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1 UNITED STATES OF AMERICA Environmental Protection Agency 2 - - X 3 In the Matter of: HUDSON RIVER PCBs SUPERFUND SITE: 4 REMEDIAL ALTERNATIVES -STATE OF NEW YORK 5 6 - -X 7 8 Auditorium Newburgh Free Academy 201 Fullerton Avenue 9 Newburgh, New York 10 Monday, April 2, 2001 11 12 Pursuant to Notice, the Public Meeting in the above-referenced matter commenced at 7:17 13 o'clock p.m. 14 15 16 17 18 19 20 21 ELLEN GRAUER COURT REPORTING 22 133 East 58th Street 23 New York, New York 10022 24 (212) 750-6434 25 REF:40636

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1	PRESENT	
2	On Behalf of the United States EPA:	
3	MC CABE, Deputy Director, Super	fund
4	TOMCHUK, Project Manager	
5	OLSEN, Environmental Analyst	
6	FISCHER, ESQ., Counsel	
7	PRESENT:	•
8	ANN RYCHLENSKI, Public Affairs FROLLINO, Community Relations	Specialist
9	KAREN COGHLAN, TAMS Consultant	
10	Speakers: DANIEL AYEHOUSE	Page No.: 27
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1	PROCEEDINGS
2	(7:17 o'clock p.m.)
3	MS. RYCHLENSKI: Good evening. Would
4	you all please take your seats? Thank you for
5	coming out this evening.
6	This meeting is sponsored by the United
7	States Environmental Protection Agency in order to
8	discuss and take your comments on a proposal to
9	clean up the contaminated sediments of the Upper
10	Hudson River.
11	Tonight there is going to be a brief
12	presentation, and then we will take your questions
13	and your comments.
14	I am going to lay down a couple of
15	ground rules so that everything goes smoothly and
16	everybody has a chance to have their say.
17	If you want to come to the mike and you
18	have not filled out one of these index cards,
19	please do so.
20	Outside at the tables, we have the
21	handouts, and there you can please fill out one of
22	these cards.
23	Everybody has two minutes when you get
24	to the mike.

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I am going to draw your attention to 1 2 these two ladies down here (indicating), Karen and Florence; they are very nice ladies, and they take 3 their jobs very seriously. 4 What they will do is let you know how 5 6 much time you have got. When Karen holds up the green sign, you 7 8 have got time, probably about a minute or minuteand-a-half. 9 10 When Karen gets to the yellow sign, there are 30 seconds remaining and, when she gets 11 to the red, it is time to stop. Everybody gets 12 two minutes. Okay. 13 14 I want to let you know a couple of 15 things before we move into the presentation. 16 First of all, we are taking public 17 comment here tonight. We have a stenographer sitting right down here in the front row. 18 19 When you come up to the microphone to 20 give your comments or to ask a question, please 21 identify yourselves. Please speak clearly, and 22 please spell your last names so that our 23 stenographers can get a good transcript and record of tonight's proceedings. 24

1 You can send your comments to us until April 17; that is how long we are accepting public 2 3 comment on this proposal. The comments that you give us tonight 4 will go into the transcript, and we will answer 5 your comments and questions in a response summary, 6 which will answer all the questions and comments 7 which we get during this time some time in August 8 when we make our decision. Ŷ 10 Now, there are other ways you can 11 You can send your comments in to us at comment. You can send them to Doug Tomchuk, and that 12 EPA. is care of Hudson River Comments, USEPA, 290 13 14 Broadway, New York, New York, 10007. Doug's address is on the proposed plan. 15 16 That is the blue document that is out there in the 17 handouts, and I hope that all of you have taken 18 one. 19 In addition, you can comment by e-mail, 20 and we are getting a lot of e-mails. We have 21 received over 20,000 on this. So, people are 22 certainly letting us know what they think. 23 You can e-mail us at Hudsoncomment --24 that is one word -- dot Region2 -- also one word with an arabic numeral "2" -- at EPA.gov. And you

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1 have until April 17th. 2 I think that that is about it. Those are the ground rules. 3 You know you have two minutes. If you 4 5 have not already signed in, please do so. 6 If you have not availed yourself of all of the handouts, please do so. 7 8 I am going to introduce the gentleman 9 sitting to my immediate left, Mr. Bill McCabe. Bill is Deputy Director of Superfund, EPA's Region 10 11 2 Office, and he is going to talk to you tonight about the proposal EPA has out there about the 12 13 clean-up. Present as well are Doug Tomchuk, Doug 14 Fischer, and Marion Olsen. And we will be happy 15 16 to answer your questions at the end. 17 Thank you. 18 MR. MC CABE: Thank you. As Ann mentioned, there are a few of us up here. 19 20 Doug is a Project Manager; the other Project Manager could not be here with us today, 21 who is Allison Hess. 22 23 Doug Fischer is our site attorney. Marion Olsen, next to Doug Fischer, is the 24 25 toxicologist on the site.

1 So, let me begin with just a brief history of the site, and then get into some of the 2 3 problems and then what our remedy for those problems is. 4 5 We have conducted a 10-year study at about \$25 million. 6 That is about the most extensive study 7 that I have ever seen, maybe the most extensive 8 9 one in the country. 10 Interestingly enough, we have gotten a lot of comments about that. Some say, on the one 11 12 hand, "What has taken you so long?", and then, of course, there are others on the other side saying, 13 14 "Why are you rushing to judgment?" So, we are kind of in the middle of the 15 16 game. 17 This study, this peer review by five different panels of independent experts, those 18 19 experts reviewed all of our documents, our six 20 documents. We made a lot of changes; whether they 21 were major revisions, minor revisions, it did not 22 23 matter. 24 We made a lot of changes to accommodate 25 them.

We were very pleased with the results of 1 the peer review. 2 3 Obviously, everything was not perfect. It is not easy, particularly for those who wrote 4 the documents, to sit in an audience and hear 5 6 people tear their work apart. But, for the most part, we did quite 7 well. We are pretty pleased with it. 8 For instance, at peer review, there was 9 10 agreement on certain factors like -- certain very important things, like the fact that the fish pose 11 12 an unacceptable in the Hudson River. That is a rather key finding. 13 Also, 14 there was agreement that widespread diminution of 15 contaminated sediments was not happening. 16 Not surprisingly, they talked about the 17 river system being very dynamic, and you would not 18 expect that to happen. 19 The site itself covers 200 river miles from Hudson Falls to The Battery, as you can see 20 here (indicating slide). 21 The Upper Hudson, which is really the 22 focus of our study; is about 40 miles. 23 24 The rest of the river, the Lower Hudson, is about 160 miles. 25

On the next slide, you can see that what 1 2 we have done with the Upper Hudson is divide it into three sections. 3 The first section runs from Fort Edward 4 5 down to the Thompson Island Dam. That is about a six-mile stretch of river. 6 And that includes what is known as 7 Thompson Island Pool which is considered to be the 8 9 most heavily contaminated area of sediments. 10 In fact, when DEC studied this back -- I 11 think they started in the mid-seventies, they 12 determined there were about 40 hot spots in the 13 Upper River. Twenty of those hot spots are in this 14 first section. 15 And, again, that is a six-mile stretch 16 of the river. 17 18 The sediments averaged at about 42 parts per million. 19 Section 2, which is another short 20 stretch there (indicating slide), that goes about 21 five miles down to the Northumberland Dam. 22 There are 15 hot spots there, and the 23 average sediment concentration is 26 parts per 24 million. 25

Then the third section, a very extensive 1 one, all the way down to the Federal Dam in Troy 2 -- that is 29 miles -- there are five hot spots 3 there with an average concentration of about nine 4 parts per million of PCBs. 5. What this is showing you is that, 6 7 obviously, the heaviest contamination area we are really concentrating on, focusing on, is in the 8 9 upper two sections, the upper 11 miles of the river. 10 Through this study we have learned a 11 12 great deal about PCBs and about the levels in the river in the sediment and in the fish. 13 What we have determined about PCBs is 14 that they cause cancer in laboratory animals and 15 16 they are probably human carcinogens. 17 This is not only EPA's opinion, but the opinion also of a number of national and 18 19 international agencies. These agencies include the National 20 21 Institute of Environmental Health Sciences, NIEHS, National Institute of Occupational Safety and 22 Health, NIOSH, and the World Health Organization. 23 There are also some serious non-cancer 24 health effects, such as low birth rates, learning 25

12 and memory problems, thyroid disease, 1 immunological deficiencies. 2 This kind of a determination was also 3 supported by the recently completed National 4 Academy of Sciences Study. 5 As a result of this, what we encourage 6 7 all to do is to follow the fish consumption advisories. 8 Those include "eat none" from Hudson 9 Falls to Troy, and "eat none" for children under 10 11 the age of 15 and women of childbearing age in the entire Hudson River. 12 13 These fish consumption advisories, although they are very important, we do not 14 consider them long-term remedies for a variety of 15 reasons, obviously. 16 The Hudson River is a national resource. 17 We do not want to write it off. 18 There is also a goal in the Clean Water 19 Act of Fishable and Swimable Waters, and probably 20 21 most important is the reality of people eating fish whether that is for recreational, cultural or 22 subsistence reasons. 23 24 In fact, there was a Department of 25 Health study in 1996 which showed that one in six

that they surveyed had fish in their possession, 1 and one in ten had more than one fish in their 2 possession. 3 And, of course, this says nothing about 4 5 the oncological impacts to the River Otter, Mink, Shrew, Bald Eagle, et cetera. 6 On the next slide that you see, what I 7 want to talk about a little bit is the PCB levels 8 in the water column. 9 What you will see here and what you have 10 heard is that, in 1977, you heard that there was a 11 12 90 percent decrease; you are way up here, and then you come down here. And, yes, it is probably 90 13 14 percent. What was not said at the same time, 15 however, is what happened in this time period. 16 17 In 1973, the dam was removed. In 1977, General Electric stopped discharging PCBs from 18 19 their facilities. And in 1979, navigational 20 dredging ended. 21 So, what you really see from the mid-22 eighties on is pretty level. The levels have not 23 changed very much in the water column. 24 The next slide -- what I want to show 25 here is -- this shows the Thompson Island Pool,

the load increase over the Thompson Island Pool. 1 What it shows here on the bottom is the 2 3 mass coming into the Thompson Island Pool, and what is here in the red is the mass leaving the 4 5 Thompson Island Pool. What this simply shows you is that, as 6 the water goes over the sediment in the Thompson 7 8 Island Pool, this is the increase, this is just 9 PCB homologue; it is just a way of looking at it. 10 So, there is a significant increase; we figure in the neighborhood of three times extra 11 that the water column is picking up from the 12 sediment. 13 So, what does that say? It says that, 14 15 yes, the sediment is very important. 16 PCBs are coming from the sediments. It 17 is not all coming from upstream. On the next slide, this just simply 18 shows you that we have been able to fingerprint 19 20° the sediments into the water column. 21 In other words, based upon this PCB 22 homologue pattern, the sediment in the water 23 column area is at the same pattern; so, we know it is coming from there. 24 25 In other words, it is not coming from

1 upstream. It is not coming from some other source. It is coming from the sediment because 2 they have the same PCBs there. 3 The next couple of slides that we will 4 show you have to do with the fish, the PCBs in the 5 fish. 6 And, again, they are basically what I 7 just showed you in the water column. 8 There are four different ones I will 9 10 show you. Black Bass here, the first one, from Stillwater. 11 It shows you that same kind of a 12 precipitous drop, and then a leveling off. And 13 that is since the early eighties. 14 And then you will see the same kind of a 15 pattern. The next one is the Brown Bullhead, same 16 17 basic pattern. Largemouth Bass, you see a slightly 18 19 different pattern here. There is a large increase in the early nineties. This is as a result of the 20 Alan Mill Release. 21 But, as you can see, the levels have 22 dropped off again. 23 And the next one is the Brown Bullhead 24 again, the same kind of a pattern. 25

Again, it is because it is in the 1 Thompson Island Pool that they went up, and then a 2 leveling off again. So, we get the same thing. 3 With the water and the fish, what you 4 may have heard is that the levels are going down, 5 that there is no problem, you do not have to worry 6 about it. 7 8 Well, that is not the case. They have been basically the same for quite a long period of 9 10 time, and we expect them to stay that way. 11 As far as the PCBs in the sediment, 12 natural dechlorination processes are not 13 sufficient to solve the problem. You have probably heard that PCBs will 14 15 take care of themselves, that they will dechlorinate and become harmless. 16 17 That is not the case. We have found 18 that that results in about less than a 10 percent 19 mass loss. 20 There is also, as I mentioned before, 21 little evidence of burial in the Thompson Island 22 Pool, burial of PCB-contaminated sediments by 23 clean sediments. What are coring has shown -- the 24 sediment cores, the sampling of the sediment -- is 25

that more of those cores showed a loss of 1 2 inventory; in other words, it is moving out of that area at a gain or burial, in other words. 3 Also, in 60 percent of our samples, the 4 highest PCB levels were in the top nine inches of 5 6 that core, again showing that it is near the surface and it is not being buried. 7 8 Now that we know this, what are we going to do about it? 9 10 Is source control the answer, as some have said? Should we just take care of the source 11 and let the river naturally remediate itself? 12 The way we look at it is that source 13 14 control is an important part of the remedy. We believe that the effort currently 15 underway by General Electric, under order of New 16 17 York State, is a very important effort. GE is looking to remove its remaining 18 contribution of PCBs from their Hudson Falls 19 20 facility. There is a plan in-house with the 21 22 Department of Environmental Conservation, which we also have a copy of, and General Electric believes 23 it can eliminate the remaining source of PCBs. 24 25 That is great. We are all for it. It

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is absolutely necessary, but it is not the only 1 remedy. 2 As I noted before, in the chart showing 3 the amount of PCBs entering into the water column 4 in Thompson Island Pool it's a significant amount. 5 General Electric uses loses about three 6 ounces a day from its facility; we say it is about 7 five or six. Whatever it is, it is a number of 8 9 ounces. 10 And we are saying that what is added to the sediment in the Thompson Island Pool is about 11 one to one-and-a-half pounds. So, there is a 12 significant difference between the two. 13 And that is why we do not believe that 14 source control alone is the answer. 15 We absolutely believe it is necessary to 16 also clean up the sediments. 17 18 So, our proposed remedy, which on the next few slides you will be able to see somewhat 19 20 -- and it is also on some charts out front, I believe -- it shows you in red the areas we are 21 talking about remediating versus the rest of the 22 river, which is in blue. 23 24 And what you will see from here is that, 25 in River Section 1, down to the Thompson Island

1 Dam -- we are talking about 1.56 million cubic yards of sediment. 2 3 River Section 2 goes down to the Northumberland Dam; that is that five-mile 4 stretch. That is another 580,000 cubic yards of 5 sediment. 6 The final section, the 29-mile section, 7 Number 3, there is about half-a-million cubic 8 yards of sediment. 9 10 So, obviously, again, what we are looking at -- what we are concentrating on is the 11 upper two sections, the upper ll miles of the 12 river. 13 That is, by far, the most contaminated 14 area of the river that we are looking at for 15 16 remediation. 17 When you add in 340,000 cubic yards of navigational dredging, you are talking about a 18 19 remedy of about 2.65 million cubic yards of PCB-20 contaminated sediment that we are looking at 21 removing. 22 This will encompass about 500 acres out of the total of 3900 acres. 23 24 That is why we are considering it to be 25 a targeted dredging effort.

1 It is not like we are going in and ripping up, as I have heard, the entire river 2 3 bottom. That is about 12 to 13 percent of the 4 5 total area that we are talking about remediating. And, again, it is mostly in the first two river 6 sections. 7 8 On top of that, we are talking about adding one foot of backfill, clean fill. 9 This will help to restore the habitat, 10 and it would also deal with any residuals that are 11 left behind. 12 This will remove about 100,000 pounds of 13 PCBs from the river. 14 15 We figure that there is about 200,000 left in these areas (indicating on slide) out of 16 all those initial discharges that we have heard, 17 you know, a million pounds or whatever it might 18 19 be. But we figure there's about 200,000 20 left, and this will take care of about 100,000. 21 The next slide is a little bit difficult 22 23 to read, but the purpose of this is to show that the river will remain open to navigation. 24 There has been a lot of talk about 25

you are going to be having so many boats in there, 1 so many barges and dredgers, et cetera, that 2 3 nobody is going to be able to use the river; it is just going to be totally blocked off. 4 But what we have attempted to show here 5 and what is certain would be what it would look 6 like in the Thompson Island Pool. 7 8 And, again, it shows typical mechanical 9 equipment dispersal. 10 The whole point here is that this does not look too bad. It does not look like it would 11 completely clog up the river. 12 13 And that is obviously the intent: we will not be. 14 15 So, for those who have heard that -- I 16 mean, I just heard it the other day, in fact, when 17 I was testifying before the New York City Council, that General Electric doubled the number that we 18 were talking about right there in front of me. 19 20 So, you hear a lot of numbers. But it is obviously not our intent to impede navigation 21 22 and, in fact, we will not. 23 Some other items about the proposed remedy -- there will be no new local landfills 24 25 built.

The residents of the Upper Hudson made 1 it guite clear to us that they were not interested 2 in having a new landfill built in their community. 3 We understand that, and we have agreed 4 5 with them. And we have said that we will not do that. 6 Any sediment will be taken away to a 7 licensed facility outside of the Hudson Valley, an 8 9 existing facility. It is business. They will be bidding on 10 it. 11 12 There will be two dewatering or transfer stations sited one to the north and one to the 13 14 south. There has been a lot of talk about 15 those, as to where they are exactly. 16 We have done some preliminary work on 17 that. We will be doing some more work in the 18 19 future, obviously, trying to figure out where the 20 best places for those facilities are. Nothing has been selected. You really 21 22 could not select them at this point in time because then you would have to have a lot of legal 23 24 work done prior to even selecting a remedy, which I do not think too many people would be 25

1 appreciative of.

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2	So, we are still looking at that. In
3	fact, I am sure there are some people in the field
4	in the coming weeks looking at a lot of the
5	questions we have been getting from the public, a
6	lot of just a lot of the concerns, particularly
7	those related to construction and how we are going
8	to deal with the hot spots, the shoreline, et
9	cetera.
10	So, there will be we will have more
11	people in the field dealing with those issues in
12	the coming weeks and months.
13	Another issue the community was adamant
14	about was the truck traffic.
15	Understandably, if you had a whole fleet
16	of trucks every day coming out of these
17	facilities, it would be pretty destructive to
18	local communities.
19	We are going to use trucks we are
20	going to minimize the use of the trucks as much as
21	possible.
22	We intend to use rail for the dewatered
23	sediment and barges for as much of the sediment
24	and backfill and anything else that we would
25	possibly need, equipment and what-have-you, for

these facilities. 1 2 There will be, of course, extensive monitoring before, during and after. 3 4 We will be taking measures to protect 5 the water supplies. We do not expect that to be an issue, 6 7 but we have heard that as a concern, and there is 8 a good reason to be concerned obviously. 9 But we will have to come up with some sort of contingency plan. 10 11 Again, we do not expect that to be an issue. 12 There have been releases in the past, 13 14 including what I mentioned before at the Alan Mill 15 Release. 16 I do not believe there were contaminated water supplies then, and those were far greater 17 18 than anything we could imagine here. The construction time -- what we are 19 talking about is a \$460 million project presently. 20 21 We are talking about a three-year design 22 and a five-year construction period. 23 Now, what will the remedy achieve? It 24 will reduce the PCB levels in fish, obviously; 25 that is our main goal.

