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REMEDIAL ACTION PLAN - PUBLIC HEARING

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VAN DER HORST SITE
PLANT #1

PROPOSED REMEDIAL ACTION PLAN

PUBLIC HEARING

MARCH 5, 1992

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(Proceedings commenced at approximately 7:10 p.m.)

MS. NELSON: Good evening. I'd like to open our meeting tonight and thank you for coming. My name is Pat Nelson. I'm a citizen participation specialist with DEC's Division of Hazardous Waste Remediation. I work out of the Buffalo office. The purpose of tonight's meeting is to present to you the proposed remedial action plan or PRAP for the Van Der Horst site and also to provide you with a question and answer period. We're going to begin tonight with a brief presentation and then that will outline the process that we've taken to determine the nature and extent of the contamination and to find the proposed remedy that we're going to discuss. We'll also be describing that remedy and how it's going to be protective of human health and the environment. Following the presentation, we'll open it up for a question and answer period.

I'd like you to note that tonight's proceedings are being recorded by a court stenographer that will give us an accurate record of your questions and concerns and make sure they're documented in our proceedings. Therefore it's essentially for us to conduct this meeting in a real orderly

fashion, and to do so we've given you a comment question worksheet. We'd like you to use this to jot down your questions and answers and I'd like to go over a couple procedures that are outlined at the top of that. Number one, tonight when you're recognized by Mr. Allen please stand up. Number two, please be sure that you state your name and address. It's important for us to get this in the record. And each time you are recognized, if you ask one question, then sit down and stand up again, please give your name again so that we can get that in the record. Number three, we'd ask that you speak slowly and clearly so that everyone here as well as the transcriber can hear your comments. Number four, we'd ask that you try to keep your comments brief just so we make sure that we give everyone a chance to speak tonight, and if you do have several questions, perhaps you could ask one or two, then take a seat and let someone else speak and then be recognized again. Number five, whether or not you choose to speak tonight and if you do have questions, I would like you to jot them down on that piece of paper and turn them into me at the end of the evening. Please be sure that you do put your name, address, and your telephone number on so that if you have an issue that we can talk to you about, we can get back in touch with you to clarify those points. I'd also like to make sure you sign in on the

sign-in list before you leave so I can keep our mailing list updated. And the last one, we will try to answer as many of your questions tonight as possible. If there are questions we can't answer tonight because we don't have the data or document here, we will be responding to all the questions asked tonight in a document called the Responsiveness Summary which will report all the questions and all the answers we give, and then that will be placed in the document repository which is at the Olean Public Library here in town.

Before we begin, I'd like to introduce our staff first. We have Vivek Nattanmai who is the project manager for the Division of Hazardous Waste Remediation, Christopher Allen from Albany Division of Hazardous Waste Remediation, Gregory Sutton who is the project manager out of our Buffalo office, Michael Rivara who is the New York State Department of Health manager for this site, and we also have with us Glenn Winegant and Jeff Wittlinger, our consultants from ERM Northeast. Now I'd like to turn it over to Vivek Nattanmai.

MR. NATTANMAI: Good evening. My name is Vivek Nattanmai from the Division of Hazardous Waste Remediation. I'm working on this project from the Albany office, and with me on board on this project are Greg Sutton from Region 9 Buffalo Office and Mike Rivara from the Health Department Albany Office. The Remedial Investigation/Feasibility Waste

Study was conducted by NYSDEC out of the Buffalo office and of the supervision and instruction from the state. Let me begin with the location of the site. The site is located in North Olean on Penn Avenue off of North Fourth Street. There are two surface water bodies located adjacent to the site. One is the Olean Creek which is to the east of the site and Allegany River which is 1.5 miles south of the site, and to the north, south, and east of the site is a residential area and to the south and southwest of the site is an industrial area. The plant number one was a chrome plating facility started in the early 1940's. There were several reported disposal practices while the plant was in operation. One of the major disposals occurred in the year 1965 when one employee emptied a large tank containing chrome plating waste water into the sanitary sewer connection. An overflow occurred to the storm sewer because the waste flow was too high in the sanitary sewer. As a result, the waste water reaching the Olean Creek by way of the storm sewer killed at least 10,000 fish. After this incident, the County Health Department directed the plant to install a chrome unit to treat their waste water before discharge and this unit was installed in the year 1968. In the year 1967 the County Health Department made a press release cautioning the public in the North Olean area against the use of groundwater from

private wells for human consumption. The Van Der Horst Corporation ceased its operations in July 1987, and before that in 1984 New York State DEC conducted a Phase I Study in the North Olean area and that study confirmed the chrome contamination in the groundwater, but the source of the contamination was unknown at that time. In the year 1989 DEC started a full scale Remedial Investigation/Feasibility Study. The remedial investigation was conducted in three plases: Phase I of the investigation involved taking soil samples, surface soil samples and subsurface soil samples, groundwater samples, creek sediment samples, creek surface soil samples, and also during the Phase I investigation took soil samples from each of the backyards of the residents immediately adjacent to the site. We chose one location on each of the backyards and we took two samples at each location: one from 0 to 3 inches and the next sample was taken 3 to 6 inches. The Phase II investigation involved expanding the Phase I investigation by taking most samples based on the results of the Phase I investigation to determine the extent of the contamination in soil and sediment and also in the groundwater. And in Phase II investigation we took sediment sewer samples--sewer sediment samples also. In Phase III--well, most of the Phase III was focused on investigating inside the plant building. We took

wipe samples, dust samples, and we installed monitoring wells and installed monitoring wells also inside the building before we started the investigation. We found out that a number of hazardous chemicals were improperly stored inside the building. Because of the residents located so close to the site, in case of an accident or fire, it will cause a major threat to the public and there was no security for the site also, so we cautioned EPA to take immediate action for removing all the chemicals from inside the building and EPA improvised their crew in the middle of 1989 and removed all the chemicals and disposed of them off-site.

Investigation conducted at the site found contamination. Well, the locations of the soil samples, surface, subsurface, and the groundwater locations are there in the handout I gave to you, and let me show you the locations where we took samples from the Olean Creek. This is where the site is located and this is where the sanitary sewer comes and this outfall in the Olean Creek is here and we took surface water samples and sediment samples also from the creek. This is where we took sanitary sewer samples. This is where we took samples from the manholes here and here and up to here and here also and we found very high contamination in this manhole dimensioned here.

