UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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NEW CASSEL/HICKSVILLE GROUNDWATER
CONTAMINATION SUPERFUND SITE
OPERABLE UNIT 3: CONTAMINATED
GROUNDWATER

PUBLIC MEETING

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East Meadow Public Library
1886 Front Street
East Meadow, New York 11554

August 10, 2023
6:30 p.m.

P R E S E N T:

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NYSDEC:
Rob DeCandia
Alexander Klein

NYSDOH:
Jacquelyn Nealon

NANCY SILBERGER,
Official Court Reporter

MS. GREALLY: Hi everyone. My name is Maya. I'm here with Joel, we are the community involvement coordinators for the site. Thank you for coming out to the New Cassel/Hicksville Groundwater Contamination Superfund Site Proposed Plan Public Meeting for Operable Unit 3. I'm just going to take a second to go over some logistics and what tonight is going to look like.

So we have bathrooms right out here to the right, in case you need those, and so everyone is aware there are exits on both sides the front here. We are having a stenographer transcribe this meeting so we ask that you hold all your questions until the end of the presentation. At the end of the presentation there will be a Q and A session, and when you ask your question we just ask that you say your name, your affiliation, and then your question.

So I would say, like, my name is Maya. I'm from the EPA, and I want to know where the site is located. And I will go over that again too. This is right before the Q and A.

So now we'll go through the agenda for tonight which is a quick welcome, we'll introduce you to everyone who is here helping out the presentation and are here to answer your questions. We'll have our presentation from Aidan over here and then we'll have the Q and A.

So this is Aidan. He's the Remedial Project

1 Manager; Maya and Joel, Community Involvement Coordinators.
2 We are the point people if you have any questions or
3 concerns. We have Pete, the EPA section supervisor, and
4 Steph, who is our Human Health Risk Assessor, and Tom
5 Lieber, from the Office of Regional Counsel, and a couple of
6 people from the State, Rob and Alexander, and also
7 Jacqueline. Perfect. So that's our entire crew here to
8 answer anything that comes up. And now I'll toss it over to
9 Aidan.
10 MR. CONWAY: So thanks everybody for coming out
11 tonight. We are going to be talking about the New
12 Cassel/Hicksville Groundwater Contamination Superfund Site
13 and the proposed cleanup plan to address the groundwater
14 contamination at what we call Operable Unit 3.
15 So I'm going to start the presentation by giving
16 you some background on the Superfund process, the site
17 itself, and then the investigations that we've conducted.
18 And then we'll go over the results and the proposed cleanup
19 plan and then, like Maya says, we'll have time for any
20 questions.
21 So the Superfund process begins with what we call a
22 preliminary assessment of the site so when contamination is
23 identified at a source facility we conduct this preliminary
24 assessment to figure out what kind of contamination is
25 present at the site and, based upon that preliminary

1 assessment, we rank the hazards, and if the Site exceeds
2 certain hazards, it is listed on the National Priority List,
3 and that is what elevates it to the Superfund program. And
4 after it becomes a Superfund site we undertake what's called
5 a remedial investigation. That's, basically, trying to
6 figure out the nature and extent of the contamination that's
7 present at that site. And once we figure that out we
8 conduct what's called feasibility study where we evaluate
9 the remedial alternatives in order to clean up that site.
10 And once that is complete, that's where we are
11 today, at the proposed plan stage in the Superfund process.
12 So EPA releases a proposed cleanup plan and remedial
13 alternatives to address that contamination, and we involve
14 the community throughout this process to make sure that the
15 community is aware of what's going on in the neighborhood,
16 what the EPA is doing to clean up this contamination. And
17 after 30 days of a comment period, which for this site we've
18 already extended it. We have a 60-day public comment period
19 to allow the community to weigh in, after which we compile
20 what's called the record of decision document which is going
21 to formalize the selection of a remedy at the site.
22 And then once we have selected a remedy, we go
23 through the remedial design process where we design a remedy
24 and then we'll construct and implement that remedy. And
25 then depending on what that remedy entails after the

1 construction is completed we will conduct long-term
2 maintenance to make sure that that remedy is cleaning up the
3 contamination.
4 So today we are obviously talking about the
5 New Cassel/Hicksville Groundwater Contamination Superfund
6 Site. It's located in Nassau County and, specifically,
7 today we are talking about Operable Unit 3, which is, you
8 can see is in red here. It encompasses Salisbury and
9 Eisenhower Park, and with large, complex Superfund sites
10 like the New Cassel/Hicksville groundwater site we split it
11 up into multiple phases, or operable units as we like to
12 call them, so that we can address different geographic areas
13 of contamination or different types of contamination to make
14 sure we are cleaning the Superfund site up in the most
15 efficient way possible.
16 So to date we have three operable units identified
17 at this site. Operable Unit 1 is located up here, it is
18 south of Old Country Road and Grand Boulevard. Operable
19 Unit 3 in red here is located south of, or down gradient of
20 that, and Operable Unit 2 is the area to the east of there
21 near the Wantagh Parkway.
22 So to give you a little background on the site and
23 the site history. Investigations began with the State, and
24 in 2011 the site was transferred to the National Priorities
25 List, that's why the EPA took over the site. We compiled

