Robin

PROPOSED PLAN FOR REMEDIAL ACTION

ONALASKA MUNICIPAL LANDFILL SUPERFUND SITE,

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MS. PASTOR: I think we will get started. I know it's a little bit late, but people were coming in and we wanted them to get a chance to get settled.

Thank you. I'd like to welcome everybody here to our meeting here tonight on the Onalaska Municipal Landfill. My name is Sue Pastor and I'm the community relations coordinator for the site. Kevin Adler, the project manager for the site, is sitting over to my left, and Ms. Robin Schmidt from the DNR.

I wanted to point out a few things to everybody. I hope you all picked up an agenda. This is the agenda that we'll be following for this evening. We do have a court reporter, so we have the portion marked public comment, so if you could just stand and you could state your name and who you represent, if it's other governmental bodies or particular agency or just yourself. If you could identify yourself for her she would

appreciate it, and if have a name that needs to be spelled, I think she would appreciate that, and try to speak loudly and clearly for her. And if she can't hear I've instructed her to tell you that you need to speak louder so that we can get it all down.

We are here tonight to explain our proposed plan to clean up the landfill and the ground water at the site. Some of you were at our meeting last time so you kind of know what we're talking about and where we're coming from. And after that we will take your questions as always and after that we will take your comments.

Now our comment period started last Monday and it runs through April 4th, and we don't have any comments yet in the mail, so I'm expecting a lot of comments. You can make them verbally and the court reporter will take that down. If you don't like to speak before a crowd of people you can hand them to us.

There's this sheet that Linda Carlson, the town clerk, has passed out, and this is also a fact sheet as well so you can hand that

to us tonight if you'd like, or you can mail it to us. It's pretty much a self-mailer. Just fold it and put a stamp on it, then mail it to us. And we do read all the comments, we do respond to them, and they will be part of the public record in our Record of Decisions and that is that document that outlines the cleanup measures that will ultimately be used for the area, and that will be sometime I guess in a month or so.

So we do need your comments, we know you have some genuine concerns and we need to hear from you to make them part of our public record. So we want to hear and we just want to make sure we document them properly. So let's see, what else?

On the repositories there are two information repositories and those are information files pertaining to the site. One is at the Holman Library and one at the Onalaska Public Library. I put as much information on the site. We have sent it there for you to look at. If you think it is too much information to take in we do have the

fact sheet and it pretty much summarizes everything you need to know, but if you like to read the technical documents they're also there for you to look at as well.

And if you have questions after tonight's meeting feel free to call our phone numbers on the -- again it's in the fact sheet, it's on our -- it's on the pink card here. We can be called on the 800 number, Kevin and I, at any time, and any time during business hours. So if you need some help, some questions that need answers in order to formulate your comment, please call us, because we're available and we want to answer your questions.

There are some other materials out on the sign-in table from the DNR and also from the department of health. There's a new health assessment that's just dated last month. Copies of that are in the libraries as well or they should be anyway by now, and I'm sure if you'd like a copy, the department of health would be glad to send you. We have a couple of extra. We can take your names if

we run out of those or any other materials, okay. Okay, I guess then we will get started with the explanation of the proposed plan and I'll turn it over to Kevin.

MR. ADLER: This is a slide of the Black River, just to remind everybody what we are talking about today, starting with this. Just want to show everyone where we are tonight in the RI, FS, process so far. We are presenting our proposed plan for remedial action.

Tonight we are in the midst of the public commentary. That comment period is scheduled again on April 4th. EPA will take all the data we have assembled, examine your comments and present them to our regional administrator and he will formulate an opinion and decide on a remedy and then memorialize that in our Record of Decision.

The Record of Decisions is scheduled to be signed at the end of April. To quickly go over what we covered on the January 31 meeting, we prepared the site map and we see that the original landfill there is smack dab in the arm of the Black River. There are few residents to the north and the west and northeast, and about a mile and a quarter away there's a subdivision of about 50 homes.

The ground water flow in this particular

area is from the north towards the southwest except during flood stages of the river when the flow goes from the south to southeast or north towards the southeast.

There's a bike trail to the north, and to the south you'll see agricultural land. A little over a year ago CS had performed the sampling episodes for the residual investigations during the spring and the summer. We collected samples in the surface of the water and sediments of the Black River. Adjacent to the site we also sampled residential wells, found no contamination.

We sampled ground water beneath the landfill adjacent to the landfill and a ways away from the landfill. We sampled soils and sediments within the landfill and just outside of the landfill, and we also done a dug trenching in the landfill itself to see if we could find the 55 gallon disposal drums and determine how much they would cost. Other data they gathered included water leaving to try to determine the direction the ground water flow during different times of the year.

Some of the results we found as presented in the remedial investigation report, you see that present landfill cap has a few problems with it. There has been some freeze - thaw damage which allows precipitation to infiltrate into the landfill and help to mobilize or move contaminants out of the landfill into the ground water system. We see that some of the trash that has been placed in the landfill is periodically in contact with the ground water from time to during the flood season especially when the water table runs.

We have seen that there are maybe a number of 55 gallon disposal drums in the landfill, but the results of our investigation show that they may be scattered around and not easy to get to and they also may be crushed from the emptiness as the 6 that we did find on investigation. We also see a ground water contaminant plume which extends 500 or more feet to the south-southwest of the landfill. The plume is apparently discharging into the Black River wetland.

This plume is located in the drinking water aquifer, which was being used at a time. The site was placed on a National Priorities List of Superfund lists because the well just directly to the southwest containing in some of the plume was used in the well for drinking. However, the Town of Onalaska did replace that particular well in 1982, the deep well and it is not expected that landfill would present a problem to that new well.

We also see that there's a floating layer of naphtha solvents emanating or moving out of the landfill in the southwesterly portion in the soils above the water.

We have grouped a number of areas of concern then to investigation or cleanup. One, we see the contaminated ground water pluming, approximate general shape, as such we see it is moving towards the Black River wetland in the southwest. The cap is another area of concern and Robin will talk about that in a bit. And the contaminated soils that have a floating layer of naphtha based

solvents acts as a continual source of the ground water contaminants for the ground water contaminant plume.

In the feasibility study then we looked at different alternatives for landfill and ground water cleanup, which we tried to prevent immanent or biological exposure to contaminants in the landfill. We tried to reduce the amount of the contaminants moving out of the contaminated soils into the ground water contaminant plume. We tried to control -- think of a way to control that floating layer from moving any further away from the landfill, and we tried to prevent ground water contaminants from reaching drinking water receptors.

What does that mean? What that means is we tried to clean up the ground water contaminant plume so the water can be stored to a usable function. Right now the rivers and receptors are low, the accrements guard well as poses the highest risk over the lifetime of use of that water.

You would see an excess cancer risk of

one in one thousand cases of cancer over a lifetime somebody drinking that water. Currently nobody is drinking that water the contaminants in the landfill pose very minimal risk under scenario anyone to come into contact with them when they're moving around down there. However, we do see that ground water standards, both state and federal, are being exceeded in the ground water near the site and we see that the cap does not meet current state or federal standards.

We also note that the landfill is located in the upper Mississippi Wildlife and Fish Refuges and is also surrounded by five additional wetland areas of concern.

Therefore, we look at 10 alternatives and try to take care of the problems at the site. Four of them had to do with the landfill itself and six had to do with the ground water portion of the site. Four landfill alternatives including doing nothing but continuing to inspect the cap below the grass, repair the current cap, or upgrade -- upgrade

the current cap to meet current state and federal regulations, or upgrade the current cap to meet state and federal regulations and also extend it over that area of contaminated soil.

The six ground water alternatives we looked at include, doing no action but monitoring the plume surrounding the landfill with the slurry wall and placing a cap on top of it. The slurry wall is the method of trying to contain ground water within the landfill to try to keep contaminants in the landfill so they cannot present a problem to ground water outside of the slurry wall.

Two methods of ground water extraction and treatment were looked at and one was putting in well systems on the perimeter of the contaminant plume where the water is least contaminated, and therefore one method of treatment would be the passive air stripping which is discharging that water over a natural or manmade rock waterfall to the aerate the water a little bit and try to promote the separation of the organic

contaminents in the ground water before it's discharged into the Black River system.

The fourth alternative was placing extraction wells closer to the landfill where we extract more heavily contaminated water and have to use a different more complicated cleanup system. When we were physically aerate the water and air stripping we would need to filter off the sludge caused by aeration of that water before we discharge the water into the Black River.

The fifth ground water alternative we looked at was implementing alternative four in conjunction with a method of trying to destroy the contaminated ground water contaminated sources located in those soils to the southwest of the landfill. And one way of doing that is biological remediation and that is taking the natural occurring bacteria in the site and using them to degrade the organic window so that we have to supply excess oxygen to that area and then applying nitrogen and phosphate and water for food.

And another way of attacking that soil area is to excavate the soils and take them to a nearby asphalt plant where it would be either use the soils in the asphalt mixture for paving the roads or roast the soils in the ovens, driving off the organic compound into the atmosphere, and bringing that -- the roasted soil on the site and putting it back in the holes as made.

On the screen are the nine criteria. Criteria the U.S. EPA use to evaluate the different alternatives at the site. The two most important are protection of human health and the environment, and two, does it meet state or federal regulation?

Three through seven our comparison of each individual alternative's benefits versus the shortcomings, such as long term effectiveness, in other words, as it provides protection over the long term. And last, the cost, if it is a high cost remedy, and the lower cost remedy provides the same amount of protection and the last two criteria are state acceptance, does the State of Wisconsin agree

with the proposed plan? And the last, alternative criteria and public acceptance. And that's what we are here tonight to do is try to guage your comments about the proposed remedy.

All of these criteria and the 10 alternatives, the U.S. EPA and the State of Wisconsin believe that we should implement alternative 3LF or three landfill and 5GW or five ground water at the site. Here we upgrade the cap to meet state and federal regulations. To some of the landfill itself we would treat contaminated soil with bioremediation of the we would treat contaminated ground water by aeration, clarification, and treatment of the most contaminated or contaminant plume, treat and then discharge into the adjacent Black River.

Let's quickly run through the different ground water alternatives and then Robin will talk about the landfill alternatives. Again, the first one is no action, that could cost about $100,000 to implement because we would

need to add another three monitoring wells to the system and that would cost about $63,000 a year to take periodical samples. To monitor the inorganic contaminants and the ground water and watch the plume as it moves away from the landfill and discharges into the wet land.

Second alternative is put a cap over and build a slurry wall. It would take nearly four million dollars to implement and about $80,000 a year to maintain the cap and the slurry wall and also monitor the ground water and contaminant plume as in the no action alternative.

Three, the alternative, the perimeter ground water extraction wells would cost about $520,000 to construct and about $80,000 a year to run the equipment and also sample the ground water monitoring wells.

The fourth alternative of collection and treatment of the more heavy contaminated water. Can cost about 1.8 million dollars to implement, construct and about $150,000 to run that equipment and also take the samples from

the land wells.

Alternative five, where we also attempt to destroy the contaminants in the soils providing a continual source of contamination to the ground water, and also run the ground water extraction treatment system, alternative four, costs about 3.6 million dollars to build and about $150,000 a year to run the ground water extraction system and to take samples out of the monitoring wells.

Alternative six would cost about 3.7 million dollars to implement and $150,000 a year to run. Of these alternatives we estimate that each one would take up to 30 years or more to reach the ground water state and federal ground water standards.

However, for alternative five and six we may be able to reach those standards a bit sooner in that we are trying to destroy the continual source of the contaminant in the area right above the ground water.