In overall, the investigation conducted found

contamination in soil sediment and sewer sediments and groundwater. The major contaminants were chromium, arsenic, and lead in the soil and sediment and chromium, lead, and tetrachloroethylene in groundwater. The investigation also identified four historical source areas. These are the source areas that are believed to be contributing contamination to the groundwater. Area B and C might have resulted from past disposal practices and Area A is believed to be from leaking chromic acid tanks which are located approximately 20 feet below grade and Area D where we uncovered six plating vaults which were used in the early stages of this plant operation and three of the water samples taken from these vaults showed very high contamination of chromium.

Based on the results of this investigation, the risk assessment was done to identify the various tasks posed by contaminants of the site to the public health and water.

The conclusion of the risk assessment was under current conditions for noncarcinogenic effects there are no adverse effects and for carcinogenic effects there are chromium and arsenic in the soil that are posing a problem. And for future conditions, chromium and lead in groundwater for noncarcinogenic effects and for carcinogenic effects chromium, arsenic, and soil in groundwater used for drinking

water. Based on the risk assessment, no adverse effects to sensitive resources are expected to occur as a result. Site contaminants, however, several of the contaminants found in sediment samples are above standard and may be impacting accurate life in the creek. Based on this risk assessment and based on our investigation, we try to determine the cleanup levels for various contaminants and media at the site so that we can, when you want to remediate a site, we know how far we have to clean it up in soil and groundwater and sediment.

For groundwater, the cleanup goal is to achieve the groundwater standard which is 50 parts per billion for chromium. For surface and subsurface soil, the cleanup level determined was 50 parts per million of chromium. For creek sediments, the cleanup level determined was 26 parts per million of chromium which was as per DEC's sediment criteria.

After setting up the goals for the remediation of the site, a feasibility study was conducted. The goals for the remediation for this site are to remediate the groundwater to acceptable levels, to remediate the contaminated soil to limit the leaching of the contaminants to groundwater, to remediate the sewer sediments and creek sediments to limit the impact of the contaminants to downtake the creek life, to remediate the building structures for demolition, and

excavating the contaminated soil beneath the building.

The feasibility study identified several remedial technologies that are applicable to the site. After screening these technologies based on their implemental geographic effect study, several remediations are grouped together for the site. They are Number (1) is no action/limited action. The second alternative is to cap the site by consolidating all the contaminants, soil sediment removal and sewer sediment removal, storm sewer cleaning, and long term groundwater monitoring. The third alternative is to excavate the soil/sediment and offsite disposal, demolition of the building, storm sewer cleaning, groundwater extraction, pretreatment and discharge to POTW and long-term monitoring. The fourth alternative is to excavate soil/ sediment and on-site solidification, demolition of the building, storm sewer cleaning, groundwater extraction, pretreatment and discharge to POTW and long term monitoring. The fifth alternative is excavation, on-site solidification of less contaminated soil and offsite disposal of highly contaminated soil/sediments, demolition of building, storm sewer cleaning, groundwater extraction, pretreatment and discharge to POTW and long term monitoring. The sixth is excavation, offsite disposal of highly contaminated soil/sediment and on-site capping of less contaminated soil,

building demolition, storm sewer cleaning, groundwater extraction, pretreatment and discharge to POTW and long term monitoring. The seventh is excavation and encapsulation of soil/sediment, building demolition, storm sewer cleaning, groundwater extraction, pretreatment discharge to POTW and long term monitoring.

Based on these seven alternatives evaluated against eight important criteria which are applicable: Compliance with SCG's and regulations for reduction of toxicity, mobility, and volume of contaminants, short-term effectiveness, long-term effectiveness, and permanence. Implementability, cost, community acceptance, and overall protection of human health and environment. Based on evaluation of alternative four which is excavation of soil/sediment, storm sewer cleaning, groundwater extraction, and long-term groundwater monitoring was selected as the preferred alternative.

Let me put together the different parts in this particular alternative. Basically the limited alternative can be broadly to widely soil removal from the site and groundwater remediation. Let me present the various tasks that are being asked to perform to remove the soils from the site and Mr. Chris Allen will give the details of the groundwater remediation and overall cost of the remedy. So

to remove the soils from the site, this is what we're going to do: plant building decontamination and we're going to remove the asbestos from the building that has to be removed and disposed offsite, and we are going to demolish the building in order to excavate the contaminated soil beneath the building and the demolition of the building debris will be offsite disposed, and Olean Creek sediment will be dredged and brought off the site and the storm sewers will be cleaned and all the sediments will be brought off the site and surface and subsurface contaminated soil will be excavated and all the soil sediment from the storm sewers and sediment from the Olean Creek will be stabilized on-site and the site will be restored after that and we want to have a long-term groundwater monitoring after that.

The following figure will show you the scope of our cleanup on surface soil based on the 50 parts per million. This is the plant building and this is the area of the site, fenced area of the site, and this dotted line shows the cleanup level for surface level or surface soil cleanup area. For subsurface soil cleanup based on the concentration detected at each location we're going to excavate at different depths. For example, this one we're going to excavate up to 20 feet and this area we're going to excavate up to 12 feet and some of the area we're going to excavate up

to 4 feet. It's all based on consumption of the soil contamination we conducted due to the investigation. And finally this is the Olean Creek sediment dredging area that will be done during the cleanup. Here's the outfall that comes separate from the plant and this is the area we're going to cover up during cleanup of the creek sediment. Now Mr. Chris Allen will talk about the groundwater remediation.

MR. ALLEN: Thanks, Vivek. Again my name is Chris Allen. I'm a section chief of the Division of Hazardous Waste Remediation. As Vivek mentioned, this plant had various size tanks and vats of chromic plating solutions and some of these extended down 22 feet into the ground. EPA has since cleaned all that material out of those plants. It's readily apparent that these vats were not very--didn't have very good integrity. They leaked. When we bored inside the plant and took water samples inside the plant near where the vats were, we found extremely high groundwater contamination for chromium as well as very high soil contamination, so as a result we have to take the plant down in order to remediate that soil underneath the plant. The goal of any remedial action, and Vivek alluded to this, is to try to meet certain standards. In this instance with groundwater, our goal would be to restore this groundwater aquifer back to what we would consider groundwater standards which is 50 parts per billion

of chromium. We currently have chromium levels as high as 85,000 parts per million. We need to get to 50 parts per billion in the groundwater, so we have very high concentration of chromium in the groundwater at the plant site. The plume has been detected. We've had chromium contamination downgrading which is predominantly in a southwest direction detected approximately 850 feet away from the plant. We don't have wells that have detected the extent of the plume, but we know it has reached roughly 800 feet away from the boundary of the plant based on the information letter that a consultant was able to determine during the investigation and with a computer groundwater model. They also performed a pump test at the site. They pumped the aquifer and tried to stress the aquifer to determine how it would react to pumping. One thing you've got to keep in mind is this is a very productive aquifer. Felmont Oil was here for years and I think pumped up to 6 million gallons a day adjacent to this plant up to I believe 1986, so it's very productive. If you want to draw an analogy, it would be like drawing an underground lake. There's lots of water there. We would have to pump a significant quantity of water in order to restore this aquifer back to groundwater standard where it can be used for potable water.

