Kalamazoo

Meeting

Taken on: May 19, 2015

JENSEN LITIGATION SOLUTIONS
180 North LaSalle Street
Suite 2800
Chicago, IL 60601
312.236.6936
877.653.6736
www.jensenlitigation.com

JENSEN
Litigation Solutions

ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE - PROPOSED CLEANUP PLAN

PRESENTATION

Held at the Kalamazoo Nature Center
7000 N. Westnedge Avenue, Kalamazoo, Michigan
Tuesday, May 19, 2015, at 6:00 p.m.

Presenter: James Saric, U.S. EPA Remedial Project Manager

Coordinator: Diane Russell, U.S. EPA Community Involvement Coordinator

MS. RUSSELL: It is 6:01. We are going to go ahead and get started with tonight's meeting, and now is a good time for you guys to also silence your cell phones and other media device. That would be helpful for tonight's meeting.

So, as everyone is taking their seats here, just, again, the purpose of tonight's meeting is to provide all of you some information on EPA's proposed cleanup plan for an area of the Kalamazoo River that we have designated as Area 1. And if you picked up a fax sheet from tonight, it is the area that is shown on the front page of our fax sheet. There's a little map for your reference.

And we're also -- the purpose of tonight's meeting is to allow folks a chance to provide us with public comment on the proposed plan. Jim's going to give us some more information tonight on the proposed plan; but before we get started, I just wanted to walk you a little bit through tonight's agenda so you have an orientation of what to expect this evening. I picked it up at the front table.

So, what we have structured for this evening, I am going to start off with some introductions for

tonight's meeting, and then I will pass it off to Jim Saric, EPA Project Manager; and from there, after his presentation, we'll have an opportunity for questions and answers for the audience. Then once we finish up a short question-and-answer period, we are going to take a short break before we start the formal public comment.

Now, a couple ground rules before to think about for that public comment, we do have a court reporter with us tonight. So, as we go around and you ask questions for the public comment portion, we're going to ask you to state your name and please spell it for the court reporter. And, again, even if I visited you once, every time you kind of get the microphone you'll need to restate that because she didn't want to memorize names tonight. So, for the public comment, we'll have a court reporter here.

If you would like to make a formal public comment, we have cards in the back. Just fill out the card; and at that five-minute break tonight, you can turn those in to me; and once we get that formal public comment period started, I will take your card and read the name off of the card, and I

will come to you with the microphone to submit that to public comment.

One thing I also wanted to mention is, if you didn't feel like getting up in front of people and making a verbal comment tonight, you can always submit that in writing to me tonight or you could even -- there's a form in the fax sheet that you could send your comment directly to me in my office. As long as that's postmarked by June 3rd, those will be accepted.

Okay. So, to stay on track with tonight's agenda, I'm going to go ahead and get started with introductions.

First, I will start with myself. My name is Diane Russell, and I am the Community Involvement Coordinator for the site, and I work out of the EPA office in Saginaw, so, relatively local. Also tonight, presiding here to give a presentation, is Jim Saric, EPA's project manager, and he will be available for -- to answer questions tonight.

Other observers/participants from EPA -- we have some folks from EPA here as well, and we also have the project manager from the Michigan Department of Environmental Quality. His name is

Paul Bucholtz. He's also here this evening. And without further ado, I am going to go ahead and turn it over to Jim to start the presentation. Jim.

MR. SARIC: Can everyone hear me okay? Can you hear me okay? Well, thank you for coming out. Tonight we're going to talk about the proposed plan for the first section or Area 1 of the Kalamazoo River. And as Diane mentioned, you know, what we're going to do today is I'm going to go over a couple things. Number one, we're going to talk about the proposed plan, what is in the proposed plan and what it is. And then we're going to have an informal comment period, and just to remind you to make sure if you have got general comments about the documents or the presentation, that's fine, but those informal comments won't go on the record. If you want to have a formal comment on the record, it will be after we take the break that you can go on and do it from there.

Now, here we are in the process, so, we're in the middle of this public comment period and it's going to go on for 30 days; and when that

ends on June 3rd and after that, then we're going to -- EPA is going to -- you know, we may change the record of decision or not, but we're going to take the comments and we're going to formulate a responsive summary. So, EPA will formally respond to all the comments that are there, and then we are going to finalize it in a record of decision and, hopefully, sometime in the fall.

That's generally the process that's going to go on for Area 1. And this same process was gone through with the remedial investigation, feasibility study, proposed plan and ROD. It's going to happen six more times because there is several areas of the river. So, this is just the first one. So, we'll have many more of these meetings in the future to do.

Now, just to show you the river, just to get oriented, for those of you who aren't super familiar with it, so, in the EPA we've broken up this project, this Allied Paper/Kalamazoo River project into different areas or different operable units, and the river is Operable Unit 5. So, whenever you hear OU5 or Operating 5, we're talking about the river, and this is the whole

area, the river from the Morrow Dam all the way down to Lake Michigan, some 80 miles of the Kalamazoo River. And today, you know, we're just talking about Area 1, this most upstream portion because we generally work upstream or downstream and that's what we're talking about today is Area 1.

And, specifically, to kind of get a better idea, here is Area 1. Here is Morrow Lake. There is the dam there. It goes all the way down 22 miles to what we call -- there's the former Plainwell Dam like right there. So, this stretch of the Kalamazoo River, and then this 3-mile stretch of Portage Creek because that's part of it too, that all makes up Area 1 of Operable Unit 5, and that's what we're talking about today and that's what the proposed plan is all about, that area.

Now, we have done several projects in the river, and we have had meetings about some of those projects throughout the time, and these are what we call time critical removal actions, and some of these areas they really address some of the most significant contamination in this first

reach or Area 1 of the river. And I am just going to touch briefly on all those because they're important to the remedy and what went on in telling, obviously, the story of what happened here.

So, the first removal was back in 1988 -- I mean '98/'99, and that was the Bryant Mill Pond time critical removal, and this was an area near the Allied landfill, right across from the Allied landfill, immediately downstream of the Allied landfill, in Portage Creek, where they actually rerouted the creek, removed 150,000 cubic yards of contaminated material. This was one of the most significant sources of PCB contamination to the river historically, and they addressed that back then.

Now, years later, all the way downstream, the boundary of Area 1 where the Plainwell Dam is, between 2007 and 2009 we did another removal here, and this addressed a 2-mile stretch, essentially, from around where the Highway 131 bridge crosses the Kalamazoo River down to the former Plainwell Dam; and during the time, that 2-year period, we removed 128,000 cubic yards of

PCBs. And we also, along the sediment and bank, we also -- the river, you know, formerly went through here in this direction and we rerouted the river and put it back to its natural channel, and right now it runs right through here. This structure is all gone. But right now -- that's why we removed the dam and did that all back in 2007 to 2009.

