

REPORT OF PROCEEDINGS BEFORE

STANDING COMMITTEE ON STATE DEVELOPMENT

**INQUIRY INTO REDEVELOPMENT AND REMEDIATION OF THE RHODES
PENINSULA**

At Sydney on Thursday 7 February 2002

The Committee met at 9.30 a.m.

PRESENT

The Hon. Tony Kelly (Chair)

The Hon. Ian Cohen

The Hon. Dr Brian Pezzutti

The Hon. Henry Tsang

The Hon. Ian West

CHAIR: I welcome the media and members of the public to this first hearing of the Standing Committee on State Development inquiry into the remediation and redevelopment of the Rhodes peninsula. Today is the first hearing for the inquiry, and there will be a second all-day hearing held tomorrow in this room. The Committee has a reporting date of 15 April 2002.

I advise that under Standing Order 252 of the Legislative Council, evidence given before the Committee and any documents presented to the Committee that have not yet been tabled in Parliament may not, except with the permission of the Committee, be disclosed or published by any member of such Committee or by any other person. Copies of guidelines governing broadcasting of proceedings are available from the table by the door.

Before beginning the hearing I would like to thank the members of the Rhodes community, government agencies, interest groups and private companies who have contributed submissions to this inquiry. The hearing will commence with evidence from representatives of two Rhodes residents groups.

CAROL KENDALL, Secretary, Rhodes Residents Group, 28 Llewellyn Street, Rhodes, and

PAUL MICHAEL HANLY, spokesperson, Rhodes Peninsula Group, 73 Llewellyn Street, Rhodes, sworn and examined:

CHAIR: Are you conversant with the terms of reference of this inquiry?

Ms KENDALL: I am.

Mr HANLY: I am.

CHAIR: If you have made a submission to the Committee, do you wish it to be included as part of your sworn evidence?

Ms KENDALL: Yes.

Mr HANLY: I do. There are two submissions. One is under the Rhodes Peninsula Group and a separate two-page annexure in my own name.

CHAIR: If at any stage during your evidence you consider that in the public interest certain evidence or documents you may wish to present should be heard or seen only by members of the Committee, the Committee would be willing to accede to your request and go into in camera, confidential proceedings. I must inform you that the Parliament can then override the Committee's decision and make the evidence public; however, the Parliament has never done that. Do you wish to make an opening statement?

Ms KENDALL: Yes. I have been a resident for 35 years and the secretary of our group, which was formed in 1988, originally to preserve the housing stock in Rhodes, but of course now we have houses coming out of our ears. In 1997 the then mayor, Peter Woods, invited Jenny Nicholls, our chairperson, and me to be on the committee for the Hassall report. We were quite concerned about that report, in that it did not address a lot of issues that we were concerned about and our concerns were not noted in that report. We were concerned about the density, the height and the traffic chaos that we felt would come from that.

At that point we decided that we would have to keep a close eye on it and that we wanted some sort of an overriding committee to oversee the development of the whole peninsula because it is in three different lots, but we found that very difficult to do.

Jenny Nicholls and I were also fortunate in being on the Homebush Bay Environment Reference Group Committee, which taught us a lot about remediation and what good community consultation is about, so we decided that was the model that we wanted. The Government did employ Vivian Twyford, consultant, to consult with us. She proposed a type of consultation that we were not particularly happy with, but at that stage she dropped from the scene and we were told through a newspaper advertisement that the Government no longer wanted to communicate with us and that anything we wanted to know they would answer as we asked the questions, so we were not happy with that.

As has happened now, the remediators of two sites have set up a committee that we do want, they have been very good, and they have paid for an independent chairman of our choice, and we have a couple of people who are well versed in remediation and site clean-ups who are there to direct us and help us through this. This is one of the dirtiest sites in the world, we have lived next to it for many years, and we really need to know that what is going to happen there is going to be done well.

We still have problems, and have not fully been told how the State Government is going to deal with the public transport issues, the traffic issues and the streets around these developments. John Murray has gotten together a group of five residents and Robert Black from Planning New South Wales as an overseeing committee of this whole peninsula. However, Robert Black did say himself that he is not particularly keen to do this, he does not have time to do this, and he is not particularly interested in this, so I do not know how we are going to get on with that. We have found right through this whole process that people have fobbed us off or have not been willing to tell us things; it has just been a very frustrating experience.

The Hon. IAN COHEN: I am very concerned about what might be the simple issue of traffic flows. You stated in your submission, for example, that your calculations indicate major problems with traffic lights, and that the extra population would have a major impact on traffic flows. You have said that it may be virtually impossible to deal with the increased traffic flows, and that not everyone will use public transport even though it has been significantly upgraded. Would you like to comment with regard to be Ryde Bridge, the Victoria Road underpass and the Homebush Bay overpass?

Ms KENDALL: I do not have all the figures; I think Paul is perhaps the best one to answer a lot of those questions. However, just visually, when you live on the peninsula and you try to get out onto Concord Road and Homebush Bay Drive during peak hour, you could not fail to see how even the most wonderful traffic light upgrading at those intersections will make traffic those roads move sufficiently to let people out of this development.

If you can imagine half of the old municipality of Concord with a fence around it, with only two openings out onto the same street, and saying everybody has to get out of there when they want to, it just seems an impossible thing. That is what this peninsula is: it is just a long strip of land with a hole at each end for people to get out of it, onto the same road.

The Hon. IAN COHEN: Have traffic studies been done?

Ms KENDALL: They have been done.

The Hon. IAN COHEN: Are they based on recent figures, or are they based on older figures?

Ms KENDALL: I am not sure. Perhaps you could refer the question to Paul.

The Hon. IAN COHEN: With regard to what you, as a nearby resident, have experienced in the past with regard to contamination, has there been adequate roof testing for dust, together with topsoil testing? As a resident who has been affected by contamination in the past, what is your opinion about the ability of on-site contamination to contain dust?

Ms KENDALL: I do not feel that dust has been a problem to this point. When the first remediation took place in the 1980s, I do not even recall that there were then horrendous dust problems, although workers on the site were clothed in spacesuits. I do not think we had a great dust problem at that stage.

We have not had house dust tested. There were samples taken through different residences when the initial remediation was taking place, and there were traces of dioxin found in different places. Although, that was accounted for by Union Carbide being good corporate citizens by mowing of the lawns and filling in potholes with their soil, and I think that is where a lot of the stuff came from. I think that perhaps the dust problem can be controlled, as long as we keep onto it and as long as they are diligent in what they do.

The Hon. IAN COHEN: You say that the remediators of the two sites have developed a good relationship with the community. What are the two sites?

Ms KENDALL: The former Union Carbide site and the Allied Feeds site are being remediated by two different companies. The first one agreed to set up community liaison with us. We have an independent chairman and two expert witnesses. Residents who want to be involved can go along and have a listen. They seem to be presenting us with the facts as we believe they should be presented, and they are liaising with one another. When the second site came on board, the Allied Feeds site, they decided they would take on the same committee, which was very good, and they are liaising with us as well.

CHAIR: So the only one that is not is the former Berger Paints company?

Ms KENDALL: They are now talking to us as well, after we asked them to, and they have presented their plans for stage one and are keeping in touch with us, providing minutes of meetings that we have attended.

The Hon. IAN COHEN: In terms of the density, do you have a comment on the projected densities of these sites? We have briefly discussed the traffic issue, but in terms of this compared perhaps to other developments that have happened in the area in the recent past.

Ms KENDALL: They are far, far denser than anything else Concord has had, but the density was based on the cost of remediation. It will cost many millions so they have piled lots of building on there to cover the cost of remediation.

The Hon. IAN COHEN: To your community's knowledge, who has done that costing, and are you comfortable with the accuracy of the costing of remediation and the return these companies will get? Do you know if the ratepayer, taxpayer, government is having to fund part of this remediation?

Ms KENDALL: I do not know that. The only costing I know of was done in the Hassel report, where it gave those sorts of figures and also suggested the type of development that should be there to cover the cost. Since then I have not seen any figures on that.

The Hon. IAN COHEN: Does your committee have any requirement in terms of remediation and the types of usage that the community would be able to undertake in the surrounding areas, particularly in the waterways in the bay there?

Ms KENDALL: I am not following you. Do you mean to what level of remediation you need for that?

The Hon. IAN COHEN: Yes. Do you have any position on the types of activities that would be allowed?

Ms KENDALL: As long as the fishing ban can be lifted, then it would be fairly safe for general use. You only get into trouble with dioxin if you are ingesting it in some way, through either putting the stuff in your mouth or you are eating fish that have eaten the stuff from the bottom. It is quite safe for boating and those sorts of activities. If it were cleaned up to that degree, it would be fine, and I can believe that that is what is proposed and will be done.

The Hon. IAN COHEN: Can you give the Committee a brief overview of the Rhodes peninsula community in terms of age, ethnicity, occupation of people living there and people who are directly concerned this remediation in the area?

Ms KENDALL: On the Rhodes peninsula there are approximately 360 dwellings. We were an ageing community 10 years ago but now a lot of younger people are coming into the

area. There are lots of schoolchildren who have to travel quite some distance to go to school because the local school was closed during Metherell's time. Most people on the Rhodes peninsula are separated by the railway line. We all live on the other side of the line to these industrial sites. I guess most people have been made aware that this is going on. People tend to become very upset when something like this happens in the beginning and then they either become a little blase about it or they are happy with the way things are proceeding and therefore they are not out protesting but people are still aware of what is going on and we try to disseminate information to the community. If people come to our meetings they find out what is going on.

The Hon. IAN COHEN: Is your community aware of the actual type of remediation, the actual technology, the method that is being used?

Ms KENDALL: We are being made aware now. We have people come to explain to us the workings of the machines, how they go about it. We are still waiting to find out what sort of noise they produce and we are very concerned about the emissions from these machines. We want to ensure that whatever method they use will be very safe for the residents who live close by.

The Hon. IAN COHEN: Has any one independent body come and given you or the community and assessment of the different types of remediation process, either direct or indirect? The direct is an incineration method. Have you been given information about that method and the amount of dioxin that could escape?

Ms KENDALL: We have been given that information but we believe that the proponents on the Allied Feed site will use direct thermal absorption. There is no option there. I think Thiess on the Union Carbide site is still debating whether it should use direct or indirect. They have brought experts in to explain the differences to us. Thiess is asking for us at the end to make some sort of decision about what we think would be the best way to go. Whether they will take that opinion or not, I do not know. However, we have two people on our committee, Kate Hughes and John Pym, who we are relying on to a certain extent to suss these things out for us and guide us that way. They will give us a talk at the end of all these presentations and help us make up our mind about what we think about them because we are not experts on remediation. We have a good knowledge of it but this is not a common practice in Australia; these are mostly American practices so it has not happened a lot.

The Hon. IAN COHEN: Have you been made aware, for example, in terms of persistent organic pollution [POP], which is what we are dealing with, that there is a POP convention that you cannot destroy POP waste and create dioxin? There is a convention that says that that is not legal. Have you been made aware of that?

Ms KENDALL: Can you say that again?

The Hon. IAN COHEN: Have you been made aware of the fact that there is a POP convention that you cannot destroy POP waste and create dioxins, that there is a convention against that?

Ms KENDALL: Yes. In the direct method they are planning to use they say that the cooling down process is so quick that there would be no dioxin left. That is only produced if the process is slow and dioxins can be generated out of that process.

The Hon. IAN COHEN: Who is saying that? Who is giving you information that that particular method of destroying dioxins and the other materials—there is quite a list of them—will have a nil release of dioxin from the site, because I understand that that is part of the convention and what is required?

Ms KENDALL: Thiess had a fellow called Bill Troxler out from America who explained these processes to us. He had us believe that a direct method would destroy all dioxins in the process.

The Hon. IAN COHEN: I guess we will be questioning that during this inquiry. Did they discuss in any way the differences in cost between the direct and indirect methods of disposal?

Ms KENDALL: They said that direct would be the cheaper option because it is a much quicker process, almost half the time.

The Hon. IAN COHEN: Of the three sites, is one site of the greatest concern to your community?

