

1 TITTABAWASSEE RIVER, SAGINAW RIVER & BAY SITE

2 Public Meeting on Middleground Island

3 Proposed Cleanup Plan

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11 The Public Meeting,

12 Taken at 300 West Lafayette Avenue,

13 Bay City, Michigan,

14 Commencing at 6:34 p.m.,

15 Tuesday, March 10, 2020,

16 Before Cheri L. Gleyre, CSR-6548.

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1 PRESENTERS:

2 Diane Russell - U.S. EPA Community Involvement Coordinator

3 Mary Logan - U.S. EPA Project Manager

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5 ALSO PRESENT:

6 Stephen Blair - Cameraman, WNEM TV5

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1	INDEX	
2		
3		PAGE
4	Opening by Diane Russell:.....	3
5	Presentation by Mary Logan:.....	5
6	Question and Answer Session:.....	18
7	Comments Session:.....	38
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
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1 Bay City, Michigan
2 Tuesday, March 10, 2020
3 6:34 p.m.
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5 MS. RUSSELL: We've got a lot to cover so
6 we're going to go ahead and get started. We have a
7 nice big crowd tonight and I just want you to know
8 there's a lot of civic activities tonight, so I'm very
9 happy that you chose this one to participate in. So
10 thank you for joining us this evening.

11 Again, tonight we're going to be talking
12 about the EPA's proposed cleanup for Middleground
13 Island, and our project manager for the EPA, Mary
14 Logan, will be going over a few slides here. I do
15 apologize, we don't have audio equipment tonight, so
16 we will do our best to project. If there's something
17 that you missed, let us know, raise your hand. We
18 will repeat that and, you know, do our best to
19 enunciate so you can hear clearly.

20 As you came in we've got -- we had a fact
21 sheet if you did not get that, and that goes over and
22 explains what we're proposing to do and also gives the
23 times for public comment, so that's all referenced
24 here. I'll remind you of those things tonight.

25 And then we have an agenda. I just wanted

1 to point out this is a typical meeting that EPA will
2 put together but there's one difference. Tonight we
3 actually have a court reporter, so we've got a setup
4 where we're going to record everything that is said
5 tonight so we can post it on the Web for your
6 reference. And also there's going to be a break after
7 we do the presentation and do question and answers,
8 and we're going to go into the public comment portion.
9 And basically the way that that is set up is you can
10 submit a comment orally and the court reporter will
11 record that. The only thing I ask is that if you plan
12 to do that, grab one of these cards so that I can
13 announce in order.

14 Note that when we're at the public comment
15 portion of meeting EPA will not respond to those
16 comments tonight. We're going to wait until the
17 public comment period is over, which ends March 30th,
18 and we'll respond to those comments in a document we
19 call a responsiveness summary. So if you have
20 questions, go ahead and ask those questions during the
21 question and answer session. We will interact and be
22 able to response to those then, but after the break we
23 will not be able to respond because we're assuming
24 that those are oral comments for the court reporter,
25 okay? So if you plan to do that, don't forget to pick

1 up these numbered cards.

2 Well, I did forget to introduce myself, so
3 my name is Diane Russell and I'm EPA's community
4 involvement coordinator, and I'm just going to assist
5 with all of you tonight as you learn more about the
6 site. In addition to folks from EPA, we have some
7 other folks here from the State agency that are
8 available to answer questions. And I see that we've
9 got some folks in the back who are here from Delta
10 College. Welcome. Thank you for coming and learning
11 about cleanups in your community, so thank you very
12 much. And, again, I would like to thank all of you
13 for coming tonight.

14 At this time I'm going to go ahead and
15 introduce Mary Logan, EPA's project manager for the
16 site, to go over what we're proposing.

17 MS. LOGAN: Thanks, Diane.

18 Okay. I don't know that I have the same big
19 voice that Diane has, so again I want to emphasize
20 that if you cannot hear me, please raise your hand,
21 flag me down and I will try to make sure that you are
22 at least hearing most of the content tonight.

23 As Diane said, I am Mary Logan. I am a
24 project manager for the United States Environmental
25 Protection Agency working on a project that we call

1 the Tittabawassee River, Saginaw River and Bay Site.
2 And Middleground Island is a small piece with that
3 site. We are proposing a cleanup plan and we will
4 finalize that cleanup plan after we've evaluated
5 public comments.

6 So tonight I would like to talk about our
7 recommended cleanup action, just lay that out so you
8 know what we're talking about and then give you some
9 brief background information and talk about what we
10 found, findings of the investigations we've done on
11 the island and then discuss the various options or the
12 two options, talk about next steps and then take
13 questions and answers. So that's what we're going to
14 cover in a few slides here.

15 So just to cut to the quick, EPA's
16 recommended cleanup options is where we have found
17 levels of dioxins or furans greater than 250 parts of
18 dioxin in a trillion parts of the soil, or parts per
19 trillion. Those residential properties are eligible
20 for cleanup, and we're proposing to dig that
21 contaminated soil out of those yards, replace it with
22 clean soil and regrow, revegitate the yard.

23 The pictures you see here, we've been doing
24 cleanups along the Tittabawassee River since 2015, and
25 these are some dig and backfill of the Tittabawassee

1 River properties. Now, one of the differences here is
2 you don't see houses in these pictures. In this case
3 cleanups are in the low parts near the river itself,
4 but we have been doing residential property cleanups
5 since 2015. So as an overview Middleground Island, or
6 you'll see in the slides MGI, is part of the larger
7 Tittabawassee River, Saginaw River and Bay Site. The
8 island is in the Saginaw River about 7 miles upstream
9 of the Bay, and you guys pretty much know where you're
10 at, most of you.

11 Cleanups are proposed for those residential
12 properties that exceed EPA's cleanup number. So this
13 figure will give you a little bit of -- okay, Diane,
14 does it -- I'll try to talk forward.

15 The Dow plant has existed in Midland,
16 Michigan since the early -- since 1890's. As part of
17 their processes, like many industries at the time,
18 wastes were released into the river, and so the site
19 that we're investigating includes the lower 24 miles
20 of the lower Tittabawassee River, the Saginaw River
21 and whatever portion of Saginaw Bay contamination may
22 have migrated to. So Middleground Island is in the
23 Saginaw River about 20 or so miles from Midland and
24 the Dow plant.

25 The current use of the island is three-fold

1 really. The south end is largely residential homes
2 and properties. The north end is recreational. Here
3 you are at the Boys and Girls Club. You've got the
4 Rowing Club, Bigelow Park and there's multitask trails
5 and Sugar Trails, and in the middle there's a historic
6 landfill that operated from the 1950's -- 1956, thank
7 you, to '84 but also the Corps of Engineers operated a
8 facility where they dredged sediments from the Saginaw
9 River, placed them in a facility to get the water out
10 and those sediments were used as daily cover at the
11 landfill, but anecdotally we have heard that those
12 sediments were also made available for fill in certain
13 properties, and so we believe that those contaminated
14 sediments may have been used at some of the properties
15 on the island.

16 So in terms of the residential land use
17 there are about 41 acres of the 175-acre island that
18 comprise residential properties or properties that
19 could be residential in the future. And of those
20 there are about 37 residences on them, and the home
21 construction probably started in the 1950's. So this
22 figure I'm going to come to a couple of times, but it
23 really is oriented -- this is the north end, this is
24 the south end, so we've got residential, the landfills
25 and the recreational areas as part of the island

1 makeup today.

2 We found some dioxins in Middleground Island
3 soil in some screening samples that EPA had Dow take
4 in 2018, and so in 2019 both EPA and the State
5 requested Dow to sample, and they sampled virtually
6 every residential property -- there's a couple we'd
7 still like to sample -- as well as most of the
8 recreational properties and some of the commercial
9 properties. We found dioxin in the soil that is
10 believed to have come from early disposal in the early
11 1900's from Dow's plant in Midland. That disposal of
12 sediments moved down the river and ultimately we
13 believe were dredged by the Corps and used as fill on
14 the island.

15 Of the residential area we sampled 45
16 different areas we call sampling units, and of those
17 45 areas sampled, 17 of those exceed EPA's cleanup
18 number and are eligible for cleanup. The levels we
19 found, the numbers are up there, but they range from
20 14 parts per trillion to 1,290 parts per trillion.
21 Dow also sampled the non-residential areas. We would
22 compare those to 2,000 parts per trillion and all of
23 those samples came back well below 2,000 parts per
24 trillion. In fact, the playground areas here at the
25 north came back below the 250 parts per trillion

1 number. So that's why we're focusing our cleanup
2 efforts on the residential properties.

3 About 15 acres in total are currently
4 believed to be eligible for cleanup, and of that 15
5 acres there's about 35,000 cubic yards of soil in
6 place, but when we dig it out it will fluff up and
7 become about 46,000 cubic yards that we would have to
8 manage and dispose.

9 So the potential for exposure, why are we
10 cleaning up? You know, the term dioxins refers to a
11 large family of chemicals of similar chemical
12 composition. EPA has concluded that there can be some
13 health effects if you have frequent exposure over a
14 long period of time, so depending on the consistency
15 of your exposure there could be health effects, so we
16 want to prevent that exposure.

17 Now, in the country a lot of exposure to
18 dioxins comes from the food source, but for
19 site-related if you accidentally eat some dirt or by,
20 you know, getting it on your hands and touching your
21 mouth or eating dirty fruits or vegetables you can
22 consume a small amount of contaminated soil. So the
23 proposal is intended to replace that contaminated soil
24 with clean soil in the event that somebody was to
25 accidentally eat their dirt.

1 We really only have two options for cleaning
2 up residential properties and they are in more detail
3 in the fact sheet in here, but it's really cover the
4 material with clean material, cover the contaminated
5 material with clean soil, or dig it up and replace it
6 with clean soil. Really there are no other
7 variations. So that is what we're comparing, and we
8 have proposed alternative two, which is to dig it up,
9 replace it with clean soil and revegetate the yards.