1 all the data that had been collected prior to that and we
2 issued a supplemental remedial investigation and feasibility
3 study and selected a remedy for the operable unit in 2013.
4 That's that discrete area of groundwater contamination we
5 discussed earlier south of Old Country Road and Grand
6 Boulevard.
7 Shortly thereafter we began the remedial design
8 process for Operable Unit 1, and as part of that we
9 discovered the contamination in what was called the
10 far-field area, which we call Operable Unit 3 that I just
11 showed you there. So these operable units are being cleaned
12 up kind of concurrently at the same time. In 2016 we began
13 the remedial investigation of that Operable Unit 3 to better
14 identify the contamination there.
15 In 2018 we issued an order to the potentially
16 responsible parties for those facilities that may have
17 contributed contamination to the site in order for them to
18 conduct the remedial design in Operable Unit 1.
19 Then in 2019, the EPA continued our remedial
20 investigation by collecting water levels and measurements
21 and groundwater samples from Operable Unit 1 and Operable
22 Unit 3. We drilled six profile borings and installed 9
23 groundwater monitoring wells. And I'll talk a little bit
24 more about what kind of information that gives us.
25 Then in 2021 we continued by drilling an additional

1 seven profile borings, and three more monitoring wells in
2 Operable Unit 3. And with all the data that we collected,
3 we issued the proposed plan in July of 2023 to address
4 groundwater contamination in Operable Unit 3.
5 So Operable Unit 1 is that area south of Old
6 Country Road and Grand Boulevard. In 2013 we issued that
7 record of decision, and the remedy that was selected
8 included a combination of treatment technologies. So it
9 included the treatment of groundwater with in-well air
10 stripping, which is the forced circulation of groundwater
11 within these wells in order to transfer the contaminants
12 from a liquid to a gas phase, and the primary contaminants
13 that we are seeing in the groundwater are called volatile
14 organic compounds. So these are readily volatilized and
15 transferred from the liquid to the gas phase, and that's one
16 way that we treat them.
17 We also treat the groundwater by pumping and
18 treating it. So it would be pumped out of the ground and
19 sent to a treatment facility for treatment. And in 2013 the
20 record of decision also included chemical treatment in areas
21 of high contaminant concentrations. In this figure to the
22 right it kind of shows you the conceptual design, and since
23 then we've undertaken the remedial design at OU1. You can
24 see here a number of profile borings and monitoring wells
25 have been installed by the EPA, as well as potentially

1 responsible parties. A lot of progress has been made in
2 that area.
3 Those vertical profile borings are installed to
4 give us a better understanding, through drilling into the
5 aquifer or the groundwater, and we can sample the
6 groundwater and the geology at discrete intervals to figure
7 out what kind of contamination is present and at what
8 depths, and we also collected groundwater samples in 2023,
9 back in April, so that we can monitor the groundwater
10 quality over time.
11 So Operable Unit 2 is that area located to the east
12 of Operable Unit 1 and the New Cassel Industrial Area.
13 There is a couple of source facilities here, including the
14 Sylvania properties -- I'll zoom in here -- located next to
15 Cantiague Park.
16 The Sylvania properties were involved in the
17 research and development of nuclear elements as a part of
18 the early atomic energy program from about 1952 to about
19 1966. Cleanup and investigations have been conducted here
20 since about 1992, and using data that has been collected
21 over decades, the Army Corp. of Engineers published a
22 remedial investigation report which detailed the extent of
23 contamination resulting from the atomic energy program.
24 In 2022, the Army Corp. of Engineers performed a
25 pilot study of the properties to try and evaluate what kind

1 of treatment technology may be viable there.
2 The General Instruments site is located just south
3 of and down gradient from the Sylvania properties, and they
4 manufactured electrical components here from the 1960s to
5 about 1993, and investigation and cleanup activities have
6 been conducted since 1971. Currently, EPA is overseeing the
7 preparation of a supplemental remedial investigation report
8 so that we can better understand the contamination in this
9 area.
10 So now moving on to Operable Unit 3 and the
11 remedial investigation that we have been conducting since
12 2016, we conducted it in two phases. And the first phase
13 looked at the area here in Salisbury, in the northern
14 portion of the study area. As part of the first phase we
15 installed six vertical profile borings and nine monitoring
16 wells, including three shallow/deep well pairs. So that
17 allows us to look at the groundwater quality in different
18 areas of the aquifer over time.
19 We also collected water level measurements to
20 better understand groundwater flow directions and flow
21 patterns, and collected groundwater samples for tracking
22 groundwater quality over time.
23 As part of Phase 2, we looked at the area a little
24 bit further south, or down gradient. In this area we
25 installed an additional seven vertical profile borings and