Based on the groundwater--this overhead is a little

difficult to see. I tried to draw in this orange area is the plant site, the plant building, and this is Spruce Street and Penn Avenue comes in about here. Based on the computer groundwater model, our consultants predicted, and I want to preface this by saying it's a prediction--it's based on a lot of assumptions, it's based on data that in many manners you may say it's not complete, it's based on the data that would be determined during the investigation they predicted that if we installed five groundwater recovery wells in these locations, we would be able to remediate this aquifer--excuse me, and pump 250 gallons a minute from each groundwater recovery well, we would be able to capture an area inside this bold black line and that would essentially restore this aquifer over some period of time down to 50 parts per billion. Now this alternative means we would be pumping approximately 1,400 gallons a minute of groundwater which is over 2 million gallons a day of probably relatively if you want to call it clean water. Really chromium is the biggest contaminant in this. It's a large financial commitment on the part of the State as well as a demand power resource commitment in order to implement this remedial action based on a groundwater model. What I'm getting at, it's a sign with some art to it. It would be a very large commitment having a questionable outcome in this instance, so we went

back and looked at this. Given that the goal of remedial action is to try to get back to a standard at a minimum, we have to be protective of the health of the environment. Based on our current knowledge, there's no private water well users that are using this water for human consumption that are in this that affects the area or they shouldn't be, let's put it that way, so we assume that this area is not being used for human consumption. Theoretically if we left it there, we could say it was being protective. However, we still have a resource that's being affected by contamination. We'd like to at least attempt to restore it, so what we decided to do in our proposal is to install one well probably in the area of the highest contamination right near the plant and pump approximately 250 to 300 gallons a day for a minimum period of five years, and this is based on our calculations. Again these calculations are as tenuous or as much an estimate as the calculations to predict this. Based on that, we feel we can get a significant quantity of the highly contaminated groundwater underneath this plant. During that process, we required, since it's the higher contaminated water, the treatment works who would be required to treat it to some extent to remove the higher concentrations of chromium before it was discharged. The advantages of this? There are several advantages. One is it's a smaller quantity

of water that we know or we're more confident we can discharge to the treatment plant without having any adverse effect to the treatment or any adverse effect on the sewers and it's something we think the treatment plant can handle. It gives us an opportunity over a period of time to monitor the effect of this pumping and to better quantify and predict what's occurring in this aquifer. By pumping over a long term, we can start to get different influences and have better information to predict what would it take to bring this aquifer back to restore it completely and bring it back to its best useage which would be potable drinking water. It would also require us to install some additional monitoring wells so we can get more information as to what's occurring in the aquifer. It is also going to remove a significant amount of this contamination. We've again done rough estimates of anywhere from 10 to 30, 50 percent possibly, of total chromium in the aquifer. It does not, however, this will not and we know for sure this will not restore the aquifer back to 50 parts per million. If we do that, it will take remedial action. It's difficult to predict at this point in time.

So that's the proposal for the groundwater pumping. I just wanted to spend a little time on it so you had a little understanding of the whole process we went through to try to

decide how best to address the groundwater because we do have a significant contamination problem. The other thing is to implement a program that had five groundwater recovery wells, and at a minimum upgrading the public treatment works to accept this waste, it would cost approximately $13 million over a period of years to do that. Again, it's a very large financial commitment at a time when we don't have a lot of confidence it will meet what we want it to do. That's if we can discharge to the treatment plant. If we couldn't for some reason, and that's questionable also, it requires us to treat the water and that would be significantly more expensive.

So to recap what we're proposing at the site, and Vivek went through what we're calling the source removal, essentially you consider this whole remediation a source removal because we are trying to remove the highly contaminated ground source. Also the plant building decontamination before demolition which would include asbestos removal from the plant. The sediment removal, the storm sewer cleaning, surface and subsurface soil removal, stabilization of all those solids of sediments and soils and disposed of on-site, then restoring the site, and then we would be what we're calling a pilot program which is this 250 gallon or 300 gallon extraction and discharge to the POTW to

the groundwater. The total cost of this alternative is the capital cost which is primarily construction associated with this part of the remediation is approximately $8.5 million and the estimate for O & M which is primarily operation of the wells and the treatment absorption, carbon absorption treatment plant, is approximately $3 million for a total cost of $11.5 million.

One other thing I'd like to discuss, I think most of you are aware I hope, we're also involved in the same process at the Van Der Horst Plant 2 site which is approximately a half mile away as the crow flies from this plant. We're predicting we will be in a position to recommend a remedy on that site sometime in June or July of this year. We have a chosen remedy, we've had discussions about what the remedy while be, and we will be looking at the possibility of consolidating the Plant 1 waste of the solidified soils at the Plant 2 site. There's more room there. There is a landfill at the Plant 2 site which will probably require some type of, if I had to guess without predicting what the remedy would be, probably require some type of containment. It will probably require some time of regrading. We'll have material we can solidify and take over there to close that landfill, so we will be looking at that. The one change you may see here in the proposal is that we don't dispose of the material

that is solidified and stabilized back in the same location.

Let's talk a little bit about schedule here. We predicted the Record of Decision or the ROD which will be the outcome of this whole process will be signed hopefully by the end of this month or early April at the latest and we are obligated under state law to give the responsible party which in this case is the Van Der Horst Corporation the opportunity to do the work and they apparently do have an office. They still exist as an entity. So by law we have to go back to them before we spend any money to implement the remediation and offer them the opportunity to do the work. We usually as a rule of thumb put six months on that process. I'm hopeful in this instance because I'm not sure Van Der Horst is viable at all that we can do this in a much quicker time, but allowing a year for design, this will bring us up to October '93 and for construction to begin sometime in 1994. Spring 1994 will be the time frame we're looking at in this instance. With that, I think we can open up for questions and raise your hands.

