

Department of the Army USACE Buffalo, New York
1776 Niagara Street, Buffalo, New York 14207-3199

In the Matter of:)
Public Meeting on Seaway Site) September 24, 2008
Proposed Plan)

Transcript of meeting held on September 24, 2008.
at the Phillip Sheridan Building, Community Room
3200 Elmwood Avenue, Buffalo, New York 14217

APPEARANCES:

LIEUTENANT COLONEL DANIEL B. SNEAD
Commander Buffalo District
United States Army Corps of Engineers.

PROJECT DELIVERY TEAM: JIM KARSTEN, PROGRAM MANGER
STEVE BUECHI, PROJECT MANAGER
JANNA HUMMEL, PROJECT ENGINEER
COLIN OZANNE, OFFICE OF COUNSEL
HANK SPECTOR, HEALTH PHYSICIST
BRUCE SANDERS, PUBLIC AFFAIRS OFFICER
ARLEEN KREUSCH, OUTREACH PROGRAM SPECIALIST

CHIEF OF TECHNICAL SERVICES: DAVE CONBOY

TRANSCRIPTION SERVICE: Associated Reporting Service
Post Office Box 674
229 West Genesee Street
Buffalo, New York 14201-0674
(716) 885-2081

Proceedings recorded by electronic sound recording,
transcript produced by transcription service.

INDEX

SPEAKERS	PAGE
LIEUTENANT COLONEL DANIEL B. SNEAD	3
JANNA HUMMEL	12
LIEUTENANT COLONEL DANIEL SNEAD	30
SUPERVISOR ANTHONY CARUANA	34
KENNETH SWANEKAMP, TONAWANDA PLANNING BOARD	36
PHILLIP SWEET	38

1 P R O C E E D I N G S

2 LIEUTENANT COLONEL SNEAD: Well, good
3 evening. It's good to see everybody this evening
4 and what a nice day. It's funny. I grew up in
5 Florida and I've been here about three months
6 commanding the Buffalo District of the US Army
7 Corps of Engineers, and there's no doubt in my
8 mind, this was the coldest August I've ever
9 experienced in my entire life. But it's been
10 wonderful and I guess I anticipate that the
11 winters will be a little bit different than what
12 I had in Florida as well.

13 Well, good evening. My name is Dan Snead and
14 I'm the Commander of the Buffalo District. And
15 I'd like to welcome everybody here tonight. Also,
16 before I start I'd like to acknowledge some of the
17 elected officials or the representatives that are
18 here today in the audience.

19 First off, representing Congresswoman
20 Slaughter, Kathy Lenihan. Good to see you, Kathy.
21 Also here representing Robin Schimminger from the
22 New York State Assemblyman, Terry Weigler, and Mr.
23 Anthony Caruana, the Supervisor for the Town of
24 Tonawanda. Good to see you, sir.

25 I want to thank everybody for coming out

1 tonight and listen to our presentation on the
2 Proposed Plan for the Seaway Site. And just to
3 assure you that your participation today and in
4 the process of taking on public input is very
5 welcome and very appreciated. Next slide.

6 This is the agenda of what we're going to
7 follow today, but before I start, I want to point
8 out some of the folks that are our Project
9 Delivery Team with the Corps of Engineers at
10 Buffalo. Jim Karsten, he's our Program Manager
11 for our overall FUSRAP program, and I'll explain
12 a little bit more what FUSRAP is, a little
13 further. Steve Buechi, he's our Project Manager
14 for the Seaway Site. Janna Hummel, she's our
15 Project Engineer and she's got the incredible task
16 of trying to explain the science in terms that
17 everybody can understand this evening. So I
18 applaud her in advance to do that. Colin Ozanne,
19 with our Office of Counsel. Hank Spector, Health
20 Physicist. Bruce Sanders, Public Affairs Officer,
21 and Arleen Kreuzsch, our Outreach Program
22 Specialist. And she's helping to collect folks'
23 names that would like to make a comment.

24 Also we have, as Kathy has pointed out here
25 to me, Paul Grants with Erie County Environmental

1 Planning and Mike Hetler who's here to represent
2 Senator Rath. Good to see you, sir.

3 Also, in addition to the project delivery
4 team that's here tonight, we have some of our_
5 senior leaders. Dave Conboy, he's my Chief of
6 Technical Services Division at the Buffalo
7 District and also, Ron Church who at our higher
8 level, our division office, he manages the FUSRAP
9 program at our higher level out of, actually,
10 Chicago, correct? You're in Cincinnati. I know
11 some folks are Chicago, I get confused with that.
12 Okay, great.

13 Again, welcome. As an overview of tonight's
14 meeting I'll be continuing with the introductory
15 slides. I'll be followed by Janna, our project
16 engineer, who will give the brief on the technical
17 aspects of the project and how we arrived at the
18 preferred alternative for addressing the site. We
19 will then open up the floor to record your
20 comments regarding the Proposed Plan and the
21 transcript from tonight's meeting will be posted
22 on our website when it becomes available.

23 When you came in, you should have filled out
24 and returned a sign in card. If anyone did not,
25 please contact our folks, Arleen, right over here,

1 she can get you a card so you can fill one out if
2 you have any comments that you would like to make
3 this evening or even a written comment. On the
4 card, there is a box to mark if you which to make
5 a statement or ask a question. If, during this
6 meeting, you decide you would like to speak and
7 did not check the box, please see Arleen and we'll
8 make sure that you have an opportunity to speak
9 this evening.