It will reduce the load of PCBs over the 1 2 Troy Dam by 40 percent. 3 It will allow the fish consumption advisories to be reduced at least a generation 4 5 sooner. It will reduce the PCB levels in 6 wildlife. 7 I see there is a press release from the 8 9 State concerning just that issue. I just saw it. 10 It will reduce the risk to those who consume fish for subsistence reasons. 11 12 We know and we have heard from plenty of folks that there are a lot of people who eat fish 13 14 as a matter of subsistence for protein and are not as worried about teh fish consumption advisories 15 16 as they are about eating. 17 It will eliminate a significant amount of PCBs from the river system in the case of 18 19 significant flood events. 20 And it will accomplish much in the muchneeded navigational dredging. 21 With that, I know Ann mentioned the web 22 site and the fact that we have gotten 20,000 e-23 mails. 24 There's a lot of folks -- which is one 25

26 last, I guess, editorial comment: A lot of people 1 are writing us letters, obviously, and sending us 2 e-mails. 3 And a lot of folks are concerned that we 4 5 are not responding to them. I would just like to point out, again, 6 7 20,000 e-mails, 11 or 12 cartons full of papers with letters. 8 We obviously are looking at them all. 9 10 We are trying to compile them, kind of categorize them. 11 12 And we will be responding to them, but we will not be responding to them individually. 13 As you could imagine, that would be pretty much 14 15 impossible. There are a lot of different categories 16 17 of comments, and that is the way we will be 18 dealing with them. So, with that, before I turn it over to 19 the questions and comments from the audience, 20 there are three elected officials that I would 21 22 like to notice who would like to come up and say something. 23 24 Daniel Ayehouse, representing Congressman Hinchey; Katherine Hudson, 25

27 representing Attorney General Eliot Spitzer; and 1 2 Carl Pore, the City Manager for the City of 3 Newburgh. Danny? 4 Thank you very much. 5 MR. AYEHOUSE: At this time, I would like to pass along 6 7 my thanks to EPA from Congressman Hinchey for 8 holding this meeting here in Newburgh. Congressman Hinchey is in Washington 9 right now and is unavailable to be here, and asked 10 that I come and thank you for coming to Newburgh 11 for this public forum. 12 He also asked that I take this 13 14 opportunity to read the following statement: 15 "I strongly support EPA's decision to dredge contaminated sediments from the largest hot 16 17 spots in the Hudson River. 18 "Over the past 30 years, I have worked for many people in New York and Washington, D.C., 19 20 to make the Hudson River cleaner. "As a result of the Rockefeller Pure 21 Waters Program, the Federal Clean Water Act and 22 23 many other actions, the Hudson is healthier today than at any time during the last century. 24 25 "Unfortunately, over a period of 30

years, General Electric has put one million pounds 1 of PCBs into the river from its facilities in 2 Hudson Falls and Fort Edward. 3 "Because of PCB contamination, our 4 5 beautiful river has the unfortunate distinction of 6 being one of the country's largest toxic waste 7 sites. "Now, finally after a decade of studies 8 and delays, this last serious insult to the 9 10 integrity of the river can be removed. "I applaud the EPA's comprehensive plan 11 12 to remove PCBs from the Hudson River. It is long overdue, and I believe we should move forward with 13 14 it. 15 "PCBs are ranked as one of the most dangerous hazardous substances in our environment 16 17 and pose significant risks to humans and to wildlife. 18 19 "Significant studies have found that 20 PCBs cause cancer in animals and are probable 21 human carcinogens. "It is not acceptable to leave the PCBs 22 where they are as the river is not cleaning 23 itself. 24 "PCBs do not break down to safe levels 25

naturally. 1 "A decade of independently-examined 2 scientific studies has determined that PCBs will 3 continue to pose unacceptable risk to human health 4 5 and the environment unless we remove them. "These scientific studies have 6 determined that PCB are not going away naturally. 7 8 Without dredging, contamination of fish and wildlife will remain at unhealthy levels in the ્ર foreseeable future. 10 "For instance, a recent study by the New 11 York Department of Environmental Conservation 12 found that Snapping Turtles are so contaminated by 13 14 PCBs that they are literally living hazardous waste sites. 15 16 "Fish in the Hudson River are contaminated 10 times higher than the level 17 allowed by law, and these fish are contaminating 18 19 people. 20 "We know that many people eat fish from the Hudson River and those who do face 21 22 substantially increased risks of cancer and other 23 serious health problems, especially our children. "The types of PCBs that bioaccumulate in 24 25 fish and other animals and bind to sediments that

they have in the Hudson happen to be the most 1 2 carcinogenic. "Unless the PCBs are removed, these fish 3 will remain contaminated at harmful levels. 4 "EPA science has shown that PCBs are not 5 6 sitting harmlessly in the bottom river in hot 7 spots. "Roughly 500 pounds of PCBs are moving 8 downstream and into the food chain every year, 9 contaminating fish and wildlife from the Troy Dam 10 down to The Battery. 11 "EPA's proposed clean-up would 12 dramatically improve the health of the river by 13 14 removing 100,000 pounds of PCBs from the areas where they are most concentrated. 15 "The risk to human health and fish would 16 be reduced fivefold immediately following the 17 clean-up. 18 "The State would able to relax fish 19 20 consumption advisories much sooner than if nothing were done. 21 22 "Unfortunately, GE has demonstrated that 23 it will stop at nothing to ensure the proposed 24 clean-up never happens. 25 "They have spent an estimated \$60

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million that has completely distorted the facts in 1 an effort to deceive Hudson Valley residents. 2 "GE has even tried to have the Superfund 3 Law, which protects Americans from toxic wastes, 4 declared unconstitutional. 5 "GE objects to Superfund's provisions 6 7 that require the polluter rather than the taxpayers to pay for the clean-up. 8 "I believe that GE should be held 9 responsible for the pollution and pay to clean it 10 up just like any other company is required to do. 11 "Seven years before the Government 12 banned PCBs, GE was told by the PCB manufacturer, 13 14 Monsanto, that PCBs were harmful substances and 15 yet they continued to dump them in the river. 16 "While GE claims that forcing them to 17 pay the cost of clean-up would be unfair because 18 their discharges were legally permitted at all times, this is, in fact, false. 19 20 "PCBs continue to seep into the river 21 from their plant without a permit. "And in 1975, a State Administrative Law 22 Judge ruled that GE's discharges violated State 23 24 water quality standards in the early 1970s. 25 "Documentation shows that in the early

1980s, GE violated the Clean Water Act by 1 2 exceeding their discharge permit. "These violations directly contradict 3 GE's claims that they have always abided by their 4 permit. 5 "In my lifetime, tremendous progress has 6 been made in cleaning up the Hudson River. 7 "Both the New York and the Federal 8 Goverment have made substantial investments in 9 10 bringing the Hudson back to life. 11 "GE should now take responsibility for its share. 12 "EPA's plan to dredge PCBs from the 13 Hudson should go forward so that future 14 15 generations are not left with the legacy of 16 pollution, and the residents of the Hudson Valley can fully enjoy the benefits of a clean Hudson. 17 18 "Thank you very much." 19 (Applause.) 20 MR. MC CABE: Thank you. Ms. Hudson? 21 22 MS. HUDSON: My name is Katherine 23 Hudson. I am an Assistant Attorney General in the 24 Environmental Protection Bureau, and I welcome 25 this opportunity to present the statement of the

New York State Attorney General, Eliot Spitzer, in 1 support of the Environmental Protection Agency's 2 remedy for contaminated sediments in the Hudson 3 River. 4 The Attorney General strongly supports 5 EPA's decision to dredge sediments from the most 6 contaminated areas of the Hudson River. 7 Fish throughout the Hudson River, from 8 9 Hudson Falls to The Battery, are contaminated with PCBs. Wildlife is contaminated. 10 As confirmed by the new mammal and flood 11 planning PCB data released by the Department of 12 Environmental Conservation just today, humans are 13 14 exposed and are also contaminated with PCBs. It is time to address that problem. 15 We applaud the EPA in Washington and Region 2 for the 16 care and thoroughness they exhibited in reaching 17 this conclusion. 18 And we applaud the Department of 19 Environmental Conservation staff for the time and 20 21 effort they have expended in studying the river and reviewing the EPA' proposal. 22 Congress made a decision 20 years ago --23 and has repeatedly reaffirmed it since then --24 25 that there is a compelling need to clean up toxic

34 waste sites. 1 Companies responsible for the 2 3 contaminants must clean them up, preferably by removing them. 4 5 States around the country, including New York, have made similar judgments passing similar 6 7 toxic waste clean-up laws. The Hudson River, after decades of 8 study, is long overdue for a clean-up. 9 Based on the extensive evidence in the 10 record, EPA's technical and scientific staff have 11 made four critical determinations with which DEC's 12 13 technical staff agree. These four points amply justify EPA's 14 15 proposed remedy. According to the EPA: 16 17 1. PCBs cause harm to humans and wildlife, including harm to the immune, 18 19 reproductive, nervous, and endocrine systems. 20 PCBs are probable human carcinogens. 21 2. PCBs in the Hudson River sediments are available to fish and other animals and from 22 there can be ingested by humans. We know that 23 24 people are still eating contaminated fish from the Hudson River. 25

Indeed, the impacts on downstate 1 residents with respect to the consumption of fish 2 are particularly acute. 3 The New York State Department of Health 4 advises that children and women of childbearing 5 age eat no fish from the Hudson River and that 6 7 others seriously restrict consumption because the fish are contaminated by PCBs. 8 However, despite this advice, anglers 9 continue to eat the fish they catch, and they 10 often share the catch with members of their 11 families. 12 The advice goes unheeded and, in many 13 cases, unheard. 14 Recent studies show that recreational 15 anglers regularly eat fish from the river and that 16 many share the fish with family members. 17 This activity increases with distance 18 where downstate anglers are much more likely to 19 20 eat the fish than their upstate comrades. 21 Members of minority groups are also more 22 likely to consume the fish. In 1992, a study found that, while only 23 47 percent of Whites ate fish they caught from the 24 25 Hudson River, 77 percent of Blacks and 94 percent

of Hispanics consumed the contaminated fish. 1 2 Further, this study showed that 3 approximately 50 percent of downstate anglers reported sharing Hudson River fish with the most 4 at-risk population, women and children. 5 3. The Hudson River is not cleaning 6 itself of PCBs. 7 8 While the river is cleaner now than it 9 was 30 years ago, that is largely because the 10 State has expended tremendous resources to reduce sewage and other industrial discharges. 11 12 The PCBs that remain in the river, however, are invisible. 13 The PCB lev1s in the fish have decreased 14 15 only marginally in the over 20 years since GE 16 stoped using PCBs at its Hudson Falls and Fort Edward plants. 17 Over the last seven years, PCB levels 18 have remained essentially stable. 19 20 Unless the PCBs are removed from the 21 river, the fish will remain contaminated. 22 Dredging the hot spots in the Hudson 4. 23 River will remove large quantities of PCBs and, in conjunction with control of the continuing 24 25 discharges from the Hudson Falls plant, will lead

to major improvements in the river. 1 This remedy will dramatically decrease 2 human health risks, particularly in the Upper 3 Hudson River Valley. 4 It will also cut almost in half the flow 5 of PCBs over the Troy Dam, significantly assisting 6 the recovery of the 150 miles of the Lower Hudson 7 River. 8 These long-term benefits far outweight 9 the limited short-term impacts that may result. 10 In addition to these scientific findings 11 12 by EPA, a well-established body of law supports requiring GE to clean up its PCBs from teh Hudson 13 River. 14 15 For 20 years, companies big and small, regardless of the legalities of the discharges, 16 have cleaned up their toxic discharges under the 17 Federal Superfund Program and its state 18 equivalents. 19 There is no reason to treat GE 20 21 differently. 22 Moreover, contrary to the common 23 misperception, GE's discharges were not always permitted or legal. 24 25 Indeed, GE had no permit for most of its

1	discharges. And even some of its discharges
2	pursuant to a permit were found to be unlawful.
3	When GE charges unfairness of requiring
4	it to clean the Hudson River of PCBs it put there,
5	one can only ask whether or not it would be more
6	unfair to ask New Yorkers to let still more
7	decades pass before the Hudson River fish are
8	safe, before the environment is cleaner.
9	Every year, the State is faced with
10	dozens of companies who refuse to clean up site
11	contaminated with their waste. Would it be fair
12	to them to make the taxpayer foot the bill for
13	GE's clean-up and not theirs?
14	And would it be fair to them to let GE's
15	pollution remain in the river while the State
16	required others to perform and pay for a clean-up?
17	The State and Federal Governments have
18	spent billions of dollars reducing sewage and
19	other discharges into the Hudson River.
20	Would it be fair to those taxpayers to
21	have all that effort undercut because GE refuses
22	to clean up its own pollutants?
23	Should we not finish the job of cleaning
24	up the Hudson River and revitalizing the river?
25	We must clean it up, not leave it contaminated.

1 The Attorney General, several years ago, said that the clean-up of the river had been 2 3 delayed too long. Several years ago, EPA committed to 4 5 issue a proposed remedy by December of 2000. We congratulate EPA for meeting its 6 7 commitment. 8 Now is the time to deliver. It is time 9 to start the clean-up. The Attorney General calls on GE to join 10 us in supporting this sound and fair remedy for 11 the Hudson River. 12 Together we can make progress and leave 13 our children and grandchildren a legacy we can 14 15 still be proud of. 16 (Applause.) 17 MR. MC CABE: Thank you. Carl Pore? 18 MR. PORE: Thank you for holding this 19 20 meeting in the City of Newburgh, and I welcome everyone to my alma mater, the Free Academy, Class 21 22 of '69. Where did the time go? 23 For many, many years, the Hudson River 24 has been a harbor of light for the City of 25 Newburgh.

The City has an illustrious history as a 1 2 strategic location; George Washington chose 3 Newburgh for his headquarters during the Revolutionary War. 4 From that time, through the period of 5 6 its industrial growth as an important port city 7 and center for shipbuilding to the modern day where the people are striving to reclaim the 8 9 Hudson River Waterfront for public use and 10 recreation, Newburgh has a rich history. The river has been critical to the 11 12 City's growth and prosperity. Without the Hudson River, there would be no Newburgh. 13 Governor Pataki has declared the river 14 as New York's life blood. It is Newburgh's life 15 blood as well. 16 17 After years of neglect and industrial misuse, like many cities, towns and villages up 18 19 and down the Hudson River, Newburgh has undertaken an ambitious effort to revitalize its waterfront. 20 The City has rezoned its waterfront, 21 industrial zones to waterfront classification that 22 23 encourages water-dependent uses and pubic access. 24 Former industrial properties, including 25 the Consolidated Iron site, are being cleaned up

1 and readied for redevelopment. 2 The City recently created a new public park, the Ward Brothers Memorial Park, as a part 3 of the local revitalization of the waterfront, and 4 5 seeks to encourage water-dependent purposes and increase public access to bring the people back to 6 the river. 7 8 The City has worked with Central Hudson 9 Gas and Electric to relocate a facility once located along the waterfront. 10 Central Hudson's waste posed a threat to 11 human health and the environment and suggested 12 that a limited capping program would suffice to 13 eliminate any risk to the public or the river. 14 15 The City's experts disagree and have 16 vigorously pressed for active remediation both on land and in the river. 17 Based on the advice of its experts, the 18 City believes that dredging is a safe, viable and 19 20 cost-effective way to remediate sediment 21 contamination and restore the river to health. 22 The City is pleased that, after many 23 decades of debate, the EPA has finally ordered GE to clean up its mess so that the Hudson River can 24 safely be returned to the people who have 25

1 cherished and depended on it for so many, many 2 years. Thank you. 3 (Applause.) 4 Thank you. 5 MR. MC CABE: I will read the cards out 10 at a time. 6 7 Please come up to the microphones, either one, and then we will announce the next 10 a little bit 8 later. 9 10 And please state your name, spelling it, 11 and your affiliation for the stenographer here. MS. SCHMIDT-DEAN: My name is Judy 12 Schmidt-Dean, Chair of the Citizens Liaison Group. 13 When I look back on the last 10 years of 14 15 study of PCBs and look at all of the things that we have studied -- the water, the sediment, the 16 fish and more -- I realize there is one thing we 17 have not studied: me. 18 You can study things in laboratories, 19 20 theorizing until you are blue in the face, but why 21 even bother? 22 You have four generations of people who have lived with this so-called contamination. 23 Isn't it about time you actually looked at their 24 25 health?

I am, therefore, making a formal request 1 that, before the EPA issues a Record of Decision, 2 3 that it conduct a comprehensive health study of those residents who live and work along this 40-4 mile corridor. 5 It is the only way that you can truly 6 learn what the effect of PCBs contaminating the 7 8 fish has had and will have on the human 9 population. MR. MC CABE: Thank you, Judy. 10 Marion, would you like to respond? 11 There is currently a study 12 MS. OLSEN: being conducted by the New York State Department 13 of Health, including Hudson Falls and Glens Falls 14 15 as a control population. 16 And they are looking at the effects on the nervous systems of adults between, I 17 believe, the ages of 40 to 70. 18 19 The first study was done last year; 20 there were about 100 people involved, and they 21 will be doing another hundred folks this year. 22 They will evaluate the data and then 23 develop a report and analysis of the data. 24 MS. SCHMIDT-DEAN: Well, I know about 25 the report, too, Marion.