After that, based on some data we had -- we collected information as part of our remedial investigation -- we moved upstream to what's called the Plainwell 2 Dam area. It's another section of the river where it got really, really wide, and it's called the Plainwell 2 Dam, and the purpose of that was to kind of hold water back so the Mill Race could come through the city of Plainwell. It's the island city and, so, it wants to be an island city, so, you needed to have that diversion structure there. And, so, we did a lot more bank removal along there, some of the in-stream portion, in 2009/2010, and we addressed contamination there.

And then the last project, the most recent project in Area 1 that we've done in time

critical was in Portage Creek, and that was between 2011 and 2013, running through downtown Kalamazoo here, and I'm sure many of you may have seen some of the work that went on, and that cleaned up that portion of Portage Creek from there. So, you know, I just -- you know, it's important to stress that we did a lot --we've done a lot of work already at this point within this 22-mile stretch.

Now, whenever you do these cleanups and you're looking at alternatives, one of the first things you have to do is you have to have some objectives. What are you trying to accomplish? And in all the Kalamazoo River, you know, the number one objective really is, you know, protecting people who consume Kalamazoo River fish. That's really what it comes down to. That's the most important objective, and we try to go from there.

And this is kind of our objective, what we're trying to do, is to try to, you know, reduce those levels in fish over time, and we're hopeful that kind of the targets that we set are to remove the -- to be able to go from, do not

eat any fish advisory that's on the river in this section to, hopefully, be able to get -- for the small-mouth bass, get down to have two meals per month; also, to be able to reduce the fish tissue concentration in small-mouth bass to a level that would be acceptable for a sport angler, and that sport angler is someone who would eat 125 meals a year of small-mouth bass from the area and from there. And that level -- and I will show you those numbers in a minute.

That's one of the goals is to try to get down to that level within a 30-year time frame, and the way we're going to get there, is there's this relationship between sediment and fish concentration. It's not directly proportionate, but there is a relation between the two, and we believe that we can get the sediment level in different sections of the river -- and you're going to see this term SWAC. That's the surface-weighted average concentration. The idea is if we can get the surface-weighted average concentration in each of these little areas of the river to 0.33 or less, if we get it there, the fish tissue will come down, and we're going

to achieve some of these goals for fish, and that's part of the objective, one of the first objectives we've set out.

The other ones we set up, remedial action 2, objective 2, this is really looking at mammals' or birds' meat, just like a mink, and we want to make sure it's safe for the mink to be able to consume the fish, as an example, you know, to be there.

Remedial action 3, remedial action objective No. 3 looks at birds and it looks at mammals, such as shrews, for an example, is a mammal that may be feeding up in the floodplain, birds that eat worms up in the floodplain in the soils, that's what that remedial action objective is there, to protect those, that population of those ecological receptors.

And in the last one, remedial action 4, it's going to be a general objection. We want to reduce the number of PCBs that are being transported downstream and ultimately into Lake Michigan.

So, you have to have that framework. And for the river, these really are our remedial

action objectives that we're trying to do; and from there, then we can move forward and start thinking about cleanup goals or cleanup levels, and what are our objectives? And that's kind of what we did.

And our remedial, preliminary remediation goals, they're based on -- we did these human health and ecological risk assessments. They were looked at by lots of different scientists that went through and reviewed all these things, and what we found is that the PCBS, they're really the primary driver. They drive the risk. They're the primary constituent.

Are there other constituents along the river? Yes. But the risks from PCBs are much, much higher than the risk from other constituents. And in many, many situations what you see is, where you see other constituents, you see PCBs, because the river doesn't -- you know, the river doesn't really discriminate from one constituent to another.

Wherever the river slows down and the softer sediment gets deposited, that's where you've got contamination, and that's pretty true across this

whole river, along the Kalamazoo River, you can see. And, again, as I said before, fish consumption, that's the primary risk.

So, these are our cleanup levels for our preliminary remediation goals; and for fish tissue, the number is 0.042, and that's kind of to give you an idea, and that's for that sport angler who consumes small-mouth bass, you know, and that number represents a 1-in-100,000th chance of an excess cancer risk from there. The fish tissue number of 0.6, this was for the mink, okay, and many of our fish are below that .6 level right now.

For sediment, the number is -- you know, that sediment is 0.33; and to give you an idea, the background sediment concentrations upriver, around Mead, the average concentration is around .31, so, it's pretty much close to that. From there, in soils or floodplains, for the residential areas it's 2.5. For the other areas, such as the Plainwell impoundment, where the activities are mostly recreational, the cleanup level is 11. And the reason for that is for all of us who may be recreating in the floodplain,

the cleanup level for human health would be 23 parts per million but -- so, there really isn't any risk from that type of scenario; but for the ecological receptors, the number is 11. So, we use the number 11 to kind of clean up, and that drives the cleanup for some of the floodplain areas we're talking about. So, you have to come up with these cleanup levels as part of everything before you move forward.

Now, what do we do in this whole approach? So, we did the removals; we came up with our objectives. We came up where our cleanup levels or our remediation goals, and then we took another look at the river and we broke the river up into the eight different sections, and I use that term surface-weighted average concentration again about the sediment. What's the sediment concentration? That 0.33 number.

And what we did, we looked at each one of these sections and we looked at that surface-weighted average concentration. The reason why you look at that surface-weighted average concentration is because the fish don't swim in just one spot, right? They move

throughout a larger area. So, we broke the river up, you know, into areas that were -- they made sense geomorphically. Sometimes they had a unique stretch based on their slope; sometimes there was a bridge between two areas.

So, we broke it up into smaller sections and we looked at those SWACs, if you will, and said, are any of them hot? Given all the work, what's high? What's there? And the area that jumps out is Section 3 right in here. Here's where Portage Creek comes in. It was this area right here that had a significantly higher SWAC than everything else. All the other sections were really pretty low. This is the one that we looked at, and plus we had additional data near there that helped confirm that.

So, when we looked at those, here is this area 3 -- here is where Portage Creek dumps in. Section 3 is right here. So, you can see some of these like hot spots, like right here, another area right there. So, we knew we needed to do some work remaining in this section. But, also, we collected tens of thousands of samples along this Area 1 stretch of the river, and we knew

about other deposits that existed.

So, we looked both upstream and we looked downstream to say, is there anything else nearby that we need to look at? Because you always have some -- you always want more data. You always want to look at stuff.

So, here is that -- here is where Portage Creek dumps in. We looked upstream. We knew here and here we had two what we call hot spots, and these are larger deposits, about a quarter acre in size that, you know, they're significant in size. Their concentration is greater than 50 part per million. We knew a couple of those existed upstream, and then we also looked downstream of this Section 3, and we had the same thing. We knew we had a couple of them that were downstream as well.

Now, I want to talk about one other thing. See this right here? This is what we call the Crown Vantage landfill, and right next to it, which here's the edge of the Crown Vantage. This is a little blowup of it. There's a little side channel right here, and this side channel had some high levels of PCB contamination.

Now, we sampled lots of other side channels throughout the river, but this is the only one that had any really significant contamination in it from there. And that's part of our -- that will be part of the remedies that we talk about. So, I'm going to talk about this -- I'm going to mention this remediation area, and we'll say and also the Crown Vantage side channel, and I just want you to get a reference where that's located.

