ERRATA SHEETS
Date: 12-14-00
Hudson River PCBs Public Meeting

70395

10.7027

You can send your comments through close of business February 16th to Doug and Alison, and we will respond to those comments and respond in the summary later on down the road.

Just a couple of ground rules here. When you come to the mike to speak, you have two minutes. Everybody gets two minutes. We enforce two minutes. Enough said.

If you have not filled out an index card to come to the mike and you want to come up and ask a question or give comment, please do so.

Back out in the room where we have the exhibits, we do have index cards. Please fill one out, and they will be given to me up here at the platform.

As you can see, we have two signers here also for the hearing-impaired.

Now, I am going to turn it over to Rich. Thank you.

(Applause.)

MR. CASPE: Thank you. Just a couple of other points first: Don't you wish you could bottle this heat and take it home?

We used this model to try to predict, as best we could, what would happen if you did certain things.

As I said, you start turning different dials and understanding how the river responds as you turn those dials.

We did all that, and we think we came up with a very sensible, practical and common sense approach.

And I would like to go into that remedy and explain it to you a little bit.

Now, the first slides that have been up here since you walked in shows the three sections of the River.

The 40-mile stretch of the River here is what we call the Upper Hudson.

The first section is six miles long and is the most contaminated.

And when I say "the first", that is Section One.

The northernmost section is six miles long. It is the area, basically, between Roger's Island, Fort Edward, and the Thompson Island Dam.

In that area, fish are highly

This is the preferred alternative that we have.

When we say "targeted", they say, "Well, how can you target something that is 2-1/2 billion cubic yards, when the river is 35 miles long in this area and has an immense amount of sediment in it?" as you obviously would imagine.

The acreage within that area is roughly 3900 acres.

And as I will show you on the following slides -- which I am not ready to go with yet -- of that 3900 acres, we are actually impacting less than 500 of them, less than 13 percent of the surface area.

That is pretty targeted. We could have certainly targeted a greater area.

We looked for the benefit. We looked at the benefits, and we looked at the issues. We said, "Well, how do you..." -- we wanted to minimize dysfunction, certainly, and we wanted to maximize improvements.

We came up with a rationale that did that.

Would lower the fish concentrations.

We lowered the risk of movement of the PCBs, and would lower the level of PCBs that would go over the Troy Dam by approximately 40 percent into the downriver area.

The remedy we came up with was 2.65 cubic million yards of sediment removal, over 100,000 pounds of PCBs; roughly half the PCBs in the Upper Hudson River is what we are talking about removing.

The other half are diffused in other locations or in stable locations where we felt it was unnecessary to remove them.

It costs around $460 million. And that is impressive work. That means we have to invest $460 million now in order to have enough money to pay for the construction when you actually construct -- begin construction of this job in three-and-a-half years.

We came up with no local landfill. There was serious objection to it.

We felt that it was probably administratively impossible, as well as highly unacceptable to local communities.

So, we removed -- there is no local landfill.

going to have new channels so that the river will remain navigable while we are doing the work, and navigation may very well improve.

As to dewatering facilities, there will be two of them.

They will probably cover around 15 acres each.

There will be dewatering on the north end and dewatering on the sound end, in all likelihood, and they will be on commercial properties.

We are not talking about setting these things on farmland or unspoiled property.

These would be located on existing industrial/commercial facility areas.

We are going to move this material by rail.

We are not going to move the material by truck. There will not be a lot of trucks clogging the area.

We expect to be able to -- one of the criteria as we site these facilities is that we have rail transport for those locations.

Well, people say you cannot do it in five years.

We believe you absolutely can do it

is that River Section 1 that Rich showed you on the map, a six-mile reach of the river -- that they come in at a level that is fairly low but go out with a lot more PCBs in them.

So, there is a lot of increase of the PCBs that would cross that part of the pool.

That increase of PCBs comes from the sediment, and it is equivalent to about one- to one-and-a-half pounds of PCBs per day.

Next slide. This graphic shows you in the yellow the approximate concentration coming into the upstream boundary, and the blue is the concentration that leaves.

You can see that there is a large increase.

You can see that there is a change in the bottom. The bottom is PCB homologs. The site is the mass in pounds per day.

And you see the overall increase. And you add all those rows together, that is how many pounds per day.

But you also see a change in the pattern of PCBs, and that is how we identified that it would be coming from the sediments and not any other source.

But there are no other real sources than the sediment in this area, and it has to be coming from the sediment.

So, PCBs do come from the sediment and contribute to the water.

What processes naturally might solve this problem?

We investigated two of these thoroughly.

The first thing that we considered was PCB dechlorination.

We found that PCB inventories will not be naturally remediated by dechlorination.

Dechlorination is where the chlorine atom on the PCB atom will be stripped off by organisms in the sediment.