But when you consider that there are 1 hundreds of thousands of people, not just 100 --2 3 and especially in Glens Falls, not even where I live, right on the river -- that is just not 4 5 enough. It is just not enough. MS. OLSEN: This is a design that was 6 7 developed by the New York State Department of Health. 8 It was reviewed by the Agency for Toxic 9 Substances and Disease Registry. 10 11 And, usually -- this is the type of study that will be done. We are looking at 12 representative people in that community to look at 13 the effects. 14 MS. SCHMIDT-DEAN: Then I have have to 15 ask, why did they go to Glens Falls? Why didn't 16 17 they just stay on the river? MS. OLSEN: Because that is their 18 19 control population that is being evaluated. They 20 need a control that has not been impacted to compare with those individuals that are actually 21 22 exposed. MS. PULVER: Good evening. My name is 23 24 Marilyn Pulver, P-u-l-v-e-r. I am the Town Supervisor of Fort Edward. 25

I understand that there was an 1 2 announcement that the village of Fort Edward supports dredging because of the economic loss to 3 the community of boat traffic. 4 If today was April Fool's Day, I would 5 consider it a joke. But today is April 2nd, and 6 7 it is a bald-faced lie. This is just one more prime example of 8 9 paid environmentalists misrepresenting the facts. The village of Fort Edward passed a 10 11 resolution regarding navigational dredging of the yacht basin; not a part of this project, not 12 environmental dredging of the Hudson River. The 13 village is opposed to EPA's proposal. 14 Fort Edward's Mayor, Ed Ryan, and Fort 15 16 Edward Town Supervisor, Marilyn Pulver, announced 17 on December 19, 2000, that the village and the town of Fort Edward remain steadfastly opposed to 18 19 the EPA's proposed decision to dredge the Hudson 20 River. 21 Any articles that have questioned the 22 unity of Fort Edward concerning this are absolutely incorrect. 23 24 Our community, for a quarter of a century, has battled all dredge and dump proposals 25

due to the devastating economic impact of such a 1 2 project, and this one is no exception. We adamantly support our December 3 4 resolution, and call upon EPA to heed the voice of the upriver communities. 5 Sixty-five upriver communities are 6 7 united in opposition to EPA's proposed plan, and we ask that EPA consider in its process of 8 9 decision-making the level of impact to the upriver 10 communities and the consequences of this dredge 11 proposal. 12 Thank you. (Applause.) 13 MS. RUGGI: Good evening. My name is 14 15 Sharon Ruggi, R-u-g-g-i. 16 I am a councilwoman in the town of Fort Edward. 17 18 And I do have a question. But, first, I 19 want to express my appreciation for the fact that 20 you have changed you resuspension numbers, though we have really no idea how this number has been 21 derived. 22 23 And my question is very simple: Are you 24 committed to revising the numerical predictions 25 that you initially had regarding resuspension?

MR. TOMCHUK: At the time we looked at 1 2 resuspension, it was fairly late in the process. That is one of the reasons that we did 3 4 make a change in the estimated projections from 20 5 pounds. We had reason to change it to 238 6 7 because we did not get a chance to run the actual numbers through -- we do not believe it is really 8 necessary to run it through the model to predict 9 the transport of fish concentrations because, if 10 11 you look at the 100-year flood event, you have more resuspension of PCB-contaminated material or 12 13 pounds of PCBs being suspended in that type of 14 event. 15 And in about a two-year time frame, you 16 do not see any evidence of that. 17 So, from looking at that, we did not 18 believe that the impacts of the resuspension of 19 about 200 pounds over the lifetime of the dredging 20 project would be worth -- would make enough of an 21 impact to see a difference in the long-term 22 projection on the model. 23 MS. RUGGI: So, exactly what numbers did you use in order to refigure the resuspension? 24 25 MR. TOMCHUK: We used the actual make-up

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of the sediment that would be removed, the 1 2 particulate material, percent of fines, and the coarse material and sand. 3 MS. RUGGI: So, you did take into 4 5 account the resuspension that has been noted in 6 other dredge sites? I mean, it seems that the most amount to 7 date has been 2.2 percent. 8 9 So, you did not use that number in any 10 way when you --MR. TOMCHUK: Actually, that number of 11 2.2 percent that you referred to in the last 12 public meeting is just from one USGS paper. 13 We have taken a look at that paper. 14 We 15 think that there are some difficulties with that. We do not feel that that is a number 16 17 that would be applicable to the Upper Hudson. I think you have to look at the distance 18 19 downstream, sampling at key points, a couple of other factors involved there. 20 We think that -- we have looked at 21 22 another project where we found .12 in 23 resuspension. There is no paper on that; that is 24 just some internal work that we have done. 25 And we think that that is more in line

1 with what we expect from what we have seen from the turbidity monitoring there and at other sites. 2 So, we do not believe that the 2.2 is 3 the lowest. We believe that the number that we 4 are coming up with now, that it will be about 38 5 6 pounds per year, will be accurate. 7 MS. RUGGI: Could you tell me, that .12, that was at what site? 8 MR. TOMCHUK: That is for New Bedford 9 10 Harbor hot-spot removal. MS. RUGGI: Thank you. 11 MR. MC CABE: Resuspension has obviously 12 become a major issue in the last month or two. 13 14 As Doug mentioned, we are doing a lot 15 more work with it. We are looking at a lot of studies that are out there, and that is what the 16 public comment period is for. 17 We are hearing a lot of different 18 19 things, and we are going to be responding in more 20 detail when we have completed our analysis. 21 MS. CIARIMBOLI: My name is Donna 22 Ciarimboli, C-i-a-r-i-m-b-o-l-i. 23 My comments tonight are from my heart. I am a lifelong resident of the City of Newburgh. 24 25 I am a member and sit on the Board of

Directors of Hudson River Clearwater, and I am also a member of the Executive Board of the Beacon

3 Sloop Club, which is a local environmental group
4 which serves to protect and preserve the Newburgh5 Beacon Bay area.

I also have five children, and three
grandchildren that will grow up in the City of
Newburgh.

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9 And in my house, in my family, when 10 someone makes a mess, it is their responsibility 11 to clean it up.

12 So, I am urging the EPA to continue to 13 recommend that GE be responsible and clean up the 14 mess they made to my river, the Hudson.

A few years back, I was a member of a team of Clearwater volunteers that went down to the river shore to ask people fishing if they knew about the restrictions on the fish that they were catching and if they had heard of PCBs.

In Newburgh, we went to the dock andalong the shoreline.

About 50 percent of the people fishing knew about the health advisory pertaining to eating the fish, and the other 50 percent did not. The health advisory states that all

51 women of child-bearing age and children under the 1 age of 15 should not eat any fish from the Hudson 2 River. 3 Everyone I interviewed intended to eat 4 5 the fish they caught, warnings or not. I continued to ask these questions, 6 going down the river's edge and, through the 7 8 years, more and more people are not aware of the 9 advisory. We have a large number of low- to 10 middle-income families that have recently made 11 Newburgh their home, and many of them can be found 12 along the river shore fishing for eels, catfish 13 and stripers. 14 For some, this is recreation but, for 15 16 others, it is a part of their culture and, realistically, food on the table. 17 No amount of signs or orders are going 18 to stop them from feeding the youngsters, the 19 20 pregnant mothers and wives and older people that fish the bounty of the Hudson River. 21 22 The only solution is for the river to be cleaned ASAP. 23 The bottom of the river, where the eels, 24 catfish and crabs live is called "The Benfick 25

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1	Level" or "The Benfick Line".
2	For me, the bottom line is that PCBs
3	have to be removed from there, and it must be done
4	immediately.
5	(Applause.)
6	MR. BALLANTINE: My name is Chris
7	Ballantine. I am here tonight representing the
8	Sierra Club.
9	The Sierra Club fully supports your
10	Preferred Alternative Number 4.
11	I believe that, in some instances, we
12	ought to be looking at recovering more PCBs from
13	the toxic hot spots.
14	I have two specific questions tonight
15	for EPA.
16	I understand, through newspaper
17	articles, that the group CEASE is trying to
18	arrange a meeting with Administrator Whitman of
19	the EPA.
20	And my call to you is, if that meeting
21	happens, I would hope we would be given the
22	courtesy of the environmental community meeting
23	with the EPA Administrator as well.
24	Obviously, politics have changed, but
25	the fact that we need to clean up and restore this

53 river has not. 1 2 And I would respectfully urge equal 3 opportunity. My second question concerns the fact 4 5 that a notice that is being released from DEC 6 today that we need to evaluate carefully suggests to me that the problem is actually far worse than 7 we are talking about. 8 9 As I understand it, the EPA proposed 10 remedy only addresses material in the river and not in the adjacent floodplains. 11 And I think it bears out that there is 12 serious contamination in these floodplains. 13 The other thing that will fall faster 14 than GE's credibility if we are not careful will 15 be property values. 16 17 So, I would urge all my good friends in the Upper River communities to think twice about 18 19 slamming the Environmental Protection Agency and 20 opposing the clean-up until you know whether or not this material is in your back yard. 21 22 I thank you. (Applause.) 23 24 MR. MC CABE: Just one comment on that. CEASE wants to meet with the new 25

54 Administrator, and I think there are quite a few 1 other people who want to meet with the 2 3 Administrator. We will certainly take it all into 4 5 consideration. Region 2 has not yet briefed the new 6 Administrator, so we will let you know. 7 Doug, go ahead. 8 MR. TOMCHUK: I just checked in a little 9 bit more detail my answer to Sharon Ruggi 10 previously concerning the differences between the 11 numbers in the FS. 12 13 And I knew 30 pounds of PCBs was a small correction factor. 14 15 The larger correction was that, in our models, we looked at Tri-Plus PCBs, PCBs with 16 17 three or more chlorines per molecule because that 18 is the consistent basis over the long-term time 19 frame. 20 And the number was not a total PCB 21 number. 22 So, the total PCB number was never calculated previously. And 38 pounds is total 23 24 PCBs. I just wanted to make sure that 25

55 everybody understood that. 1 MR. MC CABE: Patrick? 2 3 MR. SHANNON: My name is Patrick Shannon. 4 I would like to commend the EPA for the 5 6 proposed plan to clean up the PCBs. I am glad to see that, after years of 7 8 study, we are finally looking at a realistic clean-up. 9 10 When the question occurs as to whether or not dredging is the right way to clean up the 11 river, I believe that, in fact, it is. 12 General Electric did their own project 13 14 in cleaning up the Hudson. They used a clamshell 15 with a pilot project, and they did a good job of 16 it. 17 It was on a smaller scale, but it proves that, with GE's technology, it can be a very 18 19 successful project. 20 So, I urge EPA to go ahead with the full 21 plan. 22 (Applause.) 23 MR. CIRNIGLIA: I am Vincent Cirniglia. 24 I am a lifelong resident of the Hudson Valley. 25 Years ago, before industrialization,

whatever pollutants were in the river were there 1 from the air. 2 Companies came in and they made their 3 money building things that bring good things to 4 5 all our lives. And for that, I am thankful. But by the 6 7 same token, when they made their money, in the 8 process, they polluted the waters that we either drink or eat from, and I think it is their 9 responsibility to clean it up. 10 That should be part of their profit 11 12 model, and it is something that they should have 13 taken into consideration when they built these 14 plants to begin with. Hindsight is great but, ultimately, they 15 16 need to look at that. 17 And I applaud them for doing their designs now to show how they can clean their own 18 19 sites, but they have created a bigger problem that 20 they need to address. And if they had spent as much money in 21 that as they do in their advertising, we would be 22 23 a little bit further along right now. 24 Thank you. 25 (Applause.)

MS. HEALY: My name is Maryellen Healy, 1 H-e-a-l-y. I am a resident of the Hudson Valley. 2 And I would like to congratulate the EPA 3 for its plan to actively remove the PCBs from the 4 targeted hot spots in the Upper Hudson. 5 In particular, I am concerned that 6 7 pregnant women and developing fetuses are particularly vulnerable to these types of chemical 8 exposures. And we must protect the children. 9 10 There is a report by a team of doctors called "In Harm's Way", and it says that millions 11 of children in the United States have learning 12 disabilities, reduced IQs and exhibit destructive 13 14 aggressive behavior because of exposure to toxic chemicals, and these are preventable contributors 15 to these conditions. 16 I work in the field of early 17 intervention, and I see on a daily basis the 18 19 effect of lead poisoning on brain development: language, learning, behavior and sensory 20 retardation have all been tested and documented. 21 22 PCB exposure is no different. Through 23 deliberate exposure by the chemical industry and 24 profit-seeking corporations, we humans and the 25 animal population carry a burden of lead, mercury,

58 pesticides, dioxins and PCBs. 1 I do not believe that the river will 2 clean itself up. I believe that it is pure 3 4 propaganda that General Electric has spent endless dollars advertising. 5 I see countless dollars wasted on 6 advertising when we have a public health issue at 7 8 hand. Cost should not be a deterrant to public 9 health initiatives, and we are failing to protect 10 11 the children from industrial poisons. And I would like to say that I agree 12 13 with Rachel Mann who said that, to some, our current regulatory system is like a trial in which 14 the criminal defendants get to serve on the jury. 15 If we want to have children who can 16 play, who can think and who can learn normally, we 17 18 will have to change our corporations and our government so that protecting brain development 19 20 comes ahead of protecting profits. 21 Please, actively remove the PCBs from 22 the targeted hot spots along the Upper Hudson. 23 It is time to start the clean-up. 24 Thank you. 25 (Applause.)

MS. ROWAN: I am Kathy Rowan, R-O-w-a-n, 1 2 head of corporate responsibility for the Merryknoll Sisters, and international Catholic 3 4 religious organization serving in over 30 5 countries. The Sisters' headquarters is in Ossining 6 7 on a hill overlooking the beauty of the Hudson River. 8 9 The Sisters are members of a regigious organization along the river, LORE. 10 In our mission statement, LORE believes 11 12 that we share a kinship with all creation and that 13 ecologically sound care of the land is a key part of our mission. 14 15 We come together to address the 16 interrelated issues of poverty, justice, and ecology in this vital region. 17 18 For us, the presence of PCBs in the Hudson River is a moral issue and is related to 19 20 poverty, justice and ecology. 21 Because of the presence of PCBs, the 22 government considers eating even one fish a danger 23 to children and women of child-bearing age. 24 PCBs pose a serious health risk to the 25 residents of the Hudson Valley.

We are especially concerned for those 1 2 who may rely on Hudson River fish for their nutrition. 3 We are concerned about justice; that 4 those who pollute be held accountable for their 5 actions. 6 7 As institutional shareholders, the Merryknoll Sisters have drafted a resolution 8 9 calling on companies to clean up the river. 10 We are concerned about ecology and the health and safety of the web of life linked so 11 12 closely with the Hudson River. We support Christie Whitman's statement 13 on the EPA's web site, her commitment to leave 14 15 America's environment cleaner when we are done than when we started. 16 And we urge the EPA to act as quickly as 17 18 possible to reduce the risks to health and the environment which the PCBs in the river have posed 19 20 for so many years. 21 Thank you. 22 (Applause.) 23 MR. SULLIVAN: My name is Ned Sullivan, Executive Director of Scenic Hudson. 24 25 I previously served in the New York

overseeing dozens of hazardous waste clean-up 2 projects. 3 I support the EPA's proposal to dredge 4 the Hudson River of PCBs, and I thank you for 5 going around the region to share your plan and all 6 the great work that you have done in putting it 7 8 together and making a technical decision. And I know there are people in the 9 Department of Environmental Conservation who have 10 11 extensive experience in cleaning up hazardous 12 waste sites and, with their endorsement and support, the clean-up will be a successful one. 13 It is the broad consensus of the 14 environmental community that PCBs pose serious 15 human health and environmental risks. 16 Yet, GE, just last week, said PCBs are 17 not a health risk. 18 This contrasts markedly with the State 19 20 Health Department's warning to children and women of child-bearing age not to consume any fish 21 caught in the Hudson from Hudson Falls to The 22 23 Battery. In your chart here, you show 24 dramatically that the 90 percent climb in PCB 25

State Department of Environmental Conservation

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1 levels in fish occurred years ago when GE was ordered to stop discharging PCBs into the Hudson, 2 3 and they have leveled off at levels that exceed the safe threshhold for consumption. 4 I want to address the effectiveness of 5 6 remedial technology to address this problem. 7 Scenic Hudson conducted a study 8 nationwide, and found that dredging technologies are effective, that sediment clean-ups in -- we 9 looked at 90 different sites and we found that 70 10 clean-ups reduced average contamination 11 12 concentrations in sediments by 82 to 99 percent. And the average reduction in fish 13 concentrations ranged from 56 to more than 99 14 15 percent. 16 So, the technology is there, and it is effective. 17 And we urge the Bush Administration to 18 follow its three bad decisions for the environment 19 20 in its first 70 days in office with a good 21 decision to clean up the PCBs in the Hudson. Thank you. 22 23 (Applause.) 24 MS. SYLCON: My name is Carol Sylcon, 25 S-y-l-c-o-n.

I live in the Town of Newburgh. 1 I was born and raised in Cornwall. 2 I am a member of the Beacon Sloop Club, 3 and I have done some work here in the City of 4 Newburgh and helped people with Literacy 5 6 Volunteers, was a consultant with Literacy 7 Volunteers having done studies with the needy 8 population. 9 And having been down along the waterfront, I have run into people who are 10 subsistence fisherpeople. 11 And I came to realize that some of the 12 people cannot read the signs concerning the fish 13 consumption advisories. 14 Also, in Beacon, I hooked up with a 15 person who ran a Hispanic radio station who 16 17 learned about the advisories and was appalled that it was not in a lot of the Hispanic newspapers. 18 So, I hope the media will make more of 19 20 an effort to get this information concerning the 21 PCBs and the EPA proposal out to some of the 22 smaller minority stations and newspapers. 23 And I want to thank you very much for 24 all that you are doing, have done and will 25 continue to do. Thank you for not forgetting

64 Newburgh. 1 And thanks again for everything. 2 3 (Applause.) MR. OBERHAUSER: My name is Daniel 4 5 Oberhauser. I am with the Fishkill Democrat 6 Committee. I am Chair of the Committee. 7 I am thankful to the EPA and to all of 8 9 the people here who are participating in this important effort. 10 Years ago, there used to be commercial 11 12 fishing in the Hudson River. Today there is no longer any commercial 13 fishing, as there used to be. And this is because 14 of PCBs. 15 Generations of fishermen had to give up 16 17 their livelihoods and find other sources of income so that they could support their families. 18 I feel it is an insult for General 19 20 Electric to show to the public on television one 21 of the most ineffective dredging techniques using 22 a clamshell steam shovel to pick up sludge and 23 sediment from a body of water. 24 There are more modern ways to do dredging today. 25

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Some of the municipalities along the 1 river take their water from the river to get water 2 to their communities. 3 And these PCBs I have no doubt are 4 5 getting into these water sources. 6 It is a hazard to all humans, wildlife and plant life as well. 7 There are many ships and barges that 8 cruise up and down the Hudson, and they stir up a 9 lot of this sediment, as do storms. 10 And these sediments do not just lay 11 there and be hidden forever; they float around and 12 get into all kinds of water sources for all kinds 13 of living things. 14 And I just wanted to make sure that this 15 gets taken into consideration. 16 17 MR. MC CABE: I just want to point out one thing. 18 As far as we know, it is completely 19 20 accurate that the water supplies are not in 21 danger. I mean, they are all heavily regulated, 22 and there are no PCBs that are exceeding limits, 23 to our knowledge. 24 25 MS. RAYNOR: My name is Helen Raynor, a

member of the Sisters of the Presentation located 1 over in New Windsor. 2 We have been in the area for 80 years, 3 so we have a vested interest in the Hudson River. 4 I grew up along the Hudson, and I fished 5 for stripers with my father and my grandfather, 6 and that was before GE messed the river up. 7 I think GE should be held responsible 8 9 for cleaning up the mess they have created in the 10 Hudson. The PCBs were created and dumped by GE, 11 12 and they have the technology to clean it up. 13 I really cannot believe that they would have gone ahead and invented PCBs without knowing 14 how to clean it up. 15 I think this is a moral issue, a matter 16 17 of right and wrong, and it touches on the quality of life of human beings and non-human beings all 18 along the river. 19 This contamination is adversely 20 affecting health and, as many people mentioned, 21 22 especially the children. John Coleman was in the Bronx on 23 Thursday and reminded us that slavery, civil 24 rights and women's rights never made headway until 25