1 another three monitoring wells. In the aquifer formation,
2 we collected water level measurements and groundwater
3 samples, and we did geophysical surveys to get a better
4 understanding of the geologic conditions there.
5 And so what we found through the remedial
6 investigation was that there were a number of primary
7 contaminants of potential concern, and those are those
8 volatile organic compounds that I talked about a little bit
9 earlier. So those include things like Tetrachloroethylene,
10 or PCE, Trichloroethylene, or TCE, and the breakdown
11 components of those compounds.
12 As those sit in the groundwater, over time they
13 will slowly degrade naturally, and they will break down into
14 other components at a very slow rate, including
15 Cis-1,2-Dichloroethene, Trans-1,2-Dichloroethene and
16 1,1-dichloroethene, and Vinyl Chloride, and we also
17 discovered 1,4-dioxane in the groundwater.
18 In this chart, it might be a lot to look at. Just
19 to kind of give you an understanding of some of the
20 contaminants of concern, what concentration we found, in
21 which monitoring well, and at what depth below the ground.
22 So at the top of this list we have PCE detected at
23 6,500 micrograms per liter in the groundwater at a depth of
24 380 feet below the ground surface. In monitoring well 3, as
25 you can see, TCE and Cis-1,2 DCE were also found in high

1 concentrations in the same monitoring well at the same
2 depth. And after those compounds you can see the maximum
3 detected concentrations drop off pretty significantly. And
4 it's important to also note that you can see the sample
5 depth of these maximum contaminant concentrations are
6 generally about 350 to 515 feet below the ground surface.
7 We are installing very deep wells and we are tracking the
8 water quality in very deep portions of the aquifer
9 formation.
10 So with the data that we collected through the
11 remedial investigation, EPA conducts what is called the
12 human health risk assessment in order to evaluate potential
13 future exposures to contaminated groundwater. And that's
14 important to point out because currently there are no
15 completed exposure pathways to the contaminated groundwater
16 and nobody can install drinking water wells to access the
17 contaminated groundwater. So the Human Health Risk
18 Assessment only looked at future exposures. Residents in
19 the area receive their drinking water from the public
20 municipal water suppliers that treat their water prior to
21 distribution and to meet all federal and state standards.
22 So this risk assessment looked at potential future
23 exposures if groundwater were to come in contact with
24 residents in these future scenarios without any treatment.
25 And what we found was that the future use of

1 drinkable groundwater would result in elevated risk for
2 child and adult residents, as well as workers at the site.
3 And these are the primary contaminants of potential concern
4 that contributed to the risk: PCE, TCE, Cis-1,2-DCE, as well
5 as 1,1,2-Trichloroethane.
6 So with that information at hand, the EPA develops
7 what are called Remedial Action Objectives that we put in
8 place to ensure that whatever remedy we implement that it
9 meets the Remedial Action Objectives; and the first one is
10 going to be to prevent or minimize the potential future
11 human exposure through dermal exposure, that's contact with
12 the skin, ingestion or inhalation of site-related
13 contaminants in groundwater at concentrations in excess of
14 federal and state standards.
15 The second objective is going to be to minimize the
16 potential for any further migration of that groundwater
17 contamination at concentrations that exceed federal and
18 state standards.
19 And the last Remedial Action Objective is going to
20 restore the impacted aquifer to its most beneficial use,
21 which is a source of drinking water, and by reducing the
22 contaminant levels to the more stringent of the federal or
23 New York State standard.
24 So now we are going to be talking about the
25 proposed cleanup plan that we put out July 24th which

1 evaluated four remedial alternatives to clean up the
2 contamination.
3 The first alternative is a no action alternative.
4 This is required by CERCLA. This alternative would involve
5 no further action at the site. It wouldn't cost anything.
6 However, it would not meet those remedial action objectives.
7 So we really use it as a baseline for comparison while we
8 look at the evaluation of the following alternatives, which
9 I'll talk about in a little more detail in the coming
10 slides.
11 Alternative 2 is the groundwater pump and treat;
12 alternative 3 is the Enhanced In-Situ Bioremediation and
13 Pump and Treat; and Alternative 4 is the In-Situ Chemical
14 Reduction and Pump and Treat.
15 And it's important to note that there are some
16 common elements to all of these alternatives that have been
17 proposed. So that includes groundwater pump and treat at
18 the down gradient edge of contamination where you see a
19 total concentration of contaminants of about 100 micrograms
20 per liter in the groundwater. After the groundwater is
21 pumped to a treatment facility it would be treated and
22 discharged. We would also monitor the groundwater quality
23 in the long-term to ensure that it is meeting the remedial
24 action objectives, and we would ensure that institutional
25 controls, such as groundwater use restrictions, would remain