Alternative 5 GW, therefore, it consists of the bioremediation of those soils process for approximately two years, on site ground

water extract is at about 170 gallons per minute, treat it and discharge it to the Dodge Chute of the Black River, running that for approximately 5 to 30 years in order to meet the federal and state ground water standards. We would monitor the ground water contaminant plume and we would allow the front edge of the plume or contaminant or lower concentration to continually discharge into the wetlands safely, and if monitoring shows that ground water standards are exceeded we may need some additional action in that area.

This slide shows where approximately four extraction wells would be in the ground water treatment system. The pink area is the the area of contaminant soil where the bio remediation is proposed to occur.

This is a plan view. This is a cross-section of the pipes that we need to bury in the ground to supply the oxygen for the aerobic bacteria.

Robin will now talk about the landfill alternatives. Robin Schmidt.

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MS. SCHMIDT: Thanks, I realize a number of you have probably been to the last meeting and some of this might be redundant, but I think we need to go over some of the basics to make sure everybody is up to speed who perhaps may not have been able to attend the last meeting.

I will speak briefly tonight about the portion of the Remedial Investigation that focused on the landfill unit itself, as opposed to the ground water unit and soil study, that Kevin talked about.

The RI involved conducting what we call a geophysical investigation, which was trying to look at what might be buried in the land by using what we call geophysics, which tries to find -- basically we use it for finding barrels, large metal objects, to see if we can find some hot spots which might be more easily removed instead of locating if they had contained materials in them basically we want to remove those that were full.

The remedial investigation included digging some test pits as Kevin had talked

about, using the backhoe based on the geophysics to see if there might be some hot spots. We want to see if the barrels in there, whether or not there are materials in them or not.

We also investigated the integrity of the cap or the cover material placed over the landfill. The cap was important because the purpose of the cap is to prevent water from infiltrating into the waste material carrying contaminants from the waste material then into the ground water and eventually having those contaminates migrate out of sight.

So we felt it was important to investigate the cap. The cap also protects the public from coming in direct contact with the waste materials themselves. So we want to look at the wastes.

We found through the Remedial Investigation that the -- and the test pits that there -- there were no intact barrels in the area that we looked at. Kevin mentioned we found six drums and those drums did not contain any material, and the condition of the

drums lead us to the belief that likely most of the drums in the landfill probably are in the same condition of being crushed and empty. But we really don't have any way of knowing that for sure.

We also found that the cap was inadequate in a number of ways and I have an overhead that will show what we found. Basically, we found several parts of the cap where the materials that were supposed to be placed over the cap were basically sands or silty sands and they're relatively thin. They were less than 12 inches in some areas.

We also found signs of animal burrows that would allow water to directly be flowing from the surface of the site to deeper portions where they might come in contact with waste.

We also found large areas of the cap where there was evidence of frost damage and that's important because when the ground freezes and thaws it tends to constrict and then to form cracks. And those cracks will allow water to seep directly down into the

waste material which is what we're trying to avoid through the use of a cap.

The next step was to conduct the feasibility study, look at alternatives for remediating or fixing the sites so the the Superfund goal is to protect the human health and environment.

Kevin showed the criteria we looked -- we're looking at alternatives and think those criteria are important, they are what really drive the Superfund program. I have an overhead that shows you the alternatives we looked at for the landfill. I'm really bad at doing this backwards. The no action alternative is required by the superfund although we have for the alternative -- the basically no action alternative nothing else will be done to reduce exposure to the contaminant, simply to perhaps some mowing of the lawn or whatever is going on the site would take place, but that is basically it, no action. The cost of this alternative is approximately $1,000 per year for operation and maintenance.

The second alternative is a cap upgrade, and let me just take this off for a second. I'll put it back up and explain to you when I talk about a cap upgrade. When this site was closed in 1908, there were state solid wastes regulations that were required, what a cap had to be comprised of, and that is what you see on the top picture, basically a slope of 2 percent covering vegetation underneath, that is 24 inches of the compacted clay and then basically the daily cover that is placed over waste materials routinely in that landfill and then the waste mass.

Those regulations change because what we found through experience and through time is that in Wisconsin we have a winter season and that winter season will cause, as we had seen in this site, frost to occur and that frost will basically destroy the cap, and some new regulations came into play that require, if you look from the bottom going up the waste mass, a grading layer so that you have a 5 percent slope, which allows water to run off a little bit more quickly.

The same compacted clay of 24 inches put on top of that is a cover soil that basically has to be -- has to meet the minimum frost depths of an area, and on top of that cover soil that would be top soil and then some vegetation, and we note that you don't want to see deep rooted vegetation because then the roots come from the waste to the material.

So the regulations have changed between 1980 and what we have now. And when we talk about upgrading the cap we're talking about upgrading it to meet the old regulations which as we can see at the site were not necessarily very effective, because the frost damage that has occurred at the site, and the alternative that I will talk about after that is then using these new regulations which allows for the additional material to protect from the winter frost actions.

So basically for a cap upgrade it would meet the standards that were in effect when the site was closed in 1908, it would cost approximately $390,000 a year in construction

cost, what we call capital costs, and cost approximately $3,200 per year in operation and maintenance.

The multi-layer cap would be meet current standards, it would cost 1.5 million dollars for construction and approximately $14,000 per year in operation and maintenance, and then the final alternative that we looked at was if we did find contaminated soil near the landfill we would want to protect that area from the infiltrating water so these contaminants would not flow, so the fourth alternative was use the multilayer fill cap over the landfill and the contaminated soils. That would cost approximately 2.3 million dollars in construction costs and $23,000 per year operational maintenance. I think as you know in looking at the proposed plan and what Kevin has explained, the agency have selected an alternative which we call 3LF as the preferred alternative, has met the current regulations for closed landfills. We also believe that this will help in long term

effectiveness. This is the best alternative for long term effectiveness because with this cap we wouldn't have to come back in 5 years and observe whether or not there's additional frost damage, and what we hope to do with that type of a cap is to make it more effective in the long term and that's just the right type operation and maintenance that goes with any cap is, what would have to maintain into the future as with any sanitary landfill.

I think with that that's -- that's hopefully a brief enough discussion of this alternative and I'll turn it back over to Kevin.

MR. ADLER: This particular slide is a slide showing what the proposed multilayered cap would look like in the landfill, the different layers. Okay, the reasons why we chose alternative 3LF and 5GW:

Number one. They do protect human health and the environment, and they do comply with the environmental regulations. As we see up on the screen, we also see that the Superfund long term goal of actively turning up sites as satisfied through the bio remediation of the sole changing contamination and the extraction and the treating of the contaminants of the ground water. Another reason is that except for perhaps bio remediation, the technology we have chose, for example, even our previous technology and bioremediation is an emerging technology, and that is also another Superfund goal of encouraging the use of alternative technologies to clean up sites wherein the use is practical.

Okay. The next step after considering public comment and all the data, the regional adminstrator will finish the Record of

Decision in April, the agency will give the people who brought waste -- hazardous waste the owner-operator to the site, give them a chance to do the recommended cleanup through a period of negotiations with those parties.

Whether or not there's agreement with those parties, the design phase of the project should be in late this year or early next year, and that phase will entail drawing up plans for the employment of the extraction wells, employment of the building, and employment of ground water treatment system treatability study for the bioremediation to determine what ground level you need to enhance, to figure out how much nutrients do we have to pump into the ground? How much air do we need to enhance the revocation of those chemicals and also to draw plans of the employment of the multi-layer cap for the land.

I don't know if you can see this, but we are, as I understand, the Record of Decision in the spring of this year, begin

design as soon as possible, summer or fall of this year or spring of the next year, and begin the actual construction of the cleanup alternative in late 1991.

One of the most important question is who's going to pay for the cleanup? According to the Superfund law, people who own hazardous waste sites or operate hazardous waste sites or brought waste to the site under their own volition or people who generate waste that was brought to a hazardous waste site are liable for the cleanup of this site.

According to the law we must give these parties a chance to volunteer to perform the clean up. In other words, in the Record of Decision, if the parties decide as a group they are going to clean up the site, they amongst themselves will divide the cost of the clean up amongst themselves. The EPA will not direct one party to pay more than another. We can give advice as to cost sharing, but that is nonbinding.

And finally if the parties are unable to or not willing to clean up the site, up front,

EPA can either order them to do so through the court system or decide to use Superfund money to pay for the site clean up and then pursue those parties later in order to try to recover what costs they can to try to replenish the Superfund.

This particular site is municipally owned site, which means the State of Wisconsin and U.S. EPA will share in equal the cost of the clean up, if the responsible parties are unable or unwilling to do the recommended clean up.

MS. PASTOR: Okay. We will take your questions in a minute. I just want to explain the difference between questions and comments. Questions, of course, I'll give you time to ask all the questions you have in your mind, and when we have pretty much exhausted that period we will go to the public comment portion of the meeting and that is where you make a statement. If you ask it in a question form I'll have to stop you and ask you to rephrase it in a form of a comment.

So the court reporter can document your thoughts, your opinions, your comments should at least be in a statement form, so that's the difference. So I just want to clarify questions and comments. So before we take your comments, I imagine you'll have some questions before we go to that. So if you have questions, if you want to be recognized I'll be glad to call on you, and do speak loud so the court reporter can get your words down.

Who would like to start? Yes.

PATRICK SMITH: I represent myself. On your ground water treatment system you've got

a discharge to the river in the Bullet Chute. Right now Bullet Chute most of the time is dry. Can you discharge that to a dry river bed, and if you can't what are you going to do about it?

MS. PASTOR: Can you discharge to a dry-- that's a good question. This is Phil Smith, he's from our contractor, CHTN Mill, and sometimes he's able to help us out on some of the questions.

MR. SMITH: Right now we have -- have it on that map showing discharge to -- it's actually Dodge Chute, and you are right, it is dry part of the year. And that is an oversight in our part. We would actually discharge it to Bullet Chute, which is also full of water. That's about five miles up to the north.

MS. PASTOR: The gentlemen in the glasses in the back, you're going to have to speak up.

BRIAN HELM: I represent St. Mary's Clinic. I have a question concerning the water table what would be done. You've mentioned that it does rise and actually come

in contact with the landfill. I didn't understand any of the alternatives as to addressing this problem.

MS. PASTOR: Address the water table, what will be done, is the question?

MR. ADLER: What alternatives will address that problem. It's occurring already, and it is ground water extraction treatment system is designed to capture any contaminants that will be mobilized from that action.

The treatment network would be placed in the direction of the flow with the ground water to try to capture those contaminants as they move out of the landfill.

MS. SCHMIDT: I was also going to the testing, and it's almost impossible to try to lower it and it's all standard, and we would have to have an incredible amount of pumpage to really lower the water table to keep the waste from coming -- to keep the ground water from coming in contact with the waste so that option really is -- I don't think technically feasible to try to keep it lower in -- in times of high water levels.

MS. PASTOR: Who else has a --

ROY HARSCH: I represent the Town of Onalaska. In the ground water remedy section did you study institutional controls?

MR. ADLER: Institutional controls are part of the no action alternative. This is not found to be reliable over the long term of infiltration.

ROY HARSCH: Is it true a State of Wisconsin has made a prohibition against the location of any new well within 1200 feet of existing landfills without a variance from the DNR?

MS. SCHMIDT: We have regulations that do require a variance if the well is to be installed in 1200 feet, and the -- I will note that such a variance has been granted very recently at the -- the site so -- so while there's a law that says you can't do it, but variances are very frequently granted.

ROY HARSCH: That's an action that has to be approved by the DNR?