67 they were addressed as moral issues. 1 And, therefore, I repeat what he said 2 3 down there: The environment needs to be embraced as a moral issue because it is not just a clean-up 4 5 program or an economic issue. My personal opinion is that we should 6 7 dredge. However, my one concern is, where will 8 the sediment go? Whose back yard will it end up 9 in? 10 It is nice that the Hudson River people 11 12 will not have to worry about it, but who will? There is a principle in biology that 13 says, "There is no away since the earth is a 14 15 whole." (Applause.) 16 17 MR. MC CABE: Responding to where the sediments will go, they will be -- the plan 18 19 envisioned right now is that they will be dewatered and taken by rail to facilities that are 20 21 permitted for the disposal of the PCBs. 22 What we did in our planning was, for 23 costing purposes -- since we need to analyze alternatives also on a cost basis -- was that we 24 25 selected out of a number of available disposal

facilities, one in Texas, for the PCB-contaminated 1 2 waste. That would be the waste that is 3 considered under the Toxic Substances Control Act 4 to be regulated, over 50 parts per million; and 5 6 that was Texas. But there are a number of facilities. 7 And, again, this would be bid out, and this is 8 something that these facilities want. 9 And non-toxic or under 50 could go to a 10 landfill in the Niagara Falls area. 11 Again, there are other facilities 12 13 available. 14 Also, it is important to remember that the concern with respect to PCBs is through the 15 food chain, through the fish. 16 17 It is not that they are good for you by 18 any stretch of the imagination, but it is not a consideration at these landfills. 19 So, while it not a perfect solution, 20 21 that they are not completely destroyed, there are facilities that are well-regulated and permitted 22 23 to handle this waste. 24 And that is where they would go. 25 MR. RUBINSTEIN: Good evening. My name

is Ed Rubinstein, and I am a journalist. 1 Unlike a lot of the great people here, I 2 am not originally from the Hudson Valley. I am 3 originally from New York City. 4 I have various friends who work for the 5 EPA in the New York office and have friends who 6 7 have tagged Bass and other fish. I also am familiar with the PCB levels 8 in our fish. 9 From my name, Rubinstein, a lot of 10 people could figure out I have a Jewish heritage. 11 This weekend begins Passover, and one of 12 the main ingredients in gefilte fish is carp. 13 Well, wouldn't it be great if the Hudson 14 River could become a mecca for carp? 15 (Laughter.) 16 Anyway, I do have a 17 MR. RUBINSTEIN: 18 couple of questions. 19 Is there any breakdown of the funds, the 460 million? 20 Secondly, on the remediation front, is 21 22 there anything in the area of emerging technology that could make this project move along quicker? 23 24 MR. MC CABE: A breakdown of the funds 25 in terms of where they are coming from or --

What gets used for 1 MR. RUBINSTEIN: 2 what? What goes where? MR. MC CABE: The cost of each 3 4 individual item, like, how much expenditure for disposal and that kind of thing? 5 6 MR. RUBINSTEIN: The \$460 million, how 7 are those costs allocated? What line items are for what? 8 MR. MC CABE: All right. 9 10 Doug, do you want to go over that? 11 MR. TOMCHUK: I will address that. The 12 largest thing so far is the disposal cost; you 13 know, it is the transportation and disposal in these off-site facilities. 14 They just -- let me add this up quickly 15 -- add up to about 300-plus-million of that 16 figure. 17 18 The design and the testing and things like that would be about \$25 million. 19 20 There is a whole table of information 21 here, so it is hard to pull things out. But the biggest cost by far is the 22 transportation and disposal. 23 Treatment would cost more than that 24 25 though. That is one of the reasons why that was

71 the preferred remedy. 1 The backfilling costs about \$40 million 2 3 -- 40- to \$45 million. So, there is a whole breakdown here. 4 5 The dredging is about \$54 million. MR. MC CABE: And as far as new 6 technology, we have been looking for something in 7 situ, in place in the river. 8 9 And, unfortunately, we have not been 10 able to come up with something there. 11 There are, of course, a number of technologies that could destroy PCBs, all the way 12 13 up to thermal treatment. That, of course, since we are not going 14 15 to site a landfill in the Hudson Valley, we are 16 not going to site a thermal treatment facility in the Hudson Valley. 17 So, once we take it away from there, 18 19 then there is no point to thermally treating it at 20 a disposal facility and then disposing of it there. 21 22 So, we do have to consider cost as one 23 of the many factors. 24 I guess one other last MR. TOMCHUK: 25 point is that one of the things that we are

supposed to be looking at during this design 1 period -- that we will be looking at -- is some 2 3 beneficial reuse of the non-PCB waste, non-toxic 4 waste. So, there are some opportunities of 5 6 beneficial use of that material. 7 There are a number of facilities that are looking into that type of product, being like 8 an aggregate type product in cement or making 9 cement out of it. 10 11 So, there are some options there that 12 will be explored. 13 They are not in the cost estimate. Thev would be able to reduce the cost estimate if they 14 could be actually used. 15 16 MR. MC CABE: There is actual product 17 testing going on from sediments in the New York Harbor area and, hopefully, we will get something 18 from that. 19 20 MR. TOMCHUK: And these are present work 21 costs. 22 MS. INGERRA: I am Amanda Ingerra. I am here representing (inaudible) Public Interest. 23 We 24 are a church group in the City of New Paltz. 25 We are a student-run activist

organization, and I am an environmental intern. 1 I have lived in Kingston, New York, my 2 whole life. 3 And when I was younger, I was not 4 allowed to swim in the Hudson. 5 And I want my children to have the 6 opportunity to be able to swim in the Hudson. 7 8 And it really saddens me that GE has 9 polluted not only our river, but our minds with 10 their false advertising. And I did actually -- I read a study in 11 12 the Daily Freeman last week -- and, I'm sorry, I 13 do not remember -- it was a local geologist; I do not remember his name. 14 15 He is a university professor. He had studied the sediments, and he concluded that 16 17 because -- the reason I am saying this is because 18 the residents of the Lower Hudson Valley do not 19 think that it is as polluted as the Upper Hudson 20 Valley. 21 The geologist concluded that Kingston has the third highest level of PCBs in the Hudson; 22 23 the first being the Upper Hudson, the second being 24 that New York Harbor, and the third being 25 Kingston.

1 And I do not know if you have done studies on that or not. 2 3 And I think that people should know that it does affect them. 4 5 And that is pretty much it. 6 MR. MC CABE: Thanks, Amanda. Did you want to say something, Doug? 7 MR. TOMCHUK: Actually, we have not seen 8 9 a paper about the levels in the Kingston area. 10 So, if you have information on that, please submit that directly during the public comment period. 11 12 MS. INGERRA: Okay. 13 (Applause.) MS. SWINGLE: I am Melissa Swingle, and 14 15 I am not originally from this area. I am a student who came to this area 16 17 and, like many people who came to this area, I did not know about not being able to fish and swim in 18 the Hudson River because of the PCBs. 19 20 So, this is just proving that there are more innocent victims, and they are getting hurt 21 22 more and more. And we do have to blame GE. 23 A lot of 24 people have raised the issue as to why it has 25 taken so long.

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Well, who do we blame for that? We keep 1 2 letting these corporations get away with hurting ourselves, hurting our environment. And it is 3 4 unfair. I do want to thank you for what you have 5 6 done, and I hope you can get the problem solved 7 soon. 8 MR. MC CABE: Thank you, Melissa. 9 (Applause.) MR. SCHAFFO: Rich Schaffo from Scenic 10 11 Hudson. 12 We have heard a lot about the USGS 2.2 13 suspension rate. 14 I just wanted to read a statement that was from a report done by the Fort James 15 16 Corporation in January 2001 after that USGS study was done on the Fox (phonetic) River. 17 18 It states that after completing the dredging project, quote, "The turbidity monitoring 19 data showed the dredging activities did not cause 20 21 significant sediment resuspension." 22 There is just another point I want to 23 clarify. The Friends of a Clean Hudson released a 24 list of municipalities that support the clean-up 25 today.

It is a list of 53. I will submit the 1 list to you. It does not include the Village of 2 3 Fort Edward on it. Fort Edward did pass a navigational 4 dredging resolution calling upon the EPA to do 5 that navigational dredge because they know that an 6 environmental dredge will require more disruption 7 for contamination to be removed. 8 9 And just in terms of the other talk 10 about the DEC release of the data today, I just 11 wanted to point out a couple of things.

They are really underscoring the falseness of GE's claims that the river is cleaning itself up and that PCB levels are declining.

From the press release, "The New York State Department of Environmental Conservation Commissioner announced today that the findings from a preliminary study of the Upper Hudson River Valley showed elevated levels of PCBs in floodplain soils and mammals that live near the river.

23 "The preliminary results indicate that 24 wild geese and river otters have been exposed to 25 PCBs and have elevated levels of PCBs in their

1 bodies.

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2	"River otter have 172 parts per million,
3	and PCB contamination levels were found in fish in
4	the Hudson River that have not dropped
5	significantly since the mid-1980s; and that the
6	concentration levels in fish have varied over
7	time, but still greatly exceed values of
8	reasonable risk for human consumption of fish,
9	including the EPA's goal of .05 for unrestricted
10	consumption."
11	So, the basic point is that fish levels
12	are not declining; the river is not cleaning
13	itself, and we need to move on this aggressive
14	clean-up ASAP.
15	Thank you.
16	(Applause.)
17	MR. MICHAELS: I am Craig Michaels, and
18	I am here tonight on behalf of Riverkeeper. We
19	are an environmental group in Garrison, New York.
20	We have heard over and over again that
21	General Electric wants to clean the river; they
22	care about a clean river; they would like to clean
23	up the source of the PCB contamination.
24	And, in fact, they have spent millions
25	of dollars cleaning up their plant sites since

1977. 1 2 And recently they spent millions more telling us about those clean-ups. 3 4 So, what about this clean-up? GE seems to commend itself for the fact that they now have 5 only three ounces of PCBs leaking into the Hudson 6 River every day. 7 They think this is a good thing: 8 "We are down to three ounces." 9 10 Well, you know, this chemical was banned 11 in 1977, the plant was closed in 1984, and there 12 are still three ounces a day coming into the 13 river. I think that is pathetic. 14 GE should have never -- if they were a 15 responsible company, they would have never buried what they knew to be a toxic chemical in bedrock 16 17 that any geologist in the world could tell you was 18 unstable at best; nevermind the fact that this whole clean-up was part of a settlement with the 19 20 State and that GE was required by the State to do this. 21 22 What is even more pathetic and 23 disgusting about General Electric though is the 24 fact that they completely disregard the EPA's 25 accepted decade-long peer-reviewed scientific

research. 1 2 Now, this research that was referred to here tonight said specifically that the main 3 source of PCB contamination in the Lower Hudson is 4 the PCB-contaminated sediments in the Upper 5 Hudson, not the plant sites themselves. 6 And, in fact, we have proof -- GE's old 7 plant, as I said, leaks about three ounces a day. 8 9 So, now, if that was the only source of 10 contamination, we would have about 68 pounds per year coming over the Federal Dam in Troy. 11 12 And, instead, we have more like 500 13 pounds. So, there is no way that their site can 14 15 be the only source of contamination. The main source is the sediment. 16 The 17 PCBs are not being buried; they are not breaking They are washing downstream to us every 18 down. 19 year. Now, this is not an either/or scenario, 20 21 as GE would have you believe. 22 They want you to believe that, "We have to clean up our plant, or we will clean up the 23 24 river." 25 And, actually, it is both: They need to

follow through on the requirements to clean up 1 their plant site, and they need to get rid of the 2 main source of contamination, which is the 3 sediment. 4 And if GE does not want to dredge, then 5 it better come to the table with a better 6 7 alternative that they can do. And instead of coming to the table, they 8 are out there telling us lies, that PCBs do not 9 10 harm humans. 11 And what this is is exactly what the tobacco industry did. It is tobacco science: 12 Don't buy it. GE lies. GE deceives us, and then 13 14 spends millions of dollars trying to avoid a 15 clean-up for a river that they singlehandedly devastated. 16 17 (Applause.) 18 MR. MC CABE: There is a question from a Hubert Boyd here: "Is it true that PCBs in the 19 20 Hudson were legally disposed of under existing laws, regulations and permits?" 21 22 I think they would say partially so. Ι think you heard quite well before from the 23 24 Attorney General's Office exactly what was legal, 25 what was not legal, what was in gray areas or

1 whatever. But I think it is most important to 2 3 remember, which GE itself recognizes that, under the Superfund Law, they are responsible parties. 4 End of story. 5 Did you have other comments, sir? 6 MR. BOYD: My name is Hubert Boyd, B-o-7 8 y-d, and I am a resident of Newburgh. And I quess for the record I should 9 10 indicate I was once employed by GE about 30 years 11 ago until I was layed off. So, I hold no grief one way or the other for GE. 12 But as a chemist, I would have to ask 13 14 some questions. 15 How many residents in the impacted area 16 have been shown to have been affected by PCBs? 17 How many cancer cases have been caused by PCBs? For \$460 million, how many cancer cases 18 19 will be prevented by the clean-up? 20 And I ask those questions as an individual and as a scientist. 21 22 MR. MC CABE: Before I turn it over to Marion, who is our toxicologist, the way that we 23 24 do our risk assessments -- well, first of all, let 25 me start with saying that there are a variety of

82 1 bans and restrictions in the river. 2 So, even if someone were to have done 3 such a study, while we know that people do not always obey those, certainly an awful lot of 4 people who could eat the fish do not eat the fish 5 6 now. So, we do not have any particular number 7 8 of residents. The basis is not a whole population; we do them on an individual risk. 9 So, 10 we do not know particular numbers or how many 11 cancers are there now, how many would be prevented in the future. 12 13 Marion may want to comment on that, as she did mention a study that was underway. 14 MS. OLSEN: In our risk assessment 15 process, essentially what we are looking at is 16 17 current and future exposure. 18 And in the risk assessment for the Upper Hudson River, our increased risk was one in a 19 20 thousand. 21 And to put that in perspective, it is a 22 thousand times higher than EPA's goal of protection and 10 times higher than the highest 23 24 level that is permitted. In addition, we looked at non-cancer 25

health effects. 1 And we looked at young children, we 2 looked at adolescents, and we looked at adults. 3 And those levels in the Upper Hudson, 4 for the young children, they were about a hundred 5 times the level that is considered basically safe. 6 This is what is called a "reference 7 curve", and it is a level that is set to be 8 protective of children and other populations that 9 10 are exposed. For the adolescents, it was 71 times 11 higher, and for the adults it was 65 times higher. 12 13 We did a separate human health risk assesment for the Mid-Hudson, and the risks were 14 about half of that level. 15 And this looked into the future. 16 And, again, as Bill mentioned, we are looking at risks 17 18 to recently exposed individuals. The toxicity information that is used in 19 this is very much from analyses that were 20 21 conducted by EPA. 22 In 1996, EPA conducted a reassessment of the cancer data, and concluded, again, that PCBs 23 24 are a probable human carcinogen. 25 And we also made specific

recommendations for the toxicity values that are 1 2 used. For non-cancer, the reference values 3 were developed in about mid-1990. And EPA is 4 5 currently involved in reassessment of this data. I mention this because the toxicity 6 7 information that is used is used at all of our Superfund sites across the nation. 8 9 This has gone through peer review, and it has been used by the agency throughout risk 10 assessments at different sites. 11 And I hope that addresses your question. 12 13 All of the information is also presented in our 14 Women's Health Risk Assessment, which also was externally peer-reviewed -- it is actually a 15 16 separate document. 17 And if you review it, you can review the Agency's conclusions related to health risks from 18 19 the Hudson River. MR. MC CABE: And Marion will probably 20 21 kill me for saying this, but she can explain this program that is going on with DOH to you again 22 later. 23 24 But it is very difficult, as you may imagine, with all the different contaminants that 25

85 are in the environment, to isolate one. 1 I am sure there is some way to estimate 2 doing it, but it is still rather difficult to 3 estimate what one particular contaminant at 4 5 whatever levels you may have been exposed to over 6 your lifetime for cancer may have done to you. MR. LEWYTA: My name is John Lewyta, L-7 8 e-w-y-t-a. I just wanted to say that I appreciate 9 -- I did send an e-mail, and you responded back to 10 me within four hours. 11 I run an industrial services company 12 13 over here in Cornwall, New York. And my company is currently involved 14 15 with a variety of industrial wastewater clean-ups, 16 primarily in pulp and paper. 17 Also, my affiliated companies are doing 18 dredging projects currently right now in the State 19 of Ohio and the State of Michigan. 20 Basically, as an independent engineering 21 consultant, I am supportive of the dredging of the 22 Hudson River, obviously; it is my bread and 23 butter. 24 My company uses a variety of cost 25 effective and environmentally sound technologies

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1 in our projects. If you look at the sequential steps in 2 3 the process of these types of clean-ups -- with dredging, dewatering, and disposal -- there are a 4 lot of proven technologies out there in the 5 6 marketplace and also some emerging technologies; in fact, we are looking at a couple of them in New 7 8 Jersey. As an engineer, we usually pick up where 9 the scientists leave off. And I was trained to 10 deal with environmental issues both in my 11 12 corporate life and in my private life. So, I am really glad to see that you are 13 driving this process basically based on 14 fundamental science and not being sidetracked by 15 political science on both sides of the issue. 16 17 Thank you. 18 (Applause.) My name is Larry Pines. 19 MR. PINES: Ι 20 am a researcher, and I have been one for several 21 years. I am just wondering -- on the disposal 22 23 of this material, I did not see anything in the 24 report there about what is going to happen to the 25 water that has been squeezed out or whatever,

removed from the sediments. 1 The sediment itself I saw is going to be 2 trucked or transferred by rail to landfills, 3 permitted landfills. 4 Several years ago, I received a big book 5 from the EPA about systems for treating toxic 6 wastes and things like that, one of which was 7 high-energy electron beam irradiation which, 8 apparently, was used in Brooklyn. 9 And, also, I talked with some folks down 10 in, I think, Atlanta who were using it down there. 11 And this process could eliminate the 12 PCBs from the water and the sediment, and it flows 13 from technology such as putting it on a barge, 14 sucking it up out of the river, running it through 15 16 this process, and then disposing of the sediment back into the river and the water back in. 17 18 As long as you can destroy the PCBs right there as you collect them, I do not see any 19 reason why not to use it, other than the fact that 20 this technology requires a great deal of 21 22 electricity. 23 And contrary to what they are saying in California and what President Bush is saying, 24 25 there is no energy crisis; it is just merely a

1 crisis of ethics.