So, what we did is we looked at the SWACs for Section 3, and then we looked at hot spots or deposits upstream and downstream, and we combined all that into one area that's approximately three miles long, and this area is what we call the remedial reach. And this is how -- this is how we determine or we came up with -- you know, we used to come up with our sediment alternatives for what to do for sediment in the river. This is the remedial area that needed additional work and that's -- and from there, we then started coming up alternatives.

And we've developed seven different sediment alternatives, and I'll talk about them in a minute, but we came up with seven sediment

alternatives and five floodplain alternatives, and that's a separate issue, and I'll touch that. We developed our alternatives based on kind of going through that logic train, that process, basically, thinking through where we were.

And we took the alternatives, and all the alternatives have to go and be evaluated against these nine Superfund evaluation criteria, and there's these threshold criteria. It has to protective of human health and the environment, right? It's got to meet those legal objectives. It has to be compliant with applicable laws, right? That's very important. All the remedies have to pass those first.

And then we have this balancing criteria: Implementability, long-term and short-term effectiveness, cost-effectiveness, and then the last criteria are the state and community acceptance, and that's why we're here today, to talk about that. So, that's -- these criteria we looked at for everything that was involved, and we looked at the various remedies.

MEMBER OF AUDIENCE: Turn it off.

MR. SARIC: Thank you. So, we have this --

this is the remediation area we talked about, and this is where we developed our sediment alternatives. So, let's talk about the sediment alternatives we looked at and then, ultimately, the one we're proposing from here to go forward.

So, these are the sediment alternatives. The first we had to look at is the no further action alternative. And this is kind of a statutory obligation. We have to look at, what if you did nothing? So, we looked at that.

The second alternative we looked at is, what if we didn't physically go in and do any work, we just monitored it? And if you just monitored it, you might reach those cleanup goals in 87 years at a cost of $2.7 million dollars from there, so, those are two remedies that are there.

Remedy S3A -- that's sediment 3A. That's why we have the S designation, and the S3A remedy, this was one where we knew -- you go in and you excavate those five, you know, hot spots we talked about, as well as some additional sampling, some 19,500 cubic yards of material. It takes a couple years to implement. It takes 32 years to reach those fish tissue goals, and

the cost is some 13 to 16 million.

Remedy S3B is very similar to S3A, where you're going to remove those hot spots within that remedial reach we talked about, but the difference is -- you know, we talked about in S3A you're going to remove that Crown Vantage side channel; but in S3B, you're going to cap that Crown Vantage side channel. We looked at that, so, it's removal versus capping. The time frames are the same; two years to do it, 32 years to recover, but the costs are slightly less if you're going to cap the Crown Vantage side channel versus dig it up.

Remedy S4A for sediment, now this one is, basically, you're still going to remove all the hot spots but, also, along the banks of the river there's a mile and a half stretch, essentially, in each one, you would go and preferentially remove the material along both banks, one-and-a-half miles on each side. You would remove that under this remedy, and then you would also excavate that Crown Vantage side channel. So, it takes a little bit longer to implement, four years to implement. You reach your goals by

seven years faster, a 25-year time frame, and the cost is 33 million, so, it's almost three times the cost from there.

And then S4B is the same thing as S4A where you're going to remove the hot spots, remove the side bank material; but in this situation, you're going to cap that Crown Vantage side channel, and it's a little bit cheaper.

And then the last sediment alternative we looked at is sediment or S5, and this is a situation we looked at, what if you took it all away? What if you went through and you dredged 20 miles of the river a foot deep, you know, what would it be? And if you take that approach, it's going to take -- you're going to remove a huge volume of material, anywhere between 300,000 and almost 500,000 cubic yards of sediment. It's going to take at least ten years to implement. That's using multiple crews to go in there. Forty-five years to reach your fish cleanup goals. Now, part of it -- well, why if you're taking everything out, why does it take longer to reach those goals? And there's a couple reasons for that. One is it takes at least ten years to

do the project and, secondly, you're going to do a lot of environmental harm and stir up the entire system, and it's going to take a greater time to get recovery ongoing when you do that. And the cost of this project, that one, is going to be anywhere from 200 to 337 million dollars.

So, we've kind of -- you've got the no action boundary on one end and you've got the full excavation on the other end that we looked at.

So, EPA, our -- we also looked at, if you look on your -- I just want to make sure we looked at all the different criteria, and I don't want you to read that. It's too small, but the point being, if you look at the proposed plan, you will see this chart that we looked at against all the nine criteria, short-term, long-term effectiveness, and evaluated them all. We discuss that in the document as well.

So, EPA's preferred sediment alternative is alternative S3A and, essentially, what we're going to do there is we're going to go into this remedial reach, and we're going to require the responsible parties to sample. And we're going

to go in and we're going to sample and look for other additional hot spots or other areas of contamination; and if they're there, we're going to dig it up, and EPA is going to approve the plan. And, so, we know, at a minimum, we're going to dig up these five hot spots and the Crown Vantage side channel as part of this. But you know, through sampling, if we find other ones, we're going to dig them up. That's part of what's going to be required in this.

The estimated removal is about 19,500 cubic yards, if you want to know the volume. That SWAC number within that two years, you see it's going to go -- right now it's 1.76. It's going to drop to 1.09 in two years doing it, and the truth of the matter is, as we take more data, we get more data, we take more samples, more than likely that SWAC number is going to go down regardless, just from the limited data we have for doing that SWAC calculation.

We're going to have to do long-term monitoring. All these remedies are going to require fish sampling, sediment sampling, surface water sampling for some until you meet those

goals, and in this case, it will be 32 years. So, there's certainly a lot of long-term monitoring, and that is a big component of everything, of all these sediment remedies that are going to happen.

The estimated cost of this is between 13 and 16.6 million. The difference there is the 16.6 millions assumes there's two more hot spots that we find, you know, with that.

I just wanted to show you one other thing here. If you look at the feasibility study, you may see some of these charts. This kind of shows how -- the time to reach some of these cleanup goals for us, just to give you an idea.

So, we have a situation where -- you know, in some of our background concentrations like in Morrow Lake upstream, they're above. They're up here right now. And, so, you know, the background -- some of the fish are above some of the levels we're trying to get to. So, one thing to understand is that we do have background sources, you know, PCBs that are in some of the fish that are up above of our study area, so, that naturally exists.

And, so, our goal is to come in here, do the removal and your cleanup, and you're going to drop that concentration, and over time it's going to decrease, and here's that two meals a month number we talked about. That was one our objectives to reach. And then as it kind of went down, ultimately, here's the number you're trying to get to, that .042 number. That's that line right there for small-mouth bass to get to in 32 years going through that.

And if you look through the document, you will see a lot of these charts. And we've got upper and lower bounds on them based on some degree of conservatism, how we think this might go forward and might work but, generally, this is how it is.

Now, is there uncertainty with these numbers? Absolutely. Can I tell you it's going to be 32 years or 30 years or 34 years? I can't say that with a hundred percent certainty. That's why we've got to monitor, to see how that system recovers.