1 in place to prevent that future exposure.
2 So the first common element is that groundwater
3 pumping and treatment, and we have proposed a couple of
4 processes for treating contaminants in Operable Unit 3. So
5 the first would be air stripping. This is probably the most
6 common treatment process. It uses groundwater forced
7 through a tower with media to aerate the groundwater and
8 volatilize those contaminants from the liquid to the gas
9 phase where they can be pumped out and treated and
10 discharged. It also includes granular-activated carbon and
11 advanced oxidation processes in order to treat some of the
12 contaminants that may not be treated otherwise.
13 Then, once the groundwater is treated to meet all
14 federal and state standards it would discharged in one or
15 more of these following options. So either a new or an
16 existing recharge basin, through reinjections to the
17 groundwater, through the underground infiltration galleries,
18 or through discharge to the sanitary sewer system or surface
19 water.
20 So now we'll talk a little bit more in detail about
21 each of the other alternatives, and you can see this figure
22 to the right here shows you the conceptual design that we
23 came up with for each of the alternatives, and I'll try to
24 break it down into some components.
25 So Alternative 2 is groundwater pump and treat and

1 it involves the installation of a series of groundwater
2 extraction wells in order to pump the contaminated
3 groundwater out of the deep portion of the aquifer that we
4 have been talking about. So there is kind of two different
5 types of groundwater extraction wells that would be
6 installed here.
7 The first component looks at the portion of the
8 study area where there was deemed higher contaminant
9 concentrations, specifically, about 1,000 micrograms per
10 liter of total contaminant concentrations. Those wells
11 would be used to remove the maximum contaminant
12 concentrations.
13 And in the southern portion of the study area, a
14 series of extraction wells would be installed to create a
15 line of hydraulic control. This would prevent the further
16 migration of groundwater contamination past this point. And
17 then after the groundwater was pumped out of the ground it
18 would be conveyed to a groundwater treatment plant through
19 an underground piping network where it would then be
20 treated, again, to meet federal and state standards, and
21 then discharged through one of those options that we talked
22 about. The total cost of implementing this alternative is
23 estimated to be about $99.1 million dollars.
24 Alternative 3 is Enhanced In-Situ Bioremediation,
25 and it is similar to Alternative 2. However, when you look

at the northern portion of this study area, rather than installing extraction wells we would install a series of injection well transects perpendicular with the groundwater flow. These injection wells would be used to inject amendments, such as microorganisms and nutrients into the deep groundwater formation in order to aid and accelerate the contaminant biodegradation that is already happening to some extent, albeit on a limited scale.

So these would be installed in the northern portion of the study area where we are seeing about 1,000 micrograms per liter of total contaminants. And then in the southern portion of the study area where we are seeing about 100 micrograms per liter at the downgradient edge of the contamination, a similar series of extraction wells would be installed to create that line of hydraulic control to prevent further contaminant migration.

Similarly, all of that contaminated groundwater would be piped into a new treatment plant where it would then be treated and discharged. And the total cost of this remedial alternative is estimated to be about $202.6 million.

The last alternative that we evaluated is called In-Situ Chemical Reduction. It is very similar to Alternative 3. In the northern portion of the study area we would also install a series of injection wells. It is

1 estimated that for Alternatives 3 and 4, we may need up to
2 about 450 injection wells in order to achieve remediation.
3 Here we would install injection wells in order to
4 inject reducing agents, rather than microorganisms and
5 nutrients. So this could be something along the lines of
6 zero-valent iron, and that would accelerate the contaminant
7 degradation that is happening right now at a very slow rate.
8 Similarly, in the southern portion of the study
9 area, we would have a line of hydraulic control extraction
10 wells. You would have piping to convey the groundwater to
11 the treatment plant for treatment, and then the groundwater
12 would be discharged. The total cost of this alternative is
13 estimated to be about $198 million.
14 So now that we know all the remedial alternatives
15 that we looked at, EPA then conducts a comprehensive
16 evaluation of these using the nine criteria that you can see
17 here. And the first two are called the Threshold Criteria.
18 We would not select a remedy that did not meet the two
19 threshold criteria. So the remedy has to protect human
20 health and the environment, and it has to comply with state
21 and federal regulations.
22 Then the following five criteria are balancing, and
23 those are kind of used to compare pros and cons, in order to
24 compare all the alternatives and to allow us to select our
25 preferred.