MS. SCHMIDT: Yes, that's true. I would also note that the program expectations EPA

has stated that institutional controls can be used to mitigate short term impacts, but they do not serve as the sole remedy unless (unintelligaible) are impracticable, that's pretty much written in the guides.

ROY HARSCH: You were going through the lengths of time on the ground water. My understanding is that your standards on all of the remedies on ground water could take 30 years or longer to return to ground water?

MR. ADLER: Correct, did you say federal standards?

ROY HARSCH: And you said, I'll paraphrase you. I'm sorry, I think you said, the chosen remedy might result in the federal and state drinking water standard being met a bit sooner.

MR. ADLER: It's too early to tell how soon they would be met, but as expected that a large percent of the contaminants that are in the plume would be removed in the first five years of pumpage of that ground water.

ROY HARSCH: At the present time, does the U.S. EPA or the State of Wisconsin have

any information which would establish that in fact the federal and state drinking water standards would be met any faster by the remedy that you proposed, over one of the other remedies? Can you reduce that to writing, maybe a year, five years, ten years?

MR. ADLER: There's no real estimate when they will be met.

MR. SMITH: There's a degree of uncertainty in the landfill as to how much additional loading of contaminants to the ground water there could be, and because of that uncertainty at this time you can't predict the number of years it will take to reach the ground water standards. As Kevin is pointing out, though the low -- the massive contaminants that we do know about, we'll be getting out a much higher percent of it with the selected alternative then the other ones.

ROY HARSCH: Isn't there also a chance that the standard will never be achieved?

MR. ADLER: There's always that chance.

ROY HARSCH: You mentioned that the remedies that you have proposed for this site would be with the exception of the bioremediation, are proven technologies. The proper inference at the present time bio remediation is not approved in technology?

MR. ADLER: It's acknowledged in technology that is being proven in land study, and before we implement it at this particular site we will be doing feasability of the sites to figure out the best way of doing bio remediation of the field to take actual soil samples from the site and subject tests and see how much of the chemicals you can degrade.

MS. PASTOR: Let's see if we can get someone else before you go on.

ROY HARSCH: You're -- you're cutting off the Town from asking questions?

MS. PASTOR: No, I wanted to see if anybody else -- yes, right here in the brown shirt.

CHARLES PIERCE: and I've -- my questions are to Robin. You had four

alternatives on your second slide and I'm going to refer to the two last ones, one a million five and one was 2.3 million. Why is the operation and maintenance a lot more on the second one on -- I mean, on fourth when -- then it was on the third one?

MS. SCHMIDT: That's mostly because the larger area and therefore, it costs -- it's going to take more material to put on there because we are putting that over the area where there is contaminated soil as well, and therefore it also in additional operation and maintenance would require more money because you would have to do. It's the same operation and maintenance, but just over a larger area.

CHARLES PIERCE: How many acres more are we talking if we are considering more operation and maintenance that you explained, is there any other operation and maintenance other than mowing it?

MS. SCHMIDT: Yes, what you have to do for operation and maintenance and I believe there's DNR people whose speciality are solid waste who are here. So if I state something

incorrectly, please speak up.

In operation and maintenance you have to make sure there is no erosion being formed. You have to basically every year inspect the site and regrade perhaps to make sure there is not vegetation you don't want there growing up.

There's often settlement as more weights comes over the ground will settle. You have to make sure they maintain the slopes so you don't have the ponds in the top which allows the water to infiltrate, so the operation and maintenance is more than just mowing the lawn. It's actually making sure that the cap is the way it was put on when it was initially put on, and it will change overtime.

CHARLES PEIRCE: I have one more question. Am I allowed? How are you going to prevent the animals from digging holes in and making --

MS. SCHMIDT: That we can't do. And that's part of the operation and maintenance. I don't know what we would do if we find that is progressing. I think the thing to do is

destroy the new holes so you prevent it from getting worse and deal with that. If it does come up to be a problem in the future it's going to require that is going to be part of making sure those holes don't develop deeply, if they do develop.

MS. PASTOR: Someone else, question? In the brown jacket.

MARK SCHULTZ: I guess I've several questions. The five natural areas of concern, are they anywhere near the landfill?

MR. ADLER: Directly surrounding the landfill.

MARK SCHULTZ: Surrounding upstream?

MR. ADLER: Upstream, downstream, there's a map showing the five natural areas identified by DNR as being areas of concern.

MARK SCHULTZ: Second thing. With respect to the hydrology of the site, what percent of the water getting into the site do you feel is surface water as opposed to the ground water movement?

MR. SMITH: The second question, if you don't know, how do you see what kind of --

it's kind of hard to bring up a -- the number where you -- we certainly went through the water balance. You're asking what -- what percent of the water is coming from ground water versus infiltration?

MARK SCHULTZ: Right.

MR. SMITH: That would be mostly ground water, well over the percent of the ground water.

MARK SCHULTZ: What would be a high technology -- what purpose would other high technology cap serve?

MR. SMITH: Allows the -- the contaminant above the ground water. And it's that zone of contaminant basically that would be the least --

MARK SCHULTZ: Do you know when the plume is moving and what time of year?

MR. SMITH: The plume is always moving.

MARK SCHULTZ: Do you have any idea what time of year it moves fastest?

MR. SMITH: During the spring.

MARK SCHULTZ: Do you have any idea what

percent of the plume moves, you know, with-- when it floods? The plume is always moving. Ground water is always moving at a certain rate beneath the site. The average is approximately seven feet per year.

MR. SMITH: We factored it at high and low velocity for the site, the high velocity reflecting more of spring floods, and I believe that was in the neighborhood of maybe twice that 150 - 160 feet.

MARK SCHULTZ: What would a good flood do to bioremediation?

MR. SMITH: Well, again how -- I don't see how it would directly affect -- the bioremediation would be going for a course of a year or two years. It's all subsurface. We have the air in down below ground and we do have to supply oxygen via that air. That's where we're doing that, and the water -- moisture is the bioremediation. The flood really wouldn't affect it dramatically, which all it just adds your moisture, the stop the bioremediation for a while.

MARK SCHULTZ: So air could proceed

through?

MS. PASTOR: Someone else have a question?

STAN HOUSER: What is the potential for that site for -- by human health hazard as it exists out there today?

MR. ADLER: Human health hazards in the landfill itself or in the ground water or both?

STAN HOUSER: Pretty much the whole -- the whole picture as it's out there now.

MR. ADLER: If someone was to come into contact with the soil we tend to -- for the bioremediation, or suppose in the area, I think it was about five years somebody was on the site once a week, the estimated excess cancer risk were way below one in a million, was more on the order of one in 10 million or one in 100 million. Very low acceptable range.

The ground water would present potential excess cancer risk of one in 1000 of drinking water in the most contaminated part of the plume.

STAN HOUSER: Nobody is drinking that

water today?

MR. ADLER: No one is drinking the water today.

STAN HOUSER: There's no contaminated well or ground water?

MR. ADLER: Right now, yes. However, the agency does not intend to write it off as a potential use or a viable drinking water source.

MS. PASTOR: Gentleman in the back.

RICHARD WILL: I was over to the county library. I've been around here about 40 years and I was reading your report, it was ARCS, on top of page four under the baseline assessment, it says that there's 7 out of 100 million possible cases of cancer.

If you go down then and drink some of the this water that may be seeping, that's out of 100? I had cancer at 55 and had two operations for it and I'm still here.

Bottom of page one -- no, bottom of page five. The -- the other standards of criteria were conceded except for three inorganic chemicals, (unintelligible) chromium

and zinc. On the dilution of the ground water under the surface water is taken into account no criteria would be exceeded constantly, in fact on aquatic life would appear to be of any concern.

That was in the documents over at the county library here in Holman. So in my opinion or may be some others, there's no justification to disturb this area. Any cost at all would be to prevent any construction on or use of this area where digging would cause disturbance of the area. Keeping out -- the Ducks Unlimited issue, I believe it was the last one came out, discussing fencing on the areas which they have done in the United States, and they have found by putting up a string of four foot high chicken fence with electric wiring across around the top and around the bottom. They create these fencing out areas so that anything that flies can fly in and fly out and nest.

And their ratio of success for hatching and everything else was almost 100 percent. When they triggered this fencing out area --

if you want to fence out this area from other animals from going in there and digging just to fence them out. Don't fence them out, fence everything out except life flying.

MS. PASTOR: Do you have a question for us?

RICHARD WILL: Yes. This money, it can better be used to educate the children today in the school district. And they can inform the children of today and tomorrow about protecting the environment. We here have probably destroyed some of the environment in this area through no control 40 years ago. Now they're coping with it with controls. We were allowed to go in there 40 years ago --

MS. PASTOR: What is your --

RICHARD WILL: Had any -- my question is, why weren't you here 40 years ago? I mean you're trying to correct something that was approved and covered and now something is wrong with it, but has no threat to human beings and it has no threat to aquatic life and I don't know what you're trying to do with this money. I don't see your justification is

coming in for spending all this money.

MR. ADLER: The gentleman has pointed out that right now there is no use of contaminated ground water so the risks that represents, however, in the future it could be use of that contaminated ground water and we need to protect against that use.

We also must point out that ground water standards are being exceeded at the landfill, and that is driving up, and the cap standards have not been met. The current state and federal cap standards and that is driving this clean up remedy.

GARY VULKNER: Did I understand you saying that your responsible parties in the township should share the cost?

MR. ADLER: That's the law. These people who generate the wastes that were brought out from the hazardous waste the -- the owner and operator of the site are liable for cleanup costs. In the town of Onalaska no one owns the landfill, therefore they're partly liable in the number of the businesses brought hazardous wastes out to the landfill

over the years and they are potentially liable as well.

GARY VULKNER: Okay. Should the responsible parties that burned in there, they -- who issued those permits to burn in that landfill?

MS. SCHMIDT: I believe that at the time that a lot of the dumping was going on the DNR was basically in (unintelligible) and what we had done back when the agency was established in 1969 when the site began operation, what happened is that there were general licenses given to all the landfills throughout the state, and it didn't really have the controls or the knowledge of knowing what was good and what was bad to be put into these sites so basically we were -- we were granting the license to the sites based on the best information we had at a time.

GARY VULKNER: If you say the DNR issued the permits, why isn't the DNR standing behind what they did?

MS. SCHMIDT: Well, I guess we have learned a lot through time, and this is a

growing technology and there has been cases where people have made the claim that if the license was granted for a particular activity and the person who granted that license should be liable as well.

And my understanding is that it has been shown and I've got some attorneys who maybe can help me out a little with you, but the action of granting a permit, when you do that in good faith does not make you -- does not make the state liable.

GARY VULKNER: That means you're not going to accept the liability when you grant the permit?

LINDA WYMORE: My name is Linda Wymore, I'm the attorney for the Department of Natural Resources and I think the best answer to your question is that we are operating under a new set of laws today that were not around 40 years ago. We now have a Superfund law that imposes strict liability, and it's not based on any determination of fault on the part of anybody.

It's based on -- on simply the fact

being that be a person had something to do with the operation or ownership of a facility or the generation of waste, not whether they violated a law or did anything unreasonable at the time that they did it. We also have new state laws and more strict state solid and hazardous waste regulations that we didn't have years ago.

So the -- the main thing that has changed is the Department of Natural Resources has much more authority to regulate today then we did 40 years ago, we could not have prohibited or restricted things to the extent back then under the laws that we were working with back then.

GARY VULKNER: I -- don't you think the town people had trust in the DNR in them days and they do know the best interest of the town?