This does occur. This is one of the reasons we can do the fingerprinting that we saw from the previous slide.

What we found was that only 10 percent of the base of the PCBs would be lost through this process.

And the big thing here is that this is controlled by concentration and not time.

It is not just that we need, another

levels that exceed that by many times.

We did risk assessments, and we studied several exposure pathways.

The predominant pathway of exposure here, the primary pathway that we are concerned with, is consumption of fish.

And we found that both human and environmental risks exceed acceptable levels.

ñ The cancer risk is a thousand times the goal that EPA uses for protection.

We also found that there are non-cancer hazards over a hundred times the acceptable level for a young child, and that is 65 times the level for an adult, non-cancer health effects, such as low birth rate, immune problems and immune deficiencies, inability to fight infections.

We also did ecological risk assessments on the river otter, mink and bald eagle.

And, for example, with the fish-eating mammals and birds, higher levels of the food chain, there were unacceptable levels.

We put all this together and we found that the natural processes were not doing it

and we have currently unacceptable levels.

So, we felt that active remediation was necessary.

And, at this point, we will turn it over to the next part of the study, the Feasibility Study, which has just been released.

And Alison will explain this.

(Applause.)

MS. HESS: Thank you. There are some seats available in the front, if you would like to make yourself comfortable.

What I am going to do now is show you the process that EPA used to arrive at its preferred alternative.

The purpose of the Feasibility Study is to evaluate options to address the PCB contaminated sediments in the Upper Hudson River to protect human health and the environment.

The objectives of our study included goals for fish.

In fish, we want to reduce the cancer risks and non-cancer health hazards for people eating fish by reducing the concentrations of PCBs in the fish.

per meal -- one fish meal every two months would be at safe levels from 20 to 40 years earlier than under no action.

And one fish meal per month could be reached at 25 to 30 years earlier under this alternative.

And, certainly, this would be faster in the third river section, the last 29 miles of the Upper Hudson River.

We would also meet our target concentration of 0.05 parts per million in fish within that third river section in the last 29 miles.

We would have monitored natural attenuation, with the residual PCBs, until the acceptable levels are reached.

And this alternative assumes source control at the GE Hudson Falls site.

The aspects of this alternative are in direct response to many concerns that we have heard already: There is no local landfill; we would accommodate the normal flow of river traffic; and we would complete the project in five years using multiple dredges, and we would be in any one location for a short

I want to thank the EPA on behalf of the Congressman for the excellent presentation it made here this evening, and thank all of you folks for coming out here this evening and for giving an attentive ear to listening to our major concerns.

I wanted to keep it real short. Thank you very much.

MR. CASPE: Catherine Hudson, representing Attorney General Eliot Spitzer?

(Applause.)

MS. HUDSON: Thank you. My name is Catherine Hudson. I am Assistant Attorney General with the Environmental Protection Bureau.

We appreciate the opportunity to present this statement on behalf of the Office of the Attorney General.

The Attorney General's Office strongly supports the Environmental Protection Agency's decision to dredge sediments in the most contaminated areas of the Hudson River.

Fish throughout the Hudson River, from Hudson Falls to the Battery, are

MS. HUDSON: Based on the evidence of the record and EPA's and the State's technical and scientific review of the evidence, four points are clear and should be indisputable.

One: PCBs cause harm to humans and wildlife. That harm includes immune, reproductive, nervous and endocrine system injury, as well as cancer.

Two: PCBs in the river sediments are available to fish and other animals and from there can be ingested by humans.

We know that people are still eating contaminated fish from the Hudson River.

Three: The river is not cleaning itself of PCBs.

While the river is cleaner now than it was 30 years ago, that is largely because the State has expended tremendous resources to reduce sewage and other industrial discharges.

The PCBs that remain in the river are invisible. The PCB levels in the fish have only decreased marginally in the over 20 years since GE stopped using PCBs at its Hudson Falls and Fort Edward plants.

Over the last seven years, they have

MS. HUDSON: Based on the evidence of the record and EPA's and the State's technical and scientific review of the evidence, four points are clear and should be indisputable.

One: PCBs cause harm to humans and wildlife. That harm includes immune, reproductive, nervous and endocrine system injury, as well as cancer.

Two: PCBs in the river sediments are available to fish and other animals and from there can be ingested by humans.

We know that people are still eating contaminated fish from the Hudson River.

Three: The river is not cleaning itself of PCBs.

While the river is cleaner now than it was 30 years ago, that is largely because the State has expended tremendous resources to reduce sewage and other industrial discharges.

The PCBs that remain in the river are invisible. The PCB levels in the fish have only decreased marginally in the over 20 years since GE stopped using PCBs at its Hudson Falls and Fort Edward plants.