1 So that includes things like how well do they treat
2 the contamination in the short term; would they be effective
3 in the long-term; are they going to reduce the toxicity; how
4 implementable are they, and how cost effective are they.
5 And then once we have done that we evaluate them on the
6 modified criteria at the close of the public comment period.
7 And that's going to look at the state and community
8 acceptance of the alternative.
9 So with all that information in hand, EPA selected
10 Alternative 2 as the preferred alternative. That's
11 groundwater pump and treat, for a couple of different
12 reasons. So it's going to be the most readily
13 implementable. As I had mentioned, Alternatives 3 and 4
14 involve the construction of approximately 450 injection
15 wells in the northern portion of the study area, which would
16 present a significant disturbance to the community.
17 Alternative 2 through Alternative 4 all involve the
18 installation of extraction wells, conveyance piping, a
19 treatment plant and a recharge basin. However, Alternative
20 2 does not require installation of all of those injection
21 wells. So it's going to be the least disruptive to the
22 community and the most implementable.
23 It's also going to use proven technology, such as
24 the air stripping, the granular-activated carbon, and the
25 advanced oxidation processes we know can treat the

1 contamination present in the groundwater, and it is also the
2 most cost-effective alternative. If you noticed, it's about
3 a hundred million dollars cheaper than the next most
4 cost-effective alternative.
5 So the actual cost to construct a plan like this,
6 we estimated to be about $52 million. And in order to
7 operate and maintain the remedy over the course of 30 years,
8 which is what we estimated for the feasibility study, would
9 be about $47.5 million, bringing the total present worth
10 cost to about a little under $100 million dollars.
11 And so with that, that kind of concludes the
12 presentation. For the next steps, as I had mentioned, the
13 public comment period for the proposed plan is open right
14 now. We have extended it an additional 30 days to allow the
15 community to thoroughly review the documents that we
16 published and to submit comments, after which point on
17 September 22nd we will compile all the comments into what's
18 called a responsive summary. And there we will compile them
19 and respond to each and every comment and we will prepare a
20 record of decision which is going to formalize the selection
21 of the remedy at the site.
22 So you can address those written comments to me.
23 This is the physical address of the office. You can e-mail
24 them to me at my e-mail up here. You can also find more
25 resources for the site. So we maintain public information

1 repositories at the Westbury Public Library north of here,
2 as well as the EPA Records Center in Manhattan.
3 You can also contact the community involvement
4 coordinators if you have any questions, or myself. And you
5 can find all of the information that you need on our website
6 for the New Cassel/Hicksville site. The address is down
7 here. And these slides will be posted there so if you do
8 need anything, you can find that information there. And
9 with that, I think we have plenty of time for any questions
10 and comments.
11 I think Joel will pass out a microphone, if need
12 be. Otherwise, that conclude today's presentation. Thanks
13 everybody for sitting through that. Any questions right off
14 the bat?
15 MR. CARDOZO: Dick Cardozo. I was on the original
16 committee which I'm told goes back to the 1990s. You gave
17 the date of 2011 on there. I'm just curious, do you happen
18 to know when the State got involved before the feds did?
19 MR. CONWAY: Yes. So If I'm not mistaken, I think,
20 initially, the Nassau County Department of Health began
21 investigations in 1986, and then the State took over and
22 conducted some response actions.
23 MR. BRUCIE: Thank you very much for an excellent
24 presentation. My name is Joseph Brucie. I am President of
25 the council in this community of various organizations.

First question is, assuming that this public commentary period, there was no relation to the communities, when will this work actually start?

MR. CONWAY: So that's a good question. It's kind of variable and it's hard for me to say right now when that work would start. We go through the remedial design phase next. So we would collect additional information following the selection of a remedy. That process could take a few years, if I'm not mistaken, after which point then we would actually begin constructing and implementing that remedy.

MR. BRUCIE: All right. Second question that might lead to a third. The second question, do you have a reference point where you have had a similar situation here on Long Island and this technology has been deployed to do remediation? Do we have like -- like, for example, have you done this before in other areas of Long Island where this technology has been deployed and the outcome has been successful?

MR. CONWAY: Yes. Not in one of my sites, specifically, but maybe, Pete, do you have anything come to your mind maybe?

MR. MANNINO: Yes. The closest site would be the old Roosevelt Field Superfund site. And there we did a pump and treat system for about seven or eight years, and that's been effective.

1 MR. BRUCIE: And it's been effective, obviously?
2 MR. MANNINO: In reducing contaminant
3 concentrations, approaching the cleanup levels that are
4 provided in the ROD.
5 MR. BRUCIE: All right. And one more question, if
6 I may. I think I understood that once this gets started it
7 goes over 30 years. So that's a long time period and I'm
8 not sure you will be around after 30 years, but how does
9 this work and how does the EPA transition to new teams to
10 make sure that this gets done and gets done effectively?
11 MR. CONWAY: That's a really great question. So my
12 job as the remedial project manager is to oversee the
13 Superfund site for as long as I'm here. So I will oversee
14 the remedial design phase and the next stages of this
15 process. If I were to leave, somebody else would take my
16 place. Pete probably won't be here for too much longer, but
17 a --
18 MR. BRUCIE: Well, if the project gets started and
19 then somebody would go, that's my concern.
20 MR. MANNINO: No. The EPA has sufficient resources
21 to see this to completion.
22 MR. CONWAY: And a lot of these sites take many,
23 many years, sometimes decades, to clean up. So we always
24 ensure that we are doing what it takes to meet those
25 objectives.