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There is plenty of energy right here in the Hudson Valley, and several megawatts of electricity right here in Newburgh that goes untapped.

The technology is available to tap that energy, but the Department of Energy has not -they are not in that process -- they are not in that business.

Apparently, people cannot get grants to develop technology such as that where we would have distributed generation plants rather than centralized generation plants.

14 If it is possible, maybe you people at 15 EPA can talk the Department of Energy into 16 revising their thinking so that this process could 17 go forward.

18 MR. TOMCHUK: The main thing that we 19 have been considering at this time has been a 20 fairly conventional system using something like 21 activated carbon or UV oxidation type system 22 possibly.

23And that would be for water treatment24after the solids have been removed.

So, we will comply with all applicable

standards before the water would be discharged 1 back into the environment. 2 So, that is what we have considered. 3 Ι am not aware of the electron beam radiation 4 technology; it sounds like an interesting --5 MR. PINES: It is in your book. 6 7 MR. TOMCHUK: What's that? It is in your book. MR. PINES: EPA's. That is where I got it from. 9 10 MR. TOMCHUK: Okay. Yes. It is possible I personally am not aware of everything. 11 12 We have evaluated a lot of things for this study. You know, there is a lot of work going 13 on in different places; I had not picked up on 14 15 that one, if that could be technically promising and cost effective. 16 17 Bringing in electric power can be, you know, difficult, too, and expensive. So, there 18 19 might be a balance of that in the program as well. 20 MR. PINES: Well, as I said, the Department of Energy apparently does not have the 21 inclination to go for distributed power generation 22 and they seem to be sticking with large power 23 24 plants, centralized generation. 25 This process is being used over in

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Europe right now, and it generates quite a bit of 1 electric power. 2 And you might want to check with the 3 Department of Trade and Industry in Britain, or 4 you might want to check with the CORDIS people 5 6 over in the European Union, C-O-R-D-I-S.LU. MR. MC CABE: Okay. Thanks, Larry. That 7 is what the comment period is for, to hear any 8 kind of new ideas out there. 9 I am not familiar with that technology 10 myself either, but any information you have we 11 12 will be happy to look at. 13 MR. WALL: Hi. I am Robert E. Wall from Pine Ridge, New York. 14 And as a user of the Hudson River, I 15 have been concerned about PCBs and dioxins and 16 mercury for a number of years, going back 30 17 18 years. I have observed in studies that the 19 20 flesh of striped bass has been analyzed. 21 I noticed you people did not talk about 22 that aspect of it. One of the main concerns that Hudson 23 24 River fishermen of New Jersey have is that the EPA has changed its system of evaluation of PCBs in 25

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91 the flesh of striped bass. 1 And I have a question: Why was that 2 changed, going from whole-carcass analysis to 3 filets? 4 Canadiens used filets for a long time in 5 6 Lake Ontario studies, and we have always used in New York whole-carcass analysis. 7 And it does not apply directly to our 8 problem, but it was a question that New Jersey was 9 asking. And I associate with some respondents 10 down there. 11 We all live downstream, and thank you 12 13 for coming downstream and looking at the potential problems that people have brought to you. 14 I certainly support a health study on 15 the downstream effects, and would like you to look 16 at that. 17 18 I would also ask you to consider a pilot program of what flotation in the water column of 19 20 PCBs might be if you did what you are planning to 21 do, instead of going full-scale. 22 We have waited approximately 30 years to accomplish what we have at this point; another 23 24 year or two with pilot studies below the Troy Dam 25 and down in our area is not going to keep us from

accomplishing our goals. 1 I think we are all after the same thing. 2 It is just that I would hate to see our water 3 supplies and PCBs in the striped bass rise. 4 5 Thirdly, commercial fishing of striped 6 bass is highly recommended at this point by commercial fishermen. 7 How come they can use that high level of 8 toxic chemicals in their products is kind of iffy, 9 and we cannot look at it. 10 MR. MC CABE: Okay. The pilot study 11 effort has been raised by a number of people, and 12 13 it is something we are looking into. We have not made a particular decision 14 15 on that, but it has been suggested by a number of folks. 16 17 Commercial fishing is different from our proposal or our exposure scenario in that is --18 they use what is considered a market basket 19 20 approach in that they obtain their fish from a variety of sources and you have a variety of fish 21 22 that you are eating. 23 We have assumed that you would all be eating fish from the Hudson River, so the 24 25 exposures are very, very different.

And the FDA level, as you are very well 1 aware, is two parts per million, and what we are 2 3 looking at is .05 parts per million. So, it is just a matter of what your 4 exposure scenarios are. 5 That is what the whole thing about fish 6 7 filets is about; that our exposure for humans is based upon filets. 8 MR. TERRY: My name is Ijahi Terry, 9 10 spelled I-j-a-h-i Terry. I am a resident of Monroe-Woodbury. 11 12 Tonight I am representing Castleton State College in Vermont. 13 I have two questions. One: Is it true 14 15 that GE is not the only company that dumped PCBs into the Hudson River? 16 17 If so, why haven't these companies been brought out to help pay for this clean-up? 18 MR. MC CABE: GE is certainly the 19 primary responsible party here. 20 If there are some other minor 21 22 dischargers over the history, that is possible. 23 But GE is by and large the only 24 responsible party. They are certainly responsible for almost all the contamination. 25

But, more importantly, at this stage of 1 the game, we are not looking for anyone to pay for 2 it. 3 Right now, we are trying to make a 4 technical decision. We are trying to separate 5 those two items. 6 7 There is a lot of talk about, you know, 8 GE did it; clean up the mess, pay for it, et 9 cetera. But what we are trying to do right now 10 is come up with a decision, and that is based upon 11 science. 12 And after that decision is made as to 13 14 what is the right remedy, then we would deal with 15 who has to pay for it. 16 Yes, we would go after the responsible parties first. 17 We have a variety of legal mechanisms to 18 do that; failing that, there is what is known as 19 20 the Superfund that we would attempt to use then to 21 pay for it from the Federal side. Of course, we could also sue General 22 Electric to do it. 23 24 Like I said, there is a variety of 25 enforcement mechanisms available.

1 But that is for the future. For right now, our concern is what the right decision is for 2 the River. 3 And that is really what we are trying to 4 focus on. 5 I know everyone likes to talk about the 6 other side, but that is for another day. 7 8 MS. KATAM: Good evening. My name is Sandra Katam, and I am the President of the 9 Stewart Park and Preserve Coalition. 10 Those of you who live in our area know 11 that our focus has been saving open land adjacent 12 to Stewart Airport. 13 And we are still working on this. 14 We have some land left to go. 15 16 Our organization passed a resolution to 17 support the dredging. And I would like to comment personally 18 19 this evening on the issues that appear to be 20 emerging. 21 I am extremely saddened to see that a company such as General Electric, which has 22 23 substantial culpability by not having 24 responsibility, and is conducting those activities 25 that will prevent them from assuming their

responsibility, has actually made some headway 1 with the public. 2 I have to tell you that there are 3 similarites here with what we deal with with the 4 5 Stewart issue. 6 When it serves the opposition, they do not tell the truth. They confuse the figures. 7 They step aside from responsibility. 8 And I would be willing to assume and 9 suspect that, if GE were not liable for these 10 costs, the dredging would go forward without any 11 12 opposition whatsoever and they would not be 13 fighting the project. I am reminded of a project that occurred 14 15 at Cold Spring that was a cadmium clean-up. 16 I do not remember any problem with that whatsoever. 17 But you know what? My understanding is 18 19 that it was entirely paid for by public funds. 20 Whenever there are clean-ups to be done 21 and it is going to be paid for with public funds, 22 nobody gets upset. 2.3 What was that big power plant that closed on Long Island; Shoreham? The public not 24 25 only had to construct the plant, but they had to

97 pay for its dismantling. 1 Nobody got excited or upset. 2 You have to remember that the bottom 3 line is money. We must not forget this. We must 4 not let ourselves be misled by so-called 5 information which is based on corporations -- in 6 7 this case, GE -- trying to escape their responsibility because it will cost them money. 8 And I want to remind you that they have 9 contaminated other sites besides the Hudson. 10 If we establish a precedent here for 11 them to clean up the Hudson, then all the other 12 sites, there would be a precedent for them to 13 clean up those sites as well. 14 This is a very serious financial issue 15 for them. 16 17 How much proof do you need? From their perspective, nothing will prove that there is 18 19 going to be damage. Nothing. And I do want to advise you that you are 20 working with a very difficult issue because it 21 would appear that decisions made on the 22 Presidential level have been, from my perspective, 23 adverse to the environment. 24 25 So, I urge you to be brave. I urge

Hudson Valley citizens to please try to ignore the 1 2 propaganda. And I wish us all luck. 3 (Applause.) 4 MR. MC CABE: Thank you very much, 5 Sandra. 6 7 I just want to make one point. The clean-up that Sandra was referring to at Cold 8 Spring was the Marathon Battery site, which 9 10 actually was paid for by the responsible parties. It was not paid for out of public funds. 11 It looked like we were going to have to 12 fund it but then, at kind of the last minute, we 13 found the responsible party. 14 15 We were talking about an estimated \$100 16 million clean-up. 17 Doug pointed out to me that one of the parties was the U.S. Army, so you could look at it 18 19 that way. But, in any event, they were responsible 20 21 parties. And that is the goal of Superfund, regardless of whether it is the Federal Government 22 23 or private parties, to pay for it. 24 MR. TORLEY: My name is Larry Torley, from Windsor. 25

99 I have a couple of questions for you. 1 2 First, in your proposed plan, you talk about the time for fish to reach the safe level of 3 4 34 to 37 years, and I was wondering how you arrived at that figure. 5 I looked at the plot graph that you 6 7 have, and you could pick a time frame anywhere you 8 want. 9 Where were you actually calculating that time frame from? Where do you start and where do 10 11 you stop? MR. TOMCHUK: The time frame would be 12 13 from the time of the completion of the project to 14 the --MR. TORLEY: In the NMA, when I looked 15 at your graph, you explained the various PCB 16 levels in the fish over time. 17 18 Depending on where you started and where 19 you stopped the curve, you can generate a time to 20 zero effect anywhere you want. So, what did you actually use as your 21 22 generated time limits? 23 MR. TOMCHUK: There was a model that we used --24 25 MR. TORLEY: But how well does that fit

100 the data you have? 1 2 MR. TOMCHUK: How well did the model fit the --3 4 MR. TORLEY: Yes. How well does the 5 model fit your data? MR. TOMCHUK: Well, it calibrated well. 6 However, the calibration is one of many 7 calibrations that could be utilized to fit the 8 9 type of data set. It was peer-reviewed. We believe that 10 11 it is a good model for forecasting to -- within limits. 12 13 We did get some warnings about the longterm forecast capabilities. 14 15 On the one hand, we have a model that 16 gives us a lot of explanation of what happened in the past and gives us explanations as to any one 17 18 system. But we do have to be cautious in the 19 20 forecasting. 21 When you have two different alternatives, some of the uncertainties do drop 22 23 out because you use tracking in the model. 24 The years are really a certain time-25 frame prediction.

1 MR. TORLEY: I know the peer-review said you did a terrific job in your calibrations, but 2 3 that does not mean that, when you go forward, because of all those factors, that they are all 4 going to be the same. 5 MR. MC CABE: And what we found out --6 7 and Doug can help me on this -- is that when we 8 used the data for the last few years to try and see how it was running, if you adjusted for the 9 10 flows, it did well within a factor of two, I think, something like that. 11 12 But that shows you right there that we have to adjust for the flows which were not 13 predicted. And that is what can happen. 14 MR. TOMCHUK: The uncertainty bounds are 15 16 built into a lot of different things because we have modeled out for a six- to seven-year period. 17 After 2000, you have the uncertainties 18 and risk assessments --19 20 MR. TORLEY: In Table 2 on page 28, it looks like there is data for Cap 310 all the way 21 out, and it looks significantly different. 22 MR. TOMCHUK: I think what you are 23 pointing out is one of the reasons we selected the 24 cap -- the REM 310 was selected rather than 25

REM 000 is that it is the most cost effective for 1 the amount of risk reduction; that we do not get 2 3 significant risk reduction from the REM 0003. And if you get the chance to look 4 further into that, we do not believe that the 5 6 capping alternative provides as much long-term assurance that the cap will be maintained, and 7 there still is a lot of dredging that needs to be 8 done, 1.7 million cubic yards, so you are not 9 10 limiting dredging. So, you have the long-term reliability 11 12 of a cap to worry about, as well as most of the 13 concerns about dredging. MR. TORLEY: But your table also shows 14 15 -- indicates that they are still working on the 16 bentonite process. 17 But, as one of the previous gentlemen said, you are not planning any pilot tests on 18 this. 19 20 You are just going to go with the \$460 million project and go without any pilot tries? 21 22 MR. TOMCHUK: There are about 17 23 different projects that have dredged PCBs from various water bodies. 24 25 And, basically, you know, when you are

103 scaling up -- I mean, a lot of those were smaller. 1 While a pilot study could show you 2 3 something about process handling, I do not think the dredging technique itself would be the main 4 benefit of that. 5 Process handling would probably --6 materials handling on the shoreline would probably 7 be of benefit, but I think that we have had other 8 projects where it has been conducted. 9 10 There are other ones that are starting 11 this year and next year: U.S. Steel, 750,000 12 cubic yards in Indiana, and the Reynolds site on 13 the St. Lawrence. 14 There are numerous projects where we have seen that dredging works successfully. 15 16 MR. TORLEY: You said you have seen 17 several projects on a smaller scale. 18 What has been the resuspension rate you found there? 19 It is very difficult to 20 MR. TOMCHUK: 21 actually calculate the resuspension rates for a lot of these. 22 23 Most of these that have been done have 24 been done for turbidity, not for PCBs. 25 As far as the solids go, we do believe

we will see something on the order of -- I believe 1 it is .2 percent of solids resuspended, which is 2 3 similar to the type of resuspension that we calculated at the New Bedford site that I 4 5 mentioned previously. 6 So, we believe that the resuspension that we are looking at -- that we calculate based 7 on the models that were calibrated on these other 8 projects for solids would be valid. 9 MR. TORLEY: So, you have actually done 10 11 the calculations, measured PCBs versus turbidity 12 to make your correlation? 13 You said the resuspension rate -- it was 14 done on the turbidity, and I think you need to experiment to how what the PCB dispersal rate is 15 versus the turbidity measurements. 16 They did studies in the 17 MR. TOMCHUK: USGS paper that was mentioned previously --18 19 MR. TORLEY: That is that 2.2 percent. 20 Was that based on using the actual chemical 21 analysis of PCBs in the resuspended material when they got 2.2 percent? 22 23 MR. TOMCHUK: Yes. MR. TORLEY: What was their turbidity 24 25 measurement?

105 MR. TOMCHUK: Actually, in one of the --1 there were two projects. 2 In one of them, there was a loss of 3 turbidity downstream, and that was constant 4 turbidity monitoring. 5 6 A lot of this is difficult to judge 7 because --MR. TORLEY: Do you see what this is 8 coming to? You really do not have a good picture, 9 a good handle on what your actual dispersal rate 10 11 of PCBs will be when you do this project. You have not done a pilot study on 12 13 either. 14 You have done these other ones, mentioned turbidity, but not PCBs. 15 16 When you measure PCBs chemically versus turbidity, you get wildly different values, a 17 18 great difference between your standards. 19 MR. TOMCHUK: What is your question then? 20 MR. TORLEY: You just answered my 21 22 question. 23 You said you really do not know what the dispersal is going to be. You have a very wide --24 25 MR. TOMCHUK: I can tell you that the

106 dispersion will be less than what leaches out of 1 2 those sites over a short -- after a couple of years, there will be less than would annually leak 3 out of the sites. 4 5 You have to remember that these things 6 are not covered --MR. TORLEY: Five years in, I mean, yes, 7 8 because you take most of it out. 9 But how is a spike going to be versus a leaking rate? 1.0 MR. TOMCHUK: There is not going to be a 11 spike that is going to be measured that far 12 13 downstream; I can tell you that much. 14 It might be measureable at some point 15 downstream; the fish might go up for a little 16 while, but it will not be a long-term problem. 17 I am not sure where you are going. You are asking some questions --18 19 MR. TORLEY: It looks like you have not 20 gotten a data base sufficient to make a \$460 million decision. 21 22 MR. MC CABE: The resuspension issue, 23 this is something that we are obviously looking 24 at. 25 We have heard all about this USGS study.

107 1 We believe there are some issues with mass and bounds. 2 3 We are not prepared to go into all the details now. 4 5 We are still analyzing it. The 6 resuspension issue is getting a lot of play. Doug has mentioned that there is a 7 significant amount of PCBs going over the Troy Dam 8 We are talking about 500 pounds in the past; 9 now. a lot more than when the Alan Mill event happened; 10 a whole lot more than that. 11 12 We have not seen really that great an 13 impact based upon that. So, I do not think this minor amount, 14 whether it is 20, 38, whatever the number actually 15 16 ends up being -- it is something we will, of 17 course, want to control as best as possible. But that should not be the main focus 18 19 here. So, you said there's a lot 20 MR. TORLEY: of it coming over the dam during a particular 21 22 event, a flood; you said there was not much effect, there was not much effect of a huge spike. 23 24 What is the effect of a very low level 25 leakage rate?