10 Now, whether we pick covering or excavating
11 and backfilling, there are some common things that we
12 would have to do regardless of what we pick. We would
13 have to get property-specific designs, so any yard
14 that needs a cleanup, Dow is expected to do the work.
15 They would work with the property owner and develop a
16 plan for that particular property.

17 The work may require temporary roads on the
18 island and temporary staging areas for the equipment
19 and materials, the soil that's being brought in or
20 staging of the soil that's being hauled out. EPA and
21 EGLE, the State agency that's our counterpart, would
22 be overseeing and monitoring the cleanup to make sure
23 that it's done in the way that it's planned to be
24 done. There would be a health and safety plan.
25 Because we'll be working closely with some of the

1 properties we want to make sure that the property
2 owners and their families are safe while the work is
3 under way, but also the community and the workers
4 themselves need to be protected while we do the
5 cleanup.

6 And then finally I'm going to talk about
7 this in more detail, but there are some constraints
8 about traffic on the island. I'm sure those of you
9 who live here are very well aware of that, and so we
10 will need a traffic management plan no matter what we
11 end up doing.

12 So when we look at two options, the cover it
13 up or dig it up option, we compare those against
14 effectiveness, implementability and cost. And
15 effectiveness looks at what are the short-term
16 impacts, how reliable and safe is the option in the
17 long term, can we maintain that safety for the long
18 term. Implementability is really about building, can
19 we build the thing, will the community allow us to
20 build it, are the technical components available. And
21 then cost is just cost. So in this case you can see
22 the comparison, and this is a table that's in your
23 fact sheet, but we really see that the recommended
24 alternative costs more and is probably more difficult
25 to build, but we believe it's more reliable in the

1 long term because when you put clean cover material,
2 future homeowners will need to know that cover is
3 there, they will need to agree to maintain it, and so
4 there may be some question about what future
5 homeowners would know or agree to do. So we believe
6 removing the material is more reliable for the long
7 term.

8 So in terms of more detail about
9 effectiveness, we think that both of the alternatives
10 do short-term good, they would protect people from
11 contacting the contaminated soil. Both alternatives
12 also would have short-term impacts. You need
13 construction equipment, you need heavy -- you know,
14 you'll need trucks bringing in material, you'll need
15 construction equipment around the homes, and that can
16 be disruptive for the people who are here on the
17 island. And then both alternatives would require
18 vegetation to be -- most existing vegetation would be
19 cleared away. But I do want to say -- we had a
20 meeting prior to this. I want to emphasize, if you
21 have a mature -- if you're an eligible property and
22 you have a mature tree or some mature trees, we are
23 able to try to work around saving mature trees. And
24 that's, again, a property-specific decision where if a
25 tree -- if you want a tree out and if it's allowed if

1 you want to try to work around it, that can be done.

2 But other things, grass and shrubs, bushes, typically
3 are removed and replaced.

4 Now, both alternatives are expected to
5 generate a lot of traffic, and so you'll see the
6 numbers up here. A clean cover would be about 750
7 truckloads of clean soil brought in, and the remove
8 and replace would involve about 1,100 trucks taking
9 contaminated material off the island and then bringing
10 clean material in. So there are effects, both safety
11 and emissions effects, from that trucking.

12 There are worker safety concerns, again,
13 working around heavy equipment. We would have a
14 health and safety plan to address that. And then, as
15 I said already, alternative one may be less reliable
16 in the long term if people don't understand and comply
17 with the restrictions on the clean cover and leaving
18 it in place.

19 So to get the job done, to build it,
20 community acceptance is evaluated after we take public
21 comment, but if a community is opposed to actions,
22 that's something we need to take in mind. We would
23 need agreements from the individual property owners
24 that work would be done on their property and some
25 owners we believe might be reluctant to put long-term

1 controls on their property if we put a cover down.
2 EPA and EGLE will need to approve the final disposal
3 location for the contaminated soil, and then traffic
4 management is probably the biggest implementation
5 challenge that we think we're going to see on the
6 island.

7 So, again, going back to the map I showed
8 you earlier, vehicle access, as I'm sure many of you
9 know, is very limited. We have just the two bridges
10 and --

11 MS. RUSSELL: That's on page 2 of the fact
12 sheet, if you want an up-close look.

13 MS. LOGAN: So we just have one set of
14 bridges that brings you onto the island. Evergreen
15 Drive is a very narrow road that goes down the island,
16 and currently there are no traffic controls to help
17 you turn on and off Evergreen Drive and to get onto
18 the main road. So there's a lot of constraints in
19 terms of getting vehicles on and off the island.

20 So a traffic-management plan will be an
21 essential part of the program. We intend to develop
22 and follow a traffic-management plan or have Dow
23 develop and follow it, and that would maintain access
24 for the property owners and emergency vehicles. We
25 would have safe access getting on and off Evergreen

1 Drive from the main streets and we would have
2 extensive communication with (inaudible) and
3 stakeholders just to make sure everybody's aware of
4 the plans, they're aware of the truck patterns and
5 what's going on.

6 Additionally, there will be pre-construction
7 evaluations of the current conditions on the island,
8 and if there's any damage as a result of the
9 construction, that will be repaired and replaced as
10 necessary. We will also try to control and manage
11 dust and mud on the roadway during construction.

12 So that's a very high-level overview of the
13 cleanup plan. As Diane said, we are in a public
14 comment period that ends March 30th, so you can submit
15 comments here tonight, you can submit written comments
16 either here tonight or in the mail or e-mail.

17 Once we have the comment period concluded,
18 our next steps will include EPA and EGLE will work
19 together to take a look at the comments. We will
20 evaluate whether we go ahead with the proposed plan or
21 whether we change the plan based on comments. Then we
22 will finalize the plan after we've reviewed those
23 comments.

24 We expect Dow to begin preparing for
25 construction, so Dow is expected to do the work, and

1 they will start working on evaluating different
2 properties in terms of what would be needed for
3 design. They will begin working on traffic-management
4 plans and health and safety plans, and we expect Dow
5 to implement the cleanup as soon as possible. But
6 originally we had hoped that that would start in 2020.
7 We are finding that the water levels are going to make
8 excavation of material probably -- very next to
9 impossible, so we expect the planning to start this
10 year but construction to start in 2021. And we would
11 work with the different affected owners to see if
12 there are any short-term steps beyond the ones that
13 have already been taken that we would talk about. And
14 that was my last slide.

15 MS. RUSSELL: All right. So thank you,
16 Mary. And I know that was -- maybe this is the first
17 time you're hearing about this. It may be a lot to
18 absorb. Don't worry if you missed a few slides. We
19 will post this on our website, and our website
20 address, you don't have to memorize that tonight
21 because it's on your fact sheet as well as the agenda
22 at the bottom. So we'll have these slides posted
23 after this meeting so you can refer to that then.

24 So now that you've kind of got an idea about
25 what's going on with what the plan is, what are some

1 of your questions? We can get started with that.

2 Yes?

3 MEMBER OF AUDIENCE: Is there any talk of
4 the back channel, what's going on under the water
5 there, because that was never dredged?

6 MS. RUSSELL: Never dredged, the back
7 channel?

8 MEMBER OF AUDIENCE: To my knowledge.

9 MS. LOGAN: So are you talking about this
10 side?

11 MEMBER OF AUDIENCE: Yes.

12 MS. LOGAN: Okay. So, as I said -- and I
13 didn't get into a lot of detail, but this island is
14 part of the bigger Tittabawassee River, Saginaw River
15 and Bay Site, and so eventually -- we've been working
16 in the Tittabawassee River since 2007, and so
17 eventually we will be evaluating the Saginaw River to
18 see what, if any, actions might be needed. Because we
19 found the conditions on the island and people are
20 living here, we're moving ahead with the project, but
21 there will be sampling of the Saginaw River as we move
22 downstream but not immediately.

23 MS. RUSSELL: And you mentioned before where
24 we think that the source from this material -- isn't
25 necessarily from the river channel here, right, but

1 being dredge material which may have come upstream?

2 MS. LOGAN: Yes.

3 MS. RUSSELL: So essentially we'll be
4 looking at the river, but this isn't where this dioxin
5 came from in this portion of the river here, so we'll
6 be looking at this later, okay?

7 Yes?

8 MEMBER OF AUDIENCE: What percentage of our
9 properties contain, 100 percent or the whole yard come
10 out, do you know?

11 MS. LOGAN: So for the people in the back
12 that didn't hear it, and if I misspeak your
13 question -- I'm going to try to repeat questions
14 because as you're facing me I don't think these folks
15 can hear. So you were asking what percentage of a
16 yard --

17 MEMBER OF AUDIENCE: Yes.

18 MS. LOGAN: -- contains contamination if you
19 have eligible levels? So the way we set up the
20 sampling program is we looked at -- we took one sample
21 that averaged sediment or composited samples from the
22 entire yard. One of the things we might want to
23 evaluate is whether we look at sub areas within the
24 yard to get a better picture of that, but right now it
25 represents the entire yard.

1 MS. RUSSELL: Yes?

2 MEMBER OF AUDIENCE: So how much cover -- if
3 you do the cover option, how much cover goes on versus
4 how much do you excavate down and replace? I mean,
5 that's a big question.

6 MS. LOGAN: Again, for the folks in the
7 back, I think he was asking about what is the cover
8 thickness versus how deeply do you excavate and
9 replace. So for cover we've been looking at -- the
10 technical document is looking at 1 foot of clean soil.
11 The way we sampled the yards is we initially looked at
12 the top 6 inches, but we've sampled down to 30 inches,
13 and in most cases we would expect to -- and what we're
14 seeing is in most cases we would expect it to be 1
15 foot of excavation or 2 feet of excavation.