MS. WYMORE: Well, I can understand the feelings of the citizens of the town, but unfortunately from a legal standpoint their reliance on what they assumed, and what DNR may have assumed, is not germane to the

legal issues. The only legal issue is who owned the site, who operated the site, who owns it today, who generated the waste. Reliance doesn't enter into those legal issues.

GARY VULKNER: And what you're saying, DNR doesn't have error and omissions insurance?

MS. WYMORE: DNR is simply a state agency operating on behalf of the citizens of the state, and the citizens of the state through their legislature create laws, create legislation and all the DNR did was to comply with those laws that were in existence at the time, given the information that they had given the knowledge that they had.

We didn't have a crystal ball 40 years ago, neither did the town, but the Congress has said in the Superfund law, we don't care that anybody had a crystal ball or not, we're not going to look at who was at fault here, probably no one was at fault, all we are trying to do is to try and clean up these sites as expeditiously as possible.

MS. PASTOR: The gentleman in front of him.

TIM ARROW: Hopefully I represent some of the town folk here. Getting kind of confused, first, permit was issued to dump this waste, now it is not legal. Second, the cap is put on it was accepted by the DNR or the EPA, but I don't know if it was passed. It's no longer any good because they have upgraded everything.

Now, you're telling us it takes 5 to 30 years to implement a remedy to this landfill and what's to say 10 years down the road when we get halfway through, the laws and regulations come and says it wasn't good enough, we're going to have to start all over. The -- it's a guessing game. 5 to 30 years is a long time, hopefully I wouldn't be around in 30 years and I won't even have worries about paying the bill on this thing.

How did you guarantee in 30 years this remedy, that you so call is going to work, will be up to par with the clean water standards?

MS. SCHMIDT: Let me address within the issue that you raised, and that is the issue of the cap, how it was put on and approved by the department initially. I guess what I would say is that we have learned a lot through time. As I said earlier, we did not realize when we were first licensing landfills that we'd have to take into account the process and action in terms of destroying the cap.

I would also note that there is an amount of operation and maintenance that has to be done every year on the cap in order to keep it working as effectively as it has been, and I don't know what type of schedule the DNR has for inspecting that, but for whatever happened in the past the cap is not adequate.

Now it does not meet the standards at which it was originally put on, does not come for interest of compacting clay. I think that there are no guarantees in a lot of things that we do in many aspects of our lives. What we're working for here is the best technology we have today. We don't know what the future

technology is going to be and we don't, I think we have a pretty good track record on track right now I feel fairly confident that the cap we're looking at here is something that will be effective into the long term solution if it is properly operated and maintained and thus when you break up the costs to show those things.

With respect to, if I can recall the second part of the question, what guarantees do we have that ground water treatment --

TIM ARROW: That the remedy they're going to do now is going to be acceptable 10 years down the road?

MR. ADLER: The cap remedy or the ground?

TIM ARROW: No, I'm talking about the cleaning up the ground water.

MR. ADLER: That is the best technology that we have today, like Robin has been saying.

TIM ARROW: But they said that when the DNR gave us the permit.

MR. ADLER: That was for waste disposal

for the ground water clean up.

TIM ARROW: That's why it's contaminated?

MR. ADLER: Right, and the best way that we can spend money to clean up that contamination is to pump the water out of the ground and remove contaminant and then discharge the water into the river.

DAVE HARMON: The town supervisor. How much weight is the EPA going to give to these public comments that they're going to receive?

MR. ADLER: Each criteria is to be used in different ways. Public comments rate very high, believe it or not, it was listed last, it rates very high, it does list your comments.

Again, we have to provide protection to human health and the Black River environment, and we also have to meet safe state and federal regulations for the clean up of this site.

GREG ASBURY: I have two questions relating to public health. The first is directed toward the bulletin. Could you comment briefly on your concerns and the

significance of the pesticides found in the soils if the cap were to be disturbed? You haven't heard any discussions of those pesticides and I was just wondering if you could elaborate a little bit first on the significance and then I have a follow up on public health after that.

MR. ADLER: On the risk aspect in the -- the investigation we looked at potential (unintelligible) or to the levels of pesticides found in the soil where we excavate into the land soil. The risks calculated for those pesticides I believe were on the order of one in 100 million or one in a billion excess cancer risk caused by those, the pesticides themselves, that's for someone coming in contact with the soil and obsorbing it through their skin. There is a chance that if the cap was breached, ground water could -- rain could infiltrate through the pesticide and slowly move the pesticides into the ground water system and the pesticides could move towards the Black River in environmental and in long term viable

accumulation hazard into the organization in that environment.

GREG ASBURY: My second question has to do with the comparison or trade off of public health and safety issues and threats from building the remedy, actual construction and the possible loss of life or limb in the construction of the remedy compared to public health benefits of having the remedy in place.

I had -- and I ask the question because like Phil I came from a large project on the other side of the state where in the construction of this project numerous individuals have lost their lives. So specifically what do you see as the likelihood or chance or something, or what number of people might lose their life or become seriously injured from building the remedy as opposed to compared to the number of lives or excess cancer incidents that might be mitigate from having the remedy in place?

MR. ADLER: Approximately one chance in 100. I don't have the number in there on that

but there would be injuries and deaths.

MR. SMITH: I'm just guessing the numbers are for, I think it's one in 100.

GREG ASBURY: So I guess the final question, there's a chance that just on a pure public health and risk basis that building the remedy may have any public health cost benefits once it's constructed as proposed?

MR. ADLER: Over the short term or the long term is the --

GREG ASBURY: That's the death, you die short term, you die long term, but that was my question.

MR. ADLER: You know the long term risks are estimates. The best estimate we have now. So in order of magnitude, which you'll see one in a thousand versus one in a hundred are almost the same in comparison and also you also have to protect the environment.

STEVE: I've been living in the township for five years and yet now you're going to be blaming me?

MS. ANDREW: I'm a lawyer in EPA. No one is assessing blame --

STEVE: Well, if someone hasn't been -- been blaming anyone, how can we maybe save a lot of the time if we take a show of hands. None of us really can afford this bill that you're going to assess on us.

I find it interesting that if we try to turn the other side and say actually DNR should accept some of the responsibility and go back to the State of Wisconsin saying we made a mistake and we're supposed to help you and protect you from some of these things, and yet you're going to try to put some of the 5 million dollar bill on the citizens of the township and which is kind of unfair.

During your slide show you said that one of the ways of assessing who's responsible, first by seeing if they can afford it, and then if you can't you have to take them to court, that way as the townspeople we lose on that point, we hire our own lawyers, the state has their lawyers, the EPA has their lawyers, and we as taxpayers or the township, we're paying for all the lawyers.

Voice: I don't hear a question.

STEVE: The bottom line, who are you trying to protect? We're having to pay for the bill no matter how hard we try, the more the township people have to pay, and so you want us to roll over and play dead because all we hear now is rhetoric and you have all the toys and we're gonna have to pay the bill.

Voice: I don't hear a question yet.

STEVE: Who are you trying to protect?

VOICE: Trying to protect human health and the environment, and federal laws are set up in such a way that who generated the (unintelligible) on the property are liable for the cleanup, and again if they are unwilling or unable to pay for such a clean-up.

What the Superfund fund has been set up to pay the cleanup of that site, and in order to keep the Superfund fund viable and not have it run out over the years, if there are people that can't afford to pay for a remedy or can't be ordered to pay for or perform the remedy, then they shall do so as to replenish the funds, that the intent of

Congress to try to get the 1000 or more sites in the nation cleaned up as expeditiously as possible, and this is an uncontroverted fact.

I myself live if a county in Illinois that has a superfund site. So I'll be facing the same thing in April, which I plan to attend. I'll be asking the same questions as those who live in the same county, how can we keep the costs down and the cleanup at particular landfill. Just for the public record that was a DNR attorney.

SANDY: I represent myself. My question, I figure I only have comments really about 5GW. So I'll move into 6GW where we -- I move on to 6GW where we talk about using the waste as part of asphalt. And maybe you can answer my questions. If we bring the soils up and plan to use them in asphalt I see in the report you talk about that there is a facility for preparing asphalt using contaminated soils a few miles south of the Town of Onalaska, that was in your --

MR. ADLER: Correct.

SANDY: --feasibility study. My question

is will we sell those soils to a company that will use them for a highway, as Mark can tell you, or they use the bottom of the lake to build a highway, if we would use that asphalt or use that soil to make asphalt for the new highway. Can we get some of our costs back to cover the cost of the clean up that way? What do you do with the soils, do you sell or pay to take them away?

MR. ADLER: That would be up to the contractor who is performing the repairs in the town which is a responsible part in performing the remedy. It is very likely it could be.

SANDY: Do you know what's been done in the past?

MR. ADLER: Not personally.

MR. SMITH: Kevin, the cost that's in there was a direct quote from the people that do the asphalting so it included the net benefit to them of having that soil in their asphalt.

SANDY: So we have to pay 3.7 million to take our soil away and make a highway out of

it?

MR. ADLER: That includes the ground extraction treatment system as well.

MR. SMITH: It's actually very small percent of each batch to make -- would be the soil, and so you have take out for the federal government you wouldn't have too many, so yeah, it's not big net benefit, it just takes away the soil.

SANDY: So really that isn't an alternative for us?

MR. ADLER: It's not as viable alternative treatment of the waste. We felt to excavate the soil and treat it and biologically treat the area southwest of the landfill would be a better way.

MS. PASTOR: Gentleman way in the back that's waving.

RUSSELL BRINGE: I'm a dairyman. I think they're saying here, if I understand, the contaminated soil you're worried about people coming in contact with, is that right?

MR. ADLER: The contaminated soil is outside the landfill. We're more worried

about having the chemicals migrating through the ground water rather then people coming in contact with it because there's about 12, 15 feet below the surface.

RUSSELL BRINGE: I thought one of the reasons we're putting a cap on --

MR. ADLER: The cap goes over the -- the landfill.

RUSSELL BRINGE: Well, my point and question then, and I can see many that this crowd has this evening, would be if we would remove that product and put it for example in the asphalt, are we not contaminating something else?

MR. ADLER: Well, the asphalt contains like chemicals in the mixture.

RUSSELL BRINGE: Shouldn't -- maybe the question also should be then perhaps we shouldn't be applying asphalt?

MR. ADLER: That's why we are recommending that we do bio remediation at the site.

RUSSELL BRINGE: I can understand that, but if we get back to the point when the human

hazard the thing that I'm concern with and again want to question is the intent of Congress in creating the Superfunds.

As I understood it it was to address critical need where imminent human disaster is and if this is the most critical things at the early stage at the Superfund action to be looking at perhaps Congress is misled and need to put remedial legislation, and again I would question and you should probably answer why we should not be addressing Congress to change the funding of this work, rather, from specific individuals to the public as a whole.

In other words it's not the members of the town or the public both. In the air of the departments and in setting past relations is that not a public aspect both State of Wisconsin or the population of the United States rather then specific individuals, and I know you have to work within the existing law, but the question becomes it appears to me that this is not that critical an issue that I was lead to believe that Congress was addressing as a Superfund.

MS. ANDREWS: Again as Kevin has repeated a number of times we are abiding by the standards that are currently set up in order to protect human health and the environment and meet the standard and roles that are set up by the state and the federal government.

RUSSELL BRINGE: Is this that critical, is it on one of the top as far as critical action?

MS. ANDREWS: Well, there are standards that are not met, and the law is that we meet those standards. In regard to your questions as to the way Congress set up the superfund lay, this is the way it is set up. That was another option, but they chose to set it up as they did with the responsible parties meeting the cost of the cleanup.

RUSSELL BRINGE: Do you know that was correct, that is, do you have an opinion?