10 And just a reminder, we've put out the
11 Proposed Plan approximately thirty days ago and we
12 still have until the 27th of October to receive
13 comments so after we leave today if you still have
14 any comments, and I'll make sure that you have all
15 the contact information either through email,
16 phone or if you would like to write a letter; any
17 of those options, I'll make sure that you have
18 that information before you leave. But we will be
19 accepting those comments from now until the 27th
20 of October. Next slide.

21 There's two things that I'd like you to take
22 away from this slide. There's two terms that
23 you'll hear myself and Janna use throughout the
24 presentation this evening. The first one is
25 FUSRAP and the second one is CERCLA.

1 FUSRAP stands for Formerly Utilized Sites
2 Remedial Action Program. It was a program that
3 was created by the Federal government in 1974 and
4 its mission is to identify, investigate and, if-
5 necessary, clean up sites that were contaminated
6 from past activities associated with the Federal
7 government's early atomic energy and weapons
8 program. What the mission really means is, it is
9 our duty to protect the human health and the
10 environment now and into the future. We can't
11 change what happened at that site in the past and
12 we don't have the right authority to evaluate
13 potential past health impacts but we are going to
14 evaluate what the potential threat is of that site
15 and clean it up so that it is safe for future use.

16 To assure you, safety is our highest
17 priority. We conduct our investigations and clean
18 ups in a manner that is safe for both our workers
19 and to the public and we are also charged with
20 efficient use of the resources we're entrusted
21 with to execute the FUSRAP program. We are only
22 authorized to address contamination that is a
23 result of past Federal government atomic energy
24 program activities. Any contamination at a site
25 that is from another source is beyond our

1 authority to investigate and clean up unless it is
2 mixed in with the FUSRAP material that we are
3 actually in the process of cleaning up.

4 Finally, to get to the second piece, CERCLA.
5 CERCLA stands for Comprehensive Environmental
6 Response Compensation and Liability Act. CERCLA
7 is the law that we use and it really defines the
8 criteria that we adhere to when we decide on
9 different ways and alternatives on cleaning up the
10 different sites under this program. It is a
11 Federal law that specifies the process we must
12 follow in investigating and cleaning up our FUSRAP
13 sites. The CERCLA was enacted in 1980 and it was,
14 the most recent update to that was in 2002.

15 Also, just so you know, with the FUSRAP
16 program, initially it fell under the Department of
17 Energy until 1997 when that mission was handed
18 over from the Department of Energy to the US Army
19 Corps of Engineers and we've had it ever since.
20 Next slide please.

21 Just to give you a little background on our
22 district. We are currently managing fourteen
23 FUSRAP sites. Not only in New York, but also in
24 Ohio and one in the state of Pennsylvania. We
25 have successfully cleaned up three of these sites

1 to date and since 1997 when the program was
2 transferred to the Corps. That includes the
3 Ashland 1 and 2 sites that are co-located with the
4 Seaway site and Janna will point out those-
5 locations when she provides her presentation to
6 you.

7 We have an excellent safety record with
8 respect to the workers on the job. During
9 remediation, we also protect the surrounding
10 community with engineering controls and monitoring
11 to ensure that no contaminated material is
12 released from the site. We use an experienced,
13 multi-disciplinary team including environmental
14 engineers, health physicists, risk assessors,
15 chemists and construction managers. And the
16 reports and plans we prepare go through an
17 extensive technical review process that includes
18 a review from the US Army Corps of Engineers
19 Center of Expertise; located in Omaha, Nebraska
20 and others within the industry. We work with and
21 provide information to the state regulatory
22 agencies and our local stakeholders and we provide
23 information to and make our investigation reports
24 available to the public. Next slide.

25 This is just a basic schematic that shows the

1 process that we go through when we get a site
2 designated and tasked to our district. Currently
3 with the Seaway project site, if you see the
4 little yellow "we are here", that's where we're
5 at. We put out the Proposed Plan approximately 30
6 days ago and we still have an additional
7 approximate 30 days, up to the 27th of October to
8 receive public comment in reference to this
9 Proposed Plan.

10 Once we go from there, we'll move to a record
11 of decision on where we go with the Proposed Plan.
12 Next slide.

13 This meeting tonight, it's for you. We
14 really want to make sure that we get your
15 comments. And I emphasize that the public input
16 during this period, this sixty day period, not
17 just this evening, is very important. And this is
18 your opportunity to make your opinions on the
19 project and the Proposed Plan known and have them
20 recorded in the public record.

21 Just to know, the Proposed Plan is not the
22 final decision on action at the site. It is the
23 Corps recommendation based on our investigations.
24 A final decision on site action will not be made
25 until after all the public comments have been

1 considered and responded to. If you make
2 comments, you can look for response to them in the
3 record of decision. A transcript of this meeting,
4 along with all the comments and responses to
5 everything will be there.

6 And finally, I would just suggest to
7 everyone, that, to everyone, that when you submit
8 comments, you make them as specific as possible so
9 we can better understand what the point is that
10 you're trying to make. Let us know exactly what
11 your concerns are and what additional information
12 you think we need to incorporate into our
13 assessment. Viewpoints are important, however,
14 specific concerns and information would result in
15 a more effective comment evaluation process.

16 I will now turn things over to our project
17 engineer, Janna Hummel and she will cover the
18 technical portion of the presentation. I'll tell
19 you, the technical piece of this, it is
20 complicated and again, if you have any questions
21 at the end, feel free to ask them in reference to
22 the brief but I've asked Janna to make sure that
23 we take our time and explain it in such a way that
24 everybody can walk away at least understanding the
25 process and our overall recommendation. With

1 that, Janna.