16 MS. RUSSELL: Yes?

17 MEMBER OF AUDIENCE: What do you expect the
18 length of the project to be? Can you do it in a
19 season, is it going to take three years, how long?

20 MS. LOGAN: Once we start the construction
21 we're hoping that it would be done in a construction
22 season. There's been work done on the Tittabawassee.
23 We're even thinking maybe two to three months if
24 things go really well, but that means, you know, you
25 don't have acts of whatever, weather.

1 MS. RUSSELL: Yes?

2 MEMBER OF AUDIENCE: Just a comment with --
3 Evergreen Drive is a chip and seal road, and you start
4 running 1,100 loads of dump trucks up and down that
5 road, I'm just concerned about how much of it's going
6 to be left. I know you fix whatever you broke, but
7 that needs to be taken into consideration.

8 MS. LOGAN: So, again, this is a comment
9 about the condition of the road and Evergreen -- the
10 impacts that are potential to Evergreen Road -- Drive,
11 sorry. We would again try to document the preexisting
12 conditions and try to develop a traffic-management
13 approach that minimizes impacts and repairs and
14 replaces stuff. I mean, we know that the folks who
15 live down there need to get down there, so we'll work
16 with the community to make sure there's access and
17 that things are repaired back to condition.

18 MS. RUSSELL: Yes?

19 MEMBER OF AUDIENCE: So to follow along with
20 that, so the road costs and replacement of possible
21 damage to the road would be covered by the project,
22 although the road does split to municipalities, both
23 Frankenlust Township and the City of Bay City? That
24 whole stretch, everything is taken care of by the EPA
25 overall project?

1 MS. LOGAN: So for the folks in the back,
2 this is a question about who pays -- if there are
3 repairs that are needed by the road, who pays for it.
4 So under an EPA project we expect Dow will do the work
5 under a legal agreement with us, but if they -- if
6 there are impacts to the road that take it so that
7 it's not in the current condition, Dow would pay for
8 it to come back to the current condition. So it
9 doesn't matter the municipality, even though there's
10 that question.

11 MS. RUSSELL: Yes, you have a question?

12 MEMBER OF AUDIENCE: We're already --
13 anybody that lives on Evergreen is not satisfied with
14 the condition of the road today, let alone once the
15 work is done, and Dow is going to be coming in and out
16 and in and out making it worse. I would hope that we
17 would end up with a bigger and better road when it's
18 done.

19 MS. LOGAN: So this is not an answer you're
20 going to love, but under EPA's law we don't require
21 betterment, we require as good as.

22 MEMBER OF AUDIENCE: So you're going to give
23 us a road with more holes in it?

24 MEMBER OF AUDIENCE: It's going to be
25 tricky.

1 MS. LOGAN: Let me say this, I believe from
2 what I've heard from communities where work has been
3 done that they at the end of the work have expressed
4 satisfaction with the work.

5 MEMBER OF AUDIENCE: Okay. That's a start.

6 MS. LOGAN: But from what the regulations
7 and the law require is we would repair things to
8 as-good-as condition.

9 MEMBER OF AUDIENCE: I can only envision
10 what it's going to look like after 1,200 truckloads
11 going down the road, so that's all I can say. So
12 we're concerned, we're all concerned.

13 MS. RUSSELL: And we'll continue, you
14 know -- one of the things about these projects that we
15 do, especially associated with this site, is
16 continuing to communicate and work closely with you,
17 so this is not going to be the first and last time you
18 have access to us or even Dow's team. So this will
19 not be a surprise if you are not satisfied. You know,
20 we'll have that communication going forward and work
21 together on that.

22 I think we had -- Terry, go ahead.

23 MEMBER OF AUDIENCE: So if a resident
24 discovers that they have dioxin in their backyard but
25 it doesn't meet the 250 parts per trillion threshold,

1 is it possible that they could negotiate with Dow's
2 contractors to have the work done and would Dow then
3 take care of the contaminated soil?

4 MS. RUSSELL: Mary?

5 MS. LOGAN: So that was a question you
6 brought up just about a half an hour ago --

7 MEMBER OF AUDIENCE: Yes.

8 MS. LOGAN: -- and honestly, Terry, I have
9 not had time to think about that or talk to the team,
10 so we've got that as a question that needs to be
11 thought about.

12 MEMBER OF AUDIENCE: Okay.

13 MS. RUSSELL: So, again, it would be around
14 going outside of what we're requiring and what the
15 possibilities of that are.

16 So, sir, you have a question back there?

17 MEMBER OF AUDIENCE: There's a substantial
18 amount of underground utilities, especially down in
19 the residential portion in Frankenlust Township. You
20 mentioned a staging area and there's a lot of heavy
21 truck traffic and such. Have you taken those
22 underground utilities into consideration to make sure
23 they're not damaged while you're doing this work?

24 MS. LOGAN: That would be part of the
25 pre-construction investigation and planning, yes.

1 MS. RUSSELL: Sir, you have a question?

2 MEMBER OF AUDIENCE: Where is the off-island
3 site located at, the other alternative?

4 MS. LOGAN: We have not selected the final
5 site where the contaminated soil would be hauled to.
6 One of the places that we take stuff is back to Dow's
7 plant in Midland and relocate it back there. That's
8 the source of the contamination. Other materials have
9 gone to public landfills.

10 MEMBER OF AUDIENCE: In other words, it
11 wouldn't go to the dim dip (phonetic) for the river
12 dredging?

13 MS. LOGAN: It would not, no.

14 MS. RUSSELL: Another question, yes, sir?

15 MEMBER OF AUDIENCE: If the soil is removed
16 all around the perimeter of our homes, what about the
17 perimeter drainage around homes that would be
18 disturbed, would that be all replaced and satisfactory
19 to remove the drainage?

20 MS. LOGAN: So, again, for the folks in the
21 back, this is a construction question, if there was
22 drainage material surrounding a home and it was
23 removed, would it be replaced. So my understanding is
24 if that was removed it would be replaced, but also for
25 stability of homes sometimes we have to angle back the

1 cut, and so it would be, you know, again, evaluation
2 of a particular property about what is actually coming
3 out.

4 MS. RUSSELL: Yes?

5 MEMBER OF AUDIENCE: Okay. I'm a little
6 confused about the 250 parts per trillion as the
7 trigger when Michigan has a 90 parts per trillion
8 standard for safe human contact. Why is there such a
9 large difference?

10 MS. LOGAN: Again, for the folks in the
11 back, this woman was asking about the 250 parts per
12 trillion EPA cleanup number versus the State's generic
13 90 parts per trillion. So under the State's
14 regulations -- and we have State folks here if you
15 want to talk to them. But under the State's
16 regulations there is very conservative assumptions
17 that are put in, and they come up with a number that
18 would be protective of all circumstances.

19 What the part 201 of the State's regulations
20 and EPA allow is that we can look at site-specific
21 circumstances, so, for example, we have frozen ground
22 here in Michigan, we have snow cover in Michigan, and
23 on those days you don't become exposed to soil. We
24 have very site-specific studies on some of the other
25 aspects that go into it, so pursuant to the

1 regulations we developed a site-specific cleanup
2 number.

3 MEMBER OF AUDIENCE: Okay. That's still
4 pretty concerning though for those of us -- and I'm
5 not from Middleground Island but I do live on the
6 Saginaw River, and it's -- the numbers are just very
7 concerning. If we have 198 parts per trillion in our
8 yard, we have a house that recently flooded on January
9 11th, that the DEQ or EGLE refuses to come into the
10 house and do any testing. So how can we alleviate
11 these concerns of these numbers, 90 parts per trillion
12 versus 250?

13 In my yard I have 198 parts per trillion.
14 They won't come into the house and test after the
15 flood. They've refused to do that so far, yet they
16 won't guarantee me that the house is safe to live in,
17 so we're not living there.

18 MS. LOGAN: So you must be Sue?

19 MEMBER OF AUDIENCE: I am.

20 MS. LOGAN: Hi, Sue. I think we've talked
21 on the phone a couple of times. I think Diane and you
22 have communicated.

23 MEMBER OF AUDIENCE: Yes.

24 MS. LOGAN: So in terms of the site-specific
25 number, as I said, both the Federal and State

1 governments allow you to calculate based on
2 site-specific studies, which we have done. We both
3 have toxicologists working for our agencies that have
4 looked at the information we have to modify the
5 State's generic number. Now, in terms of your
6 property, we did have Dow sample your yard, and it's
7 below the site-specific number, so EPA can give you a
8 letter that states that your yard does not need a
9 cleanup.

10 In terms of coming into your house, I think
11 we've communicated you may have issues related to mold
12 that you may really want to evaluate, but we typically
13 don't see flood material bringing in particles that
14 would be of concern. And I think that the State
15 Health Department communicated with you about that
16 issue as well.

17 MEMBER OF AUDIENCE: But what I want is an
18 assurance that that house is safe to live in, and how
19 can I get that without testing being done? I want an
20 assurance that there is no contamination, dioxin
21 contamination, in that house that's above 90 parts per
22 trillion. And, you know, they tell me they anticipate
23 that there isn't, but that's not really an assurance.

24 MS. RUSSELL: Can I clarify? So you're
25 looking specifically for dioxin alone, because I think

1 Mary mentioned that there might be some other health
2 concerns outside of dioxin, but you're not looking for
3 that specifically?

4 MEMBER OF AUDIENCE: I'm not wanting you to
5 address mold. I know that's a separate issue and we
6 have to take care of that on our own. The dioxin is
7 the issue that I'm concerned about. And I don't -- my
8 husband has cancer. You know, we have 198 parts per
9 trillion in the yard, and I don't feel that we can
10 live there in that house safely without actually being
11 tested. Now, if it's tested and they say you're way
12 below 90 parts per trillion in dioxin, no problem,
13 we're good, you know. Then we've had the assurance
14 that we can live there safely. In the meantime since
15 January 11th we don't live in that house.