BONNIE VENO: My name is Bonnie Veno and I live right in front of the site. One of the things I wanted to know is that you mentioned demolition of the building. That has been decided for sure?

MR. ALLEN: Yes.

BONNIE VENO: The Van Der Horst itself, I don't know if you're aware of this or not, has filed for bankruptcy.

MR. ALLEN: Oh, yes, we're aware of that.

BONNIE VENO: So I'm sure they're not going to be in a position--

MR. ALLEN: I'm relatively sure of that also.

BONNIE VENO: Another question I wanted to know about is the soil removal. Because we live so closely, I wonder what kind of construction or what kind of--I should say how close it's going to be in our backyards.

MR. ALLEN: I assume--could you tell by our map are you one of the houses?

BONNIE VENO: I live on North Fourth Street. You've got a well right in our front yard.

MR. ALLEN: Just as a general statement, we will--we've done this in other instances--be excavating soil around houses right up to the basement. We've done it in several instances on other sites. We take a lot of precautions. Just to give you an example of something, first of all, there will also be constant air monitoring. The biggest problem with chromium as it's a metal, that attaches to the soil particle the way it's physically tested by water running off the site and by wind and dust, so one of the things we'll be monitoring closely is dust generation and take appropriate

action by using water sprays to keep the dust down. If necessary, we have in some instances put plastic up on the backs of houses. It's something to get in and out of the backyards quickly, you know, in one day or so to excavate the material. To not try to inconvenience the person more than necessary, we may put plastic on the house to make sure it doesn't settle on the siding, but again we monitor. With dust the best monitoring is your eye. If you see it, you know you're creating a problem. You stop work and take action. It would be the same situation to take the plant down. Any demolition is dust is being generated, but there are a lot of precautions being taken, and before any of this is implemented, we will be sitting down individually with every person involved talking over their concerns trying to accommodate you in any way we can. It's going to be an inconvenience for people there. It's not a risk in particular. The biggest risk really is from a situation which is a physical risk from having construction going on around your house.

BONNIE VENO: Right. Now will this be done--you're saying it's going to be signed in April, at the end of April you're hoping?

MR. ALLEN: Hopefully at the beginning.

BONNIE VENO: Okay, then you will not start anything

until October?

MR. ALLEN: See, we can't ask our consultants to go on to do the design documents until our lawyers tell us that Van Der Horst isn't going to do it. It's a legal issue.

BONNIE VENO: So if Van Der Horst writes you back in May and says we're not going to do it, it could start as soon as this summer?

MR. ALLEN: It certainly could, if it is determined they don't exist or are saying they aren't going to do it.

BONNIE VENO: What you're saying right now, I guess what our question is who really owns it? The state--now the state is going to clean it up. I guess who actually owns this? When you get finished with this construction, who's going to own this piece of property? I guess that's my question.

MR. ALLEN: The first answer is Van Der Horst Corporation owns the site. Bankrupt or not, they own the site. I think--I'm sure they still hold title to it. In most cases, and even if they're not paying taxes, some people file for bankruptcy for hazardous wastes sites for obvious reasons so we will not acquire the site. We can't--there's nothing in the law that says we have to. What we will do if necessary, for instance, let's say we do pump some type of pumping operation there. We will take a permanent easement on that property and that easement will have certain

conditions restricting the useage of that property, but the state won't acquire the property. We may stay indefinitely. I don't know where properties go, but we will not acquire it and eventually it will just remain in its current position. There will be appropriate measures taken. If it needs to be fenced, we'll fence it. If it needs to be--the best thing that could happen is we can do all this stuff early and take it over to the Plant 2 site. We know we're going to have to leave some material there.

BONNIE VENO: Now how will this affect people in that area? I know it's a large area and I know it's not heavily--it doesn't have a lot of houses, but I mean how can you take this material and dump it someplace else?

MR. ALLEN: I'm glad you mentioned that. It's one of the things we are considering that you have to be aware of. I think it's a very real possibility that we would propose that, but again I think we'll be in a situation in Plant 2 where we'll have material there that will have to remain in place anyways. One of the problems in the solidifying and stabilizing soil, it increases in volume. It could increase anywhere from 30 to 50 percent, so depending on how much of a hole we have left there when we're done with the demolition, it comes back to we can't sift this stabilized material down into the groundwater. We may have a problem with elevation

and other things. Essentially what you get when you stabilize the soil is a fly ash compound. It's usually a block. Ultimately what it does is it binds up even in this instance so they won't leach out into the ground. That's what it is. It just will no longer pose a risk and it will be buried so people can't come in contact with it, but there's engineering problems with it. The fact that it will increase in volume and we don't know if it will fit in between the property and there's a problem with that.

BONNIE VENO: My real question is it just doesn't seem right that you would take this hazardous stuff and then just dump it somewhere else.

MR. ALLEN: First of all, it will no longer be hazardous. By law we have to dry this to a point where it's no longer hazardous, so in essence it will have contained lead, or chromium doesn't disappear, to contain that. It will no longer be in a physical state where it will cause a problem or leach into groundwater or be airborne, so essentially it will be, if you will, soil with chromium in it. And when you have a close landfill which we have landfills about an eighth in size, you usually have to mound it and re-shape it. We may need fill over there so there could be a--

BONNIE VENO: There is no possibility then that the

chrome that's left in this could seep into any--

MR. ALLEN: I never guarantee anything.

BONNIE VENO: What I'm saying now, this is a real--

MR. ALLEN: We run tests on the material. You actually mix it with these various compounds to hold it and you grind it up and run a test called the leachability test to see about these chemicals, and that's the biggest concern. It's a technology that's being used now. It's a technology that's not a very exotic technology. It's washing it out. It's a very basic technology. We have a lot of confidence in it that it will work. It's like anything else.

BONNIE VENO: I'm just saying that because of the landfills other places where they do have a tendency in years, I'm not saying right away, but down the road a piece, that was one of my concerns.

MR. ALLEN: One of the things we're doing, this is kind of getting off the subject, in order to bury most waste now even in landfills, you have to solidify it first or have to stabilize it. One of the things they typically do is solidify or stabilize to prevent problems like that, so it could be consistent with that.

BONNIE VENO: But you can't guarantee.