10.8529

If you capped it, you are going to have 1 a very, very low level in a leak. I am just 2 3 suggesting that capping sounds better. Finally, you mentioned (inaudible) was 4 5 50 parts per million? Did I mishear you when you were talking 6 about the most concentrated levels being about 42 7 parts per million? 8 MR. MC CABE: That was an average. 9 That 10 was in River Section 1. MR. TORLEY: Which is the most 11 12 contaminated, 42 parts per million? 13 MR. TOMCHUK: On an average. MR. MC CABE: That was an average 14 15 number. MR. TORLEY: Over the entire course of 16 Section 1? 17 MR. TOMCHUK: Yes. 18 MR. TORLEY: What actually is the 19 minimum or maximum tolerable or minimum effect in 20 the animals? 21 You mentioned five times the no effect 22 level. 23 What is the no effect level? 24 25 MS. OLSEN: Okay. When EPA develops a

109 1 reference dose -- which is essentially what you are talking about -- we looked at a study that was 2 conducted in monkeys. 3 It was published literature. It was 4 evaluated. 5 I believe the low one was divided by a 6 7 factor of 300, and the reference dose is two times ten to the minus five milligrams per day. 8 9 MR. TORLEY: What is the human exposure based on the number you found in fish? 10 MS. OLSEN: We have not calculated that 11 from the study --12 MR. TORLEY: So, you have no idea what 13 the human body effect is? 14 MS. OLSEN: There has been a ban on 15 fishing for the last 25 years. 16 So, to attempt to do that study, one 17 would first have to identify those individuals who 18 19 have been consuming the fish and, secondly, the New York State Department of Health Study may 20 21 provide some information, but it has not been 22 completed yet. MR. TORLEY: And when will it be 23 completed? 24 MS. OLSEN: Individuals will be sampled 25

this summer, and then there will be an analysis of 1 2 the data, which may take a year or more to 3 complete. MR. TORLEY: So, to date, there is no 4 evidence of human disease caused by the PCBs in 5 the river? 6 I am talking about evidence, not 7 extrapolation. 8 9 MS. OLSEN: I would like to respond to that just for one second. 10 There have been other studies that have 11 been conducted on individuals who were exposed to 12 PCBs. 13 These were studies of children who were 14 exposed in utero while their mothers consumed 15 16 PCBs. There were studies in Michigan, studies 17 in North Carolina. And there have recently been 18 19 Dutch studies, where they have followed children 20 who were exposed. 21 Under these conditions, they have information on the mothers' PCB levels, the 22 23 children's PCB levels, and some of the effects that have been associated with PCB exposure. 24 25 If you would like the references for

1 those, I would be happy to provide those after the session. 2 3 MR. MC CABE: Thank you. MR. SCHUYLER: I am Steve Schuyler, S-c-4 h-u-y-l-e-r. 5 I wanted to say that I believe that the 6 7 anti-dredging position that was expressed by Fort 8 Edward is really in response to fear-mongers like General Electric and is shortsighted and based on 9 10 local economic concern and not what is good for the Hudson River as an ecosystem. 11 Incidentally, if CEASE speaks with 12 Administrator Whitman -- I teach Government here 13 at Newburgh Free Academy, and some of my students 14 15 are here tonight as well. And I took a quick poll of them before I 16 17 came down here, and we would also like to meet with Administrator Whitman. 18 19 (Applause.) 20 MR. SCHUYLER: But one of the things 21 that I try to encourage in my students is a sense 22 of responsibility for their actions and for their 23 inactions. 24 And I would like to know who is going to 25 come to my class and explain to my students why

they should be held accountable for their actions 1 2 while corporate highrollers, such as GE, are not held responsible for their actions. 3 Thanks a lot for being here, and the 4 work you are doing. 5 6 (Applause.) 7 MR. MC CABE: As I said, once we select 8 a remedy, we are going after those who are 9 responsible, just as we do at every Superfund 10 site. 11 And, actually, we have a very good success rate both in Region 2 and nationally at 12 13 having responsible parties clean up. MR. ROE: My name is Fred Roe, spelled 14 15 R-o-e, and I am a resident of the City of Poughkeepsie. 16 17 I believe the key issue that we are 18 talking about today is what to do with the PCBs, 19 not so much who pays, as the gentleman mentioned. 20 And I believe that in sort of a perverse 21 set of circumstances, we are really a little bit 22 fortunate that the PCBs are in defined locations. 23 In another sense, PCBs that are climbing 24 to the level of the contamination rates we are 25 seeing can be extremely toxic, I believe, in both

113 river animals and people. 1 2 And I point to the incident that happened at the SUNY New Paltz campus, where PCBs 3 found their way in, and just had a devastating 4 5 effect on people and the buildings and to all of us, the taxpayers. 6 7 My position is that I am 100 percent in favor of the removal of PCBs from the river. 8 I believe that PCBs residing at the 9 bottom of the river do not get better with time, 10 11 as has been pointed out. I believe this would be a public health 12 issue potentially affecting a large geographic 13 14 area. And with about 500 pounds of PCBs 15 16 flowing over the Troy Dam, that points out that this is not a static situation, but that very 17 18 likely the contamination is building. 19 I would say that, in this instance, we 20 are roughly talking about \$5000 per pound of PCB 21 in your projected costs. 22 In strange events as we have been in New 23 Paltz, I am sure that the cost was much higher per 24 pound. And the events that caused that to happen 25 were very odd and strange.

And odd things do happen, including a 1 barge going down the river dragging its anchor for 2 many miles in the Poughkeepsie area last year. 3 If that had been over a capped area, I 4 am sure that would have created a disturbance. 5 6 Thank you. MR. MC CABE: Thank you. 7 MR. LEBEAUX: My name is John Lebeaux. 8 I am originally from France but, as I kayak along 9 the Hudson River, I realize these this is truly a 10 11 very beautiful area. I, for one, would like to be able to eat 12 13 fish from the river. 14 It would help us if you could reassure and educate more fully the residents along the 15 river about the dredging process. 16 I think that very little has been said 17 18 in terms of describing the dredging itself. I 19 have seen in the newspapers, however, different types of scoopers for dredging the river. 20 21 So, I think it would help if you would give some reference as to perhaps where we could 22 23 view such a dredging situation going on right now. So, two questions to you -- or, two 24 25 requests, if you wish: One, give us some

description on the dredging process, on the 1 2 operation. Second, gives us some reference where we could look into it. 3 Thank you. 4 5 (Applause.) MR. MC CABE: As for describing the 6 7 dredging operation, it is either going to be 8 mechanical dredging or hydraulic dredging. 9 We have not selected a particular type 10 of dredging. They both work, but they, of course, both mean different processes used all the way 11 12 through the dewatering process. 13 The hydraulic dredging would have a 14 pipeline to the facility. There would be a great deal more water to deal with, to dewater and to 15 16 treat. It would require a bigger facility. 17 Mechanical dredging does not require It would be a kind of -- there would be 18 that. 19 some kind of dewatering equipment; there still would be dewatering. 20 We are talking about an environmental 21 22 dredging operation, a very careful operation, not 23 like you have seen, I guess, on some videos or commercials or whatever. 24 25 It'd be taken by barge to a dewatering

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1	facility.
2	I would reference you to the slide of
3	the Thompson Island Pool, what it would look like;
4	there were a combination of 20, I think, barges
5	and dredges and whatnot.
6	And the whole point of the slide was
7	just to show that it does not completely jam up
8	the river.
9	In fact, you can see that. It is a
10	pretty big river, and there is quite a bit of room
11	out there.
12	And we have no intention of impeding
13	navigational dredging.
14	So, it is possible that the final remedy
15	would be selected with a combination of both; it
16	is possible that it would be left open; that we
17	decide some sort of performance specifications to
18	deal with the removal of the sediment.
19	It is likely in the end that both kinds
20	of dredging will be used, but they both work.
21	As far as scaling them up, I suppose
22	that if you were to do a pilot project, that would
23	be the one thing that people would look at, if you
24	could create that kind of a scale-up.

1 We know you can dredge; I mean, it is done all over the place. 2 But can you dredge at that rate? 3 That is what some people have questioned. 4 5 We have said we are going to do it in 6 five years. That, of course, means we are going to do it at a certain rate per year. And some 7 8 have questioned that rate. 9 A pilot project could show that you could scale it up to that level. 10 But like any kind of project in any kind 11 of construction field, we do not see any 12 13 impediments to scaling it up. 14 It is not innovative technology; it is 15 all proven technology. You use more of it. 16 We do not really anticipate that being a problem. 17 18 MR. MELLEY: I am Andy Melley from Hudson River Sloop Clearwater. 19 20 Would it be safe to say that, whereas GE 21 is deriving a great deal of energy -- putting a 22 great deal of energy into saying that you cannot do a project this size, a project this size has 23 never been done. 24 25 Would it be safe to say then that this

is not a single monolithic project, but a series 1 of much smaller projects? 2 I mean, it is, after all, all those 3 little red spots on the map. 4 5 I mean, it seems to me that this is a 6 total no-brainer, and I do not understand quite 7 exactly where they are coming from. In the Netherlands now, there is a 8 · 9 project they are preparing for; a 21-millioncubic-yard dredging operation, which includes 10 11 PCBs. 12 Anyhow, moving right along, you know, 13 you obviously know about Clearwater's support for 14 your efforts. And I also want to join the other people 15 in thanking you for having come to the Mid-Hudson 16 Valley again. 17 18 My staff has been reaching out to over 19 90 communities working the municipal resolution 20 issue. The municipal resolution issue is not a 21 contest to see if we can beat GE. 22 23 In fact, since December, we have, as of today, gotten to 53 positive resolutions, and it 24 will be well over 60 by the time all this is said 25

and done. 1 2 But the point is to talk to people one at a time and get at these little spurious 3 arguments that GE has been setting up and keep 4 knocking them down. Little ducks come up; we 5 6 shoot at them, and they fall down. It is just 7 happening over and over again. But there are two issues that I would 8 like to ask if you would not mind addressing. 9 One of the issues: John Magnon 10 11 (phonetic) from GE was showing a graph at a public 12 meeting in which he said that GE has run your model and your model indicates that the 13 resuspension of PCBs will result in a net loss in 14 terms of environmental quality. 15 Have you evaluated GE's data, and can 16 17 you speak to the accuracy of their statements? 18 MR. MC CABE: We obviously have not looked at -- GE has their own models, and they 19 20 have run them. We have not evaluated their runs of our 21 22 models, just as we have not evaluated their own 23 model. I mean, we are more interested in our 2425 model and the way we run it.

I assume they -- they probably used 1 2 different assumptions than we used. And I do not know if you have anything 3 4 else to say, Doug --MR. TOMCHUK: Well, I do not know what 5 their assumptions -- assuming that they would all 6 be the same, there could still be something else 7 in someone else's model that --8 9 MR. MELLEY: Well, before the public, I can say that I have run your model, and it shows 10 that -- Clearwater runs the EPA model, and it 11 12 conclusively proves that there will be zero resuspension, and it would have equal validity 13 before the public --14 MR. TOMCHUK: We will check and get back 15 16 to you. 17 (Laughter.) 18 MR. MELLEY: Thanks very much for 19 coming. 20 (Applause.) Our model was peer-MR. MC CABE: 21 22 reviewed. There was a debate there for guite some 23 time about which model was better; we should have a contest of models, you know, run one against the 24 25 other; which one would be acceptable.

We said, "Look, it is a tool." If the 1 2 tool is proven to be sound and acceptable, which 3 the peer review has found it to be, then it works and it is fine. 4 As you have heard before, also, you can 5 6 calibrate a model a lot of different ways. That does not mean that, in the forecast 7 mode, that is going to exactly work that way. 8 It 9 depends on all those assumptions you made, all those coefficients that you fill in to make it 10 11 work. So, our's worked. We are happy with it. 12 13 GE, I guess, is happy with theirs. MS. METAXAS: I am Emily Metaxas, and I 14 am a resident of the City of Newburgh. 15 I am a transplant from Connecticut to the Hudson Valley. 16 17 I am here representing a group known as 18 the Newburgh Neighbors Network. 19 We are a grassroots organization here in the City of Newburgh, comprising abot 200 20 homeowners here in your district. 21 22 We are mainly preservationists and 23 environmentalists, and we are deeply concerned with our quality of life here in the City of 24 25 Newburgh.

We realize that the health of our city 1 2 depends upon the health and safety and beauty of our river. 3 Our group was instrumental in 4 successfully fighting the 1999 plan to barge New 5 York City garbage to our waterfront here. 6 We have been lobbying the DEC on behalf 7 of the City of Newburgh to force Central Hudson to 8 clean up their contamination here on the 9 waterfront. 10 And we most recently lobbied the 11 Newburgh City Council to come out in favor of a 12 13 resolution in support of the dredging of the PCBs from the Hudson River. 14 So, I am, therefore, here just to say 15 that I would like to go on record to say that the 16 17 leadership of the Newburgh Neighbors Network, comprising 200-plus citizens in the City of 18 Newburgh, recently, at the last meeting, voted in 19 20 favor of the dredging of the PCBs from the Hudson River. 21 22 Thank you. 23 (Applause.) 24 MR. METAXAS: Hello. My name is Bob I live at 318 Grant Street in the City 25 Metaxas.

1 of Newburgh.

2 And I also am a member of the group 3 called the Newburgh Neighbors Network, of which my 4 wife just spoke.

5 I have done quite a bit of research 6 personally and looked at the Clearwater website, 7 which is probably one of the best demonstrations 8 of the current technological dredging that takes 9 place.

We have said before -- and my wife 10 11 agrees with me -- that dredging is probably a bad word in light of the new techniques that are 12 there, and it appears to me to be a floating barge 13 with substantial negative pressure, a vacuum type 14 process which actually sucks the sediment out with 15 catches to catch stray sediment that fly away from 16 the induction end. 17

So, it seems a very reasonable and prudent argument -- and, of course, the EPA -- I mean, how many millions of dollars have been spent for studies, and how many thousands of top scientific minds have looked and confirmed your findings?

And GE is a very large, diverse, well-25 run, multi-national corporation, and they are

really a credit in the international community to the United States; they are indicative of what is possible for a corporation given the free range to

5 I studied GE in a very good business 6 college where I went to school, all the way to 7 advanced management.

pursue capitalist goals.

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Jack Welsh is probably one of the most9 quoted and lauded CEOs in existence.

And I thought, I see, now wrongly that GE had corporate spirit and a patriotism that demonstrated above the almighty dollar or the return on investment or the return -- or, earnings on stock prices, that the health of our children and the quality of our environment where we live and work is much more imporant than that.

They are a company that can readily afford this clean-up. And it is insultingly disingenuous for them to have undergone this massive marketing misinformation campaign, as far as going to put logos on websites that look like environmental groups'.

I clicked on one thinking it was yet another environmental group for the dredging, and it was GE's arguments against it. And there it

125 1 was in very small print: "GE". 2 So, I just wanted to say that it is 3 insulting what GE is doing. I laud your efforts and encourage you to 4 5 pursue the clean-up. Thank you. 6 7 (Applause.) MS. GRAY: Hi. I will keep it brief. 8 My name is Josie Gray, G-r-a-y. 9 I am a homeowner in Beacon, New York. 10 . I have been living in the Hudson Valley most of my 11 adult life. 12 I am also a student of the Hudson. 13 And on my own, I have been reading and researching the 14 15 history of my own community and about the natural environment in the Hudson River Valley. 16 17 And I have taken the time to learn about PCBs, about the health effects and about the 18 19 nature of the problems. And I commend the EPA for taking the 20 21 time to do full research and respond to the 22 issues. The PCBs, especially those in the hot 23 spots, must be removed. 24 If dredging is done with care and using 25

126 1 the most modern equipment, it is the best solution. 2 GE has had over 10 years to ponder this 3 and should not be allowed to delay this process 4 any further. 5 The PCBs should be removed because 6 7 today, unlike 20 years ago, we have a healthier river full of life in and on its banks. 8 Some day, we may even have a commercial 9 fishery again. 10 GE is spending millions to buy out 11 public opinion, but they have not bought me or 12 anyone else who takes the time to look carefully 13 14 at this complex problem. 15 Thank you. 16 (Applause.) 17 MR. CROSS: Hi. I am John Cross, C-r-o-18 s-s. And actually I become more than cross: 19 20 I become furious when I am watching all those GE commercials or miscommercials. 21 I think it is a political process. 22 Ι appreciate the hearing you are having. A lot of 23 24 people showed up; it is tough to show up this late at night, stay this late. 25

And this, I think, demonstrates that 1 people really care about this area. 2 It is a beautiful area. It is a 3 beautiful river. It is one of the most important 4 5 rivers historically in this country. We would like to see transport coming 6 back to the river, for it to be properly dredged 7 out for boats to go up and down the river. 8 I think that not just fishing but 9 tourism would pick up in this area, land values 10 would go up, et cetera. So, there are a lot of 11 benefits in this plan. 12 I particularly agree with your 13 alternative, the hot-spot dredging. 14 It would be nice to get more PCBs out; 15 but it does get kind of ridiculous to go further 16 than that right now. 17 And the capping plan just sounds 18 19 ridiculous; it sounds like it might work on a very 20 small scale but, in a huge river like this, with 21 all the things that can happen, it just does not sound like a good idea. 22 23 Anyway, I would like to say that my main concern is that, unless you have a very, very 24 strong report, it is going to be nixed by your 25

boss; I really have that feeling. 1 2 So, it is important to make sure that 3 whatever plan you put together is very strong. GE is sitting on a \$400 million profit 4 basically if they can avoid paying for this 5 because, you know, if you figure they've spent \$60 6 million for the advertising and they would save 7 \$460 million, that is a \$400 million profit. 8 9 So, it is in their interest, obviously, not to do this, even though they are the 10: 11 responsible party. Thank you very much for being here. 12 13 (Applause.) 14 MR. GABOR: Good evening. My name is Michael Gabor, G-a-b-o-r. I live here in the City 15 of Newburgh. 16 17 I just want to thank you for coming out 18 to Newburgh and giving us the opportunity to be 19 here. I am also here representing the Newburgh 20 21 Neighbors Network. 22 I just wanted to also kind of represent the future generations who obviously are not here 23 today to speak on this issue. 24 25 Our forefathers thought a lot about our

generation 100 to 200 years ago. You can see it 1 in the City of Newburgh, with the architectural 2 wonders that overlook the Hudson River. 3 Unless we do this now, we are losing any 4 5 hope of cleaning this mess up. As time goes on, the viability of the 6 7 clean-up effort will fall off. Forget the cost. 8 Forget the temporary loss of income of people whose lives presently depend on the river. 9 We need to do this for the future 10 generations, and I thank you for your time. 11 12 (Applause.) 13 MR. KURIYAKU: I am Lee Kuriyaku. Two 14 comments. One: Our communities will benefit from 15 the dredging. That does not mean that I know that 16 17 that is the right answer; I am just saying that our communities will benefit from it. 18 I was a councilman in Beacon for six 19 20 I also ran for State Assembly in seven years. 21 communities in this area along the Hudson, 22 including the City of Newburgh and the City of 23 Poughkeepsie. 24 I can say that my comments echo those of Kerry Forrest in Newburgh, that Beacon has done a 25

130 1 lot to revitalize its waterfront in the last several years. 2 We had a garbage dump, and we turned it 3 into a park. 4 5 We had a sludge incinerator. We shut it 6 We ship our sludge out now. down. We had an empty box plant on our river 7 for 15 years and, rather than putting another **8** 9 factory in, we are putting in the largest modern 10 art museum in the region. We have junk yards torn down and we are 11 doing redevelopment there. 12 13 The things that we are doing in Beacon 14 will benefit greatly from having a river that is clean, that encourages people back to the river 15 16 for recreational, commercial and residential uses. 17 So, for that, I think limited dredging helps our communities. 18 My second comment is one of how to 19 20 decide whether to dredge. 21 The decision of whether to dredge is one that is really quite simple: Rely on the experts. 22 23 And that means you do not rely on people 24 like me. I am not an expert. 2.5 It is a highly techniccal decision; that

means you rely on science, not on ads; you rely on 1 science, not on politicians. 2 3 Science means you agree on a set of standards up front, you decide what studies you 4 5 make up front, you hire experts to do those studies, you wait patiently for the results. 6 7 You undertake peer review, and you ask the peers to review the studies, and you rely on 8 those peer reviews of the original studies. 9 That seems to be what the EPA has done 10 in taking a very deliberative process. 11 I am not an expert on this subject. Ι 12 hazard a guess that, other than people up on the 13 14 stage, none of us is. And that means you rely on the experts. 15 The analogy is very straightforward. 16 17 Assume someone gets cancer: Are you going to ask a doctor or are you going to ask a 18 politician? Are you going to ask the doctor or 19 20 the lawyer? Are you going to ask the ad 21 executives or are you going to ask the doctor? 22 And once you ask the doctor, I suppose 23 you will ask for a second opinion. But when you are through, I would assume that you will trust 24 the doctor's opinions. 25