Ms KENDALL: I guess the Union Carbide site is of greatest concern because it is the dirtiest, and the bay as well—you take that as one thing. It will take a long time and the longer it takes the more avenue there is for a slip up, I suppose. I guess things go in and out of your list of priorities because McRoss has put in its development application [DA] and that is taking everybody's attention at the moment. I suppose we just deal with each bit as it comes.

The Hon. IAN COHEN: The Allied Feed site has material on the water's edge reclaimed land; it is from the Union Carbide sites.

Ms KENDALL: It does.

The Hon. IAN COHEN: Will that be using the same method of remediation?

Ms KENDALL: We are not sure whether it will be the same. They are still proposing to use thermal absorption, whether it is direct or indirect, so, yes, they are going to do that.

The Hon. HENRY TSANG: When we were on the site the consultant said that he consulted the residents and that the residents are happy that the remediation process will be 24 hours continuously. I just want to seek clarification: Are the residents aware of the proposed 24 hours?

Ms KENDALL: The residents are aware. I would not say that they are happy but it has got to be done. When you have something like this sitting in your backyard, you want it over and done with. If it is going for 24 hours, and that is the way the machine works, you must accept that. But we must ensure that it will not keep people awake at night, they will not hear it and it is not causing any disruption to normal life because it will go on for years.

The Hon. HENRY TSANG: Have they proposed a plan of activity in the way the trucking is done when you are sleeping sound?

Ms KENDALL: We have not got that far yet.

CHAIR: He told us they would do most of the removal and so on during the day so they did not have trucks beeping as they reversed and things like that.

Ms KENDALL: That is right. It is only a stockpile they would have there to process at night.

CHAIR: Just do the processing at night, that is relatively quiet, and then do the movement during the day.

Ms KENDALL: They were saying that, depending on where the machines have to be situated, there may have to be sound walls put around them. They are doing noise studies and all those sorts of things now. I guess that is still in the pipeline.

The Hon. IAN WEST: The McRoss development has already been supposedly fully remediated. Did the residents have any concerns about how the process was conducted?

Ms KENDALL: I thought they were very forthright. They consulted us all the way through it. They took us on site inspections, they explained what they were doing, they pointed out hot spots on the site that they were doing things with. I thought they were very good.

The Hon. IAN WEST: At this point in time if there was to be a clean sheet and you were able to get whatever you wanted as a resident group, what would you ask for?

Ms KENDALL: A lowering in density. More open green space on that site—there is very little. I have no objection to there being residential there. I think it is a very good idea. I have no objection to it being a mixed use type thing. I think that is good. If you can keep people occupied there and not leave the site, that would be good. I just think it is far too dense. I would like the traffic situation sorted out and some guarantees from the railways that they can cope and that there will be bus services. We just do not seem to be able to pin anything down specifically on that.

The Hon. IAN WEST: I note that the Rhodes resident group, back in February 1998, made some recommendations as to densities. Is the Rhodes resident group still wedded to enclosure number one in your submission?

Ms KENDALL: We would like to be but it will not be feasible. We can see that we cannot have very low density things. We are prepared that it will be denser than what we originally wanted. It is near a railway line that can be utilised. We will accept high density but not that high a density. The DCP stated that there should be two-storey to four-storey dwellings along the waterfront but so far we have only seen one to two-storey development; the others are all four or six. I think it could be a little more sympathetically done.

The Hon. IAN WEST: Do you believe at this point in time that you are being consulted about that?

Ms KENDALL: We have a chance to put in a submission, which we have done, about the first stage of the DCP for McRoss but that is all we can do.

The Hon. IAN WEST: Can you let us know how many members there are in the Rhodes Peninsula Group?

Ms KENDALL: There are not members as such. The Rhodes Residents Group just has as its members people who live in Rhodes. If they want to turn up to meetings, they do so. If we rally them around because we have something of concern, they seem to come out of the woodwork and they are there. We do not have a set number of members, no.

The Hon. Dr BRIAN PEZZUTTI: I am interested in the improvements that will come from this development in access to the waterway, which I understand is not with the cleanup. How do you think that is going to change the use of the waterway and will that be of major benefit to the people in the area?

Ms KENDALL: I think it will benefit the people in the area. When you see the number of people who walk around the existing walkways on the foreshore, they will utilise it, although when this was being told to us originally it was supposed to be a 30-metre setback from the water for the public to use, but it has been whittled down considerably. Ten metres of

that is going to be private open space and it is taken up with other bits and pieces. So, it has been reduced from what was mooted originally.

The Hon. Dr BRIAN PEZZUTTI: And 20 metres is not adequate?

Ms KENDALL: I do not believe so. When you take into account the number of people who are going to live there and work there, as well as people from outside that part of the peninsula who want to use it.

CHAIR: The ones who are actually living there, will they be able to use that 10 metres?

Ms KENDALL: Yes.

CHAIR: So the 20 metres will be for people like me if I want to go there?

Ms KENDALL: Yes.

The Hon. Dr BRIAN PEZZUTTI: The pathways around the developments at Pymont Point are 20 metres, and that is sculptured and very nice for fishing, and so on. Do you think you will see fishing back in Homebush Bay?

Ms KENDALL: I hope so. A lot of people want to fish there, yes.

The Hon. Dr BRIAN PEZZUTTI: So, this will be a major improvement to the quality of life for all of the people in the Rhodes area?

Ms KENDALL: I would think so.

The Hon. Dr BRIAN PEZZUTTI: What is the frequency of use of the railway station there at the moment?

Ms KENDALL: I believe there are four services an hour. I do not know. Could you ask Paul that?

The Hon. Dr BRIAN PEZZUTTI: So, we are talking about an area where you have great privilege in amenity and transport services, compared to say a country area?

Ms KENDALL: Of course.

The Hon. Dr BRIAN PEZZUTTI: So, unless we want those housing sites to be very expensive, you have density to pay back what has been an extraordinarily expensive process for both the private and public sectors, otherwise the cost of a block of land for development would be very high, would it not?

Ms KENDALL: It would.

The Hon. Dr BRIAN PEZZUTTI: Then you would have only a certain number of very wealthy people living there, which would skew the balance of what people are there now?

Ms KENDALL: Yes, but by the same token we have lived through dirty factories making 245T, so we suffered from their pollution. Now we have, practically, people pollution because we have so many people crammed in there. I do not know that that is a fair thing.

The Hon. Dr BRIAN PEZZUTTI: Do you have any idea of the whole cost of making the land suitable for development?

Ms KENDALL: No, we have not had those figures presented to us.

The Hon. Dr BRIAN PEZZUTTI: Up to date the amount would have to exceed \$200 million, before you get to the stage of putting a brick on the ground, and that is a big investment by the private and the public sectors, and the Waterways Authority's investments have been huge just to remediate. That is required by the Environment Protection Authority, but that sort of investment in those two parcels of land and the cleanup of Homebush Bay—you have to consider that—that huge investment of money cannot be wasted on a few.

Ms KENDALL: I do not doubt that, but by the same token the many people who are in those units, and existing residents, cannot access the streets because they will be chock-a-block. That is not good either.

The Hon. Dr BRIAN PEZZUTTI: So you think the streets will be chock-a-block?

Ms KENDALL: When you take into account the Olympic Park redevelopment, people going in there and commercial residents, all these industrial sites that are being redeveloped will produce more vehicles on the road. The people who buy in these developments, even though you say there will be many units and they will be cheaper, and I cannot imagine they will be less than half a million, they will have two cars, sometimes three cars, and they intend to use them. They will not leave them in the garage and catch the train for everything they want to do. There will be more people coming in and out. If the road is blocked up now, it will be even more blocked up.

The Hon. Dr BRIAN PEZZUTTI: What obvious injuries have there been from the existence of the factory sites that have been relatively derelict for many years? Have there been any identifiable public health risks from those sites?

Ms KENDALL: Yes, there are some, but I have not heard of them.

The Hon. Dr BRIAN PEZZUTTI: Do you know the nature of them?

Ms KENDALL: Cancers, I believe

The Hon. Dr BRIAN PEZZUTTI: The other thing is, what are the big selling points for this area? As a resident, what do you see as a major amenity?

Ms KENDALL: Its closeness to the city and all the things that that provides. The closeness to the water, it is very pleasant. It is just a very nice place to live. It wasn't; it used to be a very dirty, smelly, awful place to live, but it is now very nice.

The Hon. Dr BRIAN PEZZUTTI: Is there a ferry spot there?

Ms KENDALL: There is one at Meadowbank on the other side of the river. It is not accessible really, you have to go right around. There is a walkway across the old railway bridge, but that goes all the way to Meadowbank station and all the way back to the ferry wharf.

The Hon. Dr BRIAN PEZZUTTI: Is there any chance of a ferry spot there on the river, in the development?

CHAIR: That is one of the questions I was going to ask. What Brian is getting at, obviously there would not be if there was no development. If extra people come in do you think that would justify a ferry spot?

Ms KENDALL: Sydney Ferries do not believe so, but I suppose there is always room for a private ferry to shuttle around there.

CHAIR: You mentioned schools in the area. I was going to ask a question in relation to schools. Do you think the population that will come here will put pressure on to build a school?

Ms KENDALL: There is no room left for a school and there has been no provision for a school within the development.

CHAIR: But somewhere in the area? Obviously in the land around that the Government could buy, in the old area?

Ms KENDALL: I am sure there would be need for another school.

CHAIR: I am talking more about numbers.

Ms KENDALL: The profile does say that there will be a lot of people without children but there will be a lot of children as well, and I am sure it will support a school.

CHAIR: You were saying originally that it was an older area but in the past 10 years it has changed, with younger people moving in?

Ms KENDALL: Yes, kids are coming on.

CHAIR: And I suppose with these units perhaps to some degree young people will be moving in and sometimes young married people in their first homes, and you might end up with an influx of young people?

Ms KENDALL: There could be. There is supposed to be a mix of accommodation, with one, two and three-bedroom places. With three bedrooms you would expect to find a family, I would expect.

CHAIR: So, you could end up with 500 kids of school age?

Ms KENDALL: We possibly could.

CHAIR: Paul, I think the members would like to see your presentation. If we run out of time and members still have questions would you be happy to take those questions on notice and respond to them later, in a couple of weeks time?

Mr HANLY: Yes. Could I add to a couple of Carol's answers. In relation to education, the original community development plan had no analysis of the number of school-age children and the unused capacity in any local school. It simply noted the existence of the schools. Based on the demographics included in the original community development plan we analysed the number of preschoolers, and primary and high school students. All that material is in the submission on the community development plan which accompanied my personal and the Rhodes Peninsula Group submission. After Christmas I received a copy of the approved community development plan, which does have some analysis. It says that the Concord West Public School is at building capacity, although there is land. Strathfield North has demountables. St Ambrose has demountables. There is capacity at Mortlake but that capacity will be put under severe strain by the Breakfast Point redevelopment on the former AGL site. The nearest high school is more than five kilometres away. When the then Minister for Education And Training was proposing to close Hunters Hill High School he declined to accept that any enrolment in excess of three kilometres away with a local enrolment. On that basis we

estimate that there are in the suburb of Rhodes, including the new development and the old area, approximately 600 high school students.

CHAIR: Is that now or in the proposed development?

Mr HANLY: Most of which, probably 80 to 85 per cent of which, will be in the new development. So, in relation to local high schools, whilst demographic analysis in the revised community development plan indicates a split between State and private schools, total high school demand is likely to be about 90 per cent of the current enrolments at Concord High School, which is in excess of five kilometres away. Homebush Boys and Strathfield Girls, I understand, are at capacity and they will come under increasing pressure from the Newington development. There is also what we call the Millennium Waters development on the former Pacific Assets property on the western side of Homebush Bay. You also have the very large Breakfast Point. You have the Dulux site.

In our submission on traffic, if I could refer you to that, there is a map that shows the surrounding developments and the large number of either apartments or residents, I cannot remember which. Basically, the infrastructure in this area will come under incredible pressure because the population of the former Concord local government area is expected to grow from 24,000 to more than 40,000. I cannot give you the exact timeframe but that was in the former Concord local government area's plans. That is supported by the number of already approved developments. Since all the submissions closed for the original exhibition, they announced the Meadowbank employment area—4,800 residents and 2,100 workers.