2 JANNA HUMMEL: Thank you. My name is Janna
3 Hummel. I work as an Environmental Engineer at
4 the Buffalo District. Thank you for coming out to--
5 hear our presentation about Seaway. I'm going to
6 talk about some general information and background
7 on Seaway, what sort of contamination is present
8 at the site, risk and regulations that pertain to
9 Seaway. I'll tell you about the remedial
10 alternatives, that is the remedies we looked at,
11 how we selected our preferred alternative and I'll
12 go into some detail about that alternative.

13 This will be a brief and general
14 presentation. If you want more information, you
15 can read the Proposed Plan; its about fifty pages
16 long. Even more detailed information is available
17 in the Feasibility Study Addendum. These
18 documents and all documentation about Seaway are
19 contained in the administrative record for the
20 site.

21 Colonel Snead will talk about the ways to get
22 to the administrative record and it's also in the
23 fax sheet handout. Next slide.

24 The Seaway landfill is located along River
25 Road in Tonawanda. You can see it as you drive on

1 the 190 near the River Road exit and the Grand
2 Island Bridge.

3 It's about 160 feet higher than ground
4 elevation at its peak so its very noticeable. The
5 area around the site is highly industrial with
6 petroleum storage previously prevalent. The
7 closest residents are about a half mile away, both
8 across the river in Grand Island and to the
9 southeast of the site in Tonawanda. The site is
10 safe under current conditions. The FUSRAP related
11 contaminants do not pose an immediate risk to the
12 public or to workers.

13 Adjacent to the site are Ashland 1, Ashland
14 2 and Rattlesnake Creek. Remediation at each of
15 these FUSRAP sites has already been completed.
16 It's actually all the same contamination at
17 Seaway, Ashland and Rattlesnake Creek, there were
18 not operations at Seaway or Ashland, all the
19 FUSRAP material at Seaway and Ashland was
20 transported from the nearby Linde Site. Uranium
21 processing took place there.

22 Remediation at Linde is ongoing. What made
23 its way to Seaway was the part of the uranium ore
24 that wasn't useful to the Manhattan Engineer
25 District. It's low level radioactive waste. Next

1 slide.

2 Here's a summary of Seaway site history. As
3 I said, the FUSRAP related material was moved from
4 Linde and placed on Ashland between 1944 and 1946.
5 It wasn't moved to Seaway until 1974. This was
6 soil that was removed from Ashland 1 due to the
7 construction of a drainage ditch in bermed area
8 and was moved to Seaway and Ashland 2. The
9 landfill also contains other types of waste that
10 are non-FUSRAP related. The Seaway landfill
11 started accepting material in 1930 and stopped in
12 1993.

13 Also, in 1993, the Department of Energy
14 released a Proposed Plan for the Tonawanda site.
15 The Tonawanda site included Linde, Ashland and
16 Seaway. When the Army Corps took over FUSRAP they
17 decided to re-remediate the sites individually.
18 This Proposed Plan is just for Seaway. A final
19 decision, or record decision was never issued for
20 Seaway based on that proposed plan.

21 USACE was designated as lead Federal agency
22 for FUSRAP in 1997. After that, the Army Corps
23 did a walk over of the site in 1998 and a sub-
24 surface investigation in 2001. Now we're zoomed
25 in the site itself. The road in front is River

1 Road and we're looking to the southeast.

2 FUSRAP materials was placed in Areas A, B and
3 C. Areas B and C were once thought to be separate
4 areas but were found to be one area during the
5 Army Corps investigations conducted in 2001. Some
6 of this material has become mixed with soil so
7 nowadays it may be indistinguishable from soil.
8 I can tell you that when we excavated the Ashland
9 sites concentrated pockets of the material often
10 looked like coffee grounds. Much of the material,
11 especially in Areas B and C, has become mixed up
12 with the material around it.

13 You can see, hopefully from this picture,
14 that these areas don't have a final landfill cap
15 and they aren't at the same elevation as the
16 finished parts of the landfill. These areas were
17 left this way on purpose until a remedy could be
18 established. We also found out, during the 2001
19 investigation that contamination in the vicinity
20 of Areas B and C goes under some portions of the
21 closed landfill.

22 Seaway Area D was remediated as part of
23 Ashland 1. It's finished.

24 Seaway Northside and Southside. These areas
25 were found during the remediation of Ashland 2 and

1 Ashland 1. Contamination was removed up to the
2 property line but there were some remaining areas
3 and these areas are being addressed under the
4 Seaway Site. Some of this contamination is right
5 at the center of the landfill. Next slide.

6 I'm going to show you a couple things with
7 this slide. First, how the landfill is
8 configured. There's a thick layer of clay soil at
9 the bottom, greater than forty feet thick. This
10 clay soil inhibits the vertical spread of
11 contaminants. Also, around the base of the
12 landfill, there is a cut-off wall to prevent
13 lateral migration of contamination. Inside that
14 wall is a pipe that collects liquid from the
15 landfill materials so it doesn't pool and can be
16 treated. So that's the first thing.

17 Secondly, the difference between inside and
18 outside the leachate collection system. I'll talk
19 a lot about this when I talk about the remedies.
20 Material inside is essentially in the landfill and
21 therefore afforded the protections of the
22 landfill. Material outside is not. Material at
23 Seaway Southside and Northside exists both inside
24 and outside the cut off wall. They did not know
25 it was there when they put the slurry wall in.

1 It's not actually part of the slurry wall. On the
2 outside, you can see, this material is considered
3 outside the leachate collection system and this
4 portion is considered inside the leachate
5 collection system. Next slide please.