MR. ALLEN: No guarantees. I can't guarantee.

BONNIE VENO: Thanks.

MR. ALLEN: Yes, sir.

HUGO YAHN: I'm Hugo Yahn. I live on 41 Willard Street and I read the front page of the Olean Times Herald which stated that cleanup costs would be $12 million and I was wondering about an apportionment of these costs.

MR. ALLEN: Apportionment to who? What they're attributed to?

HUGO YAHN: A breakdown as to how much for such and such a part of the cleanup operation.

MR. ALLEN: I can certainly give it to you. We have that information available. I gave you a rough breakdown which is the 8.5 million.

MR. NATTANMAI: I can show you that thing which breaks down the cost. This is what it's going to cost.

MR. ALLEN: Keep in mind now this reflects the costs, the estimates of costs. We're doing the groundwater remediation with the five extraction wells. These costs are still all accurate. Okay?

HUGO YAHN: I see, and I was wondering, you need a landfill in order to deposit the hazardous waste. I was wondering where this landfill was going to be.

MR. ALLEN: Well, in this instance the proposal is to keep soil on-site after they're stabilized. If you're talking about the soils and sediments to stay on-site, if

you're talking about the building itself, we hope that decontamination will be disposed of in the CED landfill. I don't know where that's going to be.

HUGO YAHN: Have you taken--when will you take bids?

MR. ALLEN: Well, based on the estimates I gave, probably sometime in the spring in 1994.

HUGO YAHN: I see.

MR. ALLEN: Thank you. Yes, ma'am?

DOROTHY MIKOLAJCYK: My name is Dorothy Mikolajcyk and I live at Site 2.

MR. ALLEN: Site 2?

DOROTHY MIKOLAJCYK: Right, and it concerns me that you're going to put this soil there. Has that ground been tested? I mean has all the--

MR. ALLEN: Again, and I said I was concerned about making that statement tonight because we haven't chosen a remedy, I'm speculating to some extent, but that's a proposal being looking at. There's no question about it. We've gone through the same process and in some instances more detail at Plant 2 than Plant 1 and we'll be going through the public hearing process on that probably in two months or so.

DOROTHY MIKOLAJCYK: That ground has to be, you know, as contaminated because of Felmont and Dresser and industries that was there years ago.

MR. ALLEN: The documents are in the depository if you want to take a look at them. If you have any questions, give us a call and we'll give you some more information on that, but as far as--

DOROTHY MIKOLAJCYK: You mean Plant 2?

MR. ALLEN: Yeah, but as far as contaminated, there are different contaminants over there. As far as a landfill, we don't have a landfill at Plant 1. It doesn't have as high a groundwater contamination as Plant 1; it doesn't have as bad a surface soil contamination.

MR. NATTANMAI: We do have some, but not as bad as Plant 1.

MR. ALLEN: The biggest concerns at Plant 2 are some groundwater problems around the landfill. This plant was primarily a chrome plating plant, Plant 1. Plant 2 was an iron plating operation. It does have some chromic acid problems. I guess they used caustic to strip the pieces before replating with iron, so there was chrome problems over there but not as extensive as Plant 1.

DOROTHY MIKOLAJCYK: What I'm saying is a culmination of Bush Industries, that was there years ago before Van Der Horst, and I'm sure Felmont.

MR. ALLEN: We found petroleum products in the ground water up there, I don't know if it's from Felmont.

DOROTHY MIKOLAJCYK: It would be real hard to convince me that there isn't contaminants.

MR. ALLEN: Well, they're different. It's not to say one's worse than the other. I would say just because of the proximity of Plant 1 to the residences is probably more concern to us, but--

DOROTHY MIKOLAJCYK: But there are no real health hazards for Plant 1 or Plant 2?

MR. ALLEN: Not immediate health hazard. The biggest risk at Plants 1 and 2 is they were both full of chemicals and were both cleaned out by EPA who spent more than $2 million and they fenced the landfill.

RONALD VENO: I'm Ronald Veno. You were saying they have wells 3 feet down which are chromium acid laced. Do you have any estimates of how much chromium was down there?

MR. ALLEN: Do you remember what the number was? Again this is something we try to quantify. This isn't--it's very difficult to do when you look at the concentrations in the groundwater, what we call the floor spaces in the aquifer, and try to confine the water in there and get a concentration.

MR. NATTANMAI: Somewhere around 4,000 or 5,000.

MR. ALLEN: Which is about 10,000 pounds of chromium. That's not chromic acid.

RONALD VENO: When you're pumping, doesn't that chromium move?

MR. ALLEN: Hopefully it will move towards the well.

RONALD VENO: But are you going to allow it to move toward our water shed which our water shed floor's west towards the Allegany, are you going to have it pumped toward that area to pick up the chromium which may flow that way?

MR. ALLEN: Olean water supply is east of the plant. The Olean water supply is drawn east of the plant site. There is no connection between those two acquifers.

RONALD VENO: What I'm saying is down those wells like you said there's cracks below the surface which I'm saying are you going to have it pumped offsite too?

MR. ALLEN: Not in this initial stage. As I tried to explain, what we are looking at now is to try to get a better idea of how the substance is moving, what speed it's moving, and our long-term goal is to protect downgradizers, and to protect that, we don't want that stuff to end up in the people's water wells.

RONALD VENO: That's what I'm saying. Does it flow that ways towards Allegany and so on?

MR. ALLEN: It actually is the regional flow.

RONALD VENO: So right now your first stage is just to have the pump on-site?

MR. ALLEN: To pump the highly contaminated area and monitor it to see how effective that is. When you do this stuff, the best test is to actually pump the aquifer and monitor it to see what happened. The conditions are at least a minimum containment keeping at one spot, maybe not traveling at all, but keeping it or migrating it and then we can look at whatever action is necessary to maybe go out and if we think we can recover an area, to go out. There's going to be some changes or modifications in the whole system as we look at it. The problem is, and I'm an engineer, I'm not a geologist, is to try to put these things in simplified terms. I look at this and I've said it's a big underground lake. It would be like taking a well and sticking it in Lake Erie. Seriously, you've got a large body of water and if you pump it and you have minimal effect. Felmont Oil based on a UCGS Study when they were pumping for that contacted pluming water and they largely controlled that chromium. I mean it stayed there and it stayed and it was pumped into their system.

RONALD VENO: How they found out is they were pumping it up through the machinery, that's how they found out. It keeps on moving.