The one thing we do have is we have a lot of data, a lot of fish data over time, over the last

15 or 20 years, that show that recently those trends are going down slowly; but when we do additional action, we'll get those trends to go down. So, that's the sediment portion of the remedy.

Now, the other half of the story are the floodplains or the soils that are there. And, typically, the highest concentrations of PCBs that we find inside, on the floodplains, are in these bigger, larger impoundment areas or former lake areas, the areas that were dammed up where the river was narrow and then all of a sudden it just opens up. When it opens up, the water can spread and the sediment could deposit up in the floodplains.

In areas where the dam was higher, when the Plainwell Dam was eight foot higher, you had a lake; you had an impoundment. So, the Plainwell impoundment and the Plainwell 2 impoundment, these were the areas that had the highest concentration of PCBs in the floodplains, and we went in and did removal action in both. We did a removal in Plainwell and the Plainwell 2 impoundment.

And in looking at all the data, the Plainwell 2 impoundment addressed all the contamination that was a concern. It was below all the ecological concerns that were there; so, we don't have to do any work there. But in the Plainwell impoundment, this blue area highlights areas that we still need to do some other work.

And what we did was -- again, this is kind of a recreational area. And, so, the 11 part per million is the number -- it's driven -- this cleanup on this floodplain is driven by ecological receptors, mammals such shrews or birds, to protect them. So, what we did is we looked at the one-acre home range of a shrew. And we kind of looked across here and said, how many of these one-acre home ranges are above 11 parts per million? That's our cleanup number.

And currently, right now, 82 percent of them are below -- are below 11, and 18 percent are above. So, then we looked at doing extra work to figure out, what could we do to kind of remove that to make it so 98 to a hundred percent of them are below 11. And that's what the remedial actions for the floodplains look at. It's all

about the Plainwell Dam area, and these blue areas are the ones that really are laid out for the various options in the floodplain.

And here's the -- here are the alternatives again. We looked at the FPS, floodplain soil. That's what it stands for. FPS-1, the first one, is no further action. Just like looking at the sediment, we had to look at the no further action alternative from there, and that's here.

We then looked at -- FPS-2 looks at just not doing anything but just monitoring it. And, so, there's a cost of monitoring, and we don't know at this point, really, if we just monitor would you get natural recovery from flooding areas or putting clean sediment on -- clean soil on top. I don't know if that would happen or not, but we brought that remedy out.

FPS-3 is really capping this seven-acre area, with all the blue areas in the Plainwell impoundment, seven acres or 11.3, 11,300 cubic yards, but this would be -- FPS-3 would be capping that seven acres, and then you're going to have to monitor it over time, put in institutional controls, and it only takes a year

to put in that cap, and that cost is 3.8 million. Again, we're going to have long-term monitoring for that.

And then FPS-4A, you know, that goes and actually removes all those blue areas that you saw. Rather than cap them, you would remove them, and that's seven acres or 11,300 cubic yards. And in this situation, you would excavate that material about a foot and then put clean material back in. Again, it takes a year to clean that up, and the cost is about double, 6.8 million, of what FPS-3 is.

And then FPS-4B in this situation, much like the river, we looked at, what if you took the floodplains, not just in Plainwell, but all the floodplains from the Morrow Dam all the way down, you know, and in those areas you excavated all that material? Again, what would be? And that would 1.4 million cubic yards of material. It would take ten years to do that at a cost of $486 million, and you would probably do a lot of environmental damage just, basically, ripping up the floodplains from one end of the river to the other in that.

So, EPA's preferred alternative, again, we looked at all the different criteria and we evaluated against all the different factors, and our preferred floodplain alternative is FPS-4A and the excavation of the seven acres or 11,300 cubic yards within the floodplain.

And what you do is you go in and excavate it to 12 inches, put down some fabric layer, and then you would backfill it with clean material and restore the area, and then you would have to go and you would have to do long-term monitoring to make sure it stays there. You would make 98 to a hundred percent of those home ranges for those mammals and for those birds would be protected in this area. The cost of that is $6.8 million dollars.

Now, one other thing regarding the floodplains. So, the bulk of the floodplain issues were in those -- I mean, were in the former impoundments, the Plainwell and Plainwell 2 impoundments, but we have a lot of other what we call natural floodplains. They're more narrower areas where there's residences that are adjacent to the river down there. And our

residential cleanup number is 2.5 parts per million. And we've sampled a bunch of properties already, and all of them -- the majority of them or all of them are below 2.5.

But what we're going to do, we're going to go back and sample more of them, and we are in the process of doing that sampling now. So, part of the floodplain remedy includes doing additional sampling in some of these other areas to confirm all the properties are indeed below that 2.5.

Now, if they exceed that 2.5 number, they might have to get dug up. They might have to get capped. They might have to have institutional control. We're not sure. We don't believe we're going to find those above 2.5 based on all the data we've seen, but we need to take more data to confirm that, and that information is in the proposed plan. It's in the feasibility study. We just wanted to highlight that as well.

So, in looking at this, I think from EPA's perspective, both of these, the sediment remedy, S3A, and floodplain remedy, FPS-4A, EPA's position is both these remedies really represent

the best balance of all the evaluation criteria. They're protective of human health and the environment. They meet applicable regulations. They meet our remedial action objectives. They -- they're a situation where they -- they're permanent solutions to remedy these problems out there and they're going to require long-term monitoring, and they're cost effective, and I think that's all the factors that we looked at to kind of address these from here.

So, with that, before we get into any comments, you know, our next step, just to kind of remind you, what we're going to do is, you know, we can have any informal questions you've got about the presentation, about the documents itself, and these are informal. They won't go on the formal record. And then after that, we'll take a break, and then we'll have the formal comments to go there and we'll do that.

And, again, whatever comments get made in the record in the formal comments, those are going to get formalized in a record of decision and a responsive summary from there and will get finalized that way. Diane.

MS. RUSSELL: Can you get the lights for me? Thank you, Jim. Before we get started with the questions, Jim had mentioned a couple of documents: Feasibility study, proposed plan. The proposed plan is a large document, a larger document than the fax sheet. That's available on our web site. So, if you wanted to see this, that is available.

Also, for the question-and-answer period, I just wanted to remind you, in addition to what Jim had said, that now is the time to ask your questions; because when we get into the formal public comment period, EPA cannot respond to any questions during that period. So, please feel free. Now is the time to take the time to interact here so we can reserve that portion of the meeting for the public comment.

So, with that, just raise your hand, and I will come to you. I will make this easy for you. Again, please state your name and spell it for the court reporter. Thank you.

MR. KORNHEISER: My name is Kenneth Kornheiser, K-o-r-n-h-e-i-s-e-r. In this handout, it says that in the floodplain areas the

highest contaminated areas are located upstream from the former Plainwell Dam and around the two-flow control structures of Plainwell No. 2 Dam. You had said that around Plainwell No. 2 Dam the levels were not significant or not requiring attention?