6 The risks from Seaway Media. The soils,
7 groundwater, surface water and air were examined
8 as part of our investigations regarding the nature
9 and extent of contamination from FUSRAP
10 constituents. For soil, there are unacceptable
11 risks for potential future use and they are
12 radiological - radium, thorium and total uranium.
13 The potential future use considered was an
14 industrial worker for all these areas of exposure.
15 For groundwater and surface water, FUSRAP material
16 is not impacting these media. Modeling and
17 sampling shows that these media will not be
18 impacted in the next 1000 years. Air was also
19 studied and no exceedences of guidelines are
20 occurring or are predicted to occur.

21 This is a list of the standards that apply to
22 Seaway and that we will need to meet. First, any
23 remedy we must develop must be effective for 1000
24 years. So, any remedy needs to be lasting. Also,
25 for radiological contamination, the exposure

1 levels do not remain constant as the compounds
2 decay. We look at all the years out to 1000 years
3 and consider the maximum level of exposure. When
4 we remove soils, the remaining level of Radium-226
5 needs to be 5 picocuries per gram at the surface
6 and 5 pico grams at the subsurface or less.

7 Surface soil is defined as about the top 6
8 inches or the top 15 centimeters of soil. This
9 surface and sub surface is how the regulation is
10 defined and why we have two sets of clean-up
11 numbers - you'll see them on the next slide.

12 The next regulation determines clean up
13 levels for the other radionuclides at the site.
14 They are calculated on an equivalent dose of the
15 radium at 5 and 15. The last two regulations only
16 apply when we leave material in place. We have to
17 make sure that Radon flux is less than 20
18 picocuries per grams per meter squared per second.
19 Radon flux is a measure of the flow of radiation,
20 in this case, coming from the ground.

21 Also, we have to make sure that the
22 concentration of radiation in the air at or
23 outside the site border is not increased by .5
24 picocuries per meter.

25 Considering these regulations, cleanup goals

1 for contaminants of concerns were derived for an
2 industrial worker and are showed here in
3 picocuries per gram.

4 Background concentrations, that is, the
5 levels of naturally occurring radiation, are shown
6 in the first column. The average concentration
7 for Area A, which is the highest level area at
8 Seaway, are showing in the second column.

9 The radium cleanup goals in the last two
10 columns come directly from the standard on the
11 last slide. A benchmark dose, as I mentioned the
12 next regulation on the last slide, is used to
13 develop the Thorium and Uranium cleanup goals.
14 This means the level of exposure for these numbers
15 equals that for the 5 and 15 of Radium.

16 Okay, so, what does all that mean? How much
17 radiation exposure is that? Exposure to radiation
18 is measured in units called millirem. An average
19 person receives exposure to 360 millirem per year.
20 This is a theoretical tally for me: 28 from cosmic
21 radiation, 46 from the ground, 40 from food and
22 water, 200 from the air (that's radon gas), 5 I
23 would receive from two trips on airplanes I would
24 take this year (one to Florida and one to Texas).
25 I received a mammogram; that resulted in 30

1 millirems of exposure, 1 from watching TV and 10
2 from various other sources. It's a total of 360.
3 These numbers come from the National Council on
4 Radiation Protection.

5 You can also go to epa.gov and type
6 'calculate your radiation dose' and you'll see
7 something very similar to this table. Okay, so
8 what is exposure like at Seaway? Currently,
9 without any remedies, someone who would spend 3
10 hours per day around Area A (again, our highest
11 level), for 52 weeks, 3 hours a week for 52 weeks,
12 would receive about 6 millirem of exposure. This
13 amount of time is actually less than what people
14 are out there right now.

15 If, theoretically, the Army Corps were to
16 proceed with a containment or a capping remedy, an
17 industrial worker (this is someone that spends 8
18 hours a day at the site for 50 weeks per year
19 based on 7 hours inside the building and 1 hour
20 outside the building), their yearly exposure is
21 less than 1 millirem.

22 Levels of contamination off the site would be
23 much lower than either of these scenarios. To
24 have exposure to radiation at Seaway, you need to
25 have direct exposure to the materials.

1 This is a very brief introduction to these
2 concepts. We have several fact sheets available
3 outside the door, if you want to take them home
4 and learn more about radiation.

5 I'm now going to get into the remedies we
6 considered so here's a few things you need to know
7 about before I go into those.

8 In 1992, a Waterfront Regional Master Plan
9 was written to address future planning use of the
10 Town of Tonawanda waterfront area. This plan
11 concluded that the landfill, once closed, could be
12 redeveloped and used for low-intensity
13 recreational uses. This is consistent with the
14 way other closed landfills are used across the
15 country.

16 Due to the heavy presence of industrial land
17 use around the Seaway landfill and uncertainties
18 in future use regarding re-use of the entire
19 property, the Army Corps also considered the
20 possibility that portions of the site might be
21 used for industrial purposes. So, both
22 recreational and industrial scenarios were
23 evaluated. The industrial worker scenarios is
24 more conservative than the recreational user, in
25 this case because the industrial worker receives

1 more exposure. All the alternatives are
2 protective without further action from the
3 property owner, however, the Army Corps will not
4 close a landfill to its current standard or fill
5 it in to uniform height.

6 Also, for all the alternatives, any impact of
7 the closed landfill will be mitigated by restoring
8 to the original design configuration that existed
9 prior to re-remediation. Any FUSRAP material that
10 has to be moved due to grading will be shipped off
11 site for disposal. This table identifies the six
12 alternatives that were considered in the
13 Feasibility Study Addendum. Alternative 1 is No
14 action. This is a do nothing alternative that is
15 required by CERCLA as a baseline for our
16 evaluations. Since we have determined that there
17 is potential unacceptable risk at Seaway, this was
18 not considered for implementation.