MR. ALLEN: Once they stop pumping and that depression in the groundwater table comes back up to static level, that stuff started moving. That's what's occurring now. It

largely occurred by Felmont while they were pumping.

MR. NATTANMAI: As of now if you take a look at the figure which I gave you, goundwater was raised up to Well Number 19-D which is approximately I think 800 feet from the fence line of the property site, so we have traced that. We know that up to that level we have chromium damage from Van Der Horst.

RONALD VENO: Just another question from this. The Environmental Conservation, they said it's above levels which everybody knows and it does not pose a serious risk to public health. Okay, we're talking cancer, am I right?

MR. ALLEN: That's one of the carcinogens.

RONALD VENO: When you're saying it doesn't pose a serious health risk, cancer is a long-term illness.

MR. ALLEN: Provided nobody drinks the groundwater.

RONALD VENO: Right, nobody drinks the groundwater. I don't know how long I used to drink out of the pump, I don't know if I got cancer or not, but I'm just saying that I think if you want to eat a lot of dirt, you'll die from that too, from the chromium that's in the soil. That's what I'm saying. It's a long-term illness, so nobody can estimate who has it and who hasn't got it from what I understand.

MR. RIVARA: Well, it's difficult to--you're right, I mean it's difficult to diagnose that or predict that, but we

did a cancer study back in '89 which we had said at the last meeting we were at, and they did all of Olean because of the well fields and Van Der Horst there, and again it was done over a ten-year period from '76 to '86 because that was the most current cancer data that was on registry, and actually there was no increased cancer risk in males, and females in actuality one of the things found was there was actually less than anticipated cancer cases in females.

RONALD VENO: Less did you say?

MR. RIVARA: Less than expected, yes, for areas similar to the City of Olean area, so at this point I mean again it's based on data that was present at the time. We haven't found any increased cancer cases. Now you're right about, you know, drinking the water and you saw again that cancer risk was based on the fact that no one would be drinking the groundwater and again it's future and current. You know, that includes drawing the future and current conditions and that's why we want removal of the soil and cleaning up the groundwater. We hope obviously there won't be any future exposure to contaminants associated with the site, so again we've done the study, again it's limited in the sense that it was for '76 to '86 because that's the current data that's available in the cancer registry, but those are the conclusions that were drawn. I think we sent out copies of

our study to everyone who was on the mailing list that participated. If someone would like to get a copy of it, I don't have them with me, but I'll take your name and address afterwards and we'll send you copies of the reports.

MR. ALLEN: One of the things, 50 parts per billion is really largely in conjunction with the health department. That level, correct me if I'm wrong, is typically based on a cancer risk of one incidence of cancer in a million people, so when we say it's 50 parts per billion, that means that if a person--and I think we use very conservative exposure--a person living in a location for seven years using this water for personal consumption for a period of time at that level.

MR. RIVARA: It's again for every day of the year for X amount of years.

RONALD VENO: Those standards are by state or federal?

MR. ALLEN: Those are state standards.

RONALD VENO: Are they more stringent than federal?

MR. RIVARA: The state is more stringent than federal. There's even a safety factor built into that if it's a number that's health based, but it's a safety factor.

MR. ALLEN: Two years ago it was 25 parts per million, wasn't it?

MR. RIVARA: No, it was higher. Copper was like a thousand. Public drinking water and groundwater standards

dropped to 200. Lead is being considered to be dropped also. It hasn't been done yet, but that's being considered to have dropped. More studies are done or more work is being done to find if there's an increased possibility of problems. They are lowering the number of standards.

MR. NATTANMAI: I wanted to make a point here. I think in 1989 we conducted a well survey sending questionnaire forms to each of the residents living around the area asking about any drinking water they have or if they had drinking water that was abandoned and we got back all the forms from the public and we found out that after the County Health Department announcement in 1967 cautioning the public against using the groundwater for those purposes, none of the wells were active after that. That's why we immediately assumed that no one is using the groundwater in that vicinity of the plant, using it for any human consumption.

RONALD VENO: There was one other question that drawing so much water there, is it safe to garden this year? Can you water the gardens? Let me ask you this question. Offhand when did you first start monitoring the plant?

MR. ALLEN: We were involved with--I don't remember the exact history of this, but it was for at least three years prior to starting this study we were involved with negotiations with Van Der Horst to try to get them to clean

up. We started in '89, so probably '86 Van Der Horst was very--they were not willing to say they were responsible. They contested us right to the bitter end. When we went to finally just before we had this referred to our State Superfund action to be the study, we issued what's called a Summary Abatement Order against Van Der Horst because we wanted them to clean up the plant, clean up the inside of the plant, secure it. They fought that. We had a hearing process. They were very unwilling to recognize the problem with the plant size and perceive it, and the way the State law is, we had a lot of difficulty just proceeding unilaterally. If an industry is showing some interest--in this instance, we don't have the same authority they gave us. That's one reason why we became aware of the material inside the plant. We referred it to EPA. They can do it much quicker than we can. They can go right into a plant and have legal authority and just clean it up, so it was immediate risk such as that. But we were negotiating with Van Der Horst about three years before that. It was quite some time. Nobody was aware, I don't think, at least the right people weren't aware there was such a problem as it was.

RONALD VENO: You probably aren't knowledgeable about this, but in 1965 or '66 when they had the fish kill, one of

the engineers from the Health Department requested that the plant be monitored. Evidently it wasn't monitored.

MR. ALLEN: It doesn't surprise me. You've also got to keep in mind in 1965 New York State passed a law which gave us a billion dollars which is the money was being spent to clean things up and not only gave the state the money to do the work but also gave us a hammer, if you will, to go after the responsible parties and say if you aren't, we are. We also got lots more people. We got more lawyers that are more able to aggressively pursue these, so a lot of these sites didn't get started in the system until after '86, so as far as the Superfund systems--

RONALD VENO: I think our air quality had a lot to do with that.

MR. ALLEN: There's an outstanding $5,000.00 fine for air emission that was never paid.

RONALD VENO: I worked for the department at one time and the people up in Buffalo were very, very cooperative.

MR. ALLEN: That was one of the things we pursued. They filed bankruptcy when we--I think that's when they filed it. it wasn't until we issued that order against them they filed bankruptcy.

STEVEN BAKER: I'm Steve Baker. Exactly how far would you remove the soil from the perimeter of that plant? How

many feet?

MR. RIVARA: I'm sorry, I didn't hear your question.