1 MR. BRUCIE: I'm assuming at the end of the 30-year
2 period there will be a notification sent out to say it's all
3 done?
4 MR. CONWAY: Yes. So what will happen, in sites
5 where the remedy carries on for many years, we conduct what
6 are called the five-year reviews. So after the remedy is
7 constructed and implemented, we begin the five-year review
8 process. So all of our sites, every five years, I believe,
9 do what's called the five-year review with my team of hydro
10 geologists, risk assessors, and we evaluate what kind of
11 progress is being made at the site, if there are any changes
12 that need to be made to the remedy; make any recommendations
13 for the next five years, that kind of thing. So that's part
14 of that process.
15 MR. BRUCIE: I guess the local water companies are
16 on board?
17 MR. TROIANO: We're here. My name is Robert
18 Troiano, I'm the Counsel to the Town of North Hempstead, and
19 I've got an interest, governmentally, and then I've got a --
20 there is a personal interest, as well. It wasn't clear from
21 your presentation if New Cassel enhances it's water and
22 needs to be treated by this project.
23 MR. CONWAY: So the New Cassel/Hicksville
24 Groundwater Contamination Superfund site comprises a
25 widespread area of groundwater contamination. I believe it

1 encompasses a number of different well fields over the span
2 of about six-and-a-half square miles. So I think I'm not
3 sure exactly which area within New Cassel you are talking
4 about, but there are a number of State investigations
5 occurring in that area, as well, that could be potentially
6 contributing to the water contamination.
7 MR. TROIANO: Firstly, you have the New Cassel
8 Industrial Park?
9 MR. CONWAY: Yes. The New Cassel Industrial area
10 that's right here; is what you are talking about?
11 MR. TROIANO: Well, yeah. That was in the area
12 that's a little bit south of the industrial park on the
13 left-hand side. That's the part of New Cassel, part of the
14 Town of North Hempstead. So in those two areas their
15 groundwater is still contaminated. I know that they are of
16 working in that area for a long time now. So I'm not sure
17 if that's still going to be a part of this treatment
18 project.
19 MR. CONWAY: So, I mean, we don't have the exact
20 specifications of that treatment project where that would be
21 sited just yet. That would be done during the remedial
22 design phase. There were two public water supply wells
23 here, the Bowling Green wells, they are no longer in
24 service. So the residents in that area would receive their
25 water from a public municipal water supplier elsewhere. I'm

1 not exactly sure where it would come from.
2 MR. TROIANO: So then you mentioned that because
3 these areas are being serviced by a local water company, and
4 they do a great job of making sure the water is potable.
5 But then you also said that future residents, and that
6 people may in some way come close to contaminated water, or
7 make it airborne somehow. I just want to understand how
8 that would happen. And when you say "future," are we
9 talking about 30 years from now, are we talking about five
10 years?
11 MR. CONWAY: Yes. That's a good question. So the
12 contamination that we are looking at, again, is in the deep
13 portion of the aquifer. So the potential future exposures
14 that would occur would be if somebody illegally installed a
15 well that could reach that contaminated groundwater.
16 Currently, there are prohibitions on that. In
17 Nassau County you can't install that without a permit, and
18 they do have groundwater use restrictions that would prevent
19 that.
20 Also, it's very costly to dig down that far. It
21 costs us a lot of money to install a well down there. So I
22 don't think anybody would want to do that. But that's kind
23 of how somebody would be able to come in contact with the
24 contaminated groundwater.
25 MR. MANNINO: I would just add that we are required

1 to evaluate the alternatives, as well as any risks absent
2 any institutional controls. So currently there are
3 governmental controls in place that restrict drilling of
4 wells for drinking water purposes. So you are required,
5 under the NCP, to evaluate, absent those controls, would
6 there be potentially unacceptable risks. So the exposure
7 that they describe would be in the event that those
8 institutional controls were no longer in place.
9 MR. TROIANO: So what I believe they are saying is
10 it really takes a manmade action to bring that water up to
11 the surface level where it could impact people.
12 MR. MANNINO: That is correct, yes.
13 MS. GLISCI: Anita Glisci, G-L-I-S-C-I. I am a
14 resident of Merillon Avenue, and my concern is the air
15 intrusion. Have you done any air intrusion studies from
16 what happens to our basements if there are cracks in the
17 aquifer area on the sandy areas going into our homes as a
18 result of these VOCs occurring?
19 MR. CONWAY: Yes. That's a good question. So as
20 part of the Operable Unit 3 investigation, we evaluated
21 vapor intrusion as a potential pathway. We found that that
22 pathway could not exist at Operable Unit 3 due to the depth
23 of the groundwater contamination. So we didn't encounter
24 any volatile organic compounds until about 170 feet below
25 the ground surface, at which point that vapor intrusion