19 Alternative 2 is complete excavation.

20 Alternatives 3 and 5, these were Department
21 of Energy alternatives for the 1993 Tonawanda site
22 Feasibility Study and Proposed Plan. They
23 involved consolidating waste into an engineered
24 cell. These have been dropped from consideration.
25 Material at Ashland and Linde, the other parts of

1 the Tonawanda site, have been or are in the
2 process of being remediated under separate CERCLA
3 actions and all waste is being shipped off site
4 for disposal. Alternative 4 is partial
5 excavation and Alternative 6 is containment, which
6 is our preferred alternative.

7 So, of the 6 alternatives here, only 3 were
8 considered by the Army Corps for implementation.
9 Alternatives 2, 4 and 6.

10 Alternative 2 is complete excavation. Here
11 we address soils by removal of all impacted soils
12 with offsite disposal and backfill. The yellow
13 color represents areas of excavation. After we
14 would implement this alternative, no FUSRAP-
15 related materials above cleanup levels would be
16 left behind. That means that operation and
17 maintenance of the remedy would not be necessary.
18 We don't need land use controls or 5 five-year
19 reviews after implementation.

20 Let me introduce those charts since I will be
21 using them a lot in the next few slides.

22 Land use controls are put into place to
23 prevent future access to and disturbance of the
24 contained waste and can include things like deed
25 restrictions. Five-year reviews evaluate any

1 changes in conditions at the site.

2 They review the cap itinerary (sic) and
3 ensure that land use controls are being effective.

4 The cost for this alternative is estimated to be
5 113 million dollars, however, the actual cost may
6 be higher, as I said, contamination around Areas
7 B and C extends into the closed portion of the
8 landfill but our limit of sampling ends at the
9 hatch mark on the slide.

10 Notice here since it will differ for the
11 other two alternatives that all material for
12 Seaway Southside and Northside, inside and outside
13 the leachate collection system is removed.

14 Here's the second alternative we considered,
15 partial excavation. For this alternative, we
16 remove accessible soils and contain or cap
17 inaccessible soils. We define accessible as not
18 buried under more than 10 feet of soil or refuse.
19 Yellow is excavation, orange is containment. We
20 looked at the site conditions to determine what
21 was accessible. All of Area A is not deeply
22 covered by landfill material. A portion of Areas
23 B and C is not deeply covered, but this
24 transitions up quickly up a very steep slope.
25 FUSRAP material at the border of the landfill is

1 covered by 80 feet of other materials.

2 You can also see the yellow, meaning we would
3 take material outside the leachate collection
4 system for Seaway Northside and Southside. Since
5 some material above the cleanup levels is left
6 behind for this alternative, we need to monitor
7 the remedy and maintain land use controls and do
8 five-year reviews. The four feet of cover
9 consists of multiple layers of various types of
10 soil, fabric and geomembranes that are
11 specifically engineered and layered to provide
12 protection from the radiological contaminations.
13 This alternative represents the best effort to get
14 everything that is easily accessible and not under
15 closed portions of the landfill. Even though the
16 cost approaches that of alternative 2, since we
17 have more finite limits, the cost is more
18 established than alternative 2.

19 Containment is our preferred alternative.
20 I'll explain how we selected it as our preferred
21 alternative in the next few slides. In this
22 alternative, we only remove contamination above
23 the cleanup levels outside the containment system,
24 you can just see very small yellow areas. We
25 contain the soils inside the leachate collection

1 system under a minimum of 4 feet, again of various
2 types of soil, fabric and geomembranes designed to
3 provide protection. After this remedy is in
4 place, we need to maintain the cap, maintain land-
5 use controls and conduct five-year reviews to see
6 if anything at the site has changed. The cost for
7 this alternative is 30 million dollars.

8 This slide explains what are the main
9 components of the costs. All our estimates are in
10 2007 dollars. You can see that transportation
11 disposal which is the dark pink area is the major
12 component of Alternatives 4 and 6. Facilities
13 that accept low level waste are mostly in the
14 Western United States so this material goes on a
15 long trip and disposal costs are very high.

16 The major cost for containment is capping.
17 Under containment, 18 acres of material would be
18 capped. Only 4 acres are capped under Alternative
19 4.

20 Okay, how did we choose the preferred
21 alternative? CERCLA sets 9 criteria to evaluate
22 alternatives and that's what we used.

23 The first two are Threshold Criteria. They
24 are protection of human health and the environment
25 and compliance with Federal and state

1 environmental regulations. If an alternative does
2 not meet this criteria, it is not a viable
3 alternative. This would be Alternative 1, it did
4 not meet it. The 2, 4 and 6 did meet it.

5 Then there are five Balancing Criteria. Long
6 term effectiveness and Permanence, short term
7 effectiveness and Permanence, reduction in
8 toxicity, mobility or volume through treatment,
9 Implementability and cost. These are the ones
10 that have been evaluated already. The two
11 remaining criteria are Modifying Criteria. They
12 are State acceptance and Community acceptance.
13 This is where you come into the picture, this is
14 why we are here tonight.