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And the final educated answer has been, 1 "You go with limited dredging." And that is what 2 I think we should support. 3 Thank you. 4 5 (Applause.) MR. NESTLER: My name is Rick Nestler. 6 7 That is N-e-s-t-l-e-r. I have been a resident of the Hudson 8 9 Valley for over 25 years. 10 I have a couple of questions here. But, first of all, I would like to thank you for 11 12 finally pushing this project forward. 13 And I hope that, regardless of the 14 National Administration that has just stolen the 15 election --16 (Applause.) 17 MR. NESTLER: That you will continue to 18 press onward. 19 The first question is -- I have heard lots of numbers thrown around as to how many 20 21 pounds of PCBs were actually dumped into the 22 river, everything from a million down to your figure of 200,000 pounds. 23 24 Is that what you are going with, the 200,000 pounds? 25

133 MR. MC CABE: The 200,000 pounds is what 1 2 is left; the rest of it has dissipated on down 3 river. Okay. The next question 4 MR. NESTLER: 5 is -- apparently, you are going after about 6 100,000 pounds or somewhere between 40 and 50 7 percent? 8 MR. MC CABE: Approximately, yes. MR. NESTLER: And why are we not going 9 after the rest of that, is it too spread out? 10 MR. MC CABE: We developed a number of 11 12 alternatives which went further than the one that 13 we selected. 14 And based upon a number of analyses, including what is cost effective, it did not 15 really make sense; we did not get that much more 16 risk reduction in going further because, as I 17 said, much of it has dissipated. 18 19 MR. NESTLER: Okay. Thirdly, would it 20 be correct to characterize this resuspension issue 21 of possibly up to 38 pounds of this stuff going 22 over the Troy Dam as miniscule compared to the 23 rest of the project? 24 MR. MC CABE: It is certainly minor compared to what we are dealing with, but it is 25

something that we need to -- since there are so 1 many questions about it, it is something that we 2 need to firm up as best we can before we go 3 4 forward and to analyze those other projects that 5 have come up with different numbers. MR. NESTLER: But it would be better to 6 take the PCBs out of the river and risk this minor 7 resuspension than leave it lying around in the 8 river? 9 10 MR. MC CABE: Without question. We are 11 talking about 200 pounds over five years versus 12 what is going over now, approximately 500 pounds 13 in one year. 14 MR. NESTLER: Thank you. (Applause.) 15 16 MR. HINCE: Hello. My name is Eric Hince, H-i-n-c-e. 17 18 I am a licensed professional geologist, 19 and have spent my entire career, nearly 14 years, 20 in the professional practice of environmental 21 science. I am the Chief Technical Officer of a 22 23 company that specializes in in situ bioremediation technologies. 24 25 My comments are a follow-up to mine at

the last public hearing in February in 1 2 Poughkeepsie. First, for the record, I disagree again 3 with EPA's remedy, and I also disagree with GE. 4 I think that active remediation is 5 necessary, but do not feel that the studies have 6 7 adequately supported the selected remedy since they have neglected many other technologies. 8 In fact, what I refer to is the point 9 considering bioremediation technologies. 10 11 From your own FS, the references cited 12 are nearly 10 to 11 years old. In the realm of 13 technology, that is simply outmoded. Technologies, as I have been informed by 14 your consultants -- the technology evaluation 15 ended four years ago. 16 In some respects, certain portions of 17 18 the FS were essentially out of date before they 19 went to press. 20 Specifically, our company has developed 21 a technology that has significant potential, we 22 believe, for the in situ treatment of PCBs. Grossly oversimplified, this technology 23 consists of granulated composition or pellets or 24 25 briquettes which can sink into sediments and treat

1 PCBs in place without dredging. Mr. McCabe, you said at the second 2 public hearing in a row, that that would be a goal 3 and that, if such technologies were available, you 4 would conduct a pilot study. 5 Let the record show this will be the 6 7 third time I have provided information to yourselves and to your consultants concerning our 8 9 technology. We are not asking for money. Let the 10 public record show that we discussed our offer to 11 provide a certain amount of the technology for 12 13 free simply on the condition that the EPA share 14 the data. So, to reiterate, a technical review of 15 16 remedies that is, in some cases, a decade out of date, is insufficient. 17 If you expect a robust support not 18 simply by those people who have expressed their 19 20 support for the EPA, but of critics such as GE and 21 others, then I think it is imperative that the EPA do more than simply appear to be going through the 22 23 motions of public comment on what seems to me to be an obvious and pretty much foregone conclusion: 24 You are going to dredge no matter what. 25 You are

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1 going to dispose of it in a landfill no matter 2 what.

3 If this comment period is truly true-toform and true to the law, if certain technical 4 issues are raised which have direct bearing on the 5 implementability and technical merits of the 6 7 selected remedy, you are obligated under the law -- it is not a policy issue; it is a legal issue 8 and a technical issue -- to reevaluate that remedy 9 10 and give full consideration to those that could 11 work.

12 May the record show that I am going to 13 hand you information on our technology for the 14 third time now in three months.

15 And I stand here committed to support 16 the pilot study, and my company will provide the 17 product and the support. All we ask is for data, 18 and let the merits fall where they will.

19 It may work. It may not work. But what 20 are you afraid of?

21 MR. MC CABE: Eric, the comment period 22 -- it is a four-month comment period. I assume 23 you want us to take your proposal and answer it 24 specifically, and go out to the public with a new 25 proposal.

We have to take comments. We are taking 1 your comments; you are saying it for the third 2 time, and at that's fine. 3 We certainly will look at it. We are 4 5 always looking at new technologies. A lot of people during the comment 6 period are offering technologies and their ideas 7 about what we could do. 8 That is great. We will look at them. 9 That is why we have the comment period. And, yes, 10 11 we will look at it. I do not recall promising a pilot study 12 13 but, other than that, what you said was pretty 14 accurate --MR. HINCE: At the last public hearing, 15 16 you stated, almost in quote, that it is not like somebody had come to you with a technology that 17 could work in situ because, if they did, you would 18 19 conduct a pilot study. 20 I talked to you after that hearing, and, as far as I am concerned, I have a flat-out 21 recollection of that conversation. 22 You said, "Well, has the technology gone 23 through the Site Program?" And I made a point of 24 25 saying, "Where does it say in the National

Contingency Plan that you will only review 1 technologies on a Superfund site that have gone 2 through the Site Program?" 3 You said, "Well, it doesn't. It is just 4 5 our policy." So, I want to know where policy 6 7 supersedes the law and supersedes good engineering practice and good scientific practice? 8 I do not expect you to change the remedy 9 or switch to any remedy that cannot be supported 10 by thorough analysis of the nine NCP evaluation 11 12 criteria. But you have stated on the record, 13 14 agreeing with me, that you more or less have selected land disposal as the ultimate remedy 15 because all the treatment alternatives were too 16 expensive. 17 So, what you have essentially admitted 18 19 on the record is that you have tossed out eight of 20 the nine criteria in lieu of one where an RP in 21 the private sector or myself as a professional 22 representing such an RP would have the book thrown 23 at them if we said, "Well, we have looked at remedies but, you know, guess what, they are all 24 25 too expensive, so we are not going to do it."

I mean, you have to sometimes, I think, 1 listen to what you say and recognize that you are 2 3 accountable to the same system that the private sector is held. 4 5 And everybody wants to come here and 6 bash GE. I am not beholden to them or you. Ι 7 disagree with them. I have given this information to General 8 Electric. They said they will look at it. I have 9 10 not heard back. I have given it to Congressman Hinchey's 11 12 advisor. I have not heard from Congressman 13 Hinchey. 14 So, all I am asking is what is going on here? Isn't ending the technology review four 15 years ago, isn't that not adequate? 16 17 Isn't using scientific arguments --MR. MC CABE: I hear your point, and I 18 differ with you on what I said previously about 19 20 doing a pilot study, but it is neither here nor there --21 MR. HINCE: It will be in the 22 transcript. We will look at the transcript --23 24 MR. MC CABE: More important is that you have given us the information, and we will take a 25

look at it. 1 You apparently are looking for immediate 2 3 feedback. I am sorry, but you are not going to get that, nor is everyone else who has submitted 4 5 all their comments and are giving us technologies and ideas to look at. 6 We have to look at them; it is really 7 8 that simple. 9 There is no instant gratification. And 10 your assertion about throwing out eight of the nine criteria, I disagree with that, too. 11 Be that as it may, we disagree; that is 12 13 okay. MR. HINCE: You stated on the record the 14 15 last time that, basically, you had looked at 16 treatment alternatives but had decided not to go 17 with them because they were too expensive --MR. MC CABE: We have looked at 18 19 treatment alternatives and, for a variety of 20 reasons, we have not chosen them. 21 MR. HINCE: Go to the transcript --22 MR. MC CABE: Thank you, Eric. MR. ASCENZO: Steve Ascenzo, A-s-c-e-n-23 z-0. 24 Somebody said the Hudson River is on a 25

142 a fault line? Is that true? 1 2 A VOICE: Yes. The Ramapo Fault. 3 MR. ASCENZO: If something were to happen, isn't that going to send the sediment back 4 up into the river and contaminate the whole river? 5 6 MR. MC CABE: Can you address that, 7 Doug? 8 MR. TOMCHUK: There are fault lines that run along the Hudson Valley. I am not familiar 9 10 with all of those exactly. But, yes, a seismic event of a large 11 size could probably kick some sediment up into the 12 river. 13 I think I should note that, on the 14 15 geological clock, that could happen tomorrow or it could happen in 10,000 years. It is the same time 16 17 frame, you know, within that type of clock. So, you can plan for those things to a 18 certain degree. I think that is one of the 19 20 reasons that we did not move toward a capping alternative; that we selected a removal 21 alternative because of long-term uncertainty with 22 23 respect to a cap lasting. MR. ASCENZO: So, if this happened, 24 though, would the cities and towns that use the 25

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water along the Hudson be able to deal with this 1 2 sudden big rise in PCBs? They probably would not, right? Because 3 wouldn't that spike and exceed --4 MR. TOMCHUK: Again, I cannot answer 5 6 that; it is just too vague. 7 I mean, you know, certain seismic events, yes, maybe some other kind of catastrophic 8 event, like if there are dam failures and a big 9 flood comes down. 10 At the same time, you probably could not 11 drink the water for other reasons in that type of 12 case anyhow due to bacteria instead of just the 13 14 PCBs. And the water treatment plants may not 15 16 even be operational. So, it gets a little theoretical. 17 MR. ASCENZO: I just -- nobody mentioned 18 19 it. I mean, to me, that is important because it 20 definitely plays into this capping or not. 21 I guess I would just say that I think you guys are doing a great job. 22 23 There is really no -- it is not like you guys are going to become President of the country 24 or President of your division if you get GE to pay 25

144 for the clean-up; whereas, GE is looking to save 1 money, and some of the opponents to this are are 2 3 out to get money. God knows, GE probably paid half the 4 5 guys who came up here just to say what they said. 6 And I think you guys are doing a great job. I am proud of you, and thanks for all your 7 8 hard work. MR. MC CABE: Thank you, Steven. 9 10 (Applause.) MR. MARTIN: My name is Craig Martin. 11 First of all, I would like to thank you for coming 12 here tonight. 13 14 However, I would also like to express 15 some dissatisfaction at the length of time it has 16 taken to get to this point since there were 17 presentations that were held in '86 or '87 on the same topic, although I believe they were held by 18 the Department of Environmental Conservation. 19 20 The preferred alternative at that time 21 was 50 percent or more -- actually, it was very similar to the preferred alternative presented 22 tonight, in that the preferred alternative was to 23 24 dredge the hot spots. 25 However, the landfill, at that time,

that was proposed was right there adjacent to the 1 river in the Town of Fort Edward, Washington 2 3 County. The presentation tonight was very Δ 5 similar to that in that it addressed only the preferred alternative; it did not address the 6 other alternatives which were studied. 7 Although I realize there is voluminous 8 information available to us, those of us who take 9 the time to come to the meeting, I believe, do 10 deserve at least a synopsis of the alternatives 11 studied especially in light of the fact that the 12 preferred alternative contains only roughly 50 13 14 percent removal of the PCBs; the remaining 50 percent you refer to as being dispersed or 15 encapsulated in time in situ. 16 It leads me to believe that -- well, you 17 have said that roughly three-quarters of the cost 18 of the project is transporting the dredged 19 20 materials to a site such as in Texas. Therefore, there should be some 21 credibility lent to the argument that the in situ 22 processes which are available should at least be 23 explained as to what their disadvantages are. 24 25 Also, what is very similar in regards to

1	that previous meeting was your brief reference to
2	monitoring programs which would be in place to
3	monitor the rate of resuspension.
4	However, on further analysis, tonight
5	you have admitted that most of the resuspension
6	studies that have been done in the past have been
7	based upon turbidity criteria as opposed to PCB
8	levels.
9	The answer which I received that night,
10	when I specifically asked if there was a
11	contingency plan or a triggering level which would
12	require halting the project, I was informed that a
13	contingency plan would be developed.
14	Here, 13 to 15 years later, the
15	presentation is that monitoring systems will be in
16	place; however, a contingency plan is yet to be
17	developed and that, upon further investigation,
18	only one study really has addressed the PCB issue
19	as opposed to the turbidity issue.
20	The question that I have directly is
21	you mentioned with regards to the monitoring
22	program, perhaps a performance specification
23	should be written into the contracts.
24	Is the dredging technology the two
25	types of technology mentioned tonight, have they

advanced to a point such that a performance 1 2 specification can be written whereby the contractor would have to provide a bond to address 3 the resedimentation or the resuspension issue, or 4 would the bonding companies run away and thereby 5 cause your assumptions in your models to be 6 grossly inadequate? 7 The public would then -- by no means 8 would a judge look at GE to say, "Okay, now, GE, 9 10 you paid for this process; the EPA thought it would fix it, but subsequently has made it worse." 11 In that case, we would be stuck, as has 12 happened with other projects, with the public 13 14 footing the bill for a fix which the government bodies at that time thought -- at that time, they 15 16 thought that the channelization of the Everglades was the be-all and the end-all. 17 And here we are now footing a huge bill 18 19 to fix that. 20 Those are good questions, MR. MC CABE: 21 Craiq. You are correct in terms of the length 22 of presentation or the type of presentation. 23 24 It was a conscious decision on our part 25 because we will be doing about 11 of these -- at

1 least that is the current number -- and we have 2 had audiences up to, I don't know, 11-, 12-, 1300 3 people, whatever.

At a normal or standard Superfund presentation, we probably, with a study of this length -- although, remember we did do all the remedial investigation. Reports were all done separately, so we had separate meetings on those.

9 But on a study of this length, we could 10 easily go for hours, and we thought that people 11 were so interested in asking questions, that we 12 would give shorter presentations, just giving the 13 briefest facts, and rely on the written 14 documentation and deal with people's questions. 15 You are right; it could have been done

16 the other way.

We did not think that people would sit here, whether it is here or elsewhere, and really want to wait.

There are a lot of things that we are hearing on this study, a lot of issues that people have, a lot of problems that people see with the dredging scenario that, quite frankly, we have not seen elsewhere.

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Does that mean they do not exist? No.

But I think it means that there was not 1 the same level of awareness or concern or whatever 2 you might term it that those projects, like the 3 St. Lawrence River -- in our region, we just went 4 ahead and we did it. We dealt with it, and 5 everyone was pretty satisfied; they were not as 6 7 concerned about some of these issues. That does not mean these issues are not 8 9 important or that these people now are wrong. And that is why we are trying to address 10 them, but that is also why there is a dirth of 11 information on past projects, because people were 12 not concerned about all of these issues. 13 14 The performance specifications, we 15 believe -- I am not sure if I will get to your 16 question, but the performance specs will cover a 17 variety of performance issues, including resuspension. 18 I cannot tell you exactly how we would 19 20 We are looking at a number of contracting do it. 21 mechanisms now. 22 But we believe that -- yes, we will definitely deal with issues like that, but it is 23 24 not to the point -- you know, it is not like this is going to go bad for months and we say, "Oh, my, 25

look at that. There is a problem. We should not 1 have done that." 2 It is going to be much more -- I will 3 not say instantaneous, but much more of a daily or 4 hourly type of basis, the kind of monitoring we 5 will be doing. 6 7 So, we are going to find out if there is a problem. If it is necessary, we will shut down 8 9 the project, and make sure to implement whatever measures are necessary to correct the problem. 10 11 Exactly how that will be done, we 12 certainly have not gotten that far. We are conceptualizing some things, and 13 14 we are not yet into design, but they are all 1.5 issues that people have raised that we have to 16 decide how much of that will go into a performance 17 spec. Of course, obviously, the more you put 18 in, the more difficult it is for the contractor to 19 deal with. 20 21 MR. ZELNER: Good evening. My name is Alan Zelner. 22 23 First, I want to thank you for coming to Newburgh to listen to us, and we encourage you to 24 2.5 continue with having these open meetings

1 throughout the process.

I am a resident here in the City of Newburgh. I live a few blocks from the Hudson River.

5 I am a member of some of the 6 neighborhood organizations that you have heard 7 mentioned here; the Beacon Sloop Club, the 8 Newburgh Neighbors Network, and Clearwater.

9 I am also a manufacturing engineer.
10 As a resident here in the City of
11 Newburgh, I live here with my wife and my three12 year-old child. We live just a few short blocks
13 from the Hudson River.

We visit the waterfront frequently. We walk down there. We talk to our neighbors who fish and trap at the waterfront right at Newburgh Landing.

We swim in the Hudson River, we sail.We spend lots of time on and in the river.

So, first of all, I do want to say in the strongest terms that I do want to support the immediate remediation of the Hudson River PCBs through hydraulic suction or a dredging program, along with rigorous monitoring to be sure that it is done right. And things can be done right.

I also want to say that we are up here in the Hudson Valley -- I am sorry to tell you that my father, who had lived here in the Hudson Valley for many years, just died a few months ago of cancer.

6 My wife just had two miscarriages. So, 7 one of the other things I would ask you is to 8 advocate studies as to the long-term effects of 9 Hudson River PCBs on communites, endocrine and 10 carcinogenic effects.