1 pathway could not exist. There is enough clean groundwater
2 between that and the top of the water table that we would
3 not expect that to occur.
4 As part of the Operable Unit 1 work that was done
5 in the earlier 2000's, I believe that the New York State
6 Department of Health conducted a vapor intrusion evaluation.
7 I think it was in like 2007 or 2009, and they tested a
8 couple of properties and a school, and I believe no action
9 was taken at those properties. And one was scheduled for
10 monitoring.
11 MS. GLISCI: I'm sorry. My question is emerging
12 contaminants. What could we have -- do we have any
13 provisions in this proposal for new emerging contaminants
14 coming out that could be impacting this area? Like, we just
15 found one for 1,4-dioxane a few years ago. We didn't know
16 that it existed. And now we have the technology to be able
17 to test for that. So any future contaminants, would they be
18 included in this proposal to strip -- air strip and
19 remediate?
20 MR. CONWAY: Yes. So one of the treatment
21 technologies that we talked about in -- a little bit later
22 in the presentation was advanced oxidation processes. And
23 that's kind of the treatment technology to treat for
24 1,4-Dioxane, and we have included that in this proposed
25 plan.

1 MS. GLISCI: Will that be part of the Bowling Green
2 water districts ability to treat that?
3 MR. CONWAY: I don't know if I can speak on that.
4 Is there anybody that can --
5 MR. REINHART: John Reinhart, Commissioner, Town of
6 Hempstead, Department of Water. For the purposes of this
7 meeting, I guess we are responsible for the Bowling Green
8 water district, the Roosevelt Field water district, the East
9 Meadow water district, and the Levittown water district.
10 All four of those districts, in one way or the
11 other, are potentially being impacted by this. As we stated
12 earlier, the wells in Bowling Green have actually been
13 offline now for ten years. We took them offline back in
14 2013, as we felt that there was a contaminant, and it was
15 known as the unregulated contaminant monitoring rule, those
16 were called at that time.
17 So since that time, Bowling Green has been getting
18 its water from Roosevelt Field and East Meadow. It has been
19 pumped in from those two districts. We have installed an
20 AOP, that's advanced oxidation process treatment, at our
21 wells that are impacted with Dioxane currently over the MCL,
22 and we will continue to keep moving forward on that process
23 to remove any and all presences of Dioxane for our
24 customers. That's a commitment of over $225 million at this
25 point that the Town board has made with that respect.

1 Right here with me, since we are talking about
2 water, is Paul Granger from the Hicksville water district,
3 equally impacted by this.
4 Councilman Troiano asked before about the Westbury
5 area, the Westbury water district. I actually was with the
6 Westbury Water District yesterday. The wells that we are
7 talking about, they actually have recently put treatment on
8 those wells and there is another well that they are putting
9 treatment on soon. Right now it's out of service, but as
10 Paul can attest to, or any of us can attest to in this
11 industry, we are held to very, very high standards.
12 We do a tremendous amount of testing on the water
13 to make sure that any appearances that are out there we are
14 meeting or exceeding those standards for you. It's a very,
15 very costly process. We are monitoring this very, very
16 closely. We will be putting in another comments along with
17 Paul, I'm sure, as we do have some concerns about the -- we
18 appreciate the method of the proposal. We have some
19 questions about the methodology that was mentioned because
20 we would need to make sure that the districts are properly
21 protected in this case.
22 MS. GLISCI: Fine. So that the well that's located
23 on Iris Lane is no longer with the VOC power? It's no
24 longer --
25 MR. REINHART: Neither of those two wells have been

1 used. We still use the current storage tanks, we fill it
2 from the other districts, and then we pump it out to
3 maintain pressure.
4 MR. GRANGER: Just one question. Paul Granger,
5 Superintendent, Hicksville Water District, just to follow-up
6 with regard to the emerging contaminants. On the surface we
7 need to do a deeper dive, but we just need the right
8 treatment technology to address emergent contaminants. One
9 concern I had with regard to the comments, if one change is
10 to the GAC, my concern is as the State and the EPA looks to
11 regulate these compounds more, it would be the short chain
12 compounds, which are inactivated carbon and certain
13 compounds, this is the best choice.
14 So just the comment would be I would like to have
15 EPA look into the future, and we are not looking into the
16 long-term future, but it's a relatively short-term future
17 here. I think these compounds will be regulated so now is
18 the time to do some cleaning or, perhaps, some expansion to
19 accommodate those comments. Thank you.
20 MR. CONWAY: Any other questions?
21 MR. SACKMAN: Joe Sackman, resident of Hicksville,
22 also co-chair of the Long Island Press Coalition. The
23 question is about the options for remediation. Is there a
24 better success rate with Option 3 or 4 compared to 2? And
25 why, other than the inconvenience of additional injection