STEVEN BAKER: I'd like to know the perimeter to remove the soil, how many feet from the perimeter of the site?

MR. RIVARA: I'm not sure that they've got the exact footage defined.

MR. ALLEN: This roughly gives it to you.

STEVEN BAKER: You showed the yellow spots on the slide there. Is that definite or not?

MR. ALLEN: There will be confirmation in the field. This is based on the sample done so far. I suggest if you've got a concern, after this meeting come up and talk to us. I'd like to see where your house is.

STEVEN BAKER: I'd like to do that.

MR. ALLEN: Yes, ma'am.

DOROTHY MIKOLAJCYK: The eleven-five, does it also include that demolition of that?

MR. ALLEN: It's the capital cost of the construction which is the demolition and also removal.

DOROTHY MIKOLAJCYK: That's just Plant 1?

MR. ALLEN: Plant 1. I'm not sure about Plant 2. We're still waiting. I don't know what's going to happen there.

DOROTHY MIKOLAJCYK: And another question. I'm not sure how the bankruptcy laws read, but a homeowner that doesn't

pay their taxes for so many years, the property then reverts to the county and I would doubt that Van Der Horst have paid their taxes. I mean I don't know. And in that case then would the State go after the county or would it just come into play back in--

MR. ALLEN: Most people in hazardous waste aren't paying their taxes. I mean that's what happens. The counties I think have to actively take the properties, but I'm not sure exactly what the law is, so the county can just leave it and not acquire it, but the county can acquire it.

DOROTHY MIKOLAJCYK: You mean they have that option?

MR. ALLEN: I think so. The county has acquired some sites and we have one in Oswego that we have which is a remediated site and under the law the owner of the site is the responsible party, but--

DOROTHY MIKOLAJCYK: I doubt they're gonna'.

MR. ALLEN: Whether they are going to pursue it? I highly doubt it. Yes, ma'am?

JANET FUSCO: My name is Janet Fusco and I live adjacent, my backyard is adjacent to Van Der Horst. I'm concerned about the survey that was conducted in 1989. Is that when you said it was?

MR. ALLEN: The well survey?

JANET FUSCO: No, health survey.

MR. RIVARA: Okay.

JANET FUSCO: Because you stated that the rate of cancer was very low, but I know at least ten people within a two-block radius who have died of cancer in the past ten or twelve years.

MR. RIVARA: Well, I didn't personally conduct the study. It's based on the New York State Cancer Registry and the statistics that they use for the census tracks of the City of Olean were taken right from the cancer registry, and if they were reported cancer cases to the registry and they were before '86, between '76 and '86, they would have been statistically included in this. Now there are again, without breaking this whole report down, I can send you a copy of it, but there are a few hundred cases that are in there for males and females, but again with a population this size there is an expected rate and an actual rate and they were below the expected rate for the population and that was, you know, again it was done by our cancer incidence surveillance people and based on the statistics from the cancer registry. Again, if you didn't get a copy of this, we'll certainly give it to you. There's also a person who actually did the work on there and you can contact them.

JANET FUSCO: Thank you.

BONNIE VENO: The only question I have right now is

there was a little confusion that they were wondering the demolition of this building will be this year?

MR. ALLEN: No.

BONNIE VENO: Next year?

MR. ALLEN: Only if we can get referral very quickly. The first thing we have to do is--I'm not going to say it's not possible, it could happen next year.

BONNIE VENO: Anyway, couple years is what you predicted on the screen.

MR. ALLEN: Right. It's largely an eyesore right now. There's really no risk associated with it. It's been cleaned out. There's no chemicals left in it. Like I said, it's largely an eyesore.

BONNIE VENO: But it definitely is going to be in 1994? I was thinking, you know, if it was sooner. I don't know, I guess I got that confused. Another thing when they do rip this down, there are homes really close to this building.

MR. ALLEN: Right.

BONNIE VENO: If there were damage, of course the state would be liable, right?

MR. ALLEN: Right. I mean we may have to--in certain instances it's going to have to be very careful to take the building down next to your house, but we'll be working with you to make sure that--

SYLVIA SAY: I have a few questions, too. Sylvia Say, 1004 Vine Street. We have fruit trees all along our line and if that property has to be redone with surface soil, what about the shrubs?

MR. ALLEN: We'll replace all that.

SYLVIA SAY: There are animals coming out of that building: possums, woodchucks. Are they any threat to say my animals?

MR. ALLEN: I would say no.

MR. RIVARA: There's no way.

MR. ALLEN: There really isn't.

MR. RIVARA: I don't know, it's more of a wildlife issue. I suppose there's always a possibility. I mean there's always a possibility depending on what they've gotten into, I guess, but as you said, most of the chemicals have been removed.

MR. ALLEN: There are still residual chemicals, but I don't know what risk. Tell you what. We'll have to look up the law. It's a good question. I have no idea whether to be concerned about the levels of the contamination in the building, whether they're actually absorbing them.

SYLVIA SAY: One of our cats did get into the building at one point and came out covered with something yellow.

MR. ALLEN: Have you seen the pictures? That was

probably chromic acid is what it probably was. You might want to take a look at some of the pictures. There was a lot of yellow crystal and it oxydized.

SYLVIA SAY: It was powdery all over his fur and I took him over to the men that were working and they said they didn't think there was any chance of it hurting him, but they do walk around your house and get all over your furniture and clothing. My main concern is that I am so close to the building. You can stand at one point and touch the building.

MR. ALLEN: I know exactly right where you are.

SYLVIA SAY: We're very concerned about that building coming down and what's going to happen.

MR. ALLEN: Well, if anything, it will be a great advantage to you to have that building down. It can be done. There's no reason why--there's always unseen circumstances, but if it's done properly, it shouldn't have have any effects.

SYLVIA SAY: We won't have to move out of the house or anything like that?

MR. ALLEN: I won't guarantee that, but if maybe it's for a day or two, who knows, it's something we'll discuss with you personally when the time comes.

SYLVIA SAY: Also I was concerned about the gardens and eating fruits in that soil. Would that be a risk?

MR. ALLEN: Did we do any tests off that stuff?

MR. RIVARA: Not on the fruit. I think the county had done some work back in '88 or '89. Some vegetables, tomatoes.

MR. ALLEN: Isn't there guidelines you guys provide for washing?

MR. RIVARA: Washing fruits, yeah. I think their reports did not find any reports with any contamination. I think it was more a question of once they washed the vegetables.