15 Okay, here we're going to compare the three
16 alternatives that met the Threshold Criteria.

17 Long-Term Effectiveness and Permanence: all
18 the alternatives provide long-term effectiveness
19 and permanence as residues are in a waste control
20 disposal facility. I point out this is a
21 difference than the Ashland site. Treatment,
22 there is little treatment for radioactive material
23 of this nature, the only thing really is their
24 minimal consolidation and volume. Short-Term
25 Effectiveness: Opening closed portions of the

1 landfill creates risks to workers and the public
2 (this condition is also different than Ashland's)
3 as does excavation and transportation in general.
4 Containment also has the shortest duration of
5 construction, which is another factor considered
6 with this criteria.

7 Complete excavation has the longest duration
8 to complete.

9 Implementability: Complete excavation has a
10 high degree of complexity due to the impacts to
11 the closed portions of the landfill and removal of
12 large amounts of soil covering FUSRAP-related
13 materials. As I said, 80 feet towards the
14 landfill, even more, as you get into the closed
15 portion of the landfill.

16 Partial excavation has a medium degree of
17 complexity due to excavation in close proximity to
18 the closed landfill.

19 Containment is the easiest to implement.
20 Excavation is limited to Seaway Northside and
21 Seaway Southside and cost, 113 million compared
22 with 80 compared with 30 and then the two criteria
23 that have not been evaluated yet.

24 Let's talk a little bit more about
25 containment. Remedial action will include FUSRAP-

1 related material within the landfill will be
2 contained under a minimum of 4 feet of types of
3 soil, fabric and geomembranes. Also, FUSRAP-
4 related material outside the landfill will be
5 excavated and shipped off site to achieve cleanup
6 criteria.

7 After the remedy is in place, we will
8 maintain the remedy, maintain land use controls
9 and conduct five-year reviews to see if conditions
10 at the site have changed. In summary, our
11 preferred remedy is protective of human health and
12 the environment now and in the future. We
13 selected this alternative because it has a high
14 degree of effectiveness and permanence. It's
15 protected by the landfill design. It presents a
16 lower risk to workers and the community during the
17 remediation. It's much more cost effective than
18 the other alternatives and it is the most easily
19 implemented.

20 The assurances you have are: this alternative
21 would include ensuring that land use controls
22 required pursuant to NY regulations are in place
23 to prevent future access and disturbance of the
24 contained waste. Long-term surveillance and
25 maintenance of the FUSRAP-related contamination

1 would be performed by the Federal government in
2 accordance with a Land Use Control Plan that would
3 be developed by the Army Corps during the
4 completion of the record of decision. Monitoring
5 of non-FUSRAP-related waste remains the
6 responsibility of the property owner.

7 And, as required by CERCLA, implementation
8 will include review of the site conditions and cap
9 integrity every five years to ensure that land use
10 controls are effective and that operations and
11 maintenance are conducted in accordance with that
12 plan.

13 Thank you for your attention tonight. Colonel
14 Snead will take you through the rest of the
15 presentation.

16 MR. SWEET: Do you have just a minute for a
17 question?

18 LIEUTENANT COLONEL SNEAD: Sir, we, we will
19 make sure that you ask your questions; if you
20 could just bear with me for just a few more
21 slides, I appreciate it, thank you. Thank you,
22 Janna, as you can see here on the chart, we're at
23 the midway point on the 60 day comment period and
24 we will consider each comment received during this
25 period, not just this evening.

1 The date of release for the record of
2 decision will depend mainly on the number of
3 comments that we receive from you all. The record
4 of decision, currently, is scheduled to be_
5 completed in October of 2009. Of course, that can
6 change, either earlier or later, depending on how
7 many comments we do receive. And then we'll have
8 a decision beyond that regarding the remedy.

9 And where do we go from there? We begin the
10 remediation process. But to get there we would
11 have to await funding to proceed. There is
12 currently a number of ongoing remedial actions
13 under the FUSRAP program that aren't covered just
14 in the Buffalo district. There's a number of
15 other districts nationwide that have sites just
16 like this that are being remediated. So again, we
17 will have to wait to see how the funding falls out
18 on when we can actually start the remediation
19 process. Next slide.

20 So, we've come to that piece at the end of
21 our presentation here, I'll have just a few more
22 slides to provide you some information, some
23 ground rules and then we'll accept public
24 comments. Next slide.

25 Just so you're aware, we do have a

1 stenographer. He's here to record our comments
2 and that will be entered into the public record.
3 I will ask that everyone be courteous, one person
4 speaking at a time. When called upon or if you
5 want to speak, please come to the microphone that
6 we've provided right there. there's a podium right
7 there. Please state your name and if you're
8 affiliated with an agency or an organization
9 please let us know who that is. I would ask you
10 to please limit your remarks to about, to less
11 than 5 minutes, that way we have an opportunity to
12 hear everybody's comments. And please limit your
13 comments to the Seaway site.

14 Understand there might be other concerns
15 elsewhere but in most cases we might be able to
16 address those issues. I will also say that we are
17 committed to hearing your comments and we will
18 stay here until everyone has a chance to speak
19 this evening. We will first call upon those
20 people who indicated on a sign in sheet they
21 wanted to make a comment and then we will open the
22 floor to others who wish to make comments. Next
23 slide.

24 As I stated earlier, if you have written
25 comments that you would like to make, there is our

1 address. If you would like to make a written
2 comment via email, there is our email. And we do
3 have folks at Buffalo District that check that
4 daily to ensure that we get your comments. I just
5 ask that if you do this, remember, you've got
6 until October 27th to get that into us. Next
7 slide.

8 As I stated earlier, we are required by the
9 CERCLA process to ensure that all oral and written
10 comments, we respond to all those. And once we
11 receive the Proposed Plan after the public comment
12 period has closed. When the responses are ready
13 there will be made available at the administrative
14 record file locations listed here at the Tonawanda
15 Public Library and also through our headquarters
16 in Buffalo. The administrative record file
17 includes the documents the Corps will use to
18 develop the preferred alternative and Proposed
19 Plan for the site. I encourage you to obtain
20 additional information about the site from those
21 locations. Next slide.