MR. SARIC: Yeah, good question. So, in the Plainwell 2 Dam area we -- you know, we're looking at that 11 part per million number for cleanup. We did removal in that Plainwell 2 Dam area, and the removal addressed the majority of the contamination. So, when we went back and did that analysis, looking at what home ranges are, you know, above 11, we ended up having a hundred percent of them all below 11, so, we were good. That's why it got focused on the Plainwell impoundment.

MS. RUSSELL: Another question? State your name, please, and spell it for the reporter. Thank you.

MS. BULLOCK: Hi, this is Marge Bullock, B, as in boy, u-l-l-o-c-k. I'm asking a question that I hope will not be yes or no. So, I just want to say, why is it that we never hear anything about

drinking water now or in the future? Sources that are taking material from all of your sites, and why do not we get any facts regarding drinking water?

MR. SARIC: Excellent question. So, regarding drinking water, during -- you know, we have sampled the drinking water or the groundwater in the area; and when we did the Plainwell removal in 2007-2009, we put in several groundwater wells, and we sampled them, those groundwater wells, and I believe we sampled them for a two-year period, and none of the wells, none of them, had any detections of PCBs in any of the wells from -- you know, from the -- you know, that there were from the stuff that may have been in the banks. So, that was one line of evidence that we don't see any groundwater contamination occurring from the PCBs.

The PCB material itself doesn't like to get into groundwater, in general. It tends to grab onto other materials before it gets in there. So, typically, it doesn't like to do that.

And the third thing, if you look at all of -- some of the other operating units, we monitored the groundwater at some of the

landfills, the 12th Street landfill, the Willow Boulevard A-site landfill, you know, as an example, even the Allied, what you don't see -- you do not see evidence of groundwater contamination coming from sources like that.

So, my point, to answer your question is, we sampled the drinking water, and we don't see any contamination, PCB contamination, getting in the drinking water from there. So, that's why that is not a pathway that we're concerned about from the PCB contamination.

MS. BULLOCK: What about right up there by that capped area on Cork Street?

MR. SARIC: The capped area on Cork Street. The Allied Landfill?

MS. BULLOCK: Yeah.

MR. SARIC: We do have ground well monitoring wells around that. In fact, we just did a round of groundwater sampling. We revisited that, and we don't see any significant contamination. Do we have a couple detections of PCBs in a couple wells? Yes. But nothing different. There's been no changes over that, any of the PCB contamination or concentrations in those wells over a 20-year period

of time of monitoring them.

So, you know, that is not a concern from what we see. And the groundwater flow direction up in that particular area, any of that material is going to Portage Creek. It is not going to the city well, and we've confirmed that with our samplings.

MS. BULLOCK: Thank you.

MS. RUSSELL: Great. Another question? State your name, please, for the court reporter.

MR. HARRISON: Dayle, D-a-y-l-e, Harrison, normal spelling. Jim, I'm curious about the -- you talk about 20 parts per million at the Plainwell Dam impoundment as sort of a cleanup standard; but in all the other floodplains you are talking 11 parts per million, and is it because the elevation there is so much higher than the ordinary hundred-year floodplain? Or how do you guys interact with the various floodplains and impoundments versus the actual main stream where you don't have any impoundments?

MR. SARIC: All right. So, let me explain this. It's a little confusing. So, the cleanup number is 11. That's the ecological cleanup, 11 parts per million. So, in the Plainwell

impoundment where we have the blue areas -- and we looked at how many of those one-acre home ranges exceeded 11. We looked at that.

So, the next step, what we did was, we looked at and say -- you kind of look at, well, how do you dig it all up? How do you dig it up? So, we looked at, what if we took everything greater than 50 parts per million out of there? How many of those home ranges now become less than 11? What percentage? And we looked at like 50. We looked at 25. We looked at 20. We looked at 10. We looked at 5. We looked at one, and we kind of looked at them all and looked at how much material would be excavated.

And when you pick 20, you go in there and say, let's dig up everything greater than 20 parts per million within that impoundment, okay, that would allow 98 to a hundred percent of all the home ranges to be below 11 part per million.

It was a remedial action level. So, 20 wasn't the cleanup number. The cleanup number is 11, but given the range of various concentrations in there, it was -- at what concentration -- we were looking at kind of this, where do you get

the biggest bang for your buck? If you try to go in and dig up more material, you wouldn't get -- you know, to get from that 98, if you want to get 99 percent of the home ranges, you'd have to clean up way, way more material and not really make an impact.

So, the cleanup number was 11 in all those areas. We looked at different remedial action levels or goals, what material to clean up or remove to obtain, you know, the percentage of home ranges for those ecological receptors to get as close to a hundred percent as possible, if that makes sense.

Paul, you want to try to explain?

MR. BUCHOLTZ: What's your kind of followup question, Dayle?

MR. HARRISON: Well, you've got the floodplain, the Crown, for example, where the river is flowing fairly quick through there. So, you've got a different floodplain number. I don't know if you'd call it an elevation number. Maybe that would help clarify it.

MR. SARIC: No, the different number -- the different number is not based on elevation. It's

based on land use. So, the residential areas of the floodplain that are essentially residential, that number is 2.5, and that's the additional sampling that confirmed those areas upstream are below 2.5.

MR. HARRISON: Is there like a map that shows the various --

MR. SARIC: Yeah.

MR. HARRISON: -- commercial and residential?

MR. SARIC: In the feasibility study, there's a bunch of maps that show all the different land uses and, really, the 11 really applies primarily to, let's say, the Plainwell and Plainwell 2 impoundments because those areas were primarily recreational land use, and that's where -- in that scenario, that's the primary land use.

The human health number would be 23 parts per million. So, the majority of the concentrations were all below 23 parts per million in there but the -- so, the ecological cleanup number comes into play, and that becomes the lowest level. It's not like it's residential

land use in the Plainwell impoundment, except for a couple of parcels.

MR. HARRISON: I'm not sure if -- Paul, do you have a different take on that? Do you understand the question?

MR. BUCHOLTZ: It's difficult to describe what -- we think about the different criteria, right? We have three criteria that we're talking about. One is a recreational criteria, 23 parts per million. The other then is an ecological criteria of 11 to protect the animals in the floodplain. Then you have a residential number of 2.5.

So, another way to look at it is to go into Plainwell; and if we think about the site and the average concentrations, like Plainwell has an average concentration, the former Plainwell floodplain, of about 16 parts per million before the cleanup. The Plainwell Dam No. 2 average concentration at the floodplain was about 3 1/2 parts per million. And then when we get into the native floodplains upstream, we think it's even lower than that.

So, when we go to Plainwell, we exceed both

the residential criteria of 2.5 and we also exceed the ecological criteria of 11, but we don't necessarily exceed the 23 parts per million, which is the recreational area.

So, we go in there and we say, in Plainwell, this exceeds that ecological number of 11, so, we have to go in and take care of that area to achieve that goal of 11. So, that requires additional work in Plainwell.

When we go to Plainwell Dam No. 2, we see that the average is really more like 3 1/2, so, we don't think we have that purely ecological risk there that requires concentrations above 11 to exceed that. So, that really doesn't require cleanup unless you go to like 2 1/2 per million, which is residential, and that's something we are going to evaluate with additional sampling.