MS. ANDREWS: We have representatives who make our laws, so that's a position the Congress took and they are trying to represent the will of the people, and that's all I can say. You know that's a matter that

you need to address with your congressmen if you feel that -- that this is not the way you want it to be.

RUSSELL BRINGE: Question for the firm who conducted the study. Do you have a calculation for the amount of pollutants that will be put into the environment as a result of the energy spent on this project over the 30 years, I assume your pumps will be operated for, would that take into account things like that and greatest calculations on the risk of the workers? Could you tell me how many pounds of contamination were put into the environment?

MR. SMITH: From the --

RUSSELL BRINGE: From the remedial action?

MR. SMITH: I don't know what that would be in terms of like the contaminants, but the area to generate leaks.

RUSSELL BRINGE: You're saying that would be insignificant?

MR. SMITH: I don't know offhand that would -- would have to be a whole other

assessment.

RUSSELL BRINGE: Should we not know that?

MR. SMITH: I imagine if -- if we thought it was a possibility of being this percent of what would be occurring, otherwise then it would be a worthy calculation. Offhand my personal opinion is I doubt it, but I'm not going to spout off and tell you, no, it is insignificant.

RUSSELL BRINGE: If I may follow a couple more questions. Currently the plume of material is going into the surface water, that is what happens to these volatile compounds, correct?

MR. ADLER: And also metals that maybe dissolved --

RUSSELL BRINGE: And I assume nature is dispersing them in the same method you would be doing in the mechanical process?

MR. ADLER: But -- correct, but the mechanics into the dispersement in the atmosphere and the pesticide, the non voluntary organic would distort into the atmosphere could potentially be harmful

by accumulation of the aquatic life.

RUSSEL BRINGE: Do you find non volatile materials transposing in solids moving in that plume?

MR. ADLER: Volatile organic and inorganic, you find metal such as barium, lead, and arsenic, in the ground water that is moving out of the landfill, find larger chain hydrocarbons that are not volatile that are moving from the solid waste down at the landfill.

BRIAN TIPPETS: I have a real brief simple question. Is it legal for the town to implement the no action alternative, and I'd like to follow it up.

MS. ANDREW: I think we have mentioned before that federal and state standards exceed the standards that we've established under the Superfund law. So on that basis on the standards that have been established we would not be meeting or protecting human health, helping the environment, if we went with the no action remedy.

BRIAN TIPPET: My follow-up. Can

variances or exceptions be made for existing laws so the no action alternative could be implemented, if it's thought that to be the best alternative?

MS. ANDREWS: Well, again if the standards are being exceeded, unless there is some situation where it's not practicable to do the work, then something like constitutional controls might be the only way to go, but if where you have a practicable remedy that you can present, such as has been presented here today, and in a proposed plan, then that's not the situation.

BRIAN TIPPET: A question for Kevin Adler. Follow-up from the dairy farmer. I think he had a good point, and a question, I'm not sure if it was followed up like I think he was leading, and that is in the evaluation of the alternatives, the pollution from the trucks, the exhausts, was that part of the evaluation of and risk assessments?

MR. ADLER: Those were not evaluated.

MR. SMITH: They were a short term impact on the surrounding residents but in

terms of the exhaust to the atmosphere, no, we don't calculate the pounds of those. We could get into numerous endless standards if we want.

MS. PASTOR: The lady in the coat.

VIRGINIA MORRISON: I think -- I'm with the understanding that the water treatment will be going through a filtering process, is that a charcoal -- activated charcoal, and is that filter, and where will the contaminants be put after you've taken them out of the filter, if it's going into another hazardous waste dump or --

MR. ADLER: The filtration mentioned is a sand filter to try to remove iron which has precipitated. During the action of the aerating the water we change the oxidation state in the time to ferrous to ferric and the ferric is insoluble and therefore precipitates.

The sand filter would remove the iron before you discharge the water to the Black River, to meet water volume discharge standards that iron is not expected to be a

hazardous waste, but it will be put in a suitable landfill for the sludge that is produced off that sand filter. It would have to be tested before the landfill -- before we do put it into a suitable disposal.

PATRICIA SMITH: In follow-up of a question, you're talking about filtering out iron?

MR. ADLER: Iron naturally occurring the water -- ground water.

PATRICIA SMITH: It certainly does. We have been --

MR. ADLER: But to discharge the water we need to meet surface water criteria which calls for a certain amount of the iron to be in that water, and to remove the water that's coming from it is beneath the landfill in that area and discharge as it is we would exceed the discharge standard. Therefore, we have to remove the iron that we find in the water that we pump out to treat the organic chemical.

PATRICIA SMITH: Second follow-up question. You were very, very specific what-- what would happen if people came in contact

with -- on a once a week basis with soil that would be treated in this process?

MR. ADLER: The soils in the landfill itself, not the soils that we want to treat with the bio remediation. The soils that are in the landfill, if the cap were to be aerated or for some reason somebody digging in there, building near the site, and came in contact or disposed of those soils so that metals would be available for people to come in contact, the scenario was over a five year period if a person was to come in contact once a week, the risk would be on the order of 1 in 10 million or 1 in 100 million excess cancer risk created by the soil.

PATRICIA SMITH: Excuse me, my question is you've made all of these very detailed things about soil contact and you have very carefully and consistently avoided telling us what is our hazard by exposure by the air, your biodegrade after -- whatever it is, with the air filtration going through here. Obviously, this is being released into the air that we breathe.

MR. ADLER: Right now we have been doing monitoring onsite during the field activity and we cannot see the degree of the chemicals in the soil.

PATRICIA SMITH: Once you've started your filtering.

MR. ADLER: Okay. We would monitor that process as well, and if air levels increased above standards that were unacceptable it would have to stop and move that process to lower those.

PATRICIA SMITH: At whose expense?

MR. ADLER: The expense of the parties that are implementing the remedy we have for the safety of the surrounding --

PATRICIA SMITH: Once again you are inflicting legalities on us without any liability to yourselves, and we get to pick up the tab at a no end cost to us as taxpayers, is that --

MR. ADLER: I also want to point out the bioremediation can occur for years.

MIKE DEGAN: I think certain aspects of this mediation project are not so clear to the

group, judging from some of the questions that are being asked on that side of the room. There are a number of actions that are to be implemented at the site.

I think what these folks are getting at may be actual treatment of the ground water itself, the pump and treat system. If I understand the project correctly, ground water will be pumped from the aquifer and treated above grade. Is that to be done with an air stripping?

MR. ADLER: The air stripping applications would be monitored and it would be -- not be allowed to exceed state -- or present an unacceptable risk.

MIKE DEGAN: Okay. I think that's what-- I think that's what these questions are driving at. This mechanism that is to be used pumps ground water from below grade, treats it above grade, and removes the contaminants from the ground water. I think it's only fair to explain to them what the fate of those contaminants is.

MR. ADLER: The fate of the contaminants

is they are released to the atmosphere daily to the safe levels, and eventually they get degraded by photo-oxidation in the light with the degraded molecules, ultraviolet lights and sunlight from the various organic chemicals.

STAN HOUSER: Does that photo-whatever in the atmosphere, does that have any effect on the ozone layer?

MR. ADLER: No, the ozone layer is more affected by fluorocarbons.

VERN HIGGENBURT: My question is, what's the total expected cost of the project, the total cost?

MR. ADLER: Total expected cost of the project is estimated at approximately six million dollars, and that includes a capital cost to construct the -- the water treatment system, the extraction wells and the cost per year to run the extractions and the treatment system and sample the monitoring wells and analyze for the organic contaminants and the plume.

VERN HIGGENBURT: I see. Let's say that the money is spent, the project is done and

the guidelines change, then where does the responsibility fall again? Can this become a revolving thing that goes on and on and on?

MR. ADLER: Can you please repeat the question?

VERN HIGGENBURT: Well, I didn't understand it either. Anyhow, let's say that the money is spent and the project as proposed is completed and the guidelines change, as obviously they have changed since eight years ago when the first cap was put into place.

At the time they did it and didn't realize that frost would destroy the cap, there may be other things that may destroy that cap or may -- that cause a problem that will make what has been done not sufficient to meet the guidelines five years from now or ten years from now. The six million dollars that has been spent then has to be re-spent and becomes revolving. My question, is that possible?

MS. WYMORE: The answer to that question is it would require a change of the law on the

part of Congress for new standards to be applied if a remedial action is undertaken, a consent order or consent decree signed with the government and the responsible parties if that consent decree is lived up to, what is agreed to be done under that consent decree and accomplished, then the responsible parties have satisfied their obligation under the existing law. It would only be if the law changes, that the situation might change.

VERN HIGGENBURT: I think we know the guidelines are going to get more stringent as time goes, and the other thing to consider is this the right time? Would it be -- would we be better off to maybe wait a period of time until maybe more experience -- there's more experience with these problems to know what the guidelines might be for the future?

MR. ADLER: The occurring emphasis is on removing the ground water contaminants as soon as possible so we do not see a spreading of those contaminants.

MS. SCHMIDT: I guess that I would note that the longer you wait to clean up a site

inevitably the more expensive it's going to be, because you're for the most part dispursing the plume and the contaminants at that time.

The Superfund law was intended to try to expedite remediation and we have, due to the proven technology that we're trying to use at the site. The other thing I think I just want to make sure that it was understood and make sure I understood Linda's answer, was that if state standards were to change, then I think what she was saying is that the Superfund law itself would have to change, not if there were new ground water standards enacted after the consent order was signed and remediation were to take place.

As far as the Superfund law is concerned you would have met your obligation. Its only if the Superfund law were to say, at all Superfund sites you have to go back and now meet new standards. So it isn't just if a ground water standard were to change, it's the whole Superfund law itself would have to change.

ROY HARSCH: The Town of Onalaska. Maybe I'm not hearing it right, but does this mean if we sign on or enter into a settlement decree with EPA of Wisconsin I'm going to get a full release for all contaminants? I think you worded your settlement decree you're answering these questions --

MS. ANDREWS: We would have certain -- certain matters that were -- that the consent decree covered, and to the degree those were met, that would -- the consent decree terms would be met. If there are additional standards that are or additional problems that result that were not covered in that consent decree, then that would be something that would have to be --

ROY HARSCH: If, for example, if the State of Wisconsin were to establish a drinking water standard for parameter that was not covered under this remedy and found that -- that drinking water standard was being violated at that landfill, I have no release, you won't -- your release wouldn't cover that additional standard for that new parameter?

MS. ANDREWS: You know, I'm not certain about that may be one of the issues that are not settled at this time. It's one of the policies that's being discussed, is that what you're referring to?

ROY HARSCH: I have been negotiating these releases for a long period of time, my firm has, and I don't believe it applies to parameters other than what we're talking about.

MS. ANDREWS: I think again --

ROY HARSCH: I guess I just think that answer that has been given was a little broader than you're willing to give me in a release.

MS. ANDREWS: I think you're speaking about frozen aquifers which is an issue that is being discussed and I don't know what the -- what the final solution on that is or if that's been reached yet.

STAN HOUSER: What is the depth of that ground water aquifer?

MR. ADLER: About 15 feet - 20 feet below the surface.

STAN HOUSER: Okay. How far does the aquifer extend from the surface?

MR. ADLER: About 75 feet.

VOICE: About 135 feet, for the consolidated materials are about 115 feet, the thickness on the unconsolidated deposits of sand are about 115 feet thick, so it is 10 to 20 feet is the understanding above the table, and then from the water table to bed rock, 115 feet. Normally when you drill a new well down you drill through the bed rock.

