a realist.
12 At a cost of \$55.4 million to accomplish out
13 of the yearly national FUSRAP budget of
14 approximately \$100 million it will take many
15 decades for the deep excavation option never
16 to come to fruition. Most of us sitting here
17 today will be long gone before we see that
18 project come to fruition.

19 This would also further delay the closure
20 and capping of the Tonawanda Landfill which in
21 itself poses daily quality of life issues for
22 many of our residents that live near and
23 adjacent to the landfill. This is why I fully

1 support the Army Corps' shallow excavation
2 option. This would allow for proper closure
3 of the landfill and bring a piece of mind our
4 residents deserve sooner rather than later.
5 And as a side note, with the shallow
6 excavation, any efforts by the Army Corps
7 should be worked in unison with the town and
8 the DEC to make sure that their efforts aren't
9 hampering the town's efforts to be able to
10 properly cap and close the landfill.

11 I thank Senator Schumer for coming out
12 here at the beginning of the year to shed
13 light on this and I call on him to appropriate
14 the federal funding to fast track this
15 project.

16 Again, I also thank the Army Corps for
17 getting it right and for having this meeting
18 this evening. Thank you.

19 [REDACTED]: Thank you for your comments,
20 Mayor. I would like to now call to the
21 microphone [REDACTED]

22 [REDACTED] I'm [REDACTED], I'm
23 president of Citizens United for Justice. I'm

1 very glad that after meeting with Senator
2 Schumer that he was able to push to get this
3 here tonight. For all of the work we've done
4 over the past ten years, it's phenomenal how
5 fast people move when higher up government
6 officials get involved.

7 The one thing I want to make sure that
8 everybody understands, this is not over until
9 it's fully capped, fully taken care of and the
10 residents are taken care of. The first thing
11 I want to say is radiation does not go away.
12 It will continue to build in each person's
13 body, it's cumulative, it doesn't wash away,
14 time doesn't take it away. This plus the
15 compromised immune systems due to the
16 Tonawanda Coke Corporation's criminal past
17 elevates health risks for those of us living
18 in the area. This needs to be considered
19 versus a person that hasn't lived here. And I
20 understand you went through all this
21 radiation, you don't have a compromised immune
22 system, I do. I have Hashimoto's disease, my
23 immune system is severely compromised.

1 Radiation is being carried away in the
2 groundwater to Two Mile Creek finding its way
3 to the Niagara River. Over time it's going to
4 accumulate there and ruin one of our best
5 natural resources and potentially hurting
6 people further down that river.

7 This does not just impact the generation
8 living on the hill now, most of us that are
9 living there now have willed our homes to our
10 children. You are affecting not just this
11 generation, my son's generation, my grandkid's
12 great grandkids.

13 If number 4 is done the potential for an
14 environmentally friendly and community nature
15 trails which is what this site was used for
16 for years, the potential is there. Wildlife
17 is already there, we already have deer, fox,
18 turkey, multiple birds, pheasants. It could
19 be used for educational purposes for the
20 future for our children to show the right way
21 how to handle an environmental mess.

22 The potential for that site for future
23 education is phenomenal. The failure to do

1 this the right way doesn't make up for the
2 sins of our fathers. Doing number 4 is a step
3 in the right direction to pay for the sins of
4 our fathers and what they did do.

5 I would also ask that in light of how long
6 this took to come and the amount of material
7 that has to be absorbed, that you consider
8 extending the comment period to the end of
9 December to give people a chance to learn, to
10 question and to absorb everything you're
11 telling us. Granted you guys have all the
12 knowledge, give us the chance to catch up.
13 We've got a lot of catching up to do based on
14 the new information you've given us and I want
15 to thank you for that, that's phenomenal.
16 Thanks again.

17 ██████████ Ma'am, thank you for your
18 comment. I would like to now call ██████████
19 ██████████ to the microphone.

20 ██████████: I moved to the City of
21 Tonawanda in the early '60s, by the mid '60s
22 Stamp and Spot Brother were building the
23 Youngmann. They in turn excavated and made

1 the Tonawanda Flats in order to make the
2 roadbed from Delaware to Niagara Falls
3 Boulevard. In that process they had to scrape
4 some of your stuff. We got the only nuclear
5 highway in the United States that I know of.
6 On what he's saying, 2 foot of clay, we live
7 on clay hill and we are lower than what the so
8 called dump is. Are you going to get together
9 with the town and grade away from our property
10 or going to elevate it and drain towards us as
11 we have now. That's what we're looking for.

12 Secondary looking for evidently you're all
13 for bid, that takes time. 2010 you took the
14 samplings and it's five years, that takes
15 time. Everything takes time. In the meantime
16 how can I tell you how many people pass away
17 in the area. I haven't got the numbers but
18 there are plenty. Thank you.