1 wells, would you prefer Option 2?
2 MR. CONWAY: Yeah. So one of the things that we
3 looked at is, you know, how well these alternatives might do
4 in similar sites, like Pete had mentioned the old Roosevelt
5 Field. We are using proven technologies to treat the
6 contaminants that we know are present. As we are talking
7 about the emergent contaminants, there are contaminants in
8 the groundwater that may not be treated through the
9 injection amendments, whether that is In-Situ Bioremediation
10 or In-Situ chemical reduction. We can't rely on those
11 treatment technologies to treat certain types of
12 contamination.
13 So with groundwater pumping and treating, we can
14 make sure that all of that, the different types of
15 contaminants are sent through that whole treatment train so
16 we can ensure that everything is taken care of. Does that
17 make sense?
18 So it's not just about the methodology of it and
19 the disruption to the neighbors. It's about how well that
20 the treatment will -- how effective it is.
21 MR. JOSEPH: Jeremy Joseph. How is it determined
22 that these contaminants are the result of past industrial
23 activity as opposed to more recent current industrial
24 activity, because a lot is happening in the New Cassel
25 industrial area. I'm just curious about the process.

1 MR. CONWAY: So individual source facilities
2 response actions are taken there. So the State has a pretty
3 comprehensive program for tracking and cleaning up those
4 sites in this area. And where we are finding groundwater
5 contamination is several hundred feet below the ground
6 surface, far away from any potential source areas, we are
7 kind of able to link the past use of those chemicals back
8 when they were being used in the '60s, '70s, that kind of
9 thing, and we can kind of use those contaminants to identify
10 source facilities and things like that. Does that answer
11 your question?
12 MR. JOSEPH: Yes. It's not particularly ambiguous.
13 You are able to make pretty clear connections to past
14 contaminants?
15 MR. CONWAY: Yes. Anybody else?
16 MR. SACKMAN: Joe Sackman. So I remember reading
17 the report that the flow of the water is southwest, et
18 cetera, and there is a plan -- the Sands Casino is planning
19 to build a large complex next door, and I don't know -- and
20 I'm not an expert -- but would such a development -- it
21 would probably have a large demand on the water supply,
22 affect the remediation to be pulling the water in that
23 direction, such like you are not going to start pulling the
24 water up or, you know, does it have any kind of negative
25 effect on what you are trying to do in that sense, if you

1 had a large construction that comes in and there is a large
2 demand? There is a lot of people coming in. I'm sure they
3 will all want to drink water and bathe, et cetera. So would
4 that have any kind of effect?
5 MR. CONWAY: What was the facility? You said it
6 was a casino?
7 MR. SACKMAN: The Sands casino. So right next door
8 to Eisenhower Park is the Nassau Coliseum. Currently, there
9 is a hotel there, but they are supposedly going to be
10 building a casino there, or some sort of resort. A lot of
11 people are going to come in, they will be doing whatever
12 they are going to do. I'm sure there will be a large
13 demand. The water district might have better answers. I'm
14 just curious of what kind of effect it might have on what
15 you are trying to do in terms of resolving that issue?
16 MR. CONWAY: Yes. I mean, you might be in better
17 position to answer that.
18 MR. REINHART: John Reinhart. So before I listed
19 the four water districts. For this purpose, the Uniondale
20 Water District is one of the water districts, and the
21 Mitchell Field water supply area are the two areas in which
22 the proposed Sands facility would be located. Any
23 development there is going to be connecting to the existing
24 public water supply. So the water would not necessarily be
25 from that site. It's from existing public supply wells over

there.

Potentially, additional wells will be drilled to meet the demand. We are talking to the developers about that now. Any siting of that well, all -- not just this particular site, but the old Roosevelt Field site that we discussed earlier, the Paisley site is one of the sites that are out there. They are all taken into consideration when we site wells.

So, yes, while it will create a demand on the water supply, it would not be specifically a demand at that site right there. It would be the existing public water supply wells.

MR. CONWAY: Does that answer your question? Any last questions?

So I appreciate everybody coming out tonight. This is a really important part of the community involvement process through the Superfund program. So we do value everybody's input. I have some business cards if you guys need to reach out to me at some point down the line. Feel free to take a business card. You can contact me that way, and thanks for coming out. I appreciate it.

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I hereby certify the foregoing to be a true and accurate transcript of the proceeding.

Nancy Silberger

Nancy Silberger,
Official Court Reporter