16 MS. LOGAN: So we are not going to use the
17 90 parts per trillion generic number. We have
18 developed a site-specific number, so we are going to
19 stick with that, and we can talk more on a sidebar if
20 you want more technical details about how we developed
21 that or we can send you to material on our website
22 that have the technical underpinnings of it.

23 In terms of assurances, I'm not saying that
24 you or your husband -- first of all, I'm very sorry
25 about your husband's situation, but I'm not saying

1 that you or your husband would have done this, but
2 there's things that are outside of the environmental
3 controls that can contribute to contamination in a
4 household, and so that is something that we've
5 encountered, say, for example -- again, it's not
6 dioxin, but people have dry-cleaning in their house,
7 they have cleaning materials, they have other things
8 that contribute to things in the house that aren't
9 related to environmental cleanups. So we can't give
10 you a broad discussion about the condition of your
11 house. We can tell you what we know from studying.

12 MEMBER OF AUDIENCE: You could with testing
13 inside the house. That would tell us the dioxin level
14 inside the house, so that's what I would like to do.
15 We don't have to take up any more time. But my other
16 question is what studies are you looking at to show us
17 that the water level is going down in 2021?

18 MS. LOGAN: So the studies that we've looked
19 at -- and I think my counterpart at the State Police
20 -- they were posted on the NOAA website, which is the
21 National Oceanic and Atmospheric Agency. But in the
22 past 100 or so years, 80, 90 years, there have been
23 tracking of water levels in Lake Huron and they go up
24 more gradually and then typically they hit their peak
25 and come down pretty steeply, pretty quickly.

1 We actually thought that the levels last
2 year were close to the peak and expected that they
3 would start dropping down. We're hoping that that
4 pattern repeats, although right now my understanding
5 is the Corps of Engineers is saying that we may have
6 even higher levels in the bay, so we're keeping an eye
7 on the water levels in terms of hoping that they
8 continue to following the 100-year historic pattern.

9 MEMBER OF AUDIENCE: Thank you.

10 MEMBER OF AUDIENCE: Are there private
11 concerns that can do the testing for her?

12 MS. LOGAN: We cannot represent private
13 concerns.

14 MEMBER OF AUDIENCE: Are there some?

15 MS. LOGAN: Yes.

16 MS. RUSSELL: Private labs, is that what you
17 meant?

18 MEMBER OF AUDIENCE: (Nods affirmatively.)

19 MS. RUSSELL: Other questions before we take
20 a break? I want to remind you that when we get to the
21 portion where we're taking public comment EPA will not
22 be able to respond at that time. Again, we'll be
23 responding in a document we call a responsiveness
24 summary once the public comment period is closed. So
25 if you do have questions for us, now is the time. I

1 will also mention that if you want to reach out to us
2 after the meeting our contact information is on the
3 front of that fact sheet.

4 Yes?

5 MEMBER OF AUDIENCE: Is there any reason
6 that they couldn't use the former Corps of Engineer's
7 site to put the dirt that's already in that section
8 there by the closed landfill?

9 MS. RUSSELL: So any reason we couldn't use
10 the former or the dredge material site?

11 MS. LOGAN: That would certainly minimize
12 traffic and might seem logical. That is something
13 that I think -- because there's a long-term management
14 requirement that the State has, I don't know if that
15 would be -- we would be able to work out the logistics
16 of that, but that's something we can evaluate and work
17 with our partners at the State and at the County -- or
18 the City, rather, and talk to them about that.

19 MS. RUSSELL: Other questions? Yes, in the
20 back? Oh, you want to speak to that?

21 MEMBER OF AUDIENCE: Yeah.

22 MS. RUSSELL: Okay, yeah.

23 MS. THURSTON: I'm from the City of Bay
24 City. (Inaudible).

25 COURT REPORTER: I can't hear her.

1 MS. RUSSELL: Shelly, she can't hear you and
2 she's taking a transcript. Can you come up to the
3 front? I apologize again for the lack of audio.

4 MS. THURSTON: That's all right. People
5 tell me I'm too loud, so thank you.

6 I work for the City of Bay City. My name is
7 Shelly Thurston, and I'm the project manager for the
8 Middlegrounds Landfill and CDF area. And we have a
9 consent decree with the State and with a PRP partner,
10 Honeywell, for that particular area. It's also under
11 a deed restriction. So based on what our consent
12 decree says and what our deed restriction says we
13 cannot take disposal soils in either the landfill or
14 the CDF area, so that just puts that to rest.

15 MS. RUSSELL: It disqualifies that from
16 being --

17 MS. THURSTON: Disqualifies that. I know
18 that would make logical sense, but unfortunately that
19 would violate our consent decree and open up a bit of
20 a problem, so we don't want to open that problem, so
21 just a short answer to that question.

22 MS. RUSSELL: Thank you for that
23 clarification.

24 MEMBER OF AUDIENCE: So are you in charge of
25 the road too?

1 MS. THURSTON: No, I am not. You would want
2 to get with Mr. Houseback on that.

3 MEMBER OF AUDIENCE: There's a road I don't
4 like.

5 MS. THURSTON: That's Mr. Houseback, a
6 different department.

7 MS. RUSSELL: I think that's a typical
8 government answer, right?

9 MEMBER OF AUDIENCE: She was good.

10 MS. RUSSELL: Okay. So any last burning
11 questions we want to get out tonight before we just
12 take a momentary -- yes, sir?

13 MEMBER OF AUDIENCE: The cleanup for the
14 residential area -- I own some commercial property.

15 MS. RUSSELL: Commercial property, okay.

16 MEMBER OF AUDIENCE: Is that the same type
17 of things for --

18 MS. RUSSELL: Is it the same thing for
19 commercial property for cleanup area? Good question,
20 how do we treat commercial property?

21 MS. LOGAN: So so far of the commercial
22 properties that we have tested, they have not exceeded
23 the cleanup number, so the commercial properties do
24 not need a cleanup at this point. If you are the
25 gentleman who contacted me about arranging testing, we

1 will work that out. But I would anticipate it would
2 be the same thing, dig out material.

3 MEMBER OF AUDIENCE: I did speak with
4 someone last fall that came out to that property and
5 said that the level did exceed it, so I don't know if
6 they want to take additional samples, but I didn't get
7 a --

8 MS. LOGAN: This was a commercial property?

9 MEMBER OF AUDIENCE: Along Hotchkiss.

10 MS. LOGAN: I would have to look into this
11 because the results that I have -- we do not exceed
12 the cleanup number. For commercial property that
13 cleanup number is 2,000 parts per trillion.

14 MS. RUSSELL: It sounds like you might have
15 some information, sir?

16 MR. NANNEY: I do, actually. My name is
17 Rodney Nanney. I work for Frankenlust Township. I'm
18 the zoning administrator. The property he's talking
19 about is on the south side of Hotchkiss Road. It's
20 right there at the Township/City boundary. It is
21 zoned commercial, not a bit is used commercial, and it
22 probably will not be zoned commercial next year
23 because the Township is currently working through a
24 process to consider rezoning that area back to
25 residential. It was zoned commercial a long time ago

1 for activities that never actually happened, but
2 anyway, it is technically zoned commercial, but it's
3 all residential use.

4 MS. RUSSELL: All right. So if there are no
5 other questions, before I break -- I did forget to
6 mention, for the cleanup that we've been doing on the
7 Tittabawassee River over the last several years we
8 also have been working with what we call a community
9 advisory group, and I have Dave Sommers here who is
10 the president of the community advisory group. And
11 this is basically a group of citizens who really have
12 been holding meetings, talking about the work that
13 we're doing, and we come to those meetings and provide
14 information periodically. And so if that is something
15 that you're interested in, Dave Sommers can provide
16 information to you, but it's, again, a forum for
17 community members run by community members that are
18 focused on the cleanup that we're doing related to the
19 dioxins and Dow Chemical, so just for your
20 information.

21 With that I just want to remind you the ways
22 to submit comments, so we're going to take just a
23 few-minute -- short minute break, three-minute break.
24 If there's anyone left who wants to make a comment we
25 can do that with our court reporter here. You can

1 also -- if you have written down some comments and
2 want to submit them to me tonight we can do that. I
3 will take those. You can also e-mail them to me or
4 you can mail them, but there's a sheet inside the fact
5 sheet you can cut out and mail to me and I'll receive
6 those comments.

7 As long as they are postmarked or I receive
8 them by March 30th we will be able to take those and
9 put it into the record. So tonight is your
10 opportunity or you have until the 30th of March to
11 provide those to us via my inbox, okay? So with that,
12 if those of you who are not sticking around for that I
13 do want to thank you for coming tonight. Stick around
14 though if you are looking to submit a comment. I do
15 ask that you grab one of these cards so that I can do
16 it in an orderly fashion, and you'll have a few
17 minutes now to grab one of those if you intend to
18 leave a comment.

19 (Recess taken at 7:17 p.m.)

20 (Back on the record at 7:23 p.m.)

21 MS. RUSSELL: We are going to go ahead and
22 move forward into the oral comment portion. I think
23 this may be a short session, so if you had questions
24 for us after we should be available. So far -- all
25 right. So, once again, this is the portion of the

1 meeting where for those of you who maybe just want to
2 submit oral comments we have the court reporter here
3 who can record that for us. EPA will not be
4 responding today but we'll be responding in a document
5 called a responsiveness summary. And then once we are
6 finished with the -- that portion of the meeting we'll
7 go ahead and bring this to a close.

8 So with that I've handed out some cards. I
9 didn't have card 1, so we're starting with card 2.
10 And you, sir, have the floor. Thank you.