VOICE: Not always. There's many many wells that especially that area, just a typical sand boil associated with --

STAN HOUSER: Aren't normal new wells drilled through the bed rock?

VOICE: No.

GREG ASBURY: I'm with WARZYN. Have there been projects like this one elsewhere in Region 5 or in other areas of the country that have gone through RI/FS and determine the site conditions and site risks don't warrant any caps or any action, or where action like

N500 or 140 simply apply, because no action is being -- is being taken, and if so how were those sites and those Records of Decisions going to be different than the one being proposed and contemplated for the Town of Onalaska.

MS. BANGART: I'll -- I'll answer. I can speak for the region. I'm also with the DNR, I work down in Madison with the Superfund program in the State of Wisconsin. We don't have any no action Records of Decision for any of our Superfund sites. We don't have a -- a lot of Records of Decision, but none of them are no action Records of Decision.

We have either in -- in some instances require a chemical fixation and close off a particular area or apply the NR500 cap requirements because the landfill was similar to this one. The old cap just didn't work as expected or was not maintained as the department requires, and an upgrade was needed, or we have pursued pump and treat systems for ground water restoration. So

speaking from state experience, these are the -- these are typical of the activities that we have pursued at Superfund sites and at some non superfund sites as well.

DAN DUNN: I'm here also on the behalf of the Town. My question was, I believe there was earlier a comment by Kevin that the position of the EPA the institutional remedies are unreliable in a situation like this.

I am -- I guess I'm unsure what the unreliable is of a situation where the land under which the contaminated drinking water is located is acquired by a township or perhaps acquired by township and donated to the state or the federal government, how would that be unreliable in preventing the consumption of that ground water?

MR. ADLER: Well, all I can say right now is the agency policy that institutional controls are reliable over the short term, zero to five years or so, but over the long term they have not proved successful and therefore is the aim of the agency to attempt to cleanup ground water aquifer where

practicable or where able to do so.

DAN DUNN: So if -- you're saying the EPA assigns -- people can still be digging wells out there and drinking the water. There's a probability of that?

MR. ADLER: If we own the landfill probably we're talking about the area where the contaminant is reached now --

DAN DUNN: In the area of -- any area with which there's likelihood that there would be contaminant in ground water?

MR. ADLER: That's what we're trying to do is prevent this from spreading into an area and clean it up right now.

MS. SCHMIDT: Can I just make a point too, and I know this is going to sound kind of bureaucratic, but it's the real estate that we're dealing with. We are in the Superfund program.

The Superfund program has certain expectations and certain goals that Congress set. Two of those program's expectations which are very broadly publicized, are first that ground water will be returned to its best

uses within the time frame, that is reasonable or practicable, that is an expectation that Congress put on the Superfund program, it didn't say you can just buy all the land and contaminant ground about and let it go.

The Congress wants to see (unintelligible) the regulations. The other thing I want to note is, as have been stated, that institutional controls will be used to mitigate short term impacts or to supplement engineering controls, they will not serve as a sole remedy unless active response measures are impracticable, and those are two things that we have to consider when we are in a Superfund program, and this site is a Superfund site, so we have to consider these things, that's what congress mandates.

GARY SHUTTLE: Town of Onalaska. I have a couple questions, I guess. Number one is how many parties are responsible that are involved?

Number two, what happens then in 30 years if we were to leave this as is and do nothing, I hear a lot of that tonight, which

seems to be some of the opinions of people that maybe this isn't the right time to do it, maybe we can wait, and I have a real concern, I guess, as to if we did nothing what would happen in 30 years to this area?

MS. ANDREWS: We have in our general notice letter that we sent out notifying parties they were responsible for that, and we had the beginning the process of -- of negotiating with the parties and like to meet with them and get them organized. We noticed four parties, the town --

MS. PASTOR: In other words you sent letters?

MS. ANDREWS: Yes, we sent letters to these folks in the town.

MARK OTTER: Metallics and the Town, and your second question with regard to 30 years, again, we don't have that option under the Superfund program, to wait 30 years. We have standards that must be met and these -- this is the plan that has been proposed. Can you give me a worst case scenario, if you know?

MS. ANDREWS: We have given you the risk

figure throughout with regard to specific questions that have been asked and that those are the methodology that we use to determine the risk that the public is -- is exposed to under these circumstances. These have been developed under the Superfund law and we're here to see that the Superfund law is implemented, and the Superfund law doesn't allow us to wait 30 years to see.

MARK OTTER: But we assume that 30 years this condition is not gone, not better, and in most cases will get worse, would that be a correct statement or assumption?

MR. ADLER: Correct assumption, because the ground water plume will be spreading over a larger area. It would be discharging chemicals into the water that are potentially bio-accumulating of organisms to (unintellibible) fish and they contain the -- or ducks, whatever.

DON JOHNSON: Is there a document amount of contaminant on record somewhere that -- as to how many gallons or tons or whatever, is there a document that has the number?

MR. ADLER: It's landfill records we're to use -- try to estimate how much naphtha solvents or other waste were placed into the landfill, I think we estimate about 320,000 gallons of naphtha solvents were brought to the landfill. Not all were dumped, some was burned.

DON JOHNSON: That's just to a certain period of time then?

MR. ADLER: The time the landfill operated until about 1975 when some of the parties began recycling the waste instead of dumping.

DON JOHNSON: Then you based a lot of your study upon the figures then?

MR. ADLER: Study was based on samples that we took off the landfill in a surrounding area also and we -- what we used old landfill records for is to try to determine up front what we might be running into as far as types of chemicals we might find out there.

DON JOHNSON: So with that number, if that were a false number, let's say it was double, would there be more concern there?

MR. ADLER: Not necessarily. We're basing our concerns on the amount of contaminants that we see in the ground water right now and the soil right now.

LINDA CARLSON: We have asked a question at your last public hearing regarding who would assume the costs? well, assuming the townspeople are going to be taxed to pay for their share of the clean up, does an annexation relieve all these people from any costs, anybody that has been annexed from the time, say to the city or the village or whatever, does that say you're free, you don't pay nothing?

MS. ANDREWS: I'm not aware of any case law on that. That's -- that's not to say that case law won't develop on that or as more municipal landfills are cleaned up the same thing could happen and Congress could see there's a problem and pass a statute or whatever on it. I'm not aware of any case law one way or the other on that.

LINDA CARLSON: So they are not off the hook?

MARK SCHULTZ: The State of Wisconsin has concurred the one case, the municipal landfill. I wonder, what does that mean, the state has concurred, and second, is that consistent with the natural resource report policy on public involvement relative to decision making after the department?

MS. SCHMIDT: The state has concurred with EPA on the preferred remedy that we're looking at now. This public comment and hearing is what -- is what we're trying to do. We are just one party to this agreement, in terms of what the preferred and selected remedy will be.

When I say that the state has concurred, what I mean is that the state has looked at the same information you've looked at and said that we believe that the preferred remedy selected by the EPA and the state will meet state standards and will be protecting with human health and the environment and not willing to look at what the public comment is.

MARK SCHULTZ: Well, the reason I ask the question is because normally public

involvement is done before you make a decision, and is that consistent with the natural resource report policy on the public involvement?

MS. BANGART: Our decision is not final at this time. I'll point out again, I'm Susan Bangart.

MARK SCHULTZ: And you indicated it was--

MS. BANGART: We have the condition with which is the preferred remedy.

MARK SCHULTZ: What does that mean?

MS. BANGART: This is what we think the best remedy for the site, but the public, you tell us what your comments are. You present your concerns to us and then EPA and the department, based on that public comment, plus the other evaluations and criteria that go into the Superfund process will make the final decision.

MARK SCHULTZ: So that --

MS. BANGART: It is the formal process the department goes through. EPA will provide us with their draft Records of Decision, which is the document that memorialize the

selected remedy for the site, and the department at that time issues either a letter of concurrence or letters of nonconcurrence on that Record of Decision and that selected remedy. So at this point and time we have not made a final decision.

MARK SCHULTZ: Okay. So that you maybe haven't made a final decision but you've concurred that concurrence is not only the stand -- standard for the technical matters of that, but also the matters of constitutional and public policy standpoints also?

MS. BANGART: A number of the people with the department have taken a look at the -- the -- the various alternatives that have been presented for their particular site. What we're doing now is getting your public input to whether or not that this particular alternative is acceptable to the community.

MARK SCHULTZ: And I ask the question, what was the area of standard remedies on these alternatives and what is area staff's recommendations on these alternatives?

MS. BANGART: The department's position on this, which includes the area staff and the district staff, is that we concur with the preferred alternative.

I'm citing what the department's opinion is and the department being all offices affected by this -- this particular site.

MS. PASTOR: Let's just take a -- we haven't even done the comments yet so that's-- we're not going anywhere, but I'm just trying to move it along.

DAVE HARTON: The town supervisor. I had a question about the figure that was given to the gentlemen down there, six million dollar figure over 30 years. Isn't this 5GW is three million, six and 3LF is one million, five for a total five million, one and the over the next 30 years would be about another four million five for a total about 10 million, wouldn't that be closer to the right figure?

MR. ADLER: You're talking about of course $150,000 which would be the total 4.5 million sum, to yield 30 years of

$150,000 a year, that's how our (unintelligible) work out and that adds approximately the excess funds added to capital costs to yield approximate value of the proposed remedy of approximately six million dollars.

DAVE HARTER: The estimate, how much money do you need to build the remedy and how much do you have to have on hand right now to pay the area costs over 30 years?

MR. ADLER: It is like paying off a mortgage in reverse over 30 years. What we're trying to pay down a certain sum of how much you pay per year and -- and it's an engineering calculation.

For example, if we had a million dollars out of that capital costs in the bank at today's interest rates, it would be between 70 and 80 thousand dollars a year in interest. You use that portion of interest to pay for the yearly cost of running machinery, then a small amount of that one million dollars is to pay additional costs and reducing that million dollars over several years. You're also

getting interest on that.

So it is not a strict calculation of $150,000 for 30 years using 4.5 million, it is how much can you put in the bank now to yield principal and interest to pay the yearly cost for the yields.

SANDY HYTEL: My questions are regarding the bioremediation, the 5GW. I reviewed the documents you sent me. I requested it at the last meeting about a site in Wausau. You sent them to me because we agreed that the -- the contamination of the Wausau site is similar to our site?

MR. ADLER: Some of them are similar.

SANDY HYTEL: So that bioremediation was not selected as alternative there because it was uncertain -- found to be uncertain and not well demonstrated for the contaminants found at the site and that is of -- as of September 29th, 1989, so last September?

It's not considered to be adequately developed for implementation for this. Now, you've called it technology merging. I've talked to many people across the country, it's

called border line experimental, untested, unreliable, I wanted to know, does the Superfund have a special Superfund why they will take a site like ours, call it a Superfund site and pay the whole ball of wax to test this type of technology for use elsewhere, because we really can't afford to put six million dollars of our money into -- a into an experimental project. Something that was 150 miles east of here was considered not adequately developed or unreliable.

MR. ADLER: Okay. There's a number of questions you raised, and to touch upon that, Wausau had many chemicals that were chlorinated hydrocarbons and on a -- there's the chlorinated hydrocarbons come from pesticides which are regularly biodegradable.

These are components of the group and the (unintelligible) is let into the atmosphere as naturally degraded chlorinated hydrocarbons are very hard to degrade using bacteria. Therefore we feel that bioremediation will stand a much better chance of working at the Onalaska site than at Wausau than for

different remedies is chosen to be different at Wausau.

SANDY HYTEL: But it is experimental, it's border line you said, emerging, you know there are no other sites in Region 5 where you've used this technology and can demonstrate that it's currently in place and working in Wisconsin.