11 Thirdly, as a manufacturing engineer who works in industry, I can tell you that, sure, 12 13 industry wants to minimize cost; sure, certain 14 assignments will be given to people and told, "Well, if you do not take this assignment, 15 16 somebody else will, so you might as well take it." 17 But industry must have a responsibility towards the communities in which they operate. 18 And you and the United States Government 19 20 must not allow there to be any confusion or 21 exceptions on that point. In fact, I can tell you that I would 22 23 suspect that the representatives of General Electric or any other corporation publicly 24 fighting this -- I very strongly suspect that 25

personally they hope that you will do the right 1 thing and proceed with immediate and thorough PCB 2 3 removal. Thank you. 4 5 (Applause.) MR. KUKONIN: Good evening. My name is 6 I am a Cornwall, New York, resident; 7 Ken Kukonin. 8 formerly, a program manager for the largest environmental remediation corporation in the 9 United States. 10 I have been involved in a lot of PCB 11 12 remediation projects for the EPA, as well as private sector industrial clients such as GE. 13 14 I just want to note a couple of 15 observations and comments about dredging. 16 The technology has changed greatly over 17 the past few years. 18 And the hydraulic dredging that was discussed earlier can almost be considered 19 20 surgical dredging; you have a great deal of 21 control over the amount of sediment that is removed and how it is removed. 22 23 The water that is extracted, as was 24 mentioned earlier, does serve to contain the 25 resuspension of sediments.

And there have been a lot of good 1 success stories here in New York State. 2 There was the Grassy River, which I was 3 involved in on the periphery up in St. Lawrence 4 5 County, which is a fast-moving body of water. Also in Upstate New York, one of the 6 7 largest cities in this State has recently completed a dredging project that restored a 8 three-and-a-half-mile long white sand beach which 9 I believe is the longest white sand beach in the 10 United States; and that is at Plattsburgh. 11 The amount of sediment that was removed 12 13 from there was approximately 200,000 cubic yards. And that was originally supposed to be a 14 three-year project by the New York State DEC. 15 That was completed in one season. 16 Now, that was a very complicated 17 project, probably a little bit more complicated 18 than what would take place on the Hudson River. 19 So, the fears of it dragging on forever 20 21 are probably unfounded. 22 And one of the things that we should consider is not looking at the minutia, but trying 23 to see the forest here. 24 25 Thank you.

155 1 (Applause.) MR. WECKERLEY: My name is Urgin 2 Weckerley. I am a lifelong resident of Orange 3 County. 4 I have been boating on the Hudson since 5 before PCBs were invented. 6 I am also a volunteer with the Sierra 7 I volunteer for the Fort Edward Friends. 8 Club. Ι am on the executive committee of our State 9 10 Planning Chapter. I would also rather be watching the NCA 11 basketball finals as we are speaking here tonight. 12 (Laughter.) 13 MR. WECKERLEY: One of the things that 14 gets me kind of nervous is when we talk about the 15 16 risk assessments and allowable limits and 17 standards. And, earlier, you indicated how 18 19 difficult it was to factor out specific responses, 20 reactions, to a particular pollutant. My concern is the flip side of that: 21 22 What about the synergy to all of the other 23 pollutants we have to endure here? 24 Are you looking into that or are you taking those into effect? 25

Are we taking into account the toxic 1 2 cocktail that we are absorbing all the time, especially our young children, especially infirmed 3 older citizens, especially those with other 4 sensitivities? 5 I think those are other things that need 6 to be looked at, not just PCBs in isolation. 7 I am in favor of -- the Sierra Club is 8 in favor of total removal of PCBs by whatever 9 10 means. 11 And the argument really should be not whether it should be done or not done, but how it 12 should be done. 13 The GE solution at this point is a toxic 14 morphine drip that will poison us forever. 15 One solution that was recommended was 16 capping the underwater hot spots. 17 18 Have studies really been done regarding the riverbed geology and the whole effect of 19 20 channeling, totally independent of river flows, of floods, of low water and drought; but just the 21 normal channeling within the river bed itself that 22 occurs which will expose at one point or another 23 and shift back and forth all the toxins that seem 24 25 to be covered but never really are?

I have not heard that described this 1 evening or elsewhere; that whole channeling effect 2 that takes place that no capping will ever solve. 3 MR. MC CABE: The person who would cover 4 5 the synergy I suspect would be Marilyn. MS. OLSEN: The whole question of 6 synergy has been looked at by the Agency at 7 8 various times. I would mention, however, that in 9 addition to synergy there is also antagonism. 10 And there have been studies that have 11 looked at those potential effects. 12 What EPA has developed as part of its 13 policy is a mixture of guidelines that basically 14 set forth the way in which we evaluate chemicals 15 where we have multiple chemical exposure. 16 And we use adaptivity unless there is 17 specific information that we need to look at one 18 or either of the antagonisms or a synergistic 19 20 effect. There are very few chemicals that 21 22 actually have been shown to be synergistic, so it is a small universe. 23 And we feel that the nature of our risk 24 assessment process, which has gone through peer 25

1 review, which has been evaluated by a number of 2 scientists, provides a protective approach for 3 protecting children, adolescents, adults, within 4 the -- who are being exposed to environmental 5 contaminants.

The Agency also recognizes theimportance of childhood exposures to chemicals.

8 And as part of our risk assessment 9 process, we do specifically -- at most sites where 10 we have residential exposures -- for the Hudson, 11 for example, we did look at children ingesting 12 fish.

So, we do include that as part of ourprocess and our evaluation.

MR. MC CABE: The only comment I would make is that I remember one particular set of peer reviewers, who were European, said about the river system who basically said what you just said; that it is a very dynamic system and of course stuff is going to move around.

What is settling today is going to scour tomorrow. And there is a problem now; we expect there is going to be a problem for a very long time.

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But as far as any analyses, Doug, is

159 1 there anything you can say about that? MR. TOMCHUK: Actually, we have done 2 some modeling, particularly, you know, high-flow 3 events and the scour that would happen during that 4 type of thing. 5 And we have done some long-term 6 7 modeling. But these have pretty coarse scales. 8 So, it is hard to look at it through that point of 9 view, through the modeling. 10 What we do have, in fact, is sonar which 11 we can look at to show where the deposits are 12 today to compare that to what we saw in 1977 from 13 the physical descriptions that were taken when the 14 DEC went out and sampled; and in 1984, again, when 15 they were doing those types of sampling events. 16 17 And that gives us the opportunity to go out and compare the sites with sonar and 18 19 additional physical descriptions, you know, prior to the actual input for the design and prior to 20 the actual remediation effort. 21 22 We know that, for the most part, the hot 23 spots are pretty much in the same spots, and we think that they may change a bit. 24 25So, we will take the data and the

modeling. 1 We do not understand what goes on at 2 3 every location, and we need to make generalities and apply that. 4 What we do know is that PCBs are still 5 6 getting into the water and getting into the fish, and they are still bioavailable. 7 MR. WECKERLEY: Well, that just brings 8 home the point that total remediation is really 9 10 the only way to go. And thank you so much for your efforts. 11 12 MR. MC CABE: Thank you. (Applause.) 13 14 MR. SUSSMAN: Good evening. The EPA, it 15 seems to me, is at a crossroads nationally. 16 We have tremendous movement backward 17 with regards to environmental concerns. 18 Many people in our county, in Orange County, are outraged, frankly, at a lot of the 19 20 things that are being done at the national level, 21 and are waiting for the shoe to drop here on this 22 project. Now, I think one of the critical issues 23 24 is that the EPA has to cooperate with local governmental officials because there is a great 25

deal of misinformation which is being spewed by GE 1 2 and is being accepted by these local governmental leaders who are unable -- because they do not 3 4 understand the issues technically -- to refute what GE has been stating to their population. 5 I think it is critical that we take a 6 broad view working with local county, 7 governmental officials so that they fully 8 9 understand exactly what you are doing and understand the dynamics of the political process 10 from here. 11 I think the general consensus locally is 12 that this project will not go forward; George W. 13 Bush and Ms. Whitman are going to stop it. 14 And I think there has to be reassurance 15 for our local people that science will prevail, 16 17 not demagogery and politics. The only other point I would make is 18 19 Total remediation, yes. You have to start this: 20 somewhere. I think you should not in your report 21 22 overcommit to a hot-spot -- to a limited 23 remediation alternative. 24 You should suggest that stages be done. 25 That should be clearly the first stage because it

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1 is the most intense problem. We have identified that problem. 2 But you should go on to state that, 3 assuming the technology exists, clearly your 4 policy preference is for total remediation. 5 (Applause.) 6 MR. SUSSMAN: And I think the report 7 should be very, very plain on the logic of the 8 9 sequencing because, from a public policy point of view and an environmental point of view, it makes 10 no sense to go after the smaller problems first 11 but, rather, to focus on those areas where the 12 problems are more intense with the objective being 13 total remediation. 14 And I think your position should be to 15 recommend that from an environmental and policy 16 17 perspective. But I cannot overemphasize enough to 18 someone involved in their local county government 19 that you need to be in touch with the county 20 21 legislators, the county executives, the town 22 officials, so they can in a sense be your 23 ambassadors and not be disseminating misinformation about what you propose. 24 25 Thank you.

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163 MR. MC CABE: Thank you, Michael. 1 2 (Applause.) 3 MR. MC CABE: I mean, a lot of what you have said is true. 4 I wish I could figure out a way to get 5 6 to everyone. I mean, we have certainly tried whether 7 it is through these kinds of meetings, which I 8 9 know are limited, or through our community involvement program which has a governmental group 10 on it --11 MR. SUSSMAN: Let me explain briefly, 12 because I do not want to take a lot of your time. 13 14 As you know, there are legislative bodies that function for each of our counties, the 15 16 neighboring counties, whether it is Dutchess County, Orange County, going up and down the 17 river. 18 19 I think it is critical that you brief 20 the county legislators and the country executives 21 in each of these counties -- and not all of them 22 have county executives -- as well as their health 23 commissioners, their planning departments. 24 You invite them to either separate 25 meetings or one large meeting -- I would think

1 that separate meetings would be more efficacious -- and brief them and answer their questions, as 2 well as the mayors in the major communities along 3 the river. 4 What you have now, frankly, is GE 5 bombarding many of their constituents with a lot 6 of misinformation and a lot of these politicians 7 8 do not know what from what on this kind of an issue. 9 10 And you are in a position technically and I think you have a responsibility to assist 11 them. 12 You understand what is going on publicly 13 with the huge ad campaign, and I do not expect 14 15 this EPA to countervail that on that level. But I do expect appropriate information 16 17 and briefing. Thank you. 18 (Applause.) 19 20 MR. MC CABE: Thanks, Michael. A PERSON: Why can't the county 21 22 legislators come here? 23 MR. SUSSMAN: The issue is not whether they come here. The issue is that we need to 24 25 reach them so they fully understand what the EPA

165 is trying to do. 1 They may not come here, but they are 2 still pretty good people for the dissemination of 3 appropriate information. 4 You need to reach out to them. It is 5 6 your project. 7 MR. MC CABE: Thank you. 8 The last registered speaker is Alan Whitman. 9 MR. WHITMAN: First, I want to thank the 10 two ladies here who kept diligently coming back 11 12 and forth with new speakers. 13 When I arrived, I was told that I had 14 two minutes. And I was a little bit upset, frankly, 15 because I do not watch TV and I do not subscribe 16 to the newspapers; I have dyslexia. 17 So, what I did was to call you people in 18 New York a few days ago, and you very nicely sent 19 20 me your point of view. And I want to tell everybody they 21 22 attached a very nice little clip here, which is a lot safer and easier to work with than a 23 24 paperclip. 25 I thought, as I moved along here, that I

would be able to take the two minutes from a few 1 speakers who, naturally, want to go home and have 2 dinner. 3 I would like to go home and have dinner, 4 too, but I cook my own dinner so I can go home 5 6 anytime. So, if you will bear with me, this will 7 take 10 minutes. 8 9 MR. MC CABE: Well --MR. WHITMAN: I am the last speaker, 10 11 right? I believe you are the last 12 MR. MC CABE: registered speaker. 13 But is there any way you could shorten 14 15 it a bit, Alan? 16 MR. WHITMAN: I will go as quickly as I 17 can, believe me. 18 You will be glad to know that the only information, the only source of information I used 19 is this (indicating document). 20 21 I do not know anybody at GE, and I have 22 not spoken with GE, and I have not gotten anything 23 out of the newspapers. 24 EPA prefers that they dredge 2.65 million cubic yards out of the Hudson, the Upper 25

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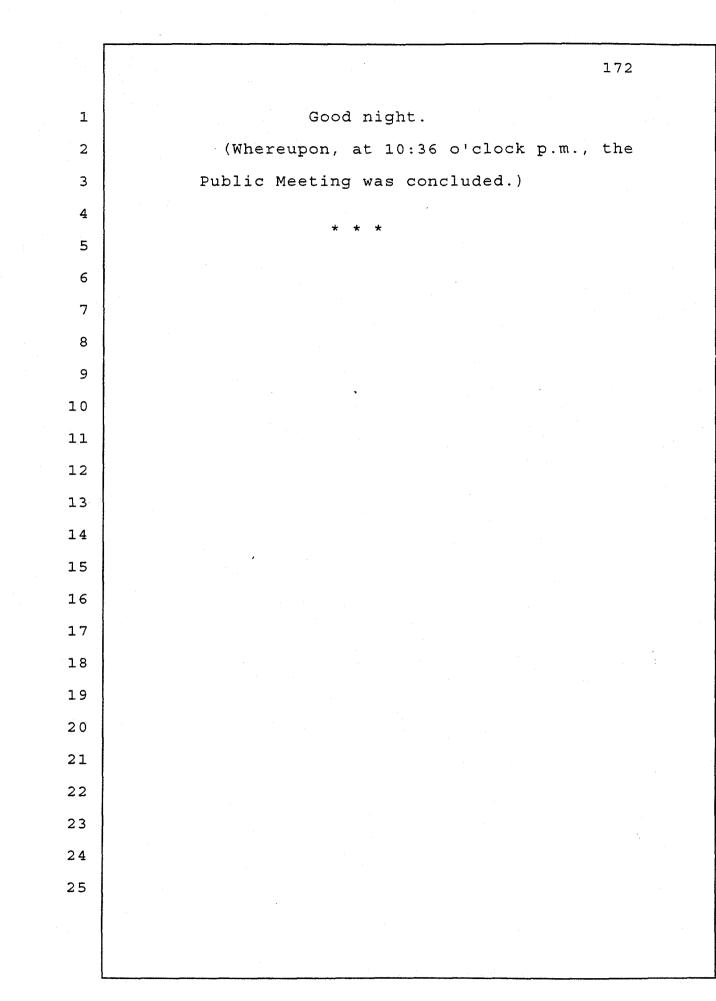
Hudson; \$460 million, and it will take five years. 1 If anybody disagrees, just holler. 2 Your objective is to reduce cancer risks 3 and non-cancer hazards for people eating fish from 4 the Hudson by reducing the concentration of PCBs 5 And I cite page 13 of the EPA report. 6 in fish. My question is: Do you have a deal with 7 the shipping industry to get GE to foot the bill 8 to clear waterways? 9 10 Nobody has talked about that tonight. EPA, page 11: Dredging for navigational 11 12 purposes has been conducted -- I may be wrong here; it could have been done for other purposes, 13 but these are the words you use in your prospectus 14 15 -- "...none since 1979..." -- that is 22 years, 21 years -- "...1978, '75 and '74..." which, to me, 16 17 if I were in the shipping business, I would probably look for some dredging so I could operate 18 19 without running afoul of the water -- of the 20 ground underneath. 21 I say there should be no remedial 22 dredging. 23 EPA says -- and I quote -- "The water" should be safe for boaters, waders and swimmers." 24 25 EPA document, page 11.

I believe you call them -- I am sorry 1 because I did not bring my dictionary, but there 2 is a good word to use. 3 Again, as to remedial dredging, I will 4 quote the EPA: "There is no Federal or New York 5 State PCBs clean-up standards." EPA document, 6 7 page 13. Again, there should be no remedial 8 9 dredging. 10 You talk about peer review, that everyone generally is agreed. 11 12 That frightens me: "generally agreed". 13 Where don't they agree? That is a question in my 14 mind. 15 PCBs are considered probable carcinogens. "Probable"; there we are: doubt. 16 17 The document says "...they can alter health..."; well, that is stronger. EPA, page 7. 18 There should be no remedial dredging. 19 What if the \$460 million turns into \$5 20 21 billion or even just \$1 billion? Who pays this 22 money? 23 What if the five years turns into 10 or 20 years? 24 25 And what if the courts hold EPA, et al,

responsible for damages that might come up? 1 We cannot tell who is going to sue in 2 this society. What if? Just think about it. 3 In summary, A, is the EPA dealing with 4 the shipping industry? There has been no dredging 5 since 1979. 6 7 The EPA says the Hudson should be safe ~<u>8</u> for recreators, but the EPA has no dredging standards. 9 10 The peer review is equivocal. I am a taxpayer. I am a householder. I am a small 11 12 businessperson. We will pay all the bills, ladies and 13 14 gentlemen. The Government does not create money; we 15 16 pay it. If something happens, it ends up being 17 up to us. Is it worth \$460 million to babysit 18 intelligent New York citizens who are fisheaters? 19 20 To me, that is the point. The issue is 21 not the PCBs. It is that we have to protect 22 people who cannot make decisions for themselves. 23 We have to remove the PCBs and spend hundreds of millions of dollars to relieve these 24 poor people while if they read -- I am dyslexic, 25

170 so I know it is difficult to read and then to 1 think about it. 2 Do we want to spend \$460 million for 3 4 that? I say there is no quo like the status 5 quo. Let's keep things as they are. 6 Thank you. 7 MR. MC CABE: Thank you, Alan. 8 9 Okay. With that, I think there is one more comment here. 10 MR. OBERHAUSER: Daniel Oberhauser. 11 Ι spoke earlier. 12 I had fish for dinner tonight, but I 13 know it was not from the Hudson. 14 Years ago, up until 1980, I used to take 15 my four children, and we used to swim in the 16 17 Hudson River at Sandy Hook. I have not done that since, and I guess 18 19 you can assume what the reason is. 20 But my one question that, really, I 21 think, is pertinent is: Has anybody other than GE evaluated their study and their model, analyzed it 22 and confirmed it or not? 23 MR. MC CABE: No. For GE's model? 24 NO. 25 As I stated before, we have done our own modeling.

We had our own model peer-reviewed, and 1 the model is a tool. 2 Our tool was successful. It works. 3 And we are using it. 4 And we do not really see any need to use 5 GE's tool. 6 MR. TOMCHUK: GE did have its model 7 published in Environmental Science and Technology. 8 I do not know if the whole model was reviewed, if 9 10 the article was reviewed before it was published. MR. OBERHAUSER: That was their model, 11 12 but no other organization reviewed it, or institute. 13 MR. MC CABE: Apparently, it was 14 published in a scientific journal, but we did not 15 do it ourselves. 16 17 MR. TOMCHUK: We are not using it either. 18 MR. OBERHAUSER: Well, I believe it is 19 better to be safe than sorry. 20 21 MR. MC CABE: Thank you. 22 Okay. With that, I would like to thank 23 those of you who remained. 24 I would like to thank you all very much for your information. 25



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1	CERTIFICATION
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4	I, BAMBI GORDON-KIMM, a Certified
5	Court Reporter, do hereby certify that I recorded
6	stenographically the proceedings herein at the
7	time and place noted in the heading hereof, and
8	that the foregoing is a complete and accurate
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