11 MR. DEWITT: Do you want the name for --

12 MS. RUSSELL: Make sure that she can hear
13 you. I'll give her the card with your name and
14 information on it so you don't have to do that.

15 MR. DEWITT: My biggest thing is that this
16 project -- right now we're finally at the
17 Middlegrounds. This has been something that's going
18 on for longer than I've owned a house in Bay City, but
19 my concern is that the area -- the underground water
20 table and contaminates may have gotten through there
21 through raising and lowering of water over time and
22 random other sites throughout the area that may or may
23 not have been Dow-related. Are those also part of
24 this project to be monitored to see if dioxins got
25 into that process, because if they get into the

1 underground water table -- and when you go back into
2 the west side of Bay City there's an area where
3 there's almost no development because it's so low and
4 the water gets up there almost every year. Are those
5 houses also going to be affected by this and have
6 possible projects done or testing done to make sure
7 that's covered?

8 MS. RUSSELL: Thank you for your comment,
9 and I'll take your card when you're done too.

10 So that was the only card I had out. Did
11 anyone else -- just one last shot if you wanted to
12 submit an oral comment or, yet again, you can submit
13 those to me written, you can mail it to me, hand it to
14 me tonight, send me an e-mail. My information is in
15 the fact sheet. You have until March 30th. Okay?

16 So if there are no others who would like to
17 submit a comment right now I'm going to go ahead and
18 close the meeting. And thank you all for coming
19 tonight, and if you have any other questions please
20 don't hesitate to contact Mary or myself. Thank you
21 very much and drive safe.

22 (Meeting concluded at 7:26 p.m.)

23

24

25

CERTIFICATE OF REPORTER

STATE OF MICHIGAN

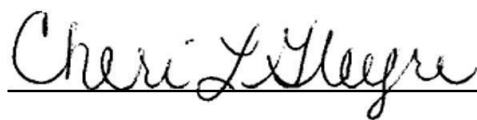
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COUNTY OF OAKLAND

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I hereby certify that I reported
stenographically the foregoing proceedings and
testimony under oath at the time and place
hereinbefore set forth; that thereafter the same was
reduced to computer transcription under my
supervision; and that this is a full, true, complete
and correct transcription of said proceedings.