MR. ADLER: We have several sites that-- that are non -- non-Superfund -- let me get away from the acronyms. Many non-Superfund sites where bioremediation is either completed and according to the company successful. We haven't gotten the investigation results back on that one or ongoing --

SANDY HYTEL: Are the contaminants similar to or the same as when we were talking (unintelligible) I hope it is not, but it is something that is more easily biodegradable than the -- than the -- some of the other contaminants in the Wausau case.

MR. ADLER: In the other case where the bio remediation has been completed I'm not aware of all the circumstances regarding the

specific contaminants. It was over in the southeast district part of the state, because it wasn't a Superfund site and I hadn't gotten any details on it.

We are looking at bioremediation for-- where we're actually implementing a treatable study at another Superfund site on PCB's, they are sometimes difficult to degrade and we're currently working on that with the -- with the potentially responsible parties, and we will be looking at this, and I think treatability studies were recently completed on increases of contaminants and increase of contaminated site, that's also a superfund site and we'll likely be looking at that to remedial-- preferred remedial alternatives of that as well.

In addition the state is looking around at ways to treat with the (unintelligible) is very simply we are looking at bioremediation as a technique that seems to be working well to degrade and remediate contamination sites where -- where the pump and treat system hasn't worked

completely to restore the aquifer or the ground water in that particular area. So we are pursuing that as a technology in the state.

I, again, I can't speak for what is being done regionally but I'm sure that -- that some of the studies that we relied on for the PCB bio remediation are national type studies and some of the bioremediation studies have been done -- a lot of the information is -- has been produced out of Minnesota, which is in Region 5 so it's -- it's something that we're going to see more of.

MR. SMITH: If I just can add to the proposition of the hydrocarbons, the (unintelligible) is being done, and I think it is somewhat beyond the call merging. It's being done almost regularly so it's not that that experimental.

SANDY HYTEL: I just couldn't find anyone who would say, yeah, that really works, and I made a lot of phone calls. I found one that said, why yeah, it works. And I said send any

documentation, you know. I called him three times, he can't find it, but there's more people out there that say it doesn't work.

MR. SMITH: You have to be very specific on which hydrocarbon you're speaking.

MR. ADLER: In essence it is chlorinated VOCE. It is very recent literature that it's proven effective but that's only last year on the Arrow matter, the hydrocarbons, the gasoline spills and the naphthas has been shown and those others he was mentioning other hydrocarbons the different very specific type.

SANDY HYTEL: So if you have to guess on percent of effectiveness, what would you give us for a percent of effectiveness?

MR. ADLER: We are talking 95 percent, we're pretty confident. And again the cost of the bioremediation isn't 6 million it's a 25 percent approximately -- of cost of the entire remedy.

MS. PASTOR: I really want to get to the comment period. How many questions -- or could we move into the comment period or come

back to questions or we can keep going with questions.

PHIL ULRY: Town of Onalaska. I just have one thing to say, one question and that is, if this naphtha was all burned at the dump we wouldn't have a problem today, is that right?

MR. ADLER: Naphtha is one of the problems that we see out there. We also see a problem in the ground water. Chlorinated hydrocarbons were brought to the sites and those were found the in the ground water as well.

PHIL ULRY: Who prohibited the burning at dump sites?

MR. SMITH: One thing to add before that, we don't even know -- once they dump and then the literature, we know what percent they burned and what percent went down.

PHIL ULRY: It was legal to the -- at that time in dump sites?

MR. SMITH: I don't know the answer.

MS. SCHMIDT: I would assume so. I mean open burning was a common practice back then.

MR. ADLER: According to site literature there was complaint of the oily spoke that emanated from the landfill and it led the DNR to quit burning at the site.

DAVE HARDER: Two quick questions. Of the four responsible parties, what percent of the township, and of the other three parties are unable or unwilling to pay? Does the EPA pick up that portion of it, or does that also get taxed onto the tax payers?

MR. ADLER: Right now we don't have an allocation of percent responsibility. That would be for them to decide amongst themselves. Allocate the relative response costs if they are unwilling, unable to finance the remedy the EPA will take over, go ahead, Superfund the entire remedy, and again cleaning up and then through the course try to recover costs from the responsible parties.

DAVE HARTER: You haven't answered the question though. If any or all of those other three parties can't pay, does the EPA pick up those charges or does it get sent back

to the town?

MR. ADLER: The EPA and the state would pay total charges up front and recover what it can through the court system. It's not necessarily what we can recover all the charges, but the Superfund law says that one responsible party is jointly liable for the entire clean up costs at the landfill or Superfund site and that's how Congress put the law together. You have anything to elaborate on?

MS. ANDREWS: That's correct. As a policy matter EPA does not hold one party responsible. Under the restrictions and several liability doctrine there's -- Kevin said, if the parties chose not to enter into a settlement or if we chose not to order them to do that, but chose to do the cleanup ourselves, if none of these other two options work out then we would come back and try to recover from all those parties through the court action.

MS. SCHMIDT: Can I just make sure -- I guess I kind of hear it maybe a different

question, that was if the other responsible parties don't want to settle and the Town wants to settle, would EPA just settle with the Town for certain portions of the cost, is that what it is or did they answer it?

DAVE HARTER: They are correct.

MS. PASTOR: We could be here all night.

SUE STRAPS: A quick follow-up question. I live in the Town of Onalaska. In other cases where the EPA has gone ahead and started to do the clean up and pay for it, then gone back through the courts later to get a company or a municipality to pay up, have they succeeded in getting the companies or the municipality to pay through the courts? Has there been any case of that?

MS. ANDREWS: I don't know about that. I could -- I could check that for you.

SUE STRAPS: No, I'm just saying that someone said earlier that they have never succeeded, therefore, the Superfund has been always been the one that's paid.

MS. ANDREWS: I'd have to check that. The specific case where we have attempted to

recover.

STAN HOUSER: I've got a question, I guess. Say this thing goes the whole gambit and EPA takes the Town of Onalaska to court, the court awards or assesses a judgment against the town. According to state statutes, I believe the town would have to levy taxes on the townspeople to pay for this assessment by the court.

The town board as an agency or a governmental agency can't just put taxes on the people, the people of the township have to, at a town meeting, vote to approve a tax levy. What happens if the people refuse to approve a tax levy? How do you know the town board can't do the -- we can't collect the money, what next?

MS. ANDREWS: I don't know. I'd have to look into the case to see if there's any case for --

MR. ADLER: And in that step the EPA and the state would then pay for the remedy and it would be ongoing in the case and protection of the human health and environment.

MS. PASTOR: Are we not ready for comments?

DON JOHNSON: Are the contaminants from these responsible parties being handled properly now? Are they going in the right hole right now?

MR. ADLER: There are no contaminants going into the landfill.

DON JOHNSON: I don't know this landfill or the landfill down the road, what are they doing now, the same byproduct?

MR. ADLER: The byproduct, as I understand, became recyclable by the industry right now.

DON JOHNSON: That's good.

MIKE DEGAN: I just want to mention that those factories are operating in compliance with state law.

MS. PASTOR: Okay. Any more questions before anybody else leaves?

Comments? Okay. This, again, I want to explain the difference between comments and questions. You've asked the questions, now this is the time you just make a statement or a comment or your opinion or whatever, you are telling us how you feel. This is, again, still part of the public record.

We think we know how you feel, but we need to have it documented. If you don't feel like talking in front of the group do write it down, and your comments do matter and we do pay attention to them. So we want to encourage you to write to us or say that if someone is not here tonight or had to leave, please ask them to direct their comment to our office using the forms that we have given you, or you know, on a separate sheet of paper.

I realize it's late. This an important part of the meeting. So let's -- let's start with the first comment. I believe the Town of Onalaska has a comment. Please state your name and who you represent and if you need

to spell your name to the court reporter--

ROY HARSH: From the law firm of Gardner, Carton & Douglas and I am counsel for the Town of Onalaska. I've got a very short statement. With me tonight is Dan Dunn, who's the town's regular attorney; Carl Pedretti, who's the chairman of the town board, and the consultant that the Town has retained, Greg Asbury, specifically will present his comment, verbal comment on the proposed remedy.

Before we get to Carl and to Greg, I want to briefly say a few things. One is that, please submit your comments. We have got comment forms here, they are very important in the record. We have got stamps available if you want them, a roll of stamps here if you want to take them home, so there's no excuse for you not to fill out the comment sheet. Fill it in. Tom Eagen provided the stamps.

There's been a lot said tonight about EPA and by the state regarding what has to be done at the site and what is driving the decision. Mr. Asbury has advised me, and will be advising the Town that we disagree technically

with some of the proposed solutions as really being unwarranted, unneeded. We don't disagree in large part, we have with very little technical comment on the actual study that has been performed but, our disagreement lies on the conclusions, what remedy is being formed in response to what is being discovered here.

There are means by which U.S.EPA can make a decision to avoid applying the state standards, and say rather what is applicable and are relevant standard, what is applicable and has to be approprate, has to be relevant to the risk of EPA's authority to make that determination, likewise, EPA can come up with alternative compliance limits or CS, if it deems so for the site.

There is likewise, authority, because EPA has entered into a decision, made Records of Decision, entered into settlement negotiations, and have accepted constitutional control with monitoring for remediation of ground water, that was after a site cleanup because it was required.

We will be providing that in our written comment that, we intend to file it with the agency. With respect to those written comments at the last public meeting, I stood up here and indicated that there was some likelihood that we might be requesting an extention of the comment period. EPA had earlier said that if such a request were received they would consent to act favorably upon that for the reasons that Greg will explain later.

We need that additional time to prepare those written comments, so I will be formally asking for 30 days extension of the comment period. I'll ask it verbally now and I will provide it later in writing. We need that time period. We need that time period in part because there is a town -- for there is a town annual meeting on April 10th. On April 10th the town board will present to the townspeople a proposal to ask the townspeople to authorize, if needed, the town board to acquire the land under which the contaminated ground water is located so as to make more

reliable proposed constitutional controls.

That's one reason we'd like to see the comment period extended. But beyond that we just simply -- our technical representative just simply needs that time, and in fact, we have been pressed enough that it was today actually we disseminated a rough draft of Greg's outline of his testimony tonight because we simply haven't had time to get it together.

There have been four or five PRP's identified together today and listed by the government, those 4 PRP's were not responsible for putting the pesticides in the landfill that have been listed in the health study that was passed out tonight, and it's research from the pesticide are researched in two or three pages.

I was happy to have Kevin clear up what the degree of risk associated with those pesticides was, but we believe that there are other people responsible for sticking the pesticide in that landfill. We have -- verbally have passed that on to the -- to

the -- U.S. EPA represnetative and to the state. We would like state and U.S. EPA to look for who's responsible for pesticides and we'd like those people to in essence be invited to the party also by giving an RP (unintelligible). At this point I think Carl wants to give a few general comments and then we will turn it over to Greg and that's all.

CARL PEDRETTI: Thank you. My name is Carl, I live in the Town of Onalaska and probably I should give a little history on it. The landfill started -- it started back in probably '69 and hazardous waste licenses were issued out until 1975 by the DNR, closure plans were started in 1977, that was by order of the DNR that we should have it closed, and get it up to grade. I think we were supposed to have it closed in '79 but it took us until '80 to get up to grade.

The cap was put on in '81, and '82 when we got the cap all on, DNR approved this cap, and one of our representatives and also that area that you said doesn't have a good cap on was a (unintelligible) area. In other words

it was stumps and trees and old buildings and so forth and that was the reason that we put the main cap on that area.