They have announced the Ryde village scheme and they have announced that 16,000 residents will go in the Olympic precinct. So in terms of educational facilities, they will be proven grossly inadequate in their current form.

You will remember that during the Vietnam war—I think most of us are old enough to remember it—a product called Agent Orange was used that had a substantial dioxin component. Those dioxin components were manufactured at the former Union Carbide site at Rhodes. The Allied Feeds and Union Carbide sites were reclaimed from the Parramatta River and Homebush Bay with the consent of the then Maritime Services Board. Part of the reclamation process involved the use of settling ponds, one of which can be seen highlighted as "reclamation works". As late as 1970 there were ponds in which reject chemical batches were dumped as part of the reclamation process. The site that you can see with the ponding there is the Allied Feeds site. People ask initially: Why would the Allied Feeds site be contaminated? It is contaminated because of the reclamation carried out by Union Carbide with Maritime Services Board consent.

The Hon. IAN COHEN: Is that major area of reclamation the Allied Feeds site more so than the Union Carbide site next door?

Mr HANLY: The Union Carbide site went through a similar process. The Department of Public Works and Services can show you photos that give a much better pictorial history.

The Hon. IAN COHEN: Is there also dioxin production re Agent Orange on the Union Carbide site?

Mr HANLY: Yes.

The Hon. IAN COHEN: What year was that photograph taken?

Mr HANLY: I believe that photograph is circa 1970. There are about 400,000 cubic metres of soil to be remediated, which is about 1,000 times the amount of soil remediated at the

North Newington site using indirect thermal desorption. It is a pilot project—that is really all it can be described as in relation to the site.

The Hon. IAN COHEN: Did the Newington site or the latest site use indirect thermal desorption?

Mr HANLY: The North Newington site used indirect thermal desorption, which is a separation technique. In addition, a secondary technique is supposed to be used to destroy the dioxins. That is the technology proposed for the Union Carbide site and the sediments in the bay. The Allied Feeds site is now owned by Meriton, which proposes to use a technique called direct thermal desorption. This is a destruction technique as opposed to a separation technique.

The Hon. IAN COHEN: I have a question that is critical for me and I think for many in the general community. You said that indirect thermal desorption was used on the Union Carbide site and you referred to sediments in the bay. Are those sediments in the bay off the Union Carbide site and the reclamation area or are you referring also to the Allied Feeds site?

Ms KENDALL: The sediments are in front of both the Allied Seeds and Union Carbide sites.

The Hon. IAN COHEN: Would there also be indirect desorption in front of the Allied Feeds site?

Mr HANLY: Yes. My understanding is that the tender accepted and the announcement made referred to indirect thermal desorption to be used for another remediation of the Union Carbide site—it had already been subject to one treatment in about 1988 to 1993—and that that same technique would be used in relation to a 45-metre wide strip of sediment along the former Union Carbide and about two-thirds on the southern end of the former Allied Feeds sites.

CHAIR: You will recall, Ian, that the map had a line that extended into the water a fair way past the Allied Feeds site. It is the responsibility of waterways.

The Hon. IAN COHEN: Yes.

Mr HANLY: This is a map of the full Sydney Region Environment Plan [SREP] 29 area. In addition to that area there is a corporate park development by Australand, which has 825 car spaces that were approved by the City of Canada Bay. There are approximately 3,000 units and 7,300 residents. It was originally announced that there would be 2,300 employees and there is a shopping centre on the southern end of the site. Based on the visitation rates at a shopping centre of a similar size—Ashfield mall—we expect about 20,000 visitors a day. I note that that number is also being quoted by the developers.

All that traffic uses the main north-south road linkage over Ryde bridge. If it goes north it goes over Ryde bridge: the equivalent of 3 per cent of Sydney's population goes over Ryde bridge every day. There is also a major intersection at Devlin Street and Blaxland Road at Ryde where Ryde council has an exhibition of a proposal to increase the densities around what is probably the worst intersection on the north-south route. The other major intersection is at Concord Road and Homebush Bay Drive. Basically all the social infrastructure, such as schools, sporting grounds and so on, is located in the section south of Concord Road. Therefore, existing residents and many future residents will use that route to go south. That intersection is critical, as are two or three others.

There is a development control plan, a community development plan and a transport management plan under SREP 29. This is a photograph of the Union Carbide site showing the

sarcophagus, which you would have seen on your visit. There was a possibility of contaminated dust, equipment failure and, with the indirect thermal desorption proposed by Thiess on the former Union Carbide site and sediments, transportation risks of concentrated contaminants.

CHAIR: Do you have a figure of the likely quantity? Will it be truckloads?

Mr HANLY: The quantity is not huge in volume in terms of truckloads. It was proposed initially to go to Queensland but there are problems because I believe the Queensland plant does not have the appropriate licence. I think Thiess has put to the community liaison group the possibility of looking at direct thermal desorption as a destruction technique, which would obviate the need for transport.

CHAIR: Is that method proposed for the Meriton site?

Mr HANLY: Yes. My understanding is that it is likely to be a much larger machine. There are some differences between the Thiess and the Meriton proposals, which I will discuss briefly now. Thiess proposes that all its preliminary treatment works be done inside a shed, which will have negative pressure so it will suck dust inside. All emissions from that shed will be controlled, which should reduce dust and odour problems. Anyone who is familiar with the AGL remediation in which Thiess was also involved will know that there has been a very high volume of complaints about dust and odour—the site has been closed on at least one occasion because of odour—the transport of materials and road safety. That issue should not apply at Rhodes, but it did apply at Mortlake.

The remediation at the Allied Feeds site does not propose housing the pretreatment operations in such a shed and there is concern about the level of dust and odour that this might cause. The North Newington and AGL remediations were conducted in relatively low-density areas—particularly the North Newington one. The remediation here is being done within 400 metres of the Meadowbank medium-density area—basically the Bank Street and Meadow Crescent two to three-storey walk-up units—and the medium- to high-density Liberty Grove development. There are four eight-storey towers in the area of Liberty Grove closest to the Union Carbide remediation. Concord West Public School is located here and the closest residents are less than 50 metres from the proposed remediation. I believe the level of dust protection afforded to local residents should be significantly higher than the standard dust measures because of the proximity of residents in Blaxland Road and the number of residents potentially affected. You can see that the distance from the northern part of the Allied Feeds site to Meadowbank is significantly less than 400 metres, and that is high density. It is about 500 metres to high density at Liberty Grove and a similar distance to Concord West Public School.

Returning to my presentation, we have talked about the intersections. There are only two entries to the SREP area: one off Oulton Avenue on Homebush Bay Drive and one under the main northern railway line. All traffic must go along the ring road.

The Hon. IAN COHEN: How do the Victoria Road underpass and the overpass at Homebush Bay Drive fit in?

Mr HANLY: The underpass on Victoria Road has been a boon to users of Victoria Road. However, its positive effects for the users of the old ring road 3 from Mona Vale to Hurstville—I hope you do not mind me calling it that; I do not know its current name—are non-existent because of problems at the Devlin Street and Blaxland Road intersection near the Ryde civic centre. I know this morning's traffic was perhaps extraordinary, but it is quite common to have morning radio reports of delays on this major road, which takes 3 per cent of Sydney's population. The Roads and Traffic Authority [RTA] issued a letter—it might be a rubber stamp but it is in the chief executive's name; I do not know whether it is handwritten—giving us the design capacity of Ryde bridge. The current flows exceed the design capacity by

up to 50 per cent and they are proposed to increase by up to a further 70 per cent. So the amount of traffic being generated onto this major arterial road is quite enormous.

Under the cross-city tunnel environmental impact statement [EIS], the estimated time for residents of Roseberry and eight other middle eastern suburbs—if I may call them that—from about four kilometres out to the centre of the city in the morning peak hour is estimated at less than 12.7 minutes. That is the time that the transport study by the RTA and the Department of Urban Affairs and Planning [DUAP] estimates it will take northbound traffic on Concord Road to get through the Concord Road-Homebush Bay Drive intersection at the completion of this development in approximately 2016. The cross-city tunnel EIS projection is for 2016 or 2021 and it says 12.7 minutes for a complete journey. The DUAP transport plan prepared with RTA and State Rail says that it will take 12.7 minutes for northbound traffic to get through one set of traffic lights.

The gaps between cars will be about half the RTA safe driving recommendation. The handbook—which is a guide to all motorists not just learner drivers—says that in good conditions a three-second gap should be maintained. If you work out the volume of cars—3,600 cars an hour on a three-lane road—and the estimated gap between them, ignoring the delays and the gaps caused by traffic lights, you will find that traffic must travel with a less than two-second gap in order to get that volume of cars through.

I do not believe there is any legally competent road transport authority in the world which recommends driving at less than two seconds. There is a Mercedes study and a Canadian study which say that the accident rates increase dramatically when there is less than a two-second gap. Once you put in the gaps caused by traffic lights on this road, the delays must be under two seconds to get the volume of traffic through.

The Hon. Dr BRIAN PEZZUTTI: Is the gap you are talking about between the tail of one vehicle and the front of the next vehicle?

Mr HANLY: That is my understanding.

The Hon. Dr BRIAN PEZZUTTI: If I stood on the Pacific Highway and watched cars go up and down I should be able to say "One and two and three and" when I count to "three" the tail of one vehicle passes a certain point and the front of the next vehicle comes?

Mr HANLY: Yes. You will find you cannot.

The Hon. Dr BRIAN PEZZUTTI: I am sure you cannot.

Mr HANLY: You definitely cannot. All I can say is that the New South Wales Government in an official public tells drivers that even in good conditions they should be maintaining a three-second gap. If you count you will find that probably 70-80 per cent are doing a two-second gap and 20-30 per cent are doing less than a two-second gap. To get the volume through this requires every car to do less than two seconds.

The Hon. Dr BRIAN PEZZUTTI: Is that what drives this estimate of a 12-minute delay to get through a particular intersection?

Mr HANLY: I am not an expert on traffic engineering, I do not know.

The Hon. Dr BRIAN PEZZUTTI: Is that how it was predicted?

Mr HANLY: I cannot tell you the answer to that. It comes out of a model called Skates. If you look at scenario seven of the transport management plan and work out which section is Concord Road, look at the side road and it will tell you in seconds 12.7 minutes.

The Hon. IAN WEST: Has the traffic management plan claimed that after the development there will be less traffic on road bridge than currently occurs?

Mr HANLY: I certainly do not believe that to be the case from my understanding.

Ms KENDALL: We did not do our own traffic studies. We have somebody within the Rhodes peninsula group who had a look at all of those figures because they do not mean much to me and came up with the fact that they are claiming that there would be less traffic.

The Hon. IAN WEST: Is enclosure eight to your letter to the Deputy Premier, Dr Andrew Refshauge, dated 9 February still valid?

Ms KENDALL: That is what we were told. That is the way that these reports read and that is why we enclosed it in that letter. I guess we have no reason to believe otherwise.

Mr HANLY: I simply draw your attention to a couple of things. On the net analysis figures which are in the appendices to the exhibited transport management plan the traffic numbers on Victoria Road are estimated to decrease in 2016. One reason why traffic numbers can decrease on vehicles per hour is because the delays are so intense that the traffic is not moving. Gridlock means no vehicles per hour pass. So when you see falling traffic numbers I would suggest to you that it pays to look very closely at the cause of the falling traffic numbers because you know from your own personal experience from the articles in the paper the other day about the growth of traffic numbers across the harbour bridge, even after the opening of the tunnel, that the Roads and Traffic Authority has consistently underestimated traffic growth and that the only time an arterial road gets reduced volumes is when a major alternate route is opened and then the growth just starts again.

CHAIR: Will you finish your presentation?

Mr HANLY: In the Lane Cove tunnel environmental impact statement there is an analysis done of the savings that would accrue in time and fuel. Based on a technique called "net present value analysis" the benefit of that saving in time and fuel was calculated as a justification for the building of the Lane Cove tunnel. No such analysis has been done to the best of my knowledge in any publicly exhibited document of the cost of the delays which are going to arise from Concord Road and Homebush Drive intersection being an "F", from Alfred Street being an "F" and from the fact that the degree of saturation at the completion of this development on all of the major intersections along that road from Homebush Bay Drive to Ryde Bridge are going to be in excess of one during peak hours. Basically, degree of saturation in excess of one says that it needs substantial improvement and there will be huge delays. The "F" says that the intersection is not coping and that major works are needed. It is frustrating because they are planning that Homebush Bay Drive and Concord Road intersection will not work when the development is complete. Natural growth has an impact on that but if you are planning surely you would plan that it will work at the completion of the development.