Cheri L. Gleyre

CSR-6548, Notary Public

Oakland County, Michigan

My Commission Expires May 9, 2020

<p>1</p> <p>1 21:10,14 1,100 15:8 22:4 1,200 24:10 1,290 10:20 100 20:9 31:22 100-year 32:8 11th 28:9 30:15 14 10:20 15 11:3,4 17 10:17 175-acre 9:17 1890's 8:16 1900's 10:11 1950's 9:6,21 1956 9:6 198 28:7,13 30:8</p> <p>2</p> <p>2 16:11 21:15 2,000 10:22,23 36:13 20 8:23 2007 19:16 201 27:19 2015 7:24 8:5 2018 10:4 2019 10:4 2020 18:6 2021 18:10 31:17 24 8:19 250 7:17 10:25 24:25 27:6,11 28:12</p>	<p>3</p> <p>30 21:12 30th 5:17 17:14 38:8,10 35,000 11:5 37 9:20</p> <p>4</p> <p>41 9:17 45 10:15,17 46,000 11:7</p> <p>6</p> <p>6 21:12</p> <p>7</p> <p>7 8:8 750 15:6 7:17 38:19 7:23 38:20</p> <p>8</p> <p>80 31:22 84 9:7</p> <p>9</p> <p>90 27:7,13 28:11 29:21 30:12,17 31:22</p> <p>A</p> <p>able 5:22,23 14:23 32:22 33:15 38:8</p>	<p>absorb 18:18 acceptance 15:20 access 16:8,23, 25 22:16 24:18 accidentally 11:19,25 acres 9:17 11:3, 5 action 7:7 actions 15:21 19:18 activities 37:1 acts 21:25 addition 6:6 additional 36:6 Additionally 17:6 address 15:14 18:20 30:5 administrator 36:18 advisory 37:9, 10 affirmatively 32:18 agencies 29:3 agency 6:7,25 12:21 31:21 agenda 18:21 ago 25:6 36:25 agree 14:3,5 agreement 23:5 agreements 15:23 ahead 5:20 6:14 17:20 19:20 24:22 38:21 alleviate 28:10</p>	<p>allow 13:19 27:20 29:1 allowed 14:25 alterative 13:24 alternative 12:8 15:15 26:3 alternatives 14:9,11,17 15:4 amount 11:22 25:18 anecdotally 9:11 angle 26:25 announce 5:13 answer 5:21 6:8 23:19 34:21 35:8 answers 5:7 7:13 anticipate 29:22 36:1 anybody 23:13 anyway 37:2 apologize 34:3 approach 22:13 approve 16:2 area 10:15 25:20 34:8,10,14 35:14, 19 36:24 areas 9:25 10:16,17,21,24 12:18 20:23 arranging 35:25 as-good-as 24:8 asking 20:15 21:7 27:11 aspects 27:25</p>	<p>assist 6:4 associated 24:15 assuming 5:23 assumptions 27:16 assurance 29:18,20,23 30:13 assurances 30:23 Atmospheric 31:21 AUDIENCE 19:3,8,11 20:8,17 21:2,17 22:2,19 23:12,22,24 24:5, 9,23 25:7,12,17 26:2,10,15 27:5 28:3,19,23 29:17 30:4 31:12 32:9, 10,14,18 33:5,21 34:24 35:3,9,13, 16 36:3,9 audio 34:3 available 6:8 9:12 13:20 38:24 averaged 20:21 aware 13:9 17:3,4</p> <p>B</p> <p>back 6:9 10:23, 25 16:7 19:4,6 20:11 21:7 22:17 23:1,8 25:16 26:6,7,21,25 27:11 33:20 36:24 38:20 backfill 7:25 backfilling 12:11 background 7:9</p>
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backyard 24:24 based 17:21 29:1 34:11 basically 5:9 37:11 bay 7:1 8:7,9,21 19:15 22:23 32:6 33:23 34:6 believe 9:13 10:13 13:25 14:5 15:25 24:1 believed 10:10 11:4 better 20:24 23:17 betterment 23:21 beyond 18:12 big 6:18 21:5 Bigelow 9:4 bigger 19:14 23:17 biggest 16:4 bit 8:13 34:19 36:21 bottom 18:22 boundary 36:20 Boys 9:3 break 5:6,22 32:20 37:5,23 bridges 16:9, 14 brief 7:9 bringing 14:14 15:9 29:13 brings 16:14 broad 31:10 broke 22:6 brought 12:19 15:7 25:6	build 13:19,20, 25 15:19 building 13:18 burning 35:10 bushes 15:2 <hr/> C <hr/> calculate 29:1 call 5:19 6:25 10:16 32:23 37:8 cancer 30:8 cards 5:12 6:1 38:15 care 22:24 25:3 30:6 case 8:2 13:21 cases 21:13,14 CDF 34:8,14 certain 9:12 certainly 33:11 challenge 16:5 change 17:21 channel 19:4, 7,25 charge 34:24 chemical 11:11 37:19 chemicals 11:11 chip 22:3 circumstance s 27:18,21 citizens 37:11 City 22:23 33:18,23,24 34:6 clarification 34:23 clarify 29:24	clean 7:22 11:24 12:4,5,6,9 14:1 15:6,7,10,17 21:10 cleaning 11:10 12:1 31:7 cleanup 7:3,4, 7,16,20 8:12 10:17,18 11:1,4 12:14,22 13:5 17:13 18:5 27:12 28:1 29:9 35:13, 19,23,24 36:12, 13 37:6,18 cleanups 6:11 7:24 8:3,4,11 31:9 cleared 14:19 close 32:2 closed 32:24 33:8 closely 12:25 24:16 Club 9:3,4 College 6:10 come 9:22 10:10 20:1,9 23:8 27:17 28:9,14 31:25 34:2 37:13 comes 11:18 coming 6:10, 13 23:15 27:2 29:10 38:13 comment 5:8, 10,14,17 15:21 17:14,17 22:2,8 32:21,24 37:24 38:14,18,22 comments 5:16,18,24 7:5 17:15,19,21,23 37:22 38:1,6 commercial 10:8 35:14,15,19, 20,21,23 36:8,12, 21,22,25 37:2	common 12:11 communicate 24:16 communicate d 28:22 29:11,15 communicati on 17:2 24:20 communities 24:2 community 6:3,11 13:3,19 15:20,21 22:16 37:8,10,17 compare 10:22 13:13 comparing 12:7 comparison 13:22 comply 15:16 components 13:20 composited 20:21 composition 11:12 comprise 9:18 concern 29:14 concerned 22:5 24:12 30:7 concerning 28:4,7 concerns 15:12 28:11 30:2 32:11,13 concluded 11:12 17:17 condition 22:9,17 23:7,8,14 24:8 31:10 conditions 17:7 19:19 22:12 confused 27:6	consent 34:9, 11,19 conservative 27:16 consider 36:24 consideratio n 22:7 25:22 consistency 11:14 constraints 13:7 16:18 construction 9:21 14:13,15 17:9,11,25 18:10 21:20,21 26:21 consume 11:22 contact 27:8 33:2 contacted 35:25 contacting 14:11 contain 20:9 contains 20:18 contaminated 7:21 9:13 11:22, 23 12:4 14:11 15:9 16:3 25:3 26:5 contaminatio n 8:21 20:18 26:8 29:20,21 31:3 content 6:22 continue 24:13 32:8 continuing 24:16 contractors 25:2 contribute 31:3,8 control 17:10
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controls 16:1, 16 31:3 coordinator 6:4 Corps 9:7 10:13 32:5 33:6 cost 13:14,21 costs 13:24 22:20 counterpart 12:21 31:19 country 11:17 County 33:17 couple 9:22 10:6 28:21 court 5:3,10,24 33:25 37:25 cover 7:14 9:10 12:3,4 13:12 14:1,2 15:6,17 16:1 21:2,3,7,9 27:22 covered 22:21 covering 12:10 cubic 11:5,7 current 8:25 17:7 23:7,8 currently 11:3 16:16 36:23 cut 7:15 27:1 38:5 <hr/> D <hr/> daily 9:10 damage 17:8 22:21 damaged 25:23 Dave 37:9,15 days 27:23 decision 14:24	decree 34:9,12, 19 deed 34:11,12 deeply 21:8 Delta 6:9 department 29:15 35:6 depending 11:14 DEQ 28:9 design 18:3 designs 12:13 detail 12:2 13:7 14:8 19:13 details 30:20 develop 12:15 16:21,23 22:12 developed 28:1 30:18,20 Diane 6:3,17, 19,23 8:13 17:13 28:21 difference 5:2 27:9 differences 8:1 different 10:16 18:1,11 35:6 difficult 13:24 dig 7:20,25 11:6 12:5,8 13:13 36:2 dim 26:11 dioxin 7:18 10:9 20:4 24:24 29:20,25 30:2,6, 12 31:6,13 dioxins 7:17 10:2 11:10,18 37:19 dip 26:11 dirt 11:19,25 33:7	dirty 11:21 discovers 24:24 discuss 7:11 discussion 31:10 disposal 10:10,11 16:2 34:13 dispose 11:8 disqualifies 34:15,17 disruptive 14:16 disturbed 26:18 document 5:18 21:10 22:11 32:23 doing 7:23 8:4 13:11 25:23 37:6, 13,18 Dow 8:15,24 10:3,5,21 12:14 16:22 17:24,25 18:4 23:4,7,15 25:2 29:6 37:19 Dow's 10:11 24:18 25:1 26:6 downstream 19:22 drainage 26:17,19,22 dredge 20:1 33:10 dredged 9:8 10:13 19:5,6 dredging 26:12 Drive 16:15,17 17:1 22:3,10 dropping 32:3 dry-cleaning 31:6	dump 22:4 dust 17:11 <hr/> E <hr/> e-mail 17:16 38:3 earlier 16:8 early 8:16 10:10 eat 11:19,25 eating 11:21 effectiveness 13:14,15 14:9 effects 11:13, 15 15:10,11 efforts 11:2 EGLE 12:21 16:2 17:18 28:9 either 17:16 34:13 eligible 7:19 10:18 11:4 14:21 20:19 emergency 16:24 emissions 15:11 emphasize 6:19 14:20 encountered 31:5 ends 5:17 17:14 Engineer's 33:6 Engineers 9:7 32:5 entire 20:22,25 environment 6:24 31:2,9 envision 24:9 EPA 5:1,15 6:6 10:3,4 11:12	12:20 16:2 17:18 22:24 23:4 27:12, 20 29:7 32:21 EPA's 6:3,15 7:15 8:12 10:17 23:20 equipment 12:18 14:13,15 15:13 especially 24:15 25:18 essential 16:21 essentially 20:3 evaluate 17:20 20:23 29:12 33:16 evaluated 7:4 15:20 evaluating 18:1 19:17 evaluation 27:1 evaluations 17:7 event 11:24 eventually 19:15,17 Evergreen 16:14,17,25 22:3, 9,10 23:13 everybody's 17:3 example 27:21 31:5 excavate 21:4, 8 excavating 12:10 excavation 18:8 21:15 exceed 8:12 10:17 36:5,11
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<p>exceeded 35:22</p> <p>existed 8:15</p> <p>existing 14:18</p> <p>expect 17:24 18:4,9 21:13,14, 17 23:4</p> <p>expected 12:14 15:4 17:25 32:2</p> <p>exposed 27:23</p> <p>exposure 11:9,13,15,16,17</p> <p>expressed 24:3</p> <p>extensive 17:2</p> <p>eye 32:6</p> <hr/> <p>F</p> <hr/> <p>facility 9:8,9</p> <p>facing 20:14</p> <p>fact 10:24 12:3 13:23 16:11 18:21 33:3 38:4</p> <p>fall 36:4</p> <p>families 13:2</p> <p>family 11:11</p> <p>far 28:15 35:21 38:24</p> <p>fashion 38:16</p> <p>Federal 28:25</p> <p>feel 30:9</p> <p>feet 21:15</p> <p>few-minute 37:23</p> <p>figure 8:13 9:22</p> <p>fill 9:12 10:13</p> <p>final 16:2 26:4</p> <p>finalize 7:4 17:22</p>	<p>finally 13:6</p> <p>finding 18:7</p> <p>findings 7:10</p> <p>first 18:16 24:17 30:24</p> <p>fix 22:6</p> <p>flag 6:21</p> <p>flood 28:15 29:13</p> <p>flooded 28:8</p> <p>fluff 11:6</p> <p>focused 37:18</p> <p>focusing 11:1</p> <p>folks 6:6,7,9 20:14 21:6 22:14 23:1 26:20 27:10, 14</p> <p>follow 16:22,23 22:19</p> <p>following 32:8</p> <p>food 11:18</p> <p>foot 21:10,15</p> <p>forget 5:25 6:2 37:5</p> <p>former 33:6,10</p> <p>forum 37:16</p> <p>forward 8:14 24:20 38:22</p> <p>found 7:10,16 10:2,9,19 19:19</p> <p>Frankenlust 22:23 25:19 36:17</p> <p>frequent 11:13</p> <p>front 33:3 34:3</p> <p>frozen 27:21</p> <p>fruits 11:21</p> <p>furans 7:17</p> <p>future 9:19 14:2,4</p>	<hr/> <p>G</p> <hr/> <p>generate 15:5</p> <p>generic 27:12 29:5 30:17</p> <p>gentleman 35:25</p> <p>getting 11:20 16:19,25</p> <p>Girls 9:3</p> <p>give 7:8 8:13 23:22 29:7 31:9</p> <p>go 5:8,20 6:14,16 17:20 21:24 24:22 26:11 27:25 31:23 38:21</p> <p>goes 16:15 21:3</p> <p>going 5:4,6,8, 16 6:4,14 7:13 9:22 13:6 16:5,7 17:5 18:7,25 19:4 20:13 21:19 22:5 23:15,20,22,24 24:10,11,17,20 25:14 30:16,18 31:17 37:22 38:21</p> <p>good 14:10 23:21 30:13 35:9, 19</p> <p>government 35:8</p> <p>governments 29:1</p> <p>grab 5:12 38:15, 17</p> <p>gradually 31:24</p> <p>grass 15:2</p> <p>greater 7:17</p> <p>ground 27:21</p> <p>group 37:9,10, 11</p>	<p>guarantee 28:16</p> <p>guys 8:9</p> <hr/> <p>H</p> <hr/> <p>half 25:6</p> <p>hand 6:20</p> <p>hands 11:20</p> <p>happened 37:1</p> <p>hailed 12:20 26:5</p> <p>health 11:13,15 12:24 15:14 18:4 29:15 30:1</p> <p>hear 6:20 20:12, 15 33:25 34:1</p> <p>heard 9:11 24:2</p> <p>hearing 6:22 18:17</p> <p>heavy 14:13 15:13 25:20</p> <p>help 16:16</p> <p>Hi 28:20</p> <p>high-level 17:12</p> <p>higher 32:6</p> <p>historic 9:5 32:8</p> <p>hit 31:24</p> <p>holding 37:12</p> <p>holes 23:23</p> <p>home 9:20 26:22</p> <p>homeowners 14:2,5</p> <p>homes 9:1 14:15 26:16,17, 25</p> <p>honestly 25:8</p>	<p>Honeywell 34:10</p> <p>hope 23:16</p> <p>hoped 18:6</p> <p>hoping 21:21 32:3,7</p> <p>Hotchkiss 36:9,19</p> <p>hour 25:6</p> <p>house 28:8,10, 14,16 29:10,18, 21 30:10,15 31:6, 8,11,13,14</p> <p>Houseback 35:2,5</p> <p>household 31:4</p> <p>houses 8:2</p> <p>human 27:8</p> <p>Huron 31:23</p> <p>husband 30:8, 24 31:1</p> <p>husband's 30:25</p> <hr/> <p>I</p> <hr/> <p>idea 18:24</p> <p>immediately 19:22</p> <p>impacts 13:16 14:12 22:10,13 23:6</p> <p>implement 18:5</p> <p>implementabi lity 13:14,18</p> <p>implementati on 16:4</p> <p>impossible 18:9</p> <p>inaudible 17:2 33:24</p>
---	---	--	--	--