MR. ALLEN: Aren't you supposed to keep--

MR. RIVARA: One of the things that we recommend in most of these cases, you don't know specifics, is that if you're concerned, it's best that you not eat the fruit at this point or the vegetable or grow a garden without knowing specifics. This gentleman's garden, we'll look at where he has it and what relation to the cleanup. Our recommendation is not to do anything until the site is remediated. We can't tell you not to. We can't require you not to, but people have gone ahead and done it in some instances and some people haven't, but just based on what has been done previously by the county, they did not find a problem with update. Some fruit and vegetables are different than others. Some are taken up through the root system and some chromium didn't seem to be a

problem, but I don't know if there's really enough information on it to say to make a real qualified determination.

SYLVIA SAY: Thank you.

PHIL TRASK: Phil Trask, 149 Duke Street. Now you've established the general groundwater flow southwest?

MR. ALLEN: Yes.

PHIL TRASK: Now the engineer from ERM last night did his presentation on proposed DEC's access road that's going through there. In their study--

MR. ALLEN: Where is it going?

PHIL TRASK: It goes from Twelfth Street in a southwesterly direction and comes out on the Cranberry Road in West State. One of their test wells they found contamination. They found chromium and lead, correct, in there?

MR. WITTLINGER: That's right.

PHIL TRASK: Probably about two miles west of there generally in a southwest direction. Now it's possible there has been a groundwater migration of those contaminants that far?

MR. ALLEN: I don't know where it is.

MR. WITTLINGER: I would say that there are wells in between the Van Der Horst site and that well that had much

lower concentration, so in other words the source of that well up in Cattaraugus Economic Development Zone property would have to be--

MR. ALLEN: Is that soil or water?

MR. WITTLINGER: It's groundwater. Would have to be between those wells that show low levels and that well on Cattaraugus Economic Development Zone property.

PHIL TRASK: So it should generally run down?

MR. WITTLINGER: It's in the same general direction. But the point is there's wells in between the Van Der Horst well and that well that have lower concentration.

MR. ALLEN: You should definitely through dispersion it will always get lower. If it gets higher, there's some other source contributing to it.

PHIL TRASK: I've got another question. I have a friend who used to work in one of the plants. He couldn't be here and he wanted me to ask this question. He was at Plant 3 in the early 50's. Now they had--I guess that's where Dresser has their Plant 2 shipping department now. I don't know if you're familiar with any of this. They had one of the deep vats that they dipped chrome plated warship gun barrels in and I guess that site now is under a concrete floor. He was just wondering if that vat had ever been drained. He has a concern maybe there's a possibility it was filled in. Is

there any information available about that?

MR. ALLEN: I think it would be interesting to know where it is.

PHIL TRASK: He said it's directly under the shipping department's I guess loading dock right now.

MR. ALLEN: At Dresser?

PHIL TRASK: At the Dresser Plant 2 shipping department.

MR. ALLEN: Interesting. Well, you know, Dresser was on the registry at one point, I don't know if it still is, as a hazardous waste site. See, this is another argument for the reason--another item in our argument why we're so apprehensive about implementing a program that would attempt to remediate this aquifer back to its, you know, pre-contamination condition because--and we run into this now in the large deep river vallies--that I mean if you dump a paint can full of solvents in one location, you'd be amazed at how much water that would contaminate, so it's not always really practical to attempt to remediate possibly an area back to its groundwater standard when there's the potential for having some other sources influence the aquifer. Just to give you an example on it, one of the things we looked at when we were trying to recommend an action here is we got a printout of all the spills that had been reported to DEC in the last three years and you'd be amazed, you know, they're

cleaned up to some extent, but there's probably some--all these things eventually may affect the condition of the groundwater. How much influence on that I don't know. Maybe it will all be held up in the sky, but these are the type of things we've got to look at when we decide how expensive it's going to be to remediate and that may develop still and could be influencing it, but I think it's interesting information and we'll pass it on. We have another group that looks at potential sites and maybe they'll be interested in this. Yes, sir?

MARK BECKER: Mark Becker. I'd like to just clarify some of the information that you had given out earlier. I'm not sure if I understand it right. You're saying that possibly the ROD will stipulate that there will be on-site placement of the solidified material?

MR. ALLEN: That's what the ROD will stipulate.

MARK BECKER: It won't leave the option of transporting to Plant 2?

MR. ALLEN: We'll discuss that, yes. We'll leave that as an option based on what's chosen as the remedy, so the people at Plant 2 around that area would have an opportunity to look at that when we come to you with the recommended remedy for Plant 2 and we can discuss it with you.

MARK BECKER: So that's a very flexible concept at this

point?

MR. ALLEN: It's not very flexible. The only thing that's flexible in the ROD where they will ultimately dispose of this material. I'm not going to predispose what's going to occur at Plant 2. We're leaving that as an option. If we didn't have Plant 2, we would be considering solidifying and leaving it. We've got to balance everything really with what's environmentally best, what's best from the public health standpoint from exposure, so I mean if this wasn't another Van Der Horst plant site, we wouldn't have this option to us. I mean legally we couldn't do it under the law since particularly the new regulations that are being passed that will permit this type of consolidation waste and a lot of the wastes at Plant 2 originated at Plant 1 in that landfill. We know that.

MARK BECKER: It appears as though you've done a good job so far.

MR. ALLEN: Thank you.

MARK BECKER: And finally you had mentioned a target pump rate of 250 to 300 gallons a day?

MR. ALLEN: Per minute. It's roughly a half a million gallons per day.

MARK BECKER: Okay, thank you.

MR. ALLEN: If there's no more questions, I want to

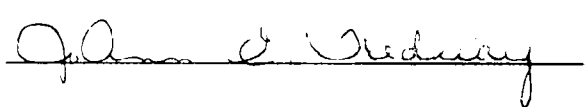
thank everybody for coming. We'll stay here--I certainly want to talk to you so we can identify where your house is, so come up and take a look at the map and pictures.

(Whereupon, proceedings were concluded at approximately 8:20 p.m.)

* * *

C E R T I F I C A T I O N

I, JO ANN E. TREDWAY, Shorthand Reporter and Notary Public in and for the State of New York, do hereby certify that I recorded stenographically the proceedings herein at the time and place noted in the heading hereof and that the foregoing is an accurate and complete transcript of same to the best of my knowledge and belief.



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DATED: March 10, 1992

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