So, then when we get into the rest of the floodplain, the only thing potentially we could exceed is the 2 1/2. We don't think that we're going to be anywhere near the 11, certainly not the 23. So, that just is going to require some additional sampling in the future to make sure that those levels in that floodplain are below

2 1/2. Does that help or --

MR. HARRISON: I think it does, but I guess looking at Plain -- when you look at the Plainwell impoundment, once those riverbanks go back to its native course, a lot of sediment is going to be seven or eight feet or more above the ordinary hundred-year floodplain for the river in that area, so, you've got that excavation to take place.

I'm just wondering how that compares to the normal, native floodplain state between Kalamazoo and Plainwell Dam No. 2. I'm wondering how you guys are going to interact with that or don't you at all? It seems like it's way above the native riverbed, Plainwell, once that takes place, Plainwell No. 1. You're excavating way above what people think of as the normal floodplains of the river.

MR. BUCHOLTZ: Yeah. I think what you're talking about gets into this inundation of these areas or -- you know, we develop criteria that are -- two specific criteria. There are aquatic criteria that applies to the in-stream, and there are terrestrial criteria that applies to the

terrestrial area.

So, Plainwell is a good example. When we did the dam removal, we lowered those water levels by several feet down by the dam, and we feel much more comfortable calling the Plainwell impoundment purely terrestrial. So, it was that dam removal that gave us the separation. So, does that --

MR. HARRISON: That's good.

MS. RUSSELL: Thank you. Another question over here.

MR. DAHLINGER: Don Dahlinger. Actually, two questions real quick. The first one, is the target removal in the river 0.33 milligrams? The second one, I saw reference to thin-layer caps over 50 percent of the area. I didn't hear you talk about that in the presentation.

MR. SARIC: The first, .33 is the sediment cleanup number, the goal or objective in each of those areas. So, yes, that is the number for the sediment.

The capping really is applying thin-layer caps. It was discussed in a couple portions. It was talked about in the issue of the floodplain.

There may be some areas -- the idea is excavating maybe some areas and would putting a thin-layer cap make more sense? And you will see prepare thin-layer cap gets mentioned for some of the hot spot removal. The idea is more sand and gravel -- you get down and remove that hot spot and you've got a depression, so, maybe put some sand or a thin layer of sand and gravel, not just to kind of level the area out but for a little added layer of protection.

That is what that is really about, not a cap like thinking of a real protective cap in that sense but just adding -- putting sand or gravel in that area.

MR. DAHLINGER: You assume you will put that on 50 percent of the remedial area?

MR. SARIC: Given the depth, you may have excavated some of that stuff. That was the thought but, really, once we are done, you know, assuming we're moving forward with the remedy, and we get done with the ROD, ultimately the next step when you get into doing the work, your remedial design plan, we'll go in and suggest additional sampling and then the design plan will

say, here's how we are going to do this. Some of these hot spots have to get dug out maybe five foot below the surface. We're going to have this depression. We're going to backfill with some clean sand. That is the type of thing, and these details are going to be in that remedial design plan that are kind of missing from -- you know, that you wouldn't expect to have in a feasibility study because it's a proposed plan. We don't know the ultimate details of what we're going to do, and we need to get more specific data. Thank you.

MS. RUSSELL: Great questions.

MS. FISHER: My name is Marla, M-a-r-l-a, Fisher, spelled like Fish. Yes, I had a question about the 11 and 22 parts per million. Those numbers seem really high to me. I don't know. I am thinking about ecological receptors but -- and like a robin's level, their number is 6 or 8. I was wondering what the risks are for those numbers, and I am thinking to other PCB receptors like the fox. I think those numbers would be lower than 11 or 22. Could you address those numbers and how it affects them and the risks

involved?

MR. SARIC: I can tell you that I can't speak for what the numbers are that we did, like the fox. I don't know those off the top of my head, and these are for the floodplains. When you talk about how we developed the ecological numbers, it was a long process. Ecological risk assessments were conducted. There was peer-reviewed studies brought in.

Experts from around the country were looking at existing data that was there, and then there was new science developed, and it looked at a number of the bird species. You know, there was -- there were -- you know, there was a lot of risk assessment science looked at. What if you took a chicken egg and you injected it with PCB and what concentration would the birds get? And other science that says -- they looked at genetic receptors and some birds only have -- they're not as susceptible to PCBs. They can handle more PCBs than other birds. Some species can do that.

You have different types of science. Some are conflicting; some are not. And all those studies, there's uncertainties with all of them.

So, what we did is try to balance looking at multiple species, not just one bird. You're looking at the shrew. You're looking at multiple birds, multiple species, looking at multiple science.

MS. FISHER: Are we are going to sacrifice the robins and eagles that won't live?

MR. SARIC: The number for larger birds is much higher, and all the signs show those are much higher; but when you look at some of that stuff, you have to balance the risk versus uncertainty. And all the risks assessed by the EPA, the State, we have to balance all that, and that 11 part per million number is really the -- kind of the reasonably exposed maximum ecological receptor. That's what we believe kind of balances the risk and uncertainty for ecological receptors. Paul, anything you want to add to that?

MR. BUCHOLTZ: I think the way Jim is describing it is good. We do have this range, you know, and maybe for the sensitive birds that are on a diet of -- you know, they're eating worms and getting a higher exposure, you know, those are some of the animals that might be more at risk. We kind

of look at a number that picks most of this stuff up.

Another piece to think about, like with the mink, we have looked at the mink, but the mink falls out on the ecological side as an aquatic receptor because they eat fish, and we get their data from the in-stream. And, again, we are looking at a cleanup point of .33 for the in-stream, and a risk assessment for the mink, sediment protection for that species was .5 to .6. We think that if we, you know, protect for people in-stream, we are going to get the ecological receptors. That's what analysis has showed us.

I think like eagles we're looking at, a lot of times, a much larger origin range that takes them outside the area, so, it gets harder to evaluate that risk. And a lot of things like the smaller birds, the shrew, they have smaller ranges. They're definitely within the contaminated area, more at risk, if that helps clarify.

MS. GERMAIN: Janet Germain, J-a-n-e-t, last name is G-e-r-m-a-i-n. We looked at dollar numbers. We looked at animals, but let's look at time slots on those charts. Some of them say

45 years; some say 85 years. Well, I'm 70 this year, and I have -- will have 10 generations then that I have lived in, ten generations of people. So, if those families live within this area, that's 10 generations in 70 years. So, 85 years could be even more generations; and if they stay in the same area, and depending on the size of their family, one family, 10 generations, that's hundreds of people. I totaled up just my family in three of the generations, and it comes to way over a hundred. So, we need to look at the people concept of it more and also the consumption of those that live from this area of wildlife, fish, and foul and so on.

So, I just wanted to put those numbers in people's heads of the alternatives we're looking at and time spans of how many people it will affect, if it can affect that many for one family. That's all I have to say right now.

MR. SARIC: Thank you.