We are told that trains are the answer, however, we know that the Government is concerned about crowds on the narrow central business district platforms. We know that the *Sunday Telegraph* says that between 5.00 and 6.00 p.m. many trains are running at 150 per cent capacity. We know that the Chatswood to Parramatta line is being implemented because there are choke points on the western lines coming into Sydney, including the main northern line which then comes in from the west. We know there are choke points: they are publicly acknowledged. That is one of the reasons for doing Parramatta to Chatswood.

The environmental impact statement for Parramatta to Chatswood states that one of the effects will be that there will be four less services per hour south of Epping down the main northern line. The whole of the support for the Roads and Traffic Authority for the transport

management plan is that the State Rail Authority has said that there will be a quadruplication of the main northern line. There are no publicly announced plans for that quadruplication and in the latest draft of the transport management plan signed off by the Minister there are significant qualifications in relation to the State Rail Authority [SRA] about the provision of rolling stock and the demand for services in other parts of the network. If the SRA does not provide the quadruplication, the rolling stock, the increase from six- to eight-carriage cars and the increased frequency of stopping then the aggressive assumptions in relation to model split will not be achieved. That will make all of this gridlock worse.

In relation to schools, the local high school is five kilometres away. There is no high school within three kilometres. That means that according to the criteria used by the Minister for Education and Training in the closure of the Hunters Hill High School, there is no local high school for 7,300 people of whom approximately 600 are of high school age in this new development. Given that after the announcement of this inquiry and with the support of the inquiry by all the major political parties, as well as the Greens, the Minister signed off on the development control plan—my understanding is that this is now a fate accomplished. If my understanding is correct—because developers now have legal rights if developments are not approved—then the high schools on the railway line should be made available and this development should effectively be put into the catchment of all high schools on the railway line to avoid the traffic and transportation issues that exist if every high school student has to travel more than the three kilometers or the five kilometres to Concord High.

In relation to primary schools, I have said that Concord West Public School has some land capacity, part of which is the closest playing field, albeit on Department of Education and Training property, to this development. In this development for 7,300 people there is not a single facility for organised active recreation—no netball courts, cricket pitches, soccer grounds or rugby fields. There is not a single facility for approximately 1,200 people between the ages eight and 19. I can provide more precise figures if you wish.

The Hon. IAN WEST: What has happened to the Rhodes Public School site?

Mr HANLY: Approximately two-thirds of the land has been sold off. It now functions as a community centre in what was a two-teacher public school.

CHAIR: It is no longer available?

Mr HANLY: It is definitely no longer available. A significant church and an aged-care facility have been built on the land. As you said, anything is possible with money. Some of the existing housing could be resumed by the Department of Education and Training. That highlights that the infrastructure is not there. I have talked about no dedicated sports grounds. Instead of going through the last three slides which will not add much I will briefly address a couple of other issues.

The Hon. IAN COHEN: Mr Hanly has an opportunity to put further submissions in writing.

CHAIR: Yes, we will put some questions to you on notice after today.

Mr HANLY: A huge document by EVS in 1998 called "Detailed Human Health and Ecological Risk Assessment of Homebush Bay Sediments" basically said that if these three blocks are done, on balance enough dioxin will be removed to meet the then current World Health Organisation standard of 10 picograms per kilogram of body weight per day tolerable daily intake. But they said to be highly confident of reaching that standard you would have to remediate all of these blocks. That is basically the strip along the former Union Carbide and the former Allied Feeds, including going out into the bay a little. That was to do ten parts, however,

in 1998 the World Health Organisation reduced its tolerable daily intake standard to one to four picograms per kilogram of body weight per day.

The Hon. IAN COHEN: Has it been reduced again in a matter of weeks ago?

Mr HANLY: It has. The Commonwealth Department of Health and Aging has made a proposal that the intake of dioxins for Australia should be 70 monthly, but in daily terms, 2.3 picograms per kilogram of body weight per day. Thiess has been very good at providing information to the community and it issued a drawing which showed that it would actually do less remediation to meet the one to four picograms standards. Frankly, I do not find that credible and I do not believe that they have been satisfactorily able to answer that. Now the standard proposed by the Commonwealth Government through the Department of Health and Aging is 2.3 picograms. I would suggest that that is the appropriate standard to which the dioxins should be remediated. That will require a significantly increased amount of remediation. That remediation will not be removing the five-times-background DDT. It will not be removing the lead deposits in the Orica sediments. I have sent in with my terms of reference a series of articles kindly obtained for me by Thiess and PPK by Gavin Birch which show conclusively that Homebush Bay will still be a very contaminated area.

There has been no public release of the testing of the sediments alongside the Orica site which can be expected to be contaminated by lead and phthalates. There is also no proposals for roof dust testing. At Cabarita Dulux remediated the roof dust and top soil of 60 houses near a lead-based paint plant. Where Berger Paints operated at Rhodes there has been no proposal for the testing of the sediments alongside where the drains would have run. There has been no proposal for roof dust testing or for top soil testing.

Similarly, whilst some limited testing was done in 1988 for the Blaxland Road residents, I believe there should be roof dust testing and there should be topsoil testing on a voluntary basis. Workers will receive blood tests so that their exposure to contaminants can be measured. Opportunities similar to those that will be provided to workers should be offered to the residents of Rhodes—firstly, to ascertain whether they already have damage, and, secondly, so that it they can be easily assured at the completion of the remediation whether or not they have had exposure.

The Hon. IAN COHEN: My question relates to the proposed remediation and that which has happened. When there is testing for dioxins, by direct or indirect methods, does that include DDD, DDE, 2,4-D, 2,4,5-T and a range of chloride phenols and chloride benzines? Are they going to be resolved in the remediation that is occurring.

Mr HANLY: Only if they are contained in the 45-metre strip of land.

The Hon. IAN COHEN: Will the process actually knock those out, similar to the dioxins?

Mr HANLY: The process will knock out those. It will not touched the metals. The metal contamination, of which there is an abundant amount, will simply be distributed on the soil on which the apartments are to be built. The metals are not destroyed. The sediments are taken out and treated. It gets rid of all ones you mentioned but does not get rid of the metals. The metal-contaminated soil is then spread on the site on which the apartments are to be built. But Thiess has advised that the contamination levels of the metals will remain below the intervention levels that they understand apply.

CHAIR: If members of the Committee had any additional questions we will endeavour to get those to you within about a week.

Mr HANLY: I will be very happy to answer any questions.

(The witnesses withdrew)

(Short adjournment)

David FURLONG, Director of Planning and Environment, City of Canada Bay Council, C/- City of Canada Bay Council, and

Darryn WESTMAN, Manager of Environment and Recreation, City of Canada Bay Council, C/- City of Canada Bay Council, sworn and examined:

CHAIR: Mr Furlong In what capacity are your appearing for the Committee?

Mr FURLONG: As a professional officer employed by the council.

CHAIR: Are you conversant with the terms of reference of this inquiry?

Mr FURLONG: Yes, Mr Chairman.

CHAIR: If council has made a submission to the Committee do you wish that to be included as part of your sworn evidence?

Mr FURLONG: The council has made a submission.

CHAIR: That will be included as part of your sworn evidence. Mr Westman, in what capacity are your appearing before the Committee?

Mr WESTMAN: As a professional officer.

CHAIR: Are you familiar with terms of reference of this inquiry?

Mr WESTMAN: Yes, I am.

CHAIR: If either of you should consider any stage during course of your evidence that in the public interest certain evidence or documents you may wish to present should be heard or seen only by the Committee the Committee will be willing to accede to your request and go into confidential session. However, I must warn you that Parliament can override our decision and make that evidence public—although it has not done so to date. Mr Furlong, would you care to make a brief opening statement?

Mr FURLONG: Thank you, Mr Chairman. We would like to be as brief as possible in our statement to the Committee. We are, of course, also finalising our submission on the McRoss development, which, as I am sure the Committee is aware, is the first major redevelopment and in respect of which submissions close tomorrow. We would like to do this as a tag-team effort, if that is convenient to the Committee.

CHAIR: Certainly.

Mr FURLONG: Darren will basically take you through, with a broad brush, a major overview of the council's submission and I would then like to add some issues that we are specifically addressing as part of the McRoss development that are equally applicable to the remediation activities. Let me also say quite clearly that council supports the submission made by the community, particularly through the Rhodes peninsula group, and Mr Hanly and the residents. We have consistently done that in the submissions that the City of Canada Bay Council has made to both the Department of Urban Affairs and Planning [DUAP] and other organisations involved.

The council's issues generally emanate from a concern about the level of information swapping and acceptance, and that relates in one sense to the history of the Rhodes peninsula. The council has been removed as the consent authority by way of the regional environmental

plan [REP]. Therefore, in an official, and one might say usual, capacity in the development consent process, the council has not been party to all of the discussions that would normally take place between an applicant and the consent authority.

We have had the opportunity in the last eight to 12 months to commence some dialogue with the Department of Urban Affairs and Planning and some other stakeholders, and we are very pleased and looking forward to being part of the Premier's Department intergovernmental agency committee, which meets for the first time next week. I cannot too much about it as yet, because we have not had our first meeting. We hope that that may overcome some of the issues of information dissemination. That forms the basis of the council's submission and that is what we would like to give the Committee an overview of.

Mr WESTMAN: As David mentioned, council has made a submission to this Standing Committee and that can be categorised into two general issues. The first, of course, is the contamination of the outlying area around Rhodes peninsula and also the associated remediation process that either has occurred or is to take place in the future; and the second, as David also mention, the planning process and the McRoss development which he may outline further. To date both council and the community have experienced quite a deal of uncertainty in the entire process relating to both contamination issues and the planning process.

I, in my role with council, the have dealt with large contaminated sites and the associated community consultation process. I am therefore familiar with how it has worked in past. At this stage I have been involved in consultation meetings with the community and I would have to say that the whole process has been quite disjointed, so far as the flow of information to the community from the different sites is concerned. There has not been a really co-ordinated approach. Council, in its submission, has outlined a number of concerns in relation to the remediation aspect. I will quickly go over those as far as the level of contamination of the various sites within the peninsula, and also adjacent to it. Also, the level to which the sites will be remediated and whether they are actually going to be safe after the remediation process has taken place.

That leads into the methods of remediation that are going to be employed in this particular area and what are the long-term and short-term impacts on, not only the local community, but wider afield. I suppose another interesting aspect is the issue of the compatibility of the development, particularly the McRoss development, working beside areas that are obviously being remediated at the same time. Development and remediation working side by side, there are issues to consider in that regard.

In its submission council has recommended a range of strategies that could go a long way to resolve in a lot of these information-flow problems that we have. The first is to appoint an independent body. That could be the Environment Protection Authority, which could review all the current information about contaminated sites in the area and get the information together. At the moment it is very difficult to get a coordinated picture across the board.

Once the information has been obtained, that gives them the opportunity to identify the issues and areas for further investigation, which really is not able to be done at this stage. I think, most importantly, the assessment of the risk to human health and the environment is something that would stem from that gathering of information, and of course the remediation strategies and so on. Just as important is the establishment, as listed by council, of a broad-based community reference process, as was outlined in the community development plan. That should be implemented as a matter of priority. It has occurred at this stage, but in a very disjointed fashion. It really should involve all sites across the peninsula, not just individual and environmental consultants from one particular site meeting at different times with the community. I think this would give the community and council greater confidence that all issues were being dealt with in a holistic manner, as opposed to dealing individually with particular sites.

The Hon. Dr BRIAN PEZZUTTI: When a piece of land like the Rhodes Peninsula becomes available for redevelopment because it is no longer suitable for use as an industrial site there have to be some strategic decisions taken about the use of that land. Do you think local government councils are in a position to undertake such a strategic review? In other words, do you think they have the capability to look at what is strategically important for the State of New South Wales?