inbox 38:11 inches 21:12 include 17:18 includes 8:19 individual 15:23 industries 8:17 information 7:9 29:4 33:2 36:15 37:14,16, 20 initially 21:11 inside 31:13,14 38:4 intend 16:21 38:17 intended 11:23 interact 5:21 interested 37:15 introduce 6:2, 15 investigating 8:19 investigation 25:25 investigation s 7:10 involve 15:8 involvement 6:4 island 7:2,11 8:5,8,22,25 9:15, 17,25 10:2,14 12:18 13:8 14:17 15:9 16:6,14,15, 19 17:7 19:13,19 28:5 issue 29:16 30:5,7 issues 29:11	<hr/> J <hr/> January 28:8 30:15 job 15:19 <hr/> K <hr/> keeping 32:6 kind 18:24 know 6:18 7:8 8:9 11:10,20 14:2,5,13 16:9 18:16 20:10 21:24 22:6,14 24:14,19 27:1 29:22 30:5,8,13 31:11 33:14 34:17 36:5 knowledge 19:8 <hr/> L <hr/> labs 32:16 lack 34:3 Lake 31:23 land 9:16 landfill 9:6,11 33:8 34:8,13 landfills 9:24 26:9 large 11:11 27:9 largely 9:1 larger 8:6 law 23:20 24:7 lay 7:7 learn 6:5 learning 6:10 leave 38:18 leaving 15:17	left 22:6 37:24 legal 23:5 length 21:18 let alone 23:14 letter 29:8 level 31:13,17 36:5 levels 7:17 10:18 18:7 20:19 31:23 32:1,6,7 limited 16:9 little 8:13 27:5 live 13:9 22:15 28:5,16 29:18 30:10,14,15 lives 23:13 living 19:20 28:17 loads 22:4 located 26:3 location 16:3 Logan 6:15,17, 23 16:13 19:9,12 20:2,11,18 21:6, 20 22:8 23:1,19 24:1,6 25:5,8,24 26:4,13,20 27:10 28:18,20,24 30:16 31:18 32:12,15 33:11 35:21 36:8,10 logical 33:12 34:18 logistics 33:15 long 11:14 13:17 14:1,6 15:16 21:19 36:25 38:7 long-term 15:25 33:13 look 13:12 16:12 17:19 20:23 24:10 27:20 36:10	looked 20:20 21:11 29:4 31:18 looking 20:4,6 21:9,10 29:25 30:2 31:16 38:14 looks 13:15 lot 11:17 15:5 16:18 18:17 19:13 25:20 loud 34:5 love 23:20 low 8:3 lower 8:19,20 <hr/> M <hr/> mail 17:16 38:4, 5 main 16:18 17:1 maintain 13:17 14:3 16:23 makeup 10:1 making 23:16 manage 11:8 17:10 management 13:10 16:4 33:13 manager 6:15, 24 34:7 map 16:7 March 5:17 17:14 38:8,10 Mary 6:15,23 18:16 25:4 30:1 material 12:4,5 14:1,6,14 15:9,10 18:8 19:24 20:1 26:22 29:13 30:21 33:10 36:2 materials 12:19 26:8 31:7 matter 13:10 23:9	mature 14:21, 22,23 mean 21:4 22:14 means 21:24 meant 32:17 meet 24:25 meeting 5:1,15 14:20 18:23 33:2 meetings 37:12,13 MEMBER 19:3,8,11 20:8,17 21:2,17 22:2,19 23:12,22,24 24:5, 9,23 25:7,12,17 26:2,10,15 27:5 28:3,19,23 29:17 30:4 31:12 32:9, 10,14,18 33:5,21 34:24 35:3,9,13, 16 36:3,9 members 37:17 memorize 18:20 mention 33:1 37:6 mentioned 19:23 25:20 30:1 MGI 8:6 Michigan 8:16 27:7,22 middle 9:5 Middlegroun d 7:2 8:5,22 10:2 28:5 Middlegroun ds 34:8 Midland 8:15, 23 10:11 26:7 migrated 8:22 miles 8:8,19,23
--	--	---	--	--

mind 15:22 minimize 33:11 minimizes 22:13 minute 37:23 minutes 38:17 missed 18:18 misspeak 20:12 modify 29:4 mold 29:11 30:5 momentary 35:12 monitoring 12:22 months 21:23 mouth 11:21 move 19:21 38:22 moved 10:12 moving 19:20 mud 17:11 multitask 9:4 municipalities 22:22 municipality 23:9	necessary 17:10 need 13:4,10 14:2,3,12,13,14 15:22,23 16:2 22:15 29:8 35:24 needed 18:2 19:18 23:3 needs 12:14 22:7 25:10 negotiate 25:1 never 19:5,6 37:1 night 36:14 NOAA 31:20 nods 32:18 non-residential 10:21 north 9:2,23 10:25 Note 5:14 number 8:12 10:18 11:1 27:12, 17 28:2,25 29:5,7 30:17,18 35:23 36:12,13 numbered 6:1 numbers 10:19 15:6 28:6, 11	32:24 38:25 ones 18:12 open 34:19,20 operated 9:6,7 opportunity 38:10 opposed 15:21 option 13:13,16 21:3 options 7:11, 12,16 12:1 13:12 oral 5:24 38:22 orally 5:10 order 5:13 orderly 38:16 oriented 9:23 originally 18:6 outside 25:14 30:2 31:2 overall 22:25 overseeing 12:22 overview 8:5 17:12 owner 12:15 owners 13:2 15:23,25 16:24 18:11	partner 34:9 partners 33:17 parts 7:17,18 8:3 10:20,22,23, 25 24:25 27:6,7, 11,13 28:7,11,13 29:21 30:8,12,17 36:13 pattern 32:4,8 patterns 17:4 pay 23:7 pays 23:2,3 peak 31:24 32:2 people 14:10, 16 15:16 19:19 20:11 31:6 34:4 percent 20:9 percentage 20:8,15 perimeter 26:16,17 period 5:17 11:14 17:14,17 32:24 periodically 37:14 phone 28:21 phonetic 26:11 pick 5:25 12:10, 12 picture 20:24 pictures 7:23 8:2 piece 7:2 place 11:6 15:18 placed 9:9 places 26:6 plan 5:11,25 7:3, 4 12:16,24 13:10 15:14 16:20,22 17:13,20,21,22 18:25	planned 12:23 planning 18:9 25:25 plans 17:4 18:4 plant 8:15,24 10:11 26:7 playground 10:24 please 6:20 point 5:1 35:24 Police 31:19 portion 5:8,15 8:21 20:5 25:19 32:21 38:22,25 possibilities 25:15 possible 18:5 22:20 25:1 post 5:5 18:19 posted 18:22 31:20 postmarked 38:7 potential 11:9 22:10 pre-construction 17:6 25:25 preexisting 22:11 preparing 17:24 presentation 5:7 president 37:10 pretty 8:9 28:4 31:25 prevent 11:16 prior 14:20 private 32:10, 12,16
<hr/> <p style="text-align: center;">N</p> <hr/> name 6:3 34:6 36:16 Nanney 36:16, 17 narrow 16:15 National 31:21 near 8:3 necessarily 19:25	<hr/> <p style="text-align: center;">O</p> <hr/> Oceanic 31:21 off-island 26:2 Oh 33:20 okay 5:25 6:18 8:13 19:12 20:6 24:5 25:12 27:5 28:3 33:22 35:10, 15 38:11 once 17:17 21:20 23:14	<hr/> <p style="text-align: center;">P</p> <hr/> p.m. 38:19,20 page 16:11 Park 9:4 part 8:6,16 9:25 16:21 19:14 25:24 27:19 particles 29:13 particular 12:16 27:2 34:10	<hr/> <p style="text-align: center;">P</p> <hr/> p.m. 38:19,20 page 16:11 Park 9:4 part 8:6,16 9:25 16:21 19:14 25:24 27:19 particles 29:13 particular 12:16 27:2 34:10	<hr/> <p style="text-align: center;">P</p> <hr/> p.m. 38:19,20 page 16:11 Park 9:4 part 8:6,16 9:25 16:21 19:14 25:24 27:19 particles 29:13 particular 12:16 27:2 34:10