22 Finally, if you would like any additional
23 information there is our phone numbers, again our
24 email and then our address and we also have
25 additional information on our website in reference

1 to the program. So, we also have a limited number
2 of copies, I believe, of the presentation we
3 provided tonight if you'd like to get one. They
4 are available at the sign in table when you leave
5 and we will also place a copy of tonight's
6 presentation up on the public website and the
7 transcript will also be made available.

8 Without further ado, I will now open up the
9 floor so Arleen, if you could, we'll start with
10 the cards and then go from there.

11 ARLEEN KREUSCH: Supervisor for the Town of
12 Tonawanda, Anthony Caruana, would you please come
13 to the microphone.

14 ANTHONY CARUANA: Thank you, Colonel Snead
15 and members of the Corps. Ladies and gentlemen,
16 I am Anthony F. Caruana, Brigadier General, United
17 States Army, retired supervisor of the Town of
18 Tonawanda, also recipient of the silver order of
19 the Fluery medal, Army Engineer Association for
20 significant contributions to the Army Engineer, I
21 mean Corps of Engineers.

22 Town of Tonawanda's position on this matter
23 is the same it has always been, namely that the
24 site should be remediated by removal of the
25 Manhattan Engineering District and the Atomic

1 Energy Commission contaminants in order to protect
2 the health, safety and welfare of our public.

3 This study confirms that the site constitutes
4 a public health risk due to radioactive-
5 contaminants present in the soil. The best way to
6 remedy the problem is removal, not through
7 containment. While alternative 6 recommendations
8 in your Proposal Plan is the most cost effective
9 at 30 million dollars, it is not the safest.

10 Alternative 2 is the best alternative since
11 it provides for complete evacuation and disposal
12 at the cost of 113 million dollars. CERCLA's
13 purpose was not to create remedies that are cost
14 effective but to protect the public from the
15 health danger created by hazardous materials on
16 sites. Budgetary concerns should not be put
17 before health concerns. These radioactive
18 contaminants have been present in our town for
19 over 60 years. If they had been removed when they
20 were originally recognized years ago, the cost
21 certainly would have been significantly less than
22 it is now. Once again, however, budgetary
23 concerns should not be put before public health
24 concerns that could be recognized in the future as
25 evidenced by your need for constant monitoring for

1 a 1000 years to come. Please consider our comments
2 prior to making your final decision on
3 recommendations for the Seaway site. We also
4 reserve our right to make additional comments
5 during the continuous public comment period which
6 ends on October 27th. I thank you for the
7 opportunity to speak tonight.

8 COURT RECORDER: Sir, how do you spell your
9 last name?

10 ANTHONY CARUANA: C-A-R-U-A-N-A.

11 ARLEEN KREUSCH: Mr. Kenneth Swanekamp from
12 the Tonawanda Planning Board.

13 KENNETH SWANEKAMP: Thank you. I just have
14 some verbal comments. The Planning Board is going
15 to be meeting next week and we'll have some more
16 written comments at that time. And most of these
17 comments are going to be directed towards land use
18 at and around the site.

19 If you take a look at what has happened
20 recently, after the Corps cleaned up Rattlesnake
21 Creek, that area which had been undeveloped vacant
22 land for decades has now seen incredible demand
23 and development, very high quality industrial uses
24 going on. The industrial park there is being
25 expanded and that was because the remediation was

1 completed. The ability for this area of the town
2 to grow as the master plan calls for, to be an
3 area for job creation, industrial growth, this is
4 going to be predicated on people being comfortable
5 with the fact that it's completely clean, as
6 Rattlesnake Creek was done and the development
7 that followed. Regardless of how many picocuries
8 you can document, the perception will be the
9 reality. And if people feel that there is a
10 health, even if it's a potential, that area is not
11 going to be able to be developed on or nearby and
12 that will be for a long time.

13 The other part of it is, the issue of land
14 use controls are a challenge. They have not been
15 effective over the last 40 years. To consider
16 them effective for the next 1000 years is
17 certainly a questionable position to take so as I
18 said, the Planning Board will be meeting next
19 week, we may have more comments but I think if you
20 take a look at what has happened immediately
21 adjacent to the site, just to the northeast, on
22 the vacant property once it was cleaned up
23 completely, the demand and development is there
24 in that environment. It is really important for
25 this to be done properly if the surrounding areas

1 are going to flourish in the future. And not just
2 be empty areas like they have been for decades in
3 the town. Thank you.

4 ARLEEN KREUSCH: Thank you. Mr. Phillip
5 Sweet.

6 MR. PHILLIP SWEET: Good evening. My name is
7 Phillip F. Sweet. I'm a resident of the Town of
8 Tonawanda.

9 LIEUTENANT COLONEL SNEAD: Good evening.

10 MR. PHILLIP SWEET: I'm here to discuss the
11 problems we have with -- the children in our
12 community are at risk because of this landfill.
13 Young lady, I wish you had brought up a map
14 showing possibly the close proximity of Hackett
15 Drive to the Tonawanda landfill and as a general
16 comment, just so my five minutes is included
17 later, The Town of Tonawanda, originally their
18 plans was to establish a golf course and your
19 criteria and your final review said that a golfer
20 could only play 15 minutes a day on this landfill
21 when it was completed and also part of the, part
22 of the requirement was to have somebody, a runner,
23 could only run a short distance and what's
24 critical is how he breathed upon finalizing
25 exercises, one little point.