MS. RUSSELL: Okay. Any other questions before we break for the public comment period? Again, this is the time to ask. We won't be able to answer any questions during the public comment

portion. This will be the time to ask those questions.

MR. HARRISON: Dayle Harrison. I'm still perplexed about this floodplain. In some areas, you excavated six feet. In some areas, you cover only a foot. How do you determine whether you are going to cover a foot of fill, if that's sufficient to protect the terrestrial or do you need to go deeper, two feet of fill? And why do you excavate sometimes six or seven feet in the floodplain, like the Plainwell impoundment, and sometimes you actually get to higher levels the deeper you go in Plainwell in some cases. Can you clarify any of that?

MR. SARIC: Yeah. I think the easiest way to look at it, when we looked at the map, we looked at a lot of maximum concentration values, right? So, within Plainwell, we look at the remedies and said, we want to dig up everything greater than 20 parts per million in that Plainwell impoundment. Some of those areas are greater than a foot down below the surface. So, that's why some of those areas we have to go down greater than a foot because we are trying to

target that.

Now, it may be that -- you know, generally, typically, if the contamination is over a foot below the surface, you know, the burrowing animals won't get down below there, so, therefore, they won't be exposed to that contamination. So, that's why that one-foot depth is kind of picked, and that's been uniform across the board in a lot of different floodplain-type cleanups, that one-foot excavation.

When we did the removals, the time critical, it was different than what you see now. You know, we had higher concentrations. What we see now is kind of the remaining stuff beyond the removal. So, I hope that clarifies, and I'd be willing to sit down and look at the maps and show you, you know, because it is confusing. I totally understand, particularly looking through some of this stuff. I can certainly --

MR. HARRISON: I just wondered what the threshold -- it sounded like it was one foot in a normal native floodplain.

MR. SARIC: That's kind of typical. I think

that one-foot barrier is kind of a typical number you look at. You know, what's the exposure below a foot? But, again, in many of these cases we were trying to be conservative and say, if any of this stuff maybe gets disturbed, gets a road put in, and we were looking at maximum values and trying to say, let's remove everything greater than 20 parts per million, as an example. It would help us insure that 98 to a hundred percent of the home ranges were protected when we're looking at that ecological number being the driver for the cleanup.

MR. HARRISON: So, the final numbers here in a lot of areas, like Otsego, Trowbridge, you're finding that there's four or five or six feet of contaminated PCB sediments along the banks. So, when you say you're only capping a foot or you're only removing a foot and covering a foot, how do you resolve that with five or six feet of contaminated shoreline sediment?

MR. SARIC: Okay. So, different situation. So, in the Plainwell, Plainwell 2, the contamination is much different. We don't see like this six-foot contamination up in the

floodplains. In Trowbridge and some of those areas, yeah. I mean, in Otsego city, you know, we see some of that stuff where you've got contamination in depth for some of those areas, and those are other issues for remedy.

The question becomes if you're going to -- if it's along the bank, it can get eroded, so, it doesn't matter if it's a foot down, if it's five foot down. If that channel is unstable and it's going to widen and move, you've got to get that material out of there; you can't just leave it in place. But if it's further away from the channel and it's a depth of four or five foot below the surface, those may be cases where you could cap that area rather than excavate it, theoretically.

And in that situation -- but then if you're going to do that, you then have to control that property. You've got to make sure no one comes in and builds a house on that property, so, you have to control it that way. We haven't made any of those decisions but, I mean, we're thinking of the alternatives to evaluate. Those are things we'll look at.

MS. RUSSELL: We have time for one or two

more questions before we get into the comment period. Any takers? Great questions tonight. Really appreciate the time you're putting in. One question back here.

MS. GERMAIN: Janet Germain. Have any areas been checked once you get into the farm area part of the river where a farmer may dig a trench for all those years, using it to -- for water use, water for his plan to irrigate it? Have you checked any areas to see if there were any PCB runoffs into old areas there?

MR. SARIC: I mean, I can't speak specifically to an example of that. We monitor surface water in lots of different areas from there all the time. Paul, anything specifically you can think of?

MR. BUCHOLTZ: No. I think, generally speaking, you know, the contamination is within pretty much the hundred-year floodplain, give or take. So, you know, we know generally the footprint, and I think, you know, one of the steps we're going to take is some additional sampling in the floodplains in some of these areas, but we don't see anything specific that

you're discussing right now. We haven't seen a situation like that.

MS. GERMAIN: Thank you.

MS. RUSSELL: We have time for one more question before we take a quick break. Any takers?

MS. BELCHAK: My name is Margy Belchak, M-a-r-g-y B-e-l-c-h-a-k. My question is going to be a nice, easy technical one.

MR. SARIC: Yeah.

MS. BELCHAK: So, your averages that you're talking about for your parts per million concentrations of the Plainwell Dam, you said was about 16 parts per million?

MR. SARIC: Yes.

MS. BELCHAK: So, when you're looking at those numbers, I'm kind of curious about a couple of things. One, what is the area that you're looking at? Obviously, if you took a huge area and did an average, you'd come up with a very low concentration, even if there's some high data points. So, what are you -- I guess, can you tell me a little about the process that you used? And if you find hot spots, you know, what do you

do? Do you do more testing around that?

MR. SARIC: Let me go back and show you something real quick. So, the area for the averages -- see the gray? The gray would represent -- this is the Plainwell impoundment. So, when Paul says the average concentration, it's the average concentration of this gray area, which is about -- you know, this one impoundment is like 16 part per mill. Okay?

MS. BELCHAK: That includes the blue areas?

MR. SARIC: That includes the blue, so, this whole thing is the impoundment, the former lake bottom, if you will.

MR. BUCHOLTZ: And it also included the areas before the removal action.

MR. SARIC: Right.

MS. BELCHAK: Key point.

MR. BUCHOLTZ: So, before 2007, 2009, just as a relative consideration of what the concentrations are like along the river. So, today the averages are lower after that removal action was done.

MR. SARIC: Really good point.

MR. BUCHOLTZ: But we haven't gone through

and recalculated.

MS. BELCHAK: Yeah, we haven't recalculated the new numbers?

MR. SARIC: Right. So, what we did then, in this area, as Paul described, that 11 part per million number became -- that's kind of the control ecological number, and we're below the 23, you know. So, then what we did is we knew -- we took -- we used the mammal, like the shrew, who has a one-acre home, a smaller home range than some of the larger -- than the bird species. So, you, basically, envision a circle that is one acre and you plot it all across that gray area.

And you look and say, how many of these one-acre home ranges exceed 11 parts per million? And before this work, 18 percent of them exceeded 11, right? 82 percent did not in this particular area. In the Plainwell 2 impoundment, a hundred percent of them were below 11.