Mr WESTMAN: With regard to the planning aspect, I suppose I am more in the environmental contamination field. Would you like to answer that, David?

Mr FURLONG: I believe yes, but I believe it has to be a collaborative approach with the State planning authorities and bodies.

The Hon. Dr BRIAN PEZZUTTI: In other words, you think that local government itself could be relied upon to take a strategic view rather than simply a local view?

Mr FURLONG: Yes, I think so. Both of the two former councils that have become the City of Canada Bay are very experienced in the redevelopment of major industrial sites, because we have such a frontage to the Parramatta River and the conversion from river transport and its industrial background. We have some of the largest that have been completed, currently completing and to go on for some time, including the Breakfast Point site, which is the largest of the lot. The approach to and methodology in creating that redevelopment were primarily a local function of the two councils, but in conjunction with the Department of Urban Affairs and Planning [DUAP] at the time.

The Hon. Dr BRIAN PEZZUTTI: Why would DUAP have to be consulted at all if you think local government has the ability to make such strategic decisions?

Mr FURLONG: I think it is always necessary to have a partnership to ensure that the views of all stakeholders are represented. We focus ourselves outwards obviously from the City of Canada Bay. We are fully aware of the needs of our community, but we also accept that the Parramatta River and the geographical location of our city have a role to play and have a very important position in the wider city and State planning and environment. So it should never be done blinkered or non-focused from either side.

The Hon. IAN COHEN: Mr Westman, the Canada Bay Council really is a johnny-come-lately in this debate. Does it have adequate information and experience to deal with what has been an intractable historical and changing situation on these sites?

Mr WESTMAN: With regard to contamination and remediation aspects, I believe so. I will probably let David answer on a strategic planning basis.

The Hon. IAN COHEN: I am looking here at the contamination issues specifically.

Mr WESTMAN: I believe there is the scope to review information provided in a co-ordinated fashion and make relevant comments in regard to whether it is suitable or not in relation to the impact on the local community. Yes, I do.

The Hon. IAN COHEN: How does the current state of play relate to two things? As I understand it, the Concord council rejected the Hassell report historically, and the former Concord council declared a number of sites on the Rhodes Peninsula never to be built on again. Could you comment on that?

Mr WESTMAN: I do not think I can comment on that one in particular, not having had the correct background. I am not sure whether David is able to.

The Hon. IAN COHEN: If this in fact was the case at a certain time, can either of you comment on that?

Mr FURLONG: Having come from the Drummoyne side of the City of Canada Bay, I am not aware of the council declaring certain sites never to be built on again.

CHAIR: Is that council's view now?

The Hon. IAN COHEN: That was concord council's new. But is it now Canada Bay Council's view that certain areas or portions of those sites are never to be built on?

Mr FURLONG: I am not aware of any resolution of the City of Canada Bay to say that they should not be built on. I think the issue for the current council, as it had been for the previous council, is that if it is to be redeveloped than it has to be redeveloped in a safe manner for the future.

The Hon. IAN COHEN: Could this lack of council corporate knowledge be putting future residents at risk?

Mr FURLONG: No. Once again, if the council is given the involvement to a level akin to what it would normally have via information and being part of the price press, then there is no reason why the council cannot ensure the safeguards, if it is dealt with fairly and evenly by the State authorities involved.

The Hon. IAN COHEN: Was either the Concord council or the present council aware that dioxin was leaching into Homebush Bay from reclaimed land through or at the bottom of the walls that were constructed? Is that a problem? Are you aware of that? Is that being addressed at present in terms of the current remediation projections?

Mr WESTMAN: I certainly have not been involved in anything to suggest that it had been occurring. The EPA had previously dealt with remediation on the site, in particular on the Union Carbide site. They were the authority on that particular project. So I am not aware.

The Hon. HENRY TSANG: Earlier residents raised issues about traffic management. I note that one of the recommendations of your council is that the Minister for Transport inform the council of plans to improve public transport in the Rhodes area in line with the proposed development. Can you explain council's specific concerns? Have those being addressed in any way in a traffic management plan? Does the council have any concern about a traffic management plan while opportunities are there to amend this plan in the future?

Mr FURLONG: Mr Chairman, I said at the beginning that there were some additional comments I would make after Darren had finished. One of those relates to traffic and its impact. The council, in conjunction with the Rhodes Peninsula Group, has had an opportunity to review the traffic management plan. Traffic, in terms of the Rhodes Peninsula, has two impacts. One is local, and one is more regional. In terms of the local impact, it is simply the ability for the residents within Rhodes and the northern end of the former Concord council to access in and out of their neighbourhoods onto Concord Road and Homebush Bay Drive.

Those roads, we accept, are regional roads and are already suffering from through traffic. But, clearly, the redevelopment of the Rhodes Peninsula in conjunction with the surrounding developments—the Australand development that the council recently approved, and of course the proposal for the ongoing redevelopment of the Olympic site—will have a substantial disbenefit on residents' opportunity to get in and out. Clearly, public transport and non-car private transport need to be very much upfront considerations. I know that the RTA is expressing some concerns about the upgrading of both the track—in terms of space of track—

but also about the amount of rolling-stock necessary to service that stock in conjunction with what is happening around the site.

Similarly, one of the issues that we intend to put as part of our submission on the McRoss development is facilities being made available for bicycle movements through to the Rhodes Peninsula and connections to the regional open-space areas via Centennial Park, and whether that is satisfactory or needs to be further looked at. All of those things the council believes are not only part of the information problem but also part of the issue where there is no master plan. That requirement under SEPP 56 has been waived, so that developments can almost occur as separate entities, whereas normally you would try to do it as a co-ordinated proposals.

For example, the McRoss development—with 1,150 units and 50,000 square metres of floor space—has no community facilities. Yes, presumably, it will be subject to section 94. The council would suggest, though, that we should really have upfront an idea of what are the community facility needs and services for the Rhodes Peninsula and allocate them specifically. It uses all the possibility for commercial open space, yet it represents only about a third of the area. There is no allocation left therefore for commercial activities immediately around the railway station. So traffic is just one of the co-ordination problems that we have.

To get in and out of the southern end of the Rhodes Peninsula it is proposed to put on and off ramps from Homebush Bay Drive. One of those, at a fairly reasonable elevation, is approximately two metres from the windows of units currently occupied within the Liberty Grove development. Clearly, that is not environmentally satisfactory for the residents. The only way to solve the problem is to erect an enormous noise barrier, which would take away their view and the benefit of their unit. So it is all part of that, Mr Tsang.

The Hon. IAN WEST: The transport management plan advised that there was going to be less traffic on Concord Road. Does council agree with that?

Mr FURLONG: No. Clearly, the assessment done by the council—as I am sure Mr Hanly can precisely tell you—indicated that one of the intersections—I think Concord Road and Homebush Bay Drive—just through normal peak-time growth over the next 10 to 15 years, potentially—and obviously the RTA would look at that—on phasing, would grow to a delay of about nine minutes just through normal traffic and something like 14½ minutes to get through the intersection once all this development is there. I think also, in the preparation of the traffic management plan, there were three or four sets of consultants who looked at it, and they all came up with different levels of service and different numbers.

The Hon. IAN WEST: Could you explain further the SEPP 56 no master plan? What is a master plan? Are we talking about a master plan for SEPP 26 and Rhodes Peninsula, or are we talking about a master plan for the whole of the healthy rivers district, or what?

Mr FURLONG: A master plan is a strategic planning tool. It is used all over the place. But, in terms of SEPP 56, which is a SEPP that relates to the redevelopment of strategic sites along the Parramatta River, primarily former government lands and industrial lands, there is a requirement that, as part of a strategic planning work for any one of those sites, a master plan must be prepared of future development of that site and that must be lodged in terms of a development approval. So you look at all the issues, both within the development and impacts of the likely development on the surrounding environment when determining the levels of density, et cetera, that you would allow on the site, amongst other things, such as integration with the road pattern, heights of buildings, public open space, access to the foreshore, and all those sorts of things.

The Minister has decided that, in the case of the Rhodes peninsula, because so much work has been done on the REP, the DCP, the traffic management plan and the community

plan, effectively all the issues that you would normally review as a master plan have been dealt with and therefore there is no need to repeat them.

What the council is saying is: Yes, that may be true on a broad review, but in terms of looking at the specific needs of the future residents of Rhodes and the community of the city of Canada Bay and how the two integrate within the next 15 to 50 or so years, there needs to be a bit more detailed planning to ensure co-ordination and the provision of services. We are using the term "master plan" in that sense within the Peninsula itself.

The Hon. HENRY TSANG: Can the council itself prepare a master plan?

Mr FURLONG: The council could, but as the council is not the consent authority it would not have any value or validity.

The Hon. IAN WEST: With regard to densities, looking at other developments in the area, including Liberty Grove, Dulux, AGL, and so on, what densities does the council consider to be okay, taking into account the commercial viability of the site?

Mr FURLONG: That is a difficult question to answer. The council would probably say, as little as possible. But a better answer, I think, would be that the council would most likely have reflected a density similar to what both former councils had done on the major industrial sites, which is a floor space of about .7 to one. We have some concerns. There are 1,150 units at McRoss. We do not know how many there are going to be on the other two, but if you take McRoss as a yardstick it is probably about one-third, and you are talking about 3,000 units and 7,000 to 8,000 people in an area that is nowhere near the size of Breakfast Point, for example, which has 1,600 units.

CHAIR: How does that work out to .7 to one? Can you relate the two figures?

Mr FURLONG: DUAP can probably give a more precise figure. It is probably close to double.

The Hon. IAN COHEN: Did not the current Canada Bay Council and the former Concord Council reject SREP 29 as overdevelopment for the area?

Mr FURLONG: The former Concord Council was involved and then subsequently rejected it, yes. Drummoyne obviously did not, because it was outside our local government area.

The Hon. IAN WEST: You have been involved in the consultation process with the community. Do you think it is adequate?

Mr FURLONG: I think it is improving. In terms of the companies who have been involved more recently in the remediation process—and Darren has been attending the community meetings that they have been holding, as have been some of our councillors. As I said earlier, we are looking forward to the opportunity of participating in the intergovernment agency committee, and we are certainly hopeful that the involvement of all parties with our community improves and continues, not only through the remediation process but obviously through the construction phase as well, because it is likely that the city of Canada Bay ends up with the construction phase and management. It is going to be exceedingly difficult for us if we have not had the opportunity to be involved.

The Hon. IAN WEST: Can you provide us with a copy of your submission to the interdepartmental committee?

Mr FURLONG: The other night the council resolved to make its submission on the McRoss development available politically, as it had to the inquiry and on the remediation, so we would be happy to do that. It is due tomorrow. It is being written while I am sitting here, and as soon as we can we would be happy to provide it to you.

The Hon. Dr BRIAN PEZZUTTI: What is the financial contribution of the city of Canada Bay to the development?

Mr FURLONG: One of the corporate issues that the council has relates to the ongoing ownership of public space within the development sites and their ongoing maintenance cost. We understand that we will be the recipient of section 94 contributions. That is fine; it is for the provision of those facilities. However, we do have some serious concerns as to the financial impact for our community of taking on board foreshore open space, remediated land, and the ongoing seawall issue. We have not yet been able to put a price on that, but it is certainly an issue that council wants to have better dialogue on.

The Hon. Dr BRIAN PEZZUTTI: Would not the Waterways Authority still own the river bank?

Mr FURLONG: The council's boundary is the mean high watermark, and obviously the sea wall comes up above the mean high watermark. Invariably, where it is public land fronting a waterway, the public authority owns the wall, as a private owner does when it is a private development. We have raised that issue with DUAP, and they have indicated a willingness to talk to us, but once again it is part of that—

The Hon. Dr BRIAN PEZZUTTI: What sort of money are we talking about in terms of section 94 contributions? Are we talking about tens, twenties or hundreds of millions of dollars?

Mr FURLONG: I do not have the figures in front of me. We are talking about some millions of dollars. We are not talking about twenties or hundreds of millions of dollars, because I believe that the council has to accept the view of the Government that our section 94 plan that makes allowance for regional open space is not particularly applicable to the Rhodes peninsula because of the proximity of the Bicentennial Park and the Olympic Park facilities. Therefore, if council does not get those moneys, they start to become thirties of millions of dollars, obviously, because they are big ticket items. But, conversely, we do not provide those facilities. So we do not take in the money, we do not spend the money, and it simply comes back to State Government.