19 [REDACTED]: Thank you for your comment,
20 [REDACTED]. You asked a question kind of
21 about the coordination with other agencies
22 regarding the capping of the landfill. I'd
23 like to point out that one of the purposes of

1 the public comment period is to allow also the
2 state agencies to review our analysis and that
3 is really the starting point for meaningful
4 collaboration on how to do that in a
5 synchronized way and of course as we move
6 forward, we'll address your comment in greater
7 detail.

8 This time I would like to call [REDACTED]
9 [REDACTED] to the microphone.

10 [REDACTED] [REDACTED] spoke with me and I
11 spoke with her.

12 [REDACTED]: Okay, thank you. I do not
13 have any additional cards. Would anyone like
14 to move to the microphone to make a comment?

15 [REDACTED]: [REDACTED], Town of
16 Tonawanda citizen. Just a couple of
17 questions. One gentlemen [REDACTED] spoke about
18 the risks of number 4 but he didn't say what
19 the risks were outside of that they're deeper
20 and the people working on it. What I'm
21 worried about what are the risks
22 environmentally and what's in number 4 that
23 you said 3 would evolve avoiding those risks,

1 what risks are we avoiding?

2 ██████████: I can address that a little
3 bit. We mentioned the risks are primarily due
4 to the depth of the excavation and the amount
5 of material that would be removed and managed
6 as part of the deep excavation. So the safety
7 risks due to the depth, the type of material
8 and the landfill that's not cohesive so extra
9 care needs to be taken to manage the side
10 slopes while we're doing the excavation for
11 worker protection. Because of the depth
12 excavation and the large volume or the high
13 water table at the site, there will be a large
14 volume of water infiltrating from the rest of
15 the landfill into the excavation that would
16 need to be managed, treated and disposed of.

17 Also, managing not only the FUSRAP
18 material but the material that is above the
19 FUSRAP material, the other landfill that would
20 need to be managed, stockpiled while we're
21 doing the excavation. And any kind of
22 associated -- potential hazards associated
23 with that fill as it's managed while we're

1 removing the FUSRAP material.

2 [REDACTED]: With the deeper excavation
3 and the risks that are happening with that, if
4 3 is taken, what about the groundwater and
5 what is -- obviously everything flows towards
6 rivers heading to Niagara River and to
7 surrounding area, without -- you know, how
8 does that balance between 3 and 4 as far as
9 radiation which I'm sure has been for many
10 years leaching into that area and the stoppage
11 of that.

12 [REDACTED]: Alternative 3 would remove
13 part of that source. The contaminated soil
14 would be potential source to leaching and to
15 the groundwater. Alternative 3 would remove
16 part of that source and then following the
17 town's final closure of the landfill that
18 would reduce any potential future infiltration
19 or leaching from the soils. Alternative 4
20 would remove all of the soil source for
21 potential future leaching in the groundwater.

22 Our sampling that we've done at the
23 landfill has found uranium in the groundwater.

1 However, groundwater is not the drinking water
2 source, it has other natural components that
3 make it not a useful or viable drinking water
4 source.

5 Also, monitored Two Mile Creek and did not
6 find elevated levels of uranium in Two Mile
7 Creek so that's why based on that, our
8 conclusion was in the risk assessment that
9 groundwater was not a media of concern. By
10 addressing the soil we're addressing the
11 potential future risk due to potential future
12 exposure to FUSRAP material.

13 [REDACTED]: Thank you.

14 [REDACTED]: You're welcome.

15 [REDACTED]: Anyone else who would like to
16 make a formal comment?

17 UNIDENTIFIED CITIZEN: I have a question.

18 [REDACTED]: Yes, ma'am.

19 UNIDENTIFIED CITIZEN: Who's going to make
20 the final decision on which one of these to
21 use, who makes the final decision?

22 [REDACTED]: So ma'am, as we discussed
23 earlier, the proposed plan which is up for

1 public comment now. We receive those public
2 comments, respond to those and develop what's
3 called a record of decision. My commanding
4 officer, [REDACTED] from the
5 Great Lakes and Ohio River Division signs off
6 on that final plan and that informs the public
7 of what we intend to do.

8 UNIDENTIFIED CITIZEN: So people have no
9 input into it, the people that live here?

10 [REDACTED]: And that is why we are here
11 tonight. We are here to hear your input and
12 to inform how we prepare this record of
13 decision.

14 Okay. I'll leave it one more chance out
15 there for anyone who would like to make a
16 comment. Again, we're all going to be
17 available after the session for one-on-one
18 dialogue and questions.