Well the DNR told us that we did not have to put a clay cap on this area because it was no hazard, but in the meantime it was right in line with these barrels of naphtha. Probably when you were instructed to make studies you probably thought that this was part of the landfill or part of the landfill but was hazardous material, and I personally think that there's no threat to wells in that area or no health hazards and that the EPA and DNR should go with the less costly plan. We believe that the cap probably does have to be updated, but to what point I don't know at this point. Other then that I guess I don't have any more comments.

GREG ASBURY: WARZYN has been obtained by the town to review the RFS document and the proposed plan and offer them advice as to stating any technical questions we might have in the documents. I say that we have little to quivel over with regard to the RFS

documents. I believe there's a couple minor points that I will discuss later, some in substance of our concern really address the proposed remedy and not the technical study of the RFS.

My comments are divided into three basic areas, our alternatives, of analyzing and ground water monitoring, and the remedy selection with regard to alternatives as it would relate to the cover, there obviously are clear choices you have in front of you, upgrade the existing cover to our new technology, or repair the existing technology in place, upgrading the technology to a higher level of -- of cap would not seem to make a lot of sense. Any reduction of the infiltration you're to get to a bigger and better cap would be small compared to the -- the primary result of reduction of the contaminant released in our opinion this would be ground water moving through the soils that contained residue related to the presents of non-active liquids.

The additional costs of the cover

technology upgrades to a bigger and better cap would -- would not reduce the protectiveness of the cover by significantly lowering the risk due to frequent contact with the waste. By eliminating this you can limit direct contact with the waste which would be an area of concern as it would relate to public health.

It is our opinion that to control risk related to direct exposure or to the waste, repairing and maintaining the existing cover is a more cost-effective solution then a one to two million dollar multi-layer cover.

As it relates to ground water, alternatives involve contaminant. Contaminants don't make sense to us and as they do not to you and you, because of the high cost and the long term commitment to the maintaining and managing of the containment facility. In that case ground water would not achieve standards in a time frame of the RI/FS.

The treatment of the ground water it appears is not a risk management

consideration, because the risk from ground water can be (unintelligible) another alternative is combine the ground water and the source treatment from a risk management standpoint. It would be the cheapest means of control and managing risk.

Treatment of ground water, to my understanding has not been found to reduce any managing measure at the advisory on the receive on the remember band which intercepts the shallow ground water flow. Treatment it would appear wouldn't do much more then what nature is already doing as the ground water is being discharged to the river.

However, even if one were to choose to pump and treat ground water, and this is the part we quibbled with the RIF is the need for the clarification. It is a little unclear and did appear as though you're suggesting the ground water might be clarified, because it is extracted, the water would have a hundred parts. It's our opinion that a properly designed and constructed extraction well would not produce ground water on 100 parts per

million, if that is the basis for need and a size of the clarification. We suggest you look at zoning and the related cost effect remedy.

As it relates to monitoring, the costs for monitoring from our standpoint appear to be high as long as one assumes that in a few years, after the fifth year of monitoring, monitering costs can include only those parameter wells that have historically been associated with some contamination, or have been found in previous monitoring of ground water by incorporated legal and combine the monitoring which is the potential for the PCB health.

After five years the costs and scope of monitoring can and should be scaled back and should be, I think, considered by the agency in drafting the eventual Record of Decision, which is your alternate remedy.

With regard to the selection of remedy there is some confusion in this or in mine as to the basis of action. It's our understanding that RCRA and Superfund calls

for EPA to identify individuals that represent unacceptable and unmanageable risks and take action to bring those risks into an acceptable risk range. A multilayer cap is another matter in the way of reducing risk to direct contact than upgrading the existing cap technology.

Pumping and treating ground water often does not achieve the health base clean up level and if you will in the one, the primary goal the return ground reduces. That last phrase is direct quote from the study provided to the EPA office that relates to the ground water pumping and treatment and of Superfund sites.

Measures to reduce contamination appear not to be beneath risk, but the simple fact contamination is present, in fact, it could be possible that the risk to public health in constructing the remedies would be larger then the risk benefits to the public for having the remedies in place, thereby producing a potential negative cost benefit from the risk management standpoint.

In a study performed by Oak Ridge National Laboratories and response U.S. EPA of the reviews they conducted of the 50 Records of Decision, and the results of that study by Oak Ridge Lab was published in Volume 39, 12th issue, the Air and the Waste Management, December 1980, and their findings, and I quote, "our findings indicate that the majority of the decisions to remedy the Superfund sites were based on the existence of contamination per se and not the actual public health risk."

You should perhaps consider if this is number 51? We have basically examined the RI/FS document on violations, and have little to say or question about it, it will take us some more time now that -- now that we have the preferred remedy, which was faxed to us, I think, at the end of last week, to see how the RI/FS documents play into and support or don't support the EPA's preferred remedy.

It will take us some time to draft that and then give it to the town and their lawyers

to determine what if any of our comments they choose to pass along, and in order for that to be following the town's decision whether they are willing to perform that, which basically just can't be done in 30 days.

MS. PASTOR: Who's next? The gentleman in the back, state your name.

GARY BOOKNER: I believe that it is an error on the DNR and EPA that it ever happened in the first place. And my personal feeling is that either the State of Wisconsin is responsible for this and should pay the cost or the United States Government, one of the two.

CHARLES PIERCE: I concur with the -- with the recommendation of our town and I feel that they have done some study, if you give them a little more time to lengthen that out, and you'll understand that that's the right way to go. That's -- just leave it as it is. Just repair the cap, if you have to haul a little bit in where its eroded, I think that is going to handle it.

I'd also say that if the questions would

have been limited to one per person and moved along we would have a lot more people here making comments now when we're supposed to be making comments. I'm a little upset with that, and I'm also upset with not being able to hear everything that was said up in front. I didn't want to be rude and interrupt. It was very difficult for people here to hear what was going on up there because he wasn't--

MS. PASTOR: If you can't hear be rude, don't be shy, just give us little signal. We're sorry if you couldn't hear.

MIKE DAGEN: I'm speaking as a concerned citizen and no way do I intend my comment to be reflective of a position that I hold. I want to express my dismay with what I feel is a downfall of the Superfund program. It is my understanding that the guidelines of the program apparently do not allow for leaving the contaminants in place and letting the natural process remedy the contamination problem,. The program wants to clean up, if you will, the problem. As it is now the contaminants are isolated from human contact

with certain precautions could remain isolated, consequently the level of risk appears to be very low.

The proposed remedy calls for the action that, if effective, removes the contaminant from their isolated location and transfers them to the atmosphere or surface water, where they are far less isolated and are in fact put in a state where the humans and the environment will likely suffer greater exposure.

To me this appears to be a classic example of contaminant transfer. In addition your own report recognizes additional risk associated with the construction of the proposed remedial solutions, a risk, I might add that is greater than the existing risk if the contaminants remain where they are.

After this a six million dollar price tag, where my concerns are even greater, you spend huge dollars to essentially heighten the real risk in the name of the clean up of a small zone of contamination is the -- seems to

be the downfall of the Superfund program. It makes me question as to whether it was the true intent of this very powerful Superfund legislation.

MS. PASTOR: Okay, who else has a comment.

BRIAN TIPPETS: I'm a resident of Brice Prairie and formally Superfund manager in the City of Janesville. After hearing tonight and after having read the feasibility study I believe that the preferred alternative creates greater risk to the people of the Prairie and Town of Onalaska, the construction danger and through the accelerated discharge of contaminants to air and water.

MS. PASTOR: Okay, thank you. Who else?

MARK SCHULTZ: I'm also a resident of Brice Prairie. To concur with the comment made by WARZYN relative to the importance of a cap relative to the amount of ground water versus surface water infiltration, I believe this should have never been a Superfund site. I once thought it should be, but based on what I've heard, it should have never been a

Superfund site, and I think the State of Wisconsin errored in making it so.

STAN HOUSER: I'm a Town of Onalaska resident as well as a town supervisor. I'm a town supervisor and town resident. I guess I just want to comment that I -- I think that the problem out there should just be left alone, possibly with a minor upgrade on the cap. I think that we can put some controls on the area that will eliminate any potential danger to humans, and the price tag that you put on this cleanup just isn't as big as the health hazard. The health hazards don't justify the price tag of the clean up.

DAVID HARTER: I would agree with the previous speakers. I think this is an overzealous remediation or correction of the problem. I don't know if the EPA takes into account the tax base -- tax base is dwindling in the Town of Onalaska. As has been mentioned there are other areas outside of the Town of Onalaska that did fall into the landfill. There's no equitable way of assessing the cost to the people who actually

caused the problems.

A lot of the businesses aren't here, the areas have been annexed, you know, people move. I don't feel that with the way that it's set up that the proper people are -- are also being assessed for this, and that maybe it should be, if in fact it needed any expensive redesign or repair, that maybe the EPA should be looking at doing it themselves instead of putting it onto a tax basis that really didn't cause the problem in the environment.

MS. PASTOR: Someone else want to make a comment?

RUSSELL BRINGE: I would suggest in the township that one of the missing components is the politician that wrote the law at the meeting. Most management of any project requires that cost benefit rather than a party that's responsible has to bear some of the risk involved in making those decisions.

It appears to me the politician has removed himself entirely from the process by saying I'm going to assess this cost on

certain other parties. And if this was a federal funded or state funded cleanup then the politician should be responsible to come up with the dollars to pay the bill. And currently the parties that will pay the bill appear to me, even though you're accepting our comments, not to have much influence on the final decision, because they're going to refer to the law for making their decision, and the politician who made the law is really not concerned about paying the bill.

And I do think the cleanup, which I am -- I am in favor of clean environment, we love our state, we love our land, but it is a cost that should be borneby the entire state, so it's the politician again looking at the price tag.

I don't know who, I didn't -- I heard the various clean up alternatives, but I didn't hear about taking bids, you know, and I'm not concerned that the end result is going to be the least costly method of accomplishing whatever needs to be accomplished. So the missing ingredient here is the politician. I

do think that I expressed the same disappointment, if this is a Superfund site I've been misled as to the need for that legislation.

I'm disappointed in that because I don't see the risk involved. I was concerned. At this point I certainly concur with many previous expressions that we're looking at a very expensive alternative for something that I at this point do not see the need for those expenses, and our politicians need to be aware of our disappointment in the legislation.

MIKE McCLURE: Town of Onalaska supervisor and resident of Town of Onalaska. I just want to be on the record to say that I'm not in favor of the EPA's proposal to cleanup, if they go ahead with this proposal I do not believe we should have to pay into the Superfund.

MS. PASTOR: Okay, no more, then we will close the comment period, but do write your comments down. You can hand them to us, don't -- if you didn't want to make your statement, otherwise please mail them. Take

the town up on its offer of stamps or put your own stamp on it or whatever you like, but please do comment, and we thank you for staying with us so late. We will then be adjourned.

(Ended at 10:30.)

TINA M. JOHNSON
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STATE OF WISCONSIN)
) ss.
COUNTY OF LA CROSSE)

CERTIFICATE

I, Tina Johnson, Court Reporter and Notary Public in and for the State of Wisconsin, do hereby certify that the foregoing transcript of the public hearing for the Onalaska Municipal Landfill Superfund Site, before Susan Pastor, is an accurate transcript within my control, held on the 14th day of March, 1990, commencing at 7 o'clock in the evening.

Dated this 9th day of April, 1990, at La Crosse, Wisconsin.

TINA JOHNSON
COURT REPORTER
P.O. BOX 371
LA CROSSE, WI 54602

My commission expires:
September 19, 1993.