The Hon. Dr BRIAN PEZZUTTI: What is likely to be the rating income of council?

Mr FURLONG: I could not tell you that, for two reasons. First, we have not done it; and second, the council is currently looking at an integrated rating system. The two councils had two different systems. Generally, the incoming dollars tend to increase when the development is fully completed because you have a greater propensity. Although, these days using unimproved capital value in strata developments is not a good way to assess your rate base. But, of course, let us not forget that 8,000 people need a lot of local services. So we might get \$10 million, but it could well cost the city of Canada Bay \$20 million a year to service that area.

The Hon. IAN COHEN: Mr Westman, you referred to the lack of a co-ordinated approach. Does the council have a position on looking at the remediation process, whether it be direct or indirect thermal desorption, and has your council been able to access the safety of either of those processes and looking at what might be best for the overall remediation of all the

sites? Are you aware of the Persistent Organic Pollution Convention, which says that you cannot destroy POPs waste and create dioxins? Have you assessed that?

Mr WESTMAN: As I said earlier, we have been given some disjointed information and there has been quite a deal in great detail from certain parties through the consultation process. We do have that information available to us and it is being reviewed at the moment. But, as I said, it would be better if it was a more co-ordinated approach, whether it is through a co-ordinated body such as the EPA, whereby all the information could be considered as a whole, as opposed to looking at one side individually within the whole area itself. At this stage we have been given certain detailed information with regard to what you have raised and it is being reviewed at the moment, but it could be done in a better matter if we were to be provided, through an appointed body, a wider range of information to be considered.

The Hon. Dr BRIAN PEZZUTTI: Surely the EPA, which sets the guidelines and polices them, should be providing this information to the community at large, as to its aims, how it is going to get there, and the policing of the issues. That is an EPA responsibility, is it not?

Mr FURLONG: Yes, it is—

The Hon. Dr BRIAN PEZZUTTI: Then what is the angst? Surely, this is a matter for the community to take up with the EPA, is it not?

Mr FURLONG: I think one of the reasons that the Premier's Department has instigated the intergovernment agency committee is to achieve just those things, and hopefully it will follow from that.

The Hon. IAN COHEN: Does your council have independent information, whether it be from the EPA or an organisation other than the developers and the scientists who are hired by the developers, providing you with an independent assessment of the pros and cons of direct or indirect desorption methods in the overall effectiveness of the clean-up?

Mr FURLONG: Not yet, no.

(The witnesses withdrew)

GARY NOEL PRATTLEY, Executive Director, New South Wales Planning, 20 St Lawrence Street, Greenwich, and

PETER MICHAEL TWINEY, Transport Planning Consultant to Planning New South Wales, 3 Cabramatta Road, Mosman, sworn and examined:

GORDON RICHARD FREDERICK KIRKBY, Team Leader, Development and Infrastructure Assessments Branch, Planning New South Wales, 2 Foucart Street, Rozelle, affirmed and examined:

CHAIR: Are you conversant with the terms of reference of this inquiry?

Mr PRATTLEY: Yes, I am.

Mr KIRKBY: Yes, I am.

Mr TWINEY: Yes, I am.

CHAIR: You have made a submission. Would you like it to be included as part of your sworn evidence?

Mr PRATTLEY: Yes.

CHAIR: If at any stage during your evidence you consider that it is in the public interest that certain evidence or documents you may wish to present to the Committee should be heard or seen only by members of the Committee, then we would be willing to accede to your request and resolve into a confidential hearing. However, I must warn you that the Parliament can override our decision and make the evidence public. Gary, would you like to make an opening statement, and then we will go through some questions?

Mr PRATTLEY: Briefly, I would like to outline the context of the proposals for Rhodes peninsula and some brief elaboration on the history as a context of the details in the submission. Firstly, I reiterate that the Minister for Planning is the consent authority for development on Rhodes peninsula and, therefore, Planning New South Wales' involvement in the peninsula is as the department which informs the Minister for Planning on planning and development matters, and undertakes assessment and planning on the Minister's behalf.

The Minister for Planning became the consent authority in November 1999 as a result of the gazettal of the Sydney Regional Environmental Plan No. 29. SREP 29 establishes the zoning, the consent authority and the planning principles for the site, and was made by the Minister on 9 November 1999. State Environmental Planning Policy No, 56, Sydney Harbour Foreshores and Tributaries, also applies to the land as a schedule 2 site. In terms of the background, I emphasise that the proposals for the redevelopment of Rhodes peninsula have not been developed or emerged in isolation but as part of the overall strategy for Sydney.

The proposals for the redevelopment of Rhodes peninsula have a long history. I understand that it has been going on since the early 1990s when ICI approached the department and the then Concord council to ascertain redevelopment options for the peninsula. A study of the entire Rhodes corridor from Strathfield to Parramatta River was commissioned about 1991, and that recommended essentially residential uses on the Rhodes peninsula site ranging in densities from 1.1:1 to 1.7:1.

The Hon. Dr BRIAN PEZZUTTI: That was done by Planning?

Mr PRATTLEY: Sorry?

The Hon. Dr BRIAN PEZZUTTI: Who commissioned that?

Mr PRATTLEY: I understand that it was commissioned jointly by the department and the then Concord council. That was not adopted by council. Later in 1997 ICI again approached the then Minister for Planning and the department to identify options for Rhodes peninsula. It presented the scheme for a regional shopping centre on the site in the order of 80,000 to 100,000 square metres, and that was not supported by the department. However, Concord council and the then Minister for Planning agreed to establish a working party, which was chaired by Professor Hans Westerman, to identify a suitable redevelopment strategy for the Rhodes peninsula site. That working party comprised representatives of a number of State Government departments, the council and the community. They presented a report to then Minister Knowles in about March-April 1998.

The strategy which was produced by Hassell recommended a gross density of 1.2:1 and it allowed for essentially residential uses with a small amount of office development—around 35,000 square metres— and about 10,000 square metres of retail was provided for in the development option. The department, in line with its ninth draft 1985 centres policy, forced the limitation on the amount of retail uses, but office uses were proposed in the Hans Westerman exercise in order to create an active centre adjacent to the railway station, I guess picking up the emerging philosophies and trends of trying to create multiuse integrated centres and integrate employment with residential development as far as possible.

In 1998 McRoss developments approached Minister Knowles seeking expansion of the retail uses permissible on the site. At that time Concord council supported that proposal, and subsequently the department was directed to review the land use mix, notably the extent of retail on the site. Those investigations were carried out in line with the department's emerging Right Place For Business And People policies, and it was concluded that a district retail facility in the order of 20,000 to 25,000 square metres with limited bulky goods development could be developed on the site. I guess throughout the process I would like to emphasise that the prevailing policy has been that of the broad Sydney strategy of producing a compact city, and that factor has largely influenced the density of development proposed on Rhodes peninsula.

It is a very strategic site in the context of the city in terms of the transport links, its rail links and certainly we, in our more recent policies currently on exhibition, are trying to encourage increased densities around public transport modes wherever they can be achieved consistent with other objectives as part of reducing car dependency as part of the whole sustainability and air quality issues. It is not confined to this site; it is obviously something we are pursuing wherever there is the opportunity around those modes to pursue that. I understand that during the Hans Westerman exercise the Environment Protection Authority and others were seeking much greater densities of closer to 1.8:1 in line with the prevailing clean air policy at the time. Clearly, there has always been pressure for retail uses on the site, again a function of its strategic location. They are the key issues from the background to the emergence of the statutory documents and the detailed planning controls that have emerged.

The Hon. Dr BRIAN PEZZUTTI: But they were not the first.

CHAIR: Are there any supplementary comments that you would like to make?

Mr TWINEY: Perhaps I might just comment from the transport planning side of it. The important feature is the railway station there, and public transport and non-car borne travel is the important feature of planning for this particular development. That is probably the thing I want to say.

Mr PRATTLEY: There is one matter I forgot to mention in relation to our submission. It is not a correction as such; it is an update. On the first page of the submission

we note that no requirements for an environmental impact statement [EIS] on the Meriton or Lidis sites have been issued. Subsequent to this being submitted there have been requirements issued on the Meriton site, and a copy of those is available if the Committee would like them.

CHAIR: Is that a copy of the EIS or a copy of the request?

Mr PRATTLEY: The requirements for the EIS.

The Hon. Dr BRIAN PEZZUTTI: What staggers me about this is that this is a site that has been empty for a while. Brierley Investments bought part of it years ago, tried to do something with it, found that it got absolutely nowhere and then the new buyers tried to get some interest in what could be done with it and then a blank wall. Now suddenly there is more interest and the Minister changed his mind and suddenly council changed its mind: yes, we can have commercial stuff there; yes, we can have residential; yes, there is argument about the density. What is it about planning and Planning New South Wales that takes these enormous periods of time to come up with the solution which was going to be there from day one? Even when you make the submission you still have not put out a requirement for an EIS. Is that because no-one has put in a development application [DA]? It is no good putting in a DA if you are not going to be successful; you are just wasting an awful lot of money and time. Then Planning New South Wales now says that you have to do this EIS on the basis of your application. They go away and they do that for another two years, and then they have the community consultation. It is a wonder anything ever gets done in this city, is it not?

Mr PRATTLEY: It is not confined to Sydney, I regret to say.

The Hon. Dr BRIAN PEZZUTTI: What is it that takes so long?

CHAIR: There were not any proposals from Meriton until recently.

Mr PRATTLEY: In relation to the EIS, yes, and in terms of the legislation we are not in a position to issue requirements. We are governed by the legislation we operate under, which dictates many of the processes and the consultation and everything else. Sites like this are very difficult sites. They are strategic. They have a long history. They have difficult issues to resolve. Based on my experience of running planning systems in five other States, such sites are never easy to address.

The Hon. Dr BRIAN PEZZUTTI: But they drive up the cost—

Mr PRATTLEY: They do.

The Hon. Dr BRIAN PEZZUTTI: —of housing and commercial development enormously, which everybody pays for, of course, because it delays and costs. Every time you buy a bit of dirt like this it is multimillion dollars for the remediation. Union Carbide has cost somebody at least \$120 million so far, and then remediation is on top of that. All the money you have tied up in that must be recouped some time by local government, by council, by people. What is it about planning that takes so long when it is so obvious what you are going to do with the site?

Mr PRATTLEY: My answer to that would be that planning is about balancing a whole range of competing interests, as is obvious from the issues before this inquiry, and achieving the outcomes for those things. The democratic processes we have in this country are never easy. You have to work through those issues. You have to debate the different merits of the different cases. There is inevitably a political process because you are dealing with people's values and competing objectives.

The Hon. Dr BRIAN PEZZUTTI: What is the difference between this site, except for the remediation and contamination, and Pymont Point? Pymont Point has been developed since 1985. It has been on-stream and rolling along. This site has little difference in terms of its background, its pollution, its history, its transport problems—all those things are almost exactly the same. Do you not learn anything from anybody?

Mr PRATTLEY: Yes. I cannot speak for the detail of the Pymont site because my understanding of and involvement with the Pymont site was when I was working for the Commonwealth Government on the Better Cities program. One of the key differences in Ultimo-Pymont is that it was a Better Cities program. It had a huge amount of Commonwealth money injected into it to resolve some of the hurdle issues that enabled that development to take place.

The Hon. Dr BRIAN PEZZUTTI: But having learnt from that, this site and this development, strategic as it is—it has the same sort of corridors of roads, it has the same problem with transport—it was obvious that once Pymont had gone ahead and been so successful in terms of moving people and compacting the city this was going to happen in other places.

The Hon. HENRY TSANG: Perhaps we can get Commonwealth money from the Better Cities program.

Mr PRATTLEY: There is no question, whether it is Ultimo-Pymont, the east Perth redevelopment, where there was highly contaminated land, or the Subiaco redevelopment in Perth, which was another Better Cities program, that the injection of significant sums of Commonwealth money to overcome major impediments to the site accelerated the development of those sites. You could argue that eventually they would have reached a value that made them commercially feasible to develop but it was the injection of those large sums of money that accelerated the processes and overcame the hurdles, as I would describe them. That was true of most of the projects around the country, to a greater or lesser degree. These obviously were the bigger ones.