19 So this concludes the formal comment
20 portion of the meeting, please feel free to
21 view the displays and talk with our staff in
22 the open house area and remember that there
23 are other ways to give us your comments. One,

1 you may write them down and leave them with us
2 here tonight. You may mail your comments to
3 us at the address on the slide. You may also
4 email them to the address listed on the slide.

5 Please ensure that your comments are
6 mailed or emailed by November 14 which is the
7 current conclusion of the comment period.
8 Your comments and all responses to them will
9 become part of the official administrative
10 record which can be viewed at the Corps office
11 in Buffalo.

12 I thank you for coming tonight. We do
13 appreciate you taking the time this evening to
14 attend and your desire to give us feedback.
15 We value your input during this decision
16 making process.

17 Responses to your comments will be
18 provided in the responsiveness summary that is
19 part of the record of decision, that's the
20 document I just spoke about. The
21 administrative record for the Tonawanda
22 Landfill Vicinity Property is available on our
23 website and we can assist you with accessing

1 that and the record contains major reports and
2 supporting documentation used for our decision
3 making for the vicinity property. An example
4 of that, the bore log data that [REDACTED] spoke
5 about during his presentation.

6 If you'd like any additional information
7 please use one of these methods to contact us
8 so we can be responsive to you. I thank you
9 again. The team will be available at the
10 posters and please drive safely on your way
11 home. Thank you.

12 [REDACTED]: So no question and answer
13 situation? Can we all ask questions so you
14 can guys can answer them for us or is that not
15 part of this?

16 [REDACTED]: This was for you to give
17 public --

18 [REDACTED] It's a comment thing where you
19 can go up there but can we just raise our hand
20 and ask questions where you guys can answer
21 them for us?

22 [REDACTED]: Everyone would kind of like
23 to have like open Q and A before we move to

1 individual posters, sure, that's fine.

2 [REDACTED]: I mean I've got multiple
3 questions but one of them is like beyond the
4 fence line, was there any drilling done and
5 testing done beyond the fence line?

6 [REDACTED], former resident of the City of
7 Tonawanda. Beyond the fence line, was any
8 testing done beyond the fence line?

9 [REDACTED]: The Corps of Engineers did
10 not do any testing beyond the fence line. We
11 sampled right up to the fence. Based on our
12 information, our data, we did not see
13 potential for material moving past the fence
14 line. However, the New York State Department
15 of Environment Conservation did do
16 investigations of several of the residential
17 properties on the other side.

18 [REDACTED]: Could you go to page 17, put
19 that up on the screen. See this saturated
20 fill. Saturated fill goes right up to the
21 fence line, what happens to it after that?
22 There's no doubt that testing needs to be done
23 beyond the fence line and that if there's

1 saturated fill going right up to the fence
2 line it doesn't just stop because there's a
3 fence above the ground.

4 [REDACTED] And that's where the New York
5 State Department of Environmental Conservation
6 did do some investigations beyond the fence
7 line and did not find evidence of FUSRAP
8 related material there.

9 [REDACTED]: In the future, stuff that's
10 left deeper than 5 feet is going to be in a
11 saturated fill zone where it could actually
12 make its way past that fence line in the
13 future, is that correct?

14 [REDACTED]: Actually the ground water
15 flow direction in this area is actually away
16 from the fence line towards the south.

17 [REDACTED]: Well, eventually it can go to
18 the creek in the river or somewhere that it
19 shouldn't be if it's left there.

20 [REDACTED]: The landfill and the testing
21 we've done and the groundwater again is in the
22 direction to the south has not found uranium
23 levels towards the Two Mile Creek or the

1 sampling we did in Two Mile Creek did not find
2 elevated uranium levels in the creek.

3 [REDACTED] What exactly is that material
4 made up of? Is it construction material, is
5 it eye beams, is it walls, is it concrete
6 floors, is it dirt, what is it?

7 [REDACTED]: The FUSRAP related material
8 it's contaminated soil. So it's basically
9 dirt, soil that has some of the FUSRAP
10 constituents within it. Primary uranium,
11 radium, thorium are the radioactive materials.

12 [REDACTED]: So if you took all of it out
13 of there, you never had to monitor it ever
14 again, no money would ever have to be spent
15 but if you leave it down in there you're going
16 to have to keep an eye on it for eternity?

17 [REDACTED]: Correct. If we remove the
18 material, alternative 4 would not require any
19 future site inspections or monitoring.
20 Alternative 3 does require site inspections
21 basically to ensure that the deeper FUSRAP
22 material is not being disturbed.

23 [REDACTED] When the town closes the

1 landfill, aren't they going to be piling up a
2 bunch of dirt and bunch of clay on top of that
3 like 30 feet of it?