<p>probably 9:21 13:24 16:4 18:8 36:22</p> <p>problem 30:12 34:20</p> <p>process 36:24</p> <p>processes 8:17</p> <p>program 16:21 20:20</p> <p>project 6:15,24, 25 19:20 21:18 22:21,25 23:4 34:7</p> <p>projects 24:14</p> <p>properties 7:19 8:1,12 9:2, 13,14,18 10:8,9 11:2 12:2 13:1 18:2 20:9 35:22, 23</p> <p>property 8:4 10:6 12:15,16 13:1 14:21 15:23, 24 16:1,24 27:2 29:6 35:14,15,19, 20 36:4,8,12,18</p> <p>property- specific 12:13 14:24</p> <p>proposal 11:23</p> <p>proposed 8:11 12:8 17:20</p> <p>proposing 6:16 7:3,20</p> <p>protect 14:10</p> <p>protected 13:4</p> <p>Protection 6:25</p> <p>protective 27:18</p> <p>provide 37:13, 15 38:11</p> <p>PRP 34:9</p>	<p>public 5:8,14, 17 7:5 15:20 17:13 26:9 32:21, 24</p> <p>pursuant 27:25</p> <p>put 5:2 14:1 15:25 16:1 27:17 33:7 38:9</p> <p>puts 34:14</p> <hr/> <p>Q</p> <hr/> <p>question 5:7, 21 14:4 20:13 21:5 23:2,10,11 25:5,10,16 26:1, 14,21 31:16 34:21 35:19</p> <p>questions 5:20 6:8 7:13 19:1 20:13 32:19, 25 33:19 35:11 37:5 38:23</p> <p>quick 7:15</p> <p>quickly 31:25</p> <hr/> <p>R</p> <hr/> <p>raise 6:20</p> <p>range 10:19</p> <p>reach 33:1</p> <p>really 9:1,23 12:1,3,6 13:18,23 21:24 29:12,23 37:11</p> <p>reason 33:5,9</p> <p>receive 38:5,7</p> <p>recess 38:19</p> <p>recommende d 7:7,16 13:23</p> <p>record 5:4,11 38:9,20</p> <p>recreational 9:2,25 10:8</p>	<p>refer 18:23</p> <p>reference 5:6</p> <p>refers 11:10</p> <p>refused 28:15</p> <p>refuses 28:9</p> <p>regardless 12:12</p> <p>regrow 7:22</p> <p>regulations 24:6 27:14,16,19 28:1</p> <p>related 29:11 31:9 37:18</p> <p>released 8:18</p> <p>reliable 13:16, 25 14:6 15:15</p> <p>relocate 26:7</p> <p>reluctant 15:25</p> <p>remind 32:20 37:21</p> <p>remove 15:7 26:19</p> <p>removed 15:3 26:15,23,24</p> <p>removing 14:6</p> <p>repair 24:7</p> <p>repaired 17:9 22:17</p> <p>repairs 22:13 23:3</p> <p>repeat 20:13</p> <p>repeats 32:4</p> <p>replace 7:21 11:23 12:5,9 15:8 21:4,9</p> <p>replaced 15:3 17:9 26:18,23,24</p> <p>replacement 22:20</p> <p>replaces 22:14</p>	<p>reporter 5:3, 10,24 33:25 37:25</p> <p>represent 32:12</p> <p>represents 20:25</p> <p>requested 10:5</p> <p>require 12:17 14:17 23:20,21 24:7</p> <p>requirement 33:14</p> <p>requiring 25:14</p> <p>residences 9:20</p> <p>resident 24:23</p> <p>residential 7:19 8:4,11 9:1, 16,18,19,24 10:6, 15 11:2 12:2 25:19 35:14 36:25 37:3</p> <p>respond 5:15, 18,23 32:22</p> <p>responding 32:23</p> <p>response 5:22</p> <p>responsivene ss 5:19 32:23</p> <p>rest 34:14</p> <p>restriction 34:11,12</p> <p>restrictions 15:17</p> <p>result 17:8</p> <p>results 36:11</p> <p>revegetate 12:9</p> <p>revegitate 7:22</p>	<p>reviewed 17:22</p> <p>rezoning 36:24</p> <p>right 18:15 19:25 20:24 32:4 34:4 35:8 36:20 37:4 38:25</p> <p>river 7:1,24 8:1, 3,7,8,18,20,23 9:9 10:12 19:14, 16,17,21,25 20:4, 5 26:11 28:6 37:7</p> <p>road 16:15,18 22:3,5,9,10,20, 21,22 23:3,6,14, 17,23 24:11 34:25 35:3 36:19</p> <p>roads 12:17</p> <p>roadway 17:11</p> <p>Rodney 36:17</p> <p>Rowing 9:4</p> <p>run 37:17</p> <p>running 22:4</p> <p>Russell 6:3 16:11 18:15 19:6, 23 20:3 21:1,16 22:1,18 23:11 24:13 25:4,13 26:1,14 27:4 29:24 32:16,19 33:9,19,22 34:1, 15,22 35:7,10,15, 18 36:14 37:4 38:21</p> <hr/> <p>S</p> <hr/> <p>safe 13:2,16 16:25 27:8 28:16 29:18</p> <p>safely 30:10</p> <p>safety 12:24 13:17 15:10,12, 14 18:4 30:14</p> <p>Saginaw 7:1 8:7,8,20,21,23 9:8 19:14,17,21</p>
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28:6 sample 10:5,7 20:20 29:6 sampled 10:5, 15,17,21 21:11, 12 samples 10:3, 23 20:21 36:6 sampling 10:16 19:21 20:20 satisfaction 24:4 satisfactory 26:18 satisfied 23:13 24:19 saving 14:23 saying 30:23, 25 32:5 says 34:12 screening 10:3 seal 22:3 season 21:19, 22 section 33:7 sediment 20:21 sediments 9:8,10,12,14 10:12 see 6:8 7:23 8:2, 6 13:21,23 15:5 16:5 18:11 19:18 29:13 seeing 21:14 selected 26:4 send 30:21 sense 34:18 separate 30:5 session 5:21 38:23	set 5:9 16:13 20:19 setup 5:3 sheet 12:3 13:23 16:12 18:21 33:3 38:4,5 Shelly 34:1,7 short 34:21 37:23 38:23 short-term 13:15 14:10,12 18:12 show 31:16 showed 16:7 shrubs 15:2 side 19:10 36:19 sidebar 30:19 similar 11:11 sir 25:16 26:1,14 35:12 36:15 site 6:6,16 7:1,3 8:7,18 19:15 24:15 26:3,5 33:7,10 site-related 11:19 site-specific 27:20,24 28:1,24 29:2,7 30:18 situation 30:25 slide 18:14 slides 7:14 8:6 18:18,22 small 7:2 11:22 snow 27:22 soil 7:18,21,22 10:3,9 11:5,22, 23,24 12:5,6,9, 19,20 14:11 15:7 16:3 21:10 25:3 26:5,15 27:23 soils 34:13	somebody 11:24 Sommers 37:9,15 soon 18:5 sorry 22:11 30:24 sounds 36:14 source 11:18 19:24 26:8 south 9:1,24 36:19 speak 33:20 36:3 specifically 29:25 30:3 split 22:22 stability 26:25 staging 12:18, 20 25:20 stakeholders 17:3 standard 27:8 start 18:1,6,9,10 21:20 22:3 24:5 32:3 started 9:21 19:1 State 6:7 10:4 12:21 27:14 28:25 29:14 31:19 33:14,17 34:9 State's 27:12, 13,15,19 29:5 states 6:24 29:8 steeply 31:25 steps 7:12 17:18 18:12 stick 30:19 38:13 sticking 38:12	streets 17:1 stretch 22:24 studies 27:24 29:2 31:16,18 studying 31:11 stuff 22:14 26:6 sub 20:23 submit 5:10 17:14,15 37:22 38:2,14 substantial 25:17 Sue 28:18,20 Sugar 9:5 summary 5:19 32:24 sure 6:21 12:22 13:1,8 16:8 17:3 22:16 25:22 surprise 24:19 surrounding 26:22 <hr/> T <hr/> table 13:22 take 7:12 10:3 15:20,22 17:19 21:19 23:6 25:3 26:6 30:6 31:15 32:19 34:13 35:12 36:6 37:22 38:3,8 taken 18:13 22:7,24 25:21 38:19 talk 7:6,9,12 8:14 13:6 18:13 19:3 25:9 27:15 30:19 33:18 talked 28:20 talking 7:8 19:9 36:18 37:12	team 24:18 25:9 technical 13:20 21:10 30:20,22 technically 37:2 tell 29:22 31:11, 13 34:5 temporary 12:17,18 term 11:10 13:17,18 14:1,7 15:16 terms 9:16 14:8 16:19 18:2 28:24 29:5,10 30:23 32:7 Terry 24:22 25:8 test 28:14 tested 30:11 35:22 testing 28:10 29:19 31:12 32:11 35:25 thank 6:10,11, 12 9:6 18:15 32:9 34:5,22 38:13 Thanks 6:17 thickness 21:8 thing 5:11 13:19 35:18 36:2 things 12:11 15:2 20:22 21:24 22:17 24:7,14 31:2,7,8 35:17 think 14:9 16:5 19:24 20:14 21:7 24:22 25:9 28:20, 21 29:10,14,25 31:19 33:13 35:7 38:22 thinking 21:23 thought 25:11 32:1
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three 21:19,23 three-fold 8:25 three-minute 37:23 threshold 24:25 Thurston 33:23 34:4,7,17 35:1,5 time 6:14 8:17 11:14 18:17 24:17 25:9 31:15 32:22,25 36:25 times 9:22 28:21 Tittabawassee e 7:1,24,25 8:7,20 19:14,16 21:22 37:7 today 10:1 23:14 tonight 5:2,5, 16 6:5,13,22 7:6 17:15,16 18:20 35:11 38:2,9,13 top 21:12 total 11:3 touching 11:20 Township 22:23 25:19 36:17,23 Township/ city 36:20 toxicologists 29:3 tracking 31:23 traffic 13:8,10 15:5 16:3,16 25:21 33:12 traffic-management 16:20,22 18:3 22:12	trails 9:4,5 transcript 34:2 treat 35:20 tree 14:22,25 trees 14:22,23 tricky 23:25 trigger 27:7 trillion 7:18,19 10:20,22,24,25 24:25 27:6,7,12, 13 28:7,11,13 29:22 30:9,12,17 36:13 truck 17:4 25:21 trucking 15:11 truckloads 15:7 24:10 trucks 14:14 15:8 22:4 try 6:21 8:14 14:23 15:1 17:10 20:13 22:11,12 turn 16:17 two 7:12 12:1,8 13:12 16:9 21:23 type 35:16 typical 5:1 35:7 typically 15:2 29:12 31:24	understandin g 26:23 32:4 unfortunately 34:18 United 6:24 units 10:16 up-close 16:12 upstream 8:8 20:1 use 8:25 9:16 30:16 33:6,9 37:3 utilities 25:18, 22	wanting 30:4 wants 37:24 wastes 8:18 water 9:9 18:7 19:4 31:17,23 32:7 way 5:9 12:23 13:3 20:19 21:11 30:11 ways 37:21 we'll 5:18 12:25 18:22 20:3,5 22:15 24:13,20 32:22 we're 5:4,8,14, 16,23 6:16 7:8, 13,20 8:19 11:1 12:7 16:5 19:20 21:13,21,23 23:12 24:12 25:14 28:17 30:13 32:3,6,21 37:13,18,22 we've 5:3 6:8 7:4,10,23 9:24 17:22 19:15 21:9, 12 25:10 28:20 29:11 30:13 31:4, 18 37:6 weather 21:25 Web 5:5 website 18:19 30:21 31:20 Welcome 6:10 woman 27:11 words 26:10 work 12:14,15, 17 13:2 14:23 15:1,24 17:18,25 18:11 21:22 22:15 23:4,15 24:2,3,4,16,20 25:2,23 33:15,16 34:6 36:1,17 37:12 worker 15:12	workers 13:3 working 6:25 12:25 15:13 18:1, 3 19:15 29:3 36:23 37:8 worry 18:18 worse 23:16 wouldn't 26:11 written 17:15 38:1
<hr/>				
Y				
<hr/>				
yard 7:22 12:13 20:9,16,22,24,25 28:8,13 29:6,8 30:9 yards 7:21 11:5, 7 12:9 21:11 yeah 33:21,22 year 18:10 32:2 36:22 years 21:19 31:22 37:7				
<hr/>				
Z				
<hr/>				
zoned 36:21,22, 25 37:2 zoning 36:18				