So, once we looked and said, okay, we have 82 percent of them that are protected, 82 percent of the home ranges. Can we do more? And that's when we looked at all the data, and we said, okay, what if you took all -- anything that was

greater than 50 parts per million, if you pull that, what percentage of home ranges are now protected? Well, you go from 82 to 85 or 88, you know, and then we looked at looking at 50. We looked at, I think, 35, 25, 20. We looked at different numbers, and it just -- when you looked at kind of that risk/benefit type thing, it was very clear that when you looked at everything greater than 20 part per million and you excavate that, which is all the blue areas, then in doing that, now 98 to a hundred percent of the home ranges are protected. So, that's kind of how we did that.

MS. BELCHAK: And that's sort of theoretical, right? So, at some point, I mean --

MR. SARIC: Right. We're going to sample. We're going to go back and sample all that. You bet, we're going to go back and sample, but, you know, a lot of the stuff inside the blue, you know, from here -- you know, from here toward the river, a lot of that was all removed. That material was all removed when we did our time critical remedial action in 2007-2009.

MS. BELCHAK: Thank you.

MS. RUSSELL: Thank you very much. Okay. So, what we're going to do is at this point we're going to take a short break to prepare for our public comment portion. If you would like to make a comment tonight, I ask that you -- we have some cards that look like this at the back desk. There's not a whole lot of writing required. Just fill out the back and turn them in to me. So, we'll take a few short minutes if you wanted to still do that, and we'll come back here to start the public comment period. Thank you.

(Proceedings concluded for this portion at 7:10 p.m.)

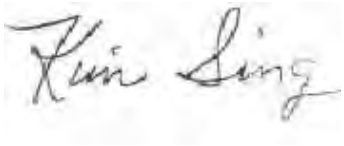
CERTIFICATE

STATE OF MICHIGAN

COUNTY OF VAN BUREN

I, KIM SING, a Certified Shorthand Reporter and Notary Public in and for the State of Michigan, do hereby certify that the foregoing transcript taken on May 19, 2015, is true and accurate to the best of my knowledge, skill, and ability.

IN WITNESS WHEREOF, I have hereunto set my hand this 28th day of May, 2015.



KIM SING, CSR-2263, CP-RPR

My commission expires:
August 11, 2017

Kalamazoo

Meeting

Taken on: May 19, 2015

JENSEN LITIGATION SOLUTIONS
180 North LaSalle Street
Suite 2800
Chicago, IL 60601
312.236.6936
877.653.6736
www.jensenlitigation.com

JENSEN
Litigation Solutions

ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE - PROPOSED CLEANUP PLAN

PUBLIC COMMENTS

Held at the Kalamazoo Nature Center

7000 N. Westnedge Avenue, Kalamazoo, Michigan

Tuesday, May 19, 2015, at 7:16 p.m.

Presenter: James Saric, U.S. EPA Remedial Project Manager

Coordinator: Diane Russell, U.S. EPA Community Involvement Coordinator

MS. RUSSELL: Let's go ahead and get started with the final piece here. Before I call the next name, please remember that this is your opportunity to provide comments which will be recorded as part of the official record for this project. EPA will not be responding to comments or questions expressed during this portion of the meeting, however, EPA will follow up with responses to comments in a Responsiveness Summary which will be made publically available.

If you -- again, if you do not want to make comments tonight, there are other ways you can submit comments on the proposed cleanup plan. You can submit them in writing to EPA's office, which is provided in the fax sheet. You can offer those online. We have an online comment form. You can also fax those to me in my Saginaw office. So, there are multiple ways you can submit those comments if you do not feel like providing those here verbally tonight.

With that, I am going to call the first commenter, and I will come to you with the microphone. And, again, please state your name, for the court reporter, and the first commenter is

Kenneth Kornheiser.

MR. KORNHEISER: Thank you. The proposed plan aims to reduce PCB levels in fish to the level acceptable for sports anglers. Sport anglers are figured to eat two bass per month. However, it acknowledges that there are a large number of subsistence anglers, and it also acknowledges that fish consumption advisories are inadequate for protecting subsistence anglers and their families.

So, I would suggest that the potentially responsible parties are potentially responsible for poisoning all of those subsistence anglers and their families; and even though it is not typically part of the remedial action in these kinds of projects and programs, that I would suggest that that needs to be addressed more sufficiently.

MS. RUSSELL: Thank you. I think I have another card coming. All right. You're next. State your name for the court reporter.

MR. HARRISON: I am Dayle Harrison, D-a-y-l-e, H-a-r-r-i-s-o-n. I am the president of a group called the Kalamazoo River Protection Association. We have been on the site -- and I know many of you have heard the story before. We have been on the

site since 1976, '77. We're still really saddened deeply by the failure of GP and the Koch Brothers -- Koch Industries to take a commanding lead in this cleanup. It's our belief that Koch Industries, when they acquired GP, factored in the billion dollar cleanup costs as a liability to reduce the purchase price for that amount. So, they need to man up and step up with the deal they already got.

So, having said that, I think, as a preliminary review, I think what EPA proposes here is adequate. We've got some more research to do and some more reading to do, but I think the two alternatives will help us with the downstream and, hopefully, bring about more cleanup in that area.

We will be submitting written comments probably within the next three or four days, but I would request an extension in the next ten days to give us more time to review what is a pretty cumbersome document. Thank you.

MS. RUSSELL: Okay. I have run out of cards, but I am willing to open it up to someone who would like to take a chance and give a comment now. And, again, no problems submitting a written comment.

Make sure that if you're going to send it by mail, it needs to be postmarked by June 3rd, and you can also submit that, again, online and can also fax that, and that information is on -- in our fax sheet. So, unless there's any last minute holdouts -- do you want to add to your comment?

MR. HARRISON: Dayle here. It's pretty perplexing that -- and this is probably a side line, but we've cleaned up -- excavated 300,000 cubic yards out of a $4 million dollar cleanup excavation process that's needed. So, if we do that in 20 years, you can figure out -- you can do the math yourself -- how long it's going to take, at this rate, to get the river restored for the fisheries, the human health risk reduced, and ecological safety for wildlife.

It's really puzzling why -- I think even the community is having difficulty understanding why it's taking so long, given the resources that these companies have, to clean up the river, and why EPA has not been more aggressive. At the present rate, we're talking about a 300-year cleanup at the present rate we're doing the work now. That's really frightening and just unbelievable.

MS. RUSSELL: Okay. Thank you. Last opportunity before we close it up for the evening. Okay. That concludes our meeting for this evening. I would like to thank you, again, for taking the time to come up and learn about the cleanup project for Area 1. Have a very safe evening and drive home safely. Thank you very much.

(Proceedings concluded at 7:24 p.m.)

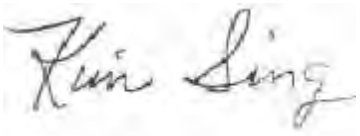
CERTIFICATE

STATE OF MICHIGAN

COUNTY OF VAN BUREN

I, KIM SING, a Certified Shorthand Reporter and Notary Public in and for the State of Michigan, do hereby certify that the foregoing transcript taken on May 19, 2015, is true and accurate to the best of my knowledge, skill, and ability.

IN WITNESS WHEREOF, I have hereunto set my hand this 28th day of May, 2015.



KIM SING, CSR-2263, CP-RPR

My commission expires:
August 11, 2017