The Hon. Dr BRIAN PEZZUTTI: Money is not the issue here.

Mr PRATTLEY: No, but to say it is becoming the impediment is the issue.

The Hon. IAN WEST: Could you provide us with a brief explanation of the purpose of the following three planning instruments SREP 29, the development control plan and the management plan, and how they link in with a new concept of the overall master plan?

Mr PRATTLEY: If you like, SREP 29 is the overall policy decision of the Government in terms of the future of the land and the broad direction. The rest was a package of plans to address the complexities of the issues and the co-ordination required. The Development Control Plan was to provide guidelines for the development, the design and landscape issues, if you like, and the Transport Management Plan was to provide an outline of the rail and road infrastructure required to satisfy the provisions of the REP, so, if you like, it was an element of the implementation of the REP, and the Community Development Plan was really to develop the community consultation and determine the level of community facilities provisions required, taking into consideration existing facilities. Finally, the Contributions Framework Plan was to consolidate the contributions required under REP 29 and the transport management plan, the provision of adequate rail and road infrastructure, the dedication and embellishment of open space, taking into consideration contributions under council's section 94 plan. So, the council's section 94 plan was embodied. It was consulted and it was embodied into that consultations framework.

The Hon. IAN WEST: So there was SREP 29 but that relates to the Rhodes Peninsula plan, but there is no overall master plan in regard to that river area outside Rhodes Peninsula in terms of some healthy rivers concept?

Mr PRATTLEY: Do we have a broader strategic plan beyond the peninsula? Not that I am aware of, other than the major strategic document for metropolitan Sydney, which sets out the essential philosophy that this is following.

The Hon. IAN WEST: Do you think there should be one?

Mr PRATTLEY: Yes. My view is that in the future we should be moving to a more strategic regional focus. The Plan First initiative that is currently being developed is specifically targeting developing regional strategies that will provide this broader framework. We are in a process of iteration, I suppose. There is a strategic framework there. My view is we can produce a better one in the future for the whole metropolitan area.

The Hon. IAN WEST: Do you think it would be appropriate to have a Healthy Rivers Commission inquiry into the Homebush Bay river area?

Mr PRATTLEY: I do not really feel equipped to answer that, given the time I have been back in Sydney. My understanding is that extensive work has been undertaken on a whole range of issues around the river. I would need to take advice to answer that question with any confidence.

CHAIR: Perhaps you could take that on notice.

Mr PRATTLEY: We will certainly take that on notice, yes.

The Hon. IAN WEST: Consultation with the community, do you think that has been adequate?

Mr PRATTLEY: Yes, I do think it has been adequate. I think we can always look at ways to improve consultation. Again, I was not involved in this process at the time, but having come into this job and having reviewed what has happened, in my view the consultation processes that have taken place are probably more extensive than I have seen in most similar circumstances in other States of Australia for this sort of development. I can go through the detail of it, which is documented in our submission, if you wish.

The Hon. IAN WEST: That is all right, but if the community were to perceive that it was not adequate, do you see any problems in improving consultation with the community?

Mr PRATTLEY: We are certainly always open for new ideas to improve consultation, yes.

The Hon. IAN WEST: Lastly, future concerns of the community in terms of promises that no doubt will be received about density, transport, contamination and the like, no doubt a lot of people will put their signatures on documents to say that everything is going to be fine. Is there any talk of ability to implement some sort of indemnities for the future?

Mr PRATTLEY: I think in terms of the issues around the contributions framework we have pretty good guarantees that can be developed. I do not think there is any issue about that. In terms of environmental contamination issues, I do not feel equipped to answer that question. I can say that my experience in other States with remediation on sites, the requirements are usually so extensive that I have not seen situations where it has been an issue.

Mr KIRKBY: In our work on the environmental impact assessments, indemnity is not something we have really used in our process. As Gary said, we like to ensure that during the assessment process at all these issues are addressed. In some industries there is a concept of bonds being introduced as part of the consent. That is a possibility, but we do not have any proposals firmly before us, for assessment to determine the risk and the level of assessment.

The Hon. HENRY TSANG: Earlier we heard from Canada Bay council that ultimately all the foreshore open space, the bank and the retaining wall, will be handed over to Canada Bay. While it could be a liability to Canada Bay it might seek to have some compensation before it will take over. Has any negotiation been discussed and what if Canada Bay refused a liability for the council and the residents? Is that a possibility or do you think there is any problem at all?

Mr KIRKBY: We have to ensure in our process that remediation is carried out to a suitable standard for the proposed development. The transfer of lands would be an arrangement between the Waterways Authority and the council, and we do not really get involved in those sorts of issues. That is a land transfer issue for them.

The Hon. HENRY TSANG: The 20 or 30-metre setback of foreshore land, that belongs to Waterways?

Mr KIRKBY: From which side? Into the water or onto the land?

The Hon. HENRY TSANG: From the high watermark to the building setback line.

Mr KIRKBY: We would have to be satisfied that the remediation, as I said, has been carried out to an appropriate standard and has been signed off by an auditor. However, the detail of any transfer of land is not my responsibility.

Mr PRATTLEY: My understanding is that the land is to be dedicated to the Minister. The intention would be that it is transferred to the council subsequently. I would assume, as in most circumstances, for that to happen we would have to convince the council that we were not handing it a liability. It comes down to making sure the job is done properly and working in consultation with the council and the community to ensure that the standards are met and that we have an important public asset and not a liability.

The Hon. Dr BRIAN PEZZUTTI: How much land does the Department of Planning own?

Mr PRATTLEY: On that site?

The Hon. Dr BRIAN PEZZUTTI: Across New South Wales. Hundreds of square kilometres or tens of acres?

Mr PRATTLEY: Closer to the former. Not hundreds of square kilometres but through the Sydney Regional Development Fund we have acquired over many years, 51 years I think, extensive areas of regional open space, as well as—

The Hon. Dr BRIAN PEZZUTTI: They are all part of the Department of Planning?

Mr PRATTLEY: They belong to the Sydney Regional Development Fund, which is administered by the Department Planning, yes.

The Hon. Dr BRIAN PEZZUTTI: And you have to maintain those properties? Around Pyrmont Point, for example, is that owned by the Department of Planning?

Mr PRATTLEY: I cannot answer that off the top of my head. In that case it is to be dedicated to the Sydney Harbour Foreshore Authority. In a broader sense, say in Western Sydney, it varies. Where we are holding land for development as regional parks or simply for biodiversity protection, we might retain the ownership of it a long time.

The Hon. Dr BRIAN PEZZUTTI: So, do you get section 94 contributions from the developer for the ongoing maintenance of these properties once you take them back from the developer? Say, the developer currently owns the high watermark, develops the land and gives you a 20-metre band.

The Hon. HENRY TSANG: It gives it to the council.

The Hon. Dr BRIAN PEZZUTTI: No, it gives it to the Department of Planning. The Department of Planning gets the land. Do they have to give you money to maintain it?

Mr PRATTLEY: No, section 94 of the legislation does not allow the Minister to take money for maintenance. It becomes a question of ensuring that those areas are developed properly and to a standard. And then the maintenance—

The Hon. Dr BRIAN PEZZUTTI: And in the interests of the taxpayers of New South Wales you maintain it out of taxpayers funds?

Mr PRATTLEY: Or council's. In other cases, like out in Western Sydney, at Kellyville we have handed extensive areas over to National Parks and they are managed by National Parks. In those cases we have also had to put in some of the major infrastructure before they would take it over.

The Hon. Dr BRIAN PEZZUTTI: The various authorities like the Foreshores Authority are still owned by the Department of Planning, are they not?

Mr PRATTLEY: No, it is a separate entity.

The Hon. Dr BRIAN PEZZUTTI: Who owns them? The Minister must be the shareholder.

Mr PRATTLEY: Yes, they report to the Minister for Planning.

The Hon. Dr BRIAN PEZZUTTI: How many people are expected to go onto the Rhodes Peninsula on that side, 7,000?

Mr PRATTLEY: About 7,300, I understand is the council's estimate.

The Hon. Dr BRIAN PEZZUTTI: This is not big-time numbers, is it?

Mr PRATTLEY: Not when we are looking at housing 190,000 people in inner-city units over the next 15 years.

CHAIR: Sorry, 190,000 in inner-city units?

Mr PRATTLEY: The amount of infill accommodation that we will have to accommodate over the next 15 years is estimated at 190,000.

CHAIR: What is the boundary?

Mr PRATTLEY: Within the metropolitan area.

CHAIR: Not inner-city?

Mr PRATTLEY: Within our existing developed areas, yes.

CHAIR: But you are talking about as far as Blacktown?

Mr PRATTLEY: Not new release lands, no. Not new greenfield lands but redevelopment or development like South Sydney, Ultimo, Pyrmont, any opportunity we can get. That is where the demand and the market is being driven. We are accommodating 70 per cent of all of our new households in the metropolitan area in infill development of one form or another. That is a very high level by Australian standards and even by international standards.

The Hon. Dr BRIAN PEZZUTTI: But the Green Square development, all that land out there, that is 30,000 or 40,000, is it not?

Mr PRATTLEY: Yes.

The Hon. Dr BRIAN PEZZUTTI: That is big time. This is small bikkies?

Mr PRATTLEY: Compared to that, yes, and compared to what we have to meet in the future.

The Hon. Dr BRIAN PEZZUTTI: The Pyrmont Point development is vastly bigger than this?

Mr PRATTLEY: Yes.

The Hon. Dr BRIAN PEZZUTTI: Yet, all that stuff about traffic and cars, confounded by better cities, building 100 units in a building and not putting in a single car park—very clever stuff that—but this one here will have to have car parking in the building?

Mr PRATTLEY: Yes, but the car parking levels—and Peter can probably talk in more detail about this—we will require to be lower than in many other cases because we are trying to drive public transport uses. Ultimo-Pyrmont was a very deliberate decision. It is an inner-city location and we do not want to encourage everyone—

The Hon. Dr BRIAN PEZZUTTI: While you are away—I will give you one instance, and that is why you will have to change that view. When Harry Triguboff did the development of Farmers and Graziers in Ultimo, the council, which had a no-parking plan, suddenly realised that nobody was ever going to redevelop the site. Harry got 2.3 car parking spaces per unit to make it commercially viable, yet I live next door to that and I hardly see a car. He has dug down three storeys into the sandstone to develop the car parking and you never see a car. The streets of Ultimo and Pyrmont are clogged with cars yet there are 30,000 more people there. So, what is this fixation? Sydney City Council used to have a maximum and now it has a minimum. The minimum is one or two per unit. So, you are going to try this old thing again and this is going to be the Minister's approval. What is there about the Department of Planning that it does not learn from what happened last year or the year before and what is there about the Department that the Minister cannot say stop stuffing around except that they go to ICAC?

Mr PRATTLEY: I am not sure what it is we are not learning.

The Hon. Dr BRIAN PEZZUTTI: The car parking issue is a classic example. You are going to limit the number of car parking spaces per unit. It is going to threaten the viability

of the place, because people are not going to have one car, they will have a car per person. That is the reality.

Mr PRATTLEY: It is not just a Department of Planning policy; it is a whole-of-government policy. If we are to accommodate the population of this city, we must find means of reducing the continuing impact of cars. If we continue to provide car spaces where they are not necessary, we will not get changes of behaviour. Yes, when we have the opportunity, close access to public transport and major upgrading of public infrastructure as proposed in this case we take a fairly strong view about trying to maximise the shift in behaviour by not stopping cars altogether but limiting the provision of car parking spaces.

The Hon. IAN COHEN: Given your interest in transport issues, is not the crux of this debate the fact that this site— a peninsula—has a critical car transport problem regarding the ability to leave the area using the road infrastructure? The inquiry heard evidence earlier that there could be huge bottlenecks. There is a critical problem with the Victoria Road overpass and the nearby underpass. I hear the goodwill about public transport—which I of course support—but the situation is critical and it is not being resolved.