4 [REDACTED]: Don't have the details to
5 share on the town's final closure plan and
6 what their final closure will entail.

7 [REDACTED]: Well, nearby it's like 30 feet
8 above the ground level so I'm sure that's what
9 they're going to do. Isn't that going to make
10 it harder to monitor what's in the ground
11 there?

12 [REDACTED]: Well, monitoring that for the
13 FUSRAP material is basically to ensure that
14 there isn't a deep excavation undergoing that
15 would expose deeper the FUSRAP material below.

16 [REDACTED] That's all I got.

17 [REDACTED] Thank you. And again, we
18 have the information around the posters. If
19 you want to talk one-on-one with any of the
20 team members or any of the particular posters
21 you want to look at.

22 [REDACTED]: Just real quick, you and I
23 discussed no matter whether you do 3 or 4, we

1 discussed screening, 8 foot screening to be
2 put up to protect the neighborhood from any of
3 the soil, dirt, whatever coming into the
4 neighborhood. We put up with this stuff for
5 so many years now, a lot of us are fed up with
6 it. Is there any plan in place to put a
7 screening up to protect the Riverview
8 neighborhood, the school, playground,
9 everything that's there, 17 months, 28 months,
10 it doesn't matter how long it's going to take.
11 The neighborhood still needs to be protected
12 from whatever is being excavated out of there.
13 What is the Army Corps' plan to protect the
14 neighborhood as the stuff is being done, what
15 measures are going to be put in place?

16 [REDACTED]: Well, the detailed plans
17 would be developed as part of the remediation
18 work plans. Once we have selected the final
19 remedy and once we have awarded the contract
20 to do the work, we work with the contractor to
21 develop the work plans necessary to conduct
22 the work safely. And obviously one of the
23 things we are very careful about on your

1 FUSRAP sites is ensuring that we are not
2 releasing any FUSRAP material from the site
3 inadvertently.

4 So we would look at various methods to
5 ensure contamination control, dust control as
6 we conduct the remediation. And that
7 consideration would look at methods to
8 protect, you know particularly for this site
9 where we do have residential area right next
10 to it we would have to look at what specific
11 methods would best help control and prevent
12 any contamination.

13 [REDACTED]: Let's face it, you're not
14 just digging into FUSRAP you're digging into
15 an old landfill that nobody knows for sure
16 what's in there. So far the residents haven't
17 been protected from that from this point
18 forward, the residents that live up on
19 Riverview need to be protected.

20 [REDACTED]: Agree. And I think actually
21 our team leader from our environment health
22 section may have a point to make here as well.

23 [REDACTED]: Yes, ma'am. One thing I'd

1 like to point is that when we do an
2 excavation, when we do remedial clean up we'll
3 have multiple rings of air monitoring that
4 will go on on that site. We'll have breathing
5 air monitors for our workers and we'll have
6 further air monitors that are sequenced so
7 that we understand where the wind directions
8 are going so that we have an idea if anything
9 is released. Your point about the other
10 chemical issue that is out there, we'll have
11 other monitoring in place that help protect so
12 it's not moving off-site. And if we were to
13 experience something like that we would have a
14 procedure in place to ensure that everybody is
15 notified if there was an issue. Thank you.

16 ██████████: I got another question. So
17 it's \$10 million to do step 3, \$55 million to
18 do step 4. How much money is it going to cost
19 to monitor that stuff from now to eternity?
20 And if the Seaway Landfill is still open at
21 that spot where that material is over there,
22 why not just get this out and put it over
23 there because you're going to leave that stuff

1 over there? So it's like two things.

2 [REDACTED]: Okay. Sorry, could you
3 repeat.

4 [REDACTED] From here to eternity how much
5 is that going to cost to monitor the step 3
6 thing?

7 [REDACTED]: The construction cost for
8 step 3 is about \$10 million. The present
9 worth cost for the monitoring is a little over
10 \$2 million. So that's the cost in today's
11 dollars that would take to do the monitoring
12 over a thousand year time period. Which for
13 alternative 3 is basically site inspections to
14 ensure that there is not any future
15 disturbance of the FUSRAP material left in the
16 Tonawanda Landfill.

17 The second part, the Seaway landfill, the
18 record of decision for that is to cap the
19 FUSRAP material in place. We do not have the
20 authority under the record of decision to add
21 additional material to the Seaway Landfill.
22 So the Seaway Landfill once funding is
23 available we'll be capping those areas of that

1 site.

2 [REDACTED] Okay. Thanks again and our
3 staff will be standing by posters so we can
4 have some one-on-one discussions and
5 additional Q and A. Thank you very much.

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