1 This letter, this evening, is respectfully
2 directed to Colonel Daniel Snead.

3 Dear Colonel Snead. Thank you for giving me
4 the opportunity this evening to submit this letter
5 and comments regarding the addendum related to the
6 FUSRAP site located in the Town of Tonawanda. In
7 direct relationship to the nuclear health risk
8 dilemma facing Tonawanda is US Army regulation
9 AR700-48 that requires the US Department of
10 Defense to provide medical assistance to residents
11 who are concerned of their health status and well-
12 being. I am hoping that the Department of Army
13 will begin to follow this regulation that will
14 most assuredly enhance long term health
15 considerations and public support. Sadly, the
16 Army has ignored numerous requests for adoption
17 and enactment of their own policy guidelines.

18 In addition, please allow me to please to
19 enter into record the below information regarding
20 AR700-48 and also the attached cure represents Dr.
21 Rose Liber (Sic) health assessment informational
22 program seminar given at Tonawanda High School on
23 September 19, 2007. Dr. Bertell sends a message
24 of critical radio nuclei educational and moral
25 value that demands the adoption and enactment of

1 a human blood, urine, body fluid bio-monitoring
2 program.

3 In addition, I would like to submit
4 photographs for record. Violations of radio
5 nuclei release at the landfill. These are
6 documented, City of Tonawanda town records and
7 with the school, the schools, City of Tonawanda
8 School system. In addition, there is a photograph
9 showing, that I took personally myself, showing
10 radio nuclei release by Ensoil (sic)
11 Corporation, I believe, direct radiation readings
12 that I personally took, documented, asking for
13 support from local officials to validate, and the
14 readings are very high. It's in very close
15 proximity to the Riverview Elementary School and
16 the additional photographs show the landfill
17 itself.

18 Sir, you need to endorse and sponsor the bio-
19 monitoring, human bio-monitoring program,
20 especially for the children. Thank you very much.

21 ARLEEN KREUSCH: Thank you, Mr. Sweet.

22 LIEUTENANT COLONEL SNEAD: Sir, can I just
23 get some clarification? You made a comment, I
24 think, just so I'm clear, Hackett Road? What's
25 the connection?

1 MR. PHILLIP SWEET: Tonawanda, Tonawanda
2 Landfill.

3 LIEUTENANT COLONEL SNEAD: You made a comment
4 that Janna did not have a map up there, what's the
5 connection with Hackett?

6 MR. PHILLIP SWEET: I would have liked to
7 have seen a photograph given. A photograph
8 submitted that shows the close proximity of the
9 Riverview Elementary School.

10 LIEUTENANT COLONEL SNEAD: Okay.

11 MR. PHILLIP SWEET: And the residents --

12 LIEUTENANT COLONEL SNEAD: Sir --

13 MR. PHILLIP SWEET: Well, it's right in their
14 backyard. I mean, you walk a few feet and you are
15 in radioactive contamination. I mean, this is
16 really serious stuff, this is not little stuff
17 we're talking about, this is little children being
18 administered to this dilemma.

19 ARLEEN KREUSCH: That is the Tonawanda
20 landfill, though, that you are talking about.

21 MR. PHILLIP SWEET: Thank you very much.

22 LIEUTENANT COLONEL SNEAD: I'd also like to
23 make just to, sir, just to clarify, now that
24 you've addressed a certain Army regulation, 700-
25 48, and I'll be honest with you, I'm not familiar

1 with that but I will make myself very familiar
2 with it. Understand, I want to clarify to you
3 that this site was not contaminated by the
4 Department of the Army. It was a different
5 Federal entity that contaminated. We've been
6 passed it to figure out a remediation with it, but
7 I'm just letting you know to make sure that you
8 understand that the site was not contaminated by
9 the Department of the Army.

10 MR. PHILLIP SWEET: It's the Army's
11 responsibility, the Army initiated the Manhattan
12 Project, it's up to the Army to make sure that
13 residents, especially children, are secure in
14 their environment. I mean, it's as simple as
15 that. It's your waste, you put it there, it's up
16 to you to take care of it. Thank you very much.

17 ARLEEN KREUSCH: Thank you, Mr. Sweet. Those
18 are all the cards that I received tonight from
19 people that were in the audience that requested to
20 speak. If there is anyone else that has decided
21 since seeing the presentation, that they would
22 like to make a statement?

23 (No response.)

24 MS. KREUSCH: There are no other comments to
25 go on record for the meeting tonight or any

1 questions or clarifications? Okay, thank you, I
2 am going to turn this meeting back over to Colonel
3 Snead for closure. Thank you.

4 LIEUTENANT COLONEL SNEAD: Again, I would
5 just like to thank everybody for coming out this
6 evening and providing those comments and again,
7 just to reiterate, you have until 27 October if
8 you would like to make any written comments and we
9 have provided all that information for you so,
10 again, thank you, and it was good to see everyone
11 and have a wonderful evening. Thanks.

12 (Meeting concluded.)

US Army Corps of Engineers Seaway Site proposed plan

CERTIFICATE

I, RHETT L. BAKER, certify that the foregoing transcript of proceedings in the matter of Public Meeting Seaway Site Proposed plan, Information Session, was recorded utilizing a Sony BM_246, and transcribed from same machine, and is a true and accurate record of the proceedings herein.

Signature Rhett L. Baker

Associated Reporting Service

Post Office Box 674

229 West Genesee Street

Buffalo, New York 14201-0674

Date: 10/10/08