Over the last seven years, they have

were not contrary to the common misperception to taxpayers who will have to pay for the clean-up if GE does not.

To those towns and industries who have done their share to clean the river and to New Yorkers who long for a cleaner Hudson River, fairness, to me, means that GE removes its toxic wastes from the river.

We save the river by cleaning it, not by leaving it polluted.

Thank you.

(Applause.)

MR. CASPE: I would also like to just acknowledge that we also received a statement from New York State Assemblyman John Fasso, which we will enter into the record.

Okay. It is your turn now. Again, pay attention to Karen. She is an ex-crossing guard. She is going to be holding up the green and yellow and red signs.

The yellow sign means 30 seconds and the red shows stop.

We have 75 people who have filled out cards to speak. At two minutes even, that is 150 minutes, which is close to three hours;

two-and-a-half hours, anyway.

And that does not include the break that we have to take at some point.

So, it is going to be a long time. Let us try and keep it to two minutes each so that everyone may have an opportunity to speak and get home at a relatively reasonable hour.

I am going to call people five at a time to the microphones. Then, after those people speak, I will call the next group of five.

This way, perhaps, we can keep people moving and it will not get too crazy here.

So, let us start. The first speaker is going to be Sonja Peters; then Dave Keegan, Robert Robinson, Congressman Joe Ruggiero, then Robert Hanson.

If you ask me why this order, I have no idea. That is the order I got the cards in.

Sonja Peters?

MS. PETERS: Hello. My name is Sonja Peters. I am 10 years old, and I just wanted to say that I would really like the river to be cleaned up because then I could swim in it and not be scared that PCBs will be getting into

I would also like to thank the many members of the DEC -- I will stop. Okay.

(Applause.)

MR. KYRIACO: I am Lee Kyriaco. I am a former city Councilman, Beacon, six years. It is a community on the Hudson River.

I recently ran for State Assembly to represent several communities.

I have been a senior vice-president at Fleet Bank, where I have been the Director of Planning, and also a senior vice-president at Chase Manhattan Bank before that.

I have no particular predisposition to penalize corporations arbitrarily. Those are the things I am.

What I am not is a scientist, an expert in this field or, certainly, a full reader of all the materials that have been developed here.

So, how do I or any layperson really assess all that is going on here?

I guess it comes down to reliance on the scientists; that we should ensure impartiality and ensure local input.

In my view, the EPA has done just

at. They have provided exceptionally thorough science. It has been extensive.

It has been thoroughly extensive -- it has been years and years; maybe too long -- peer review; that means impartial, disinterested experts when dealing with a process.

That should convey impartiality, and it does so. And it has also been reflective of local concerns.

If the EPA has done a good job, then why is there any public hullaballo whatsoever?

Well, that is pretty simple. That is because there is one party -- and only one -- that has a direct financial interest in the outcome, and that is GE, because they will have to pay for it.

And I just wanted to note that for the record that that clouds every single statement by GE in court, in science, in all their public statements --

(Applause.

MR. KYRIACO: To understand fully GE's financial liability, one could imagine what the debate over the last 20 years might

action of the river and uptake into the food chain;

"And, whereas partial dechlorination yields molecules which are still toxic, as well as being water-soluble and volatile and mobile, therefore being more bioavailable;

"And, whereas PCBs pervade the food chain with total body loads building up in humans and other living things;

"And, whereas an estimated $800 million has been lost over the last 20 years because of the closure of Hudson River commercial fisheries and restrictions on recreationally-caught fish, with the result that the Hudson Valley has lost an important cultural heritage;

"And, whereas many people do eat the fish they catch in the Hudson River because they are either ignorant of or ignore the Department of Health's warnings;

"And, whereas EPA's plan calls for selected dredging of the hot spots, the dredge being deposited in already-established toxic waste facilities where they may be contained..." --

They are much cleaner. There is no significant increase in turbidity around the dredging project.

It can be done cleanly. It is cost effective. It is safe. And there is no reason not to do it.

Thank you.

(Applause.)

MR. CASPE: Jeanne Kelly?

MS. KELLY: I chose to live in New York State, specifically the Hudson River Valley, because of the Hudson River.

I chose to live on the west shore in Kingston, New York, due to all of the public river access.

I am the mother of a 12-year-old boy. We swim, sail and fish the river daily throughout the summer.

And it is all a great day, except that we cannot eat the fish that we catch because we have to release due to the effect that it is PCB laden.

We vote for dredging the Hudson. Let us clean up the river. Let everyone admit and do their responsibility.

break.

I know you all probably want to get home.

The next speaker is John Mylod.

MR. MYLOD: John Mylod, M-y-l-o-d, Poughkeepsie, New York.

I, too, want to express my appreciation to EPA, Region 2, and all the other Federal agencies for all the work they have done on this project over the years.

I also want to commend Mrs. Browner and Governor Pataki and DEC Commissioner Cahill and Attorney General Spitzer for their support in this project.

I do support the project, although I think I am just for the first time seeing the slides tonight about an incremental increase in cost leading to a pretty large incremental increase in cost for removal of the PCBs from the river.

I think the broader project would be something I would support more than the preferred alternative right now.

However, I certainly do, at the minimum, support the alternative that EPA is

positions has stressed a moral obligation for each generation to leave a better legacy for future generations.

MR. CASPE: I am sorry, but your time is up. You can give us the written statement, and we will be sure to read the rest.

The next speaker is Marla Hall.

MS. HALL: My name is Marla Hall, Project Coordinator with NYPIRG. We are also a member of over 70 student organizations which make up the Coalition of Students for a Cleaner Hudson.

And I would commend the EPA on their decision to dredge the river.

I would like to also just comment that a man by the name of Ralph Nader once commented that people very rarely, when asked what they own, list the woods in their back yard, as they rarely list the river that runs through the neighborhood.

They often times list their homes or house.

And I think it is a really, really interesting insight.

If someone were to come in and steal

And I think it has even happened here in Dutchess County, where people are halfway reasonable.

They have been brainwashed. Have you seen any of GE's TV ads?

Please consider socking some money into a public information campaign on the realities of dredging.

That's it. I just want the people that are remaining here -- you know, unfortunately, there are a bunch of Town Boards in the Upper Hudson Valley that have said, "Oh, you know, we do not want PCBs dredged."

I am asking all the activists that are still here tonight to work on the County legislators and the Town Boards across Dutchess County.

We can get resolutions passed by the Town Boards across Dutchess County and in the County Legislature for the suction pump technology.

Lastly, I wanted to express my gratitude, again, for your coming to this decision.

With the new Administration coming in

Hudson River for 45 years.

And it is the most beautiful river in the nation.

And do we have the right to make another town or municipality accept our toxic waste?

There is going to be a lot of stuff removed, and we are going to have to find some place to dump this stuff.

I do not think that we have the right to force our contaminated waste on other people.

I do not think we have the right to transport it by truck or rail.

And I do not think we have the right to force GE to, more or less, foot the whole bill for this whole thing.

It has been brought out that they did nothing wrong. It was not illegal at the time that they dumped the waste.

With GE, the way they work, this project goes back to waste-dumping probably 40 years or more, and that is a long, long time for those PCBs to be dissipated into the water current downstream past Poughkeepsie and

cancer, you remove the cancer before it spreads

Mr. Jack Welch of General Electric and EPA, you are morally bound to do your civic duty and clean up the PCBs; get them out of the food chain.

We all live downstream from GE. We want to be able to eat the fish and reopen the fisheries safely.

History will judge you, Mr. Welch, Mr. B. and Mr. Haggard, by the actions your take.

And I honestly do not know how those three gentlemen sleep at night.

Thank you.

(Applause.)

MR. CASPE: The next speaker is Mark Searle.

MR. SEARLE: Mark Searle, S-e-a-r-l-e. I am the Secretary of the Mid-Hudson Chapter of Trout Unlimited, an international conservation organization of over 150,000 members dedicated to the restoration and maintenance of America's coldwater fisheries.

And the Mid-Hudson chapter in Dutchess County is one of the most active organizations

REVEREND PARRISH: When you talked about sealed freight cars, that seemed to be the level of thinking at this point.

And I think you have got to get much more sophisticated beyond that before you start this process because, once you get it out of the water and the waters are drying out, you are creating a hazardous product that millions of people are going to be breathing.

MR. CASPE: The material would be dried out in a dewatering facility.

REVEREND PARRISH: And as soon as it is dried out, it will go into the air. You will not have a totally contained facility.

So, you are dealing with a human hazard here of enormous proportions.

So, I am just saying that we have to study this.

We have been working on this project for seven years in New Jersey as well as New York City. And that is not the way to go. I have more detailed written comments here. I am not really sure what to do with these.

MR. CASPE: We will take them. Thank

Hudson Valley Wildlife feels that additional technologies should be incorporated to safeguard and enhance the restoration of the Hudson River.

Please keep your mind open to utilizing these channels of scientific projects.

With either decision, it is very, very important to the community how the procedures are taken care of following that.

Thank you.

(Applause.)

MR. CASPE: I will state that we did investigate hydrobotanical remediation, growing plants. There were studies that we did look at, but we did not get significant PCB uptake through those plants.

But we have studied that, and that is within the Feasibility Study.

Is that correct, Alison?

MS. HESS: Yes.

MR. CASPE: There was a 5,000-page study that was put out.

If you look in there and you are interested, you will find some analysis of