CHAIR: In a nutshell, Ian is asking whether you have addressed the issue of the two bottlenecks where vehicles move in and out of the area each day.

Mr TWINEY: It is worth explaining some of the strategy behind the access arrangements. The critical intersection on that stretch of arterial road is the Homebush Bay Drive-Concord Road intersection. That is the one that is closest to capacity during peak periods at the moment. The strategy for vehicular access to the site is that there are two access points: one to the north, which is just to the south of Ryde bridge; and one to the south at Oulton Avenue. Those two access points mean that you do not necessarily have to go through the Concord Road-Homebush Bay Drive intersection in order to access the site. You can go from any part of the site to the south via Oulton Avenue or to the north via Averill Street. You do not necessarily have to go through a potentially congested intersection. That is the basic access strategy.

The Hon. IAN COHEN: Are these not merely catch-up developments given the increasing traffic load at present without the development?

Mr TWINEY: They are catch-up developments in a way. We have identified a series of roadworks that add additional capacity to the key intersections, including the Concord Road-Homebush Bay Drive intersection. Our modelling shows that we can create roughly about the capacity of the extra demand for traffic generated by this development. Our longer-term modelling, which looks to 2016, says that arterial traffic growth will bring these intersections, particularly the Concord Road-Homebush Bay Drive intersection, back to a full level of service in peak periods. However, are modelling shows that that will be the situation for most arterial roads in Sydney by 2016 because of the growth in traffic. It is a city-wide issue. It comes back to policy: if you are to have more development in Sydney you must think about trying to locate it near public transport so that people have the option to use that transport or perhaps to travel at a different time of day so that peak periods are spread. However, that is not likely to happen.

The Hon. IAN COHEN: Does it not come back to the fact that you are trying to promote public transport because, in view of this density, you can envisage that there is huge potential for gridlock in this part of the peninsula? Do you disagree with that statement?

Mr TWINEY: I disagree about gridlock. What tends to happen is that as congestion occurs during peak periods, the peaks spread. As a result, the peak may extend from three-quarters of an hour to an hour and a quarter or an hour and half and the actual levels of operation at the intersection remain fairly steady for longer periods. This is called peak spreading, and it is a fairly well established phenomenon throughout the world.

The Hon. IAN COHEN: There was mention of allowing 12.5 minutes to get through the intersections. What is peak spreading and what is gridlock? Where do you draw the line in terms of someone who is stuck in a car during peak hour while trying to leave the peninsula?

Mr TWINEY: The difference I draw between peak spreading and gridlock is that gridlock means that traffic is not moving at all. In congested situations traffic tends to move and there are increasing delays at intersections. The mention of 12 minutes is a mistake, if you like. The models that we use—they are called SCATES models— attempt to simulate the way in which the signal-linking system, the Sydney Co-Ordinated Area Traffic system [SCATS], works. In a congested situation the results from the SCATES models are not terribly useful. In fact, the 12 minutes has come from the SCATES output that we put into our report. In order to be very transparent about the results, when we report them we tend to say that the actual vehicle delays are greater than about 140 seconds. This means that you may have to wait for more than one cycle of the signals before you get through; it does not actually mean that there is a 12-minute delay.

What happens in practice is that the RTA looks at key intersections such as this and adjusts the signal timing. Therefore, if delays on the side roads are getting too excessive, it changes the timing through the emergency control centre at the ATP to give more time on the side roads to prevent delays from becoming too great. Part of the outputs to the transport management plan are to put a camera on that intersection so that the emergency centre will know what is going on.

CHAIR: Is that in Oxford Street?

Mr TWINEY: It is in Redfern now.

The Hon. IAN COHEN: Mr Prattley, you said that you have not been in the job for very long. Therefore, I am concerned that you and your authority do not have the corporate knowledge to deal with an area with a long history of various government agency interaction and assessment of toxic sites. Does your department, which is the obvious co-ordinating body, have an overview of the types of remediation that should take place, particularly in line with legislation regarding the creation of dioxins?

Mr PRATTLEY: While I have not been here very long, my predecessor was involved extensively in this process and I come here from having previously been in charge of running planning systems in Western Australia, the Australian Capital Territory and Tasmania. Therefore, I have the capacity to review what has happened and to form a view about how well the process is being pursued and followed. I feel very comfortable about the processes that are being covered—although obviously not necessarily about how long some of these things take.

The Hon. IAN COHEN: Your submission refers to Planning New South Wales holding regular monthly meetings in order to inform residents about current development proposals. Have those meetings taken place and are they separate from the community liaison group? This is part of an ongoing process to create community confidence but I hear that the message is not getting across.

Mr PRATTLEY: The monthly meetings process is beginning now as we are moving into the next phase of dealing with DAs. There was a series of meetings previously.

The Hon. IAN COHEN: So you will hold regular monthly meetings?

Mr PRATTLEY: Yes. The first one would have been held about now if we were not otherwise occupied.

Mr KIRKBY: Are you inquiring about experience with the peninsula or technical issues?

The Hon. IAN COHEN: I am concerned about the patchwork approach and the fact that you, as a government agency, can make an overall assessment for the benefit of the community and the entire remediation. Where do you get your scientific advice in line with legislation and international conditions regarding these highly toxic materials? Do you get this information from your own scientists or do you rely on the developers consultants in this area?

CHAIR: Or the EPA?

Mr KIRKBY: We do not have in-house technical expertise in some of these areas—technical areas to do with remediation. I have some chemical engineers on staff but they are not remediation specialists. Obviously information is provided on the environmental impact statement, but it is prepared by the applicant. We also take advice from other government agencies, particularly the EPA but also agencies such as Fisheries in terms of any aquatic impacts. When these particular development applications are lodged we have also undertaken to engage independent technical advice in order to advise us and the EPA about the technology to be employed and its adequacy. We have that option and we have indicated to the proponents that we will get outside independent advice.

CHAIR: Thank you for your time and patience this morning. We will put any other questions on notice.

(The witnesses withdrew)

COLIN JOSEPH WOODWARD, Assistant Director-General, Environment Protection Authority, 59 Goulburn Street, Sydney, and

AHSLEY JOHN WATSON, Manager of Operations Projects, Environment Protection Authority, 59 Goulburn Street, Sydney, sworn and examined:

CHAIR: Are you each conversant with the terms of reference of this inquiry and do you wish your submission to be included as part of your sworn evidence?

Mr WOODWARD: Yes.

Mr WATSON: Yes.

CHAIR: If either of you should consider at any stage of your evidence that certain statements or documents should remain confidential, will be happy to go in camera. However, I point out that Parliament can override our decision and make that evidence public—not that that has ever happened. I invite you to make an opening statement based on your submission.

Mr WOODWARD: I am happy to do that and it is okay to make publicly available anything we say verbally or by written submission. The Environment Protection Authority [EPA] has made a written submission addressing the terms of reference. It will be noted that the main focus of the EPA has been on the contamination and remediation issues rather than proposed residential development and traffic and issues that have been discussed this morning. This is a complex area in terms of the history of the site, the chemical complexity of the contamination and also the legislation as well. Now I want to provide hopefully a concise summary of the issues in which you will have the most interest. There will be no new information compared to our full submission but hopefully it might clarify and draw attention to the issues in which you might have particular interest.

As the committee would be aware, the Rhodes peninsula has historically been used for industrial purposes. The history, the industrial activity and the regulatory actions have been provided in section four of our submission where we have tried to give a full summary, starting in the early part of the century. There is also a map which is in our submission. I table a colour version of it because I will be referring to various areas. The terminology we have used in it is consistent with that used by Planning New South Wales in terms of the precincts "A", "B" and "C".

I want to summarise as concisely as I can each of those precincts and the land and water contamination issues associated with those. Precinct "A" which is the Orica site is contaminated with lead and phthalates. That contamination is mainly as a result of former operations from Berger and CSR—later ICI—chemical factories which manufactured lead and also plasticisers for the paint and chemical industries. Orica (formerly ICI) voluntarily undertook remediation of the site in accordance with national and New South Wales guidelines. On the former CSR part of the site hydrocarbon contamination was pumped to the surface and treated off-site. The soil contamination was treated by land farming which is a method of mixing and aerating the soil so the hydrocarbons are evaporated off and there is some biological action which breaks down some of the contaminants.

With the former Berger site which was contaminated with lead, the preference was for on-site treatment using soil-washing techniques. This was found to be ineffective when it was tried so excavation and off-site disposal was undertaken in accordance with EPA guidelines at the time. An independent contaminated site auditor has recently reviewed the consultants' reports following the remediation of this land and has done that in accordance with the Contaminated Land Management Act and has signed off following the remediation work that

has been done and that the site is suitable for certain uses, including recreation open space and playing fields and part also for some residential townhouse-type development.

The Hon. Dr BRIAN PEZZUTTI: What is the difference?

Mr WOODWARD: There are different land uses which require different levels of cleanup. The cleanup that has been carried out is suitable for certain uses that comply with the requirements.

The Hon. Dr BRIAN PEZZUTTI: Houses or commercial development cannot be built on the blue part shown on the map?

Mr WOODWARD: It cannot just have any type of housing.

The Hon. Dr BRIAN PEZZUTTI: Why?

Mr WOODWARD: Because the cleanup that has been conducted was conducted for purposes of the proposed development and the auditor has assessed the cleanup consistent with that.

The Hon. Dr BRIAN PEZZUTTI: If it is clear for public recreation does that mean it is also suitable for housing?

Mr WOODWARD: Not necessarily, no.

The Hon. Dr BRIAN PEZZUTTI: If it is suitable for public recreation is it suitable for commercial development?

Mr WOODWARD: Not necessarily, no. There are different levels.

The Hon. Dr BRIAN PEZZUTTI: Why?

Mr WOODWARD: It has to do with not only the toxicity of the actual pollutant that you are dealing with, but one of the assessments that has to be taken into account is the exposure pathway: how likely it is that people will come in contact with the pollutant. For example, a preschool is likely to have a high likelihood that children might be out there and eating soil and so on. If you have a commercial development that is not such a high likelihood so you have slightly higher levels of requirements, or more stringent requirements as you move through a hierarchy going from industrial, open space, commercial, townhouse-type development with tennis courts and that sort of thing down to residential development with people growing vegetables and so on in their backyards. So they become more and more stringent for each of those purposes.

In conjunction with the land issue, Orica also had consultants do an assessment of the health and environmental risks associated with the lead and the phthalate contamination in the sediments in the waters adjacent to their site. That study was undertaken by consultants, URS Australia Pty Ltd, who have concluded that the contamination in the actual water and sediments is not at such a level that it would cause an unacceptable risk to the public or to the environment.

The Hon. IAN COHEN: What sort of recreational use are we talking about—fishing, wading or boating?

Mr WOODWARD: That is for the use that is proposed there. In other words, having people living on the site and therefore children being in the area, with the potential for people going near the mangroves and water and mud, so that is for the use that is proposed on the site.

The Hon. IAN COHEN: Does that including fishing?

Mr WOODWARD: Yes, fishing as well. That report has been submitted to the EPA and we are currently assessing that report at the moment. Because of the potential impacts we are consulting with New South Wales Health on that at the moment. I know that from our discussions with Health they are looking particularly carefully at the issue of potential access by children and people to the mud flats around the mangroves. There has not been a final determination by the Government on the conclusions drawn by the consultants on that.

If we then move to precinct "B" which is the former Union Carbide site, that site had soil reclamation during the 1940s and right through to the 1970s. You can see the extent of that by the historical photos that are included in our submission in attachment five. That site was primarily a pesticide manufacturing plant by Union Carbide that manufactured the herbicide 245T amongst other chemicals. The early production of 245T contained a contaminant, dioxin, that is a toxic pollutant that has been the focus of a lot of the subsequent investigations and requirements. The more recent production of 245T has removed that dioxin contamination so it is essentially a contamination problem from the earlier production of it.

From the production of pesticides at that plant there were various chemical wastes, including dioxin, chlorinated benzenes, phenols and other herbicides and organochlorine pesticides. The chemical plant closed in 1986 and in 1987 the State Pollution Control Commission issued notices which included requirements for investigations, assessments and, subsequently, remediation of the site.

The Hon. Dr BRIAN PEZZUTTI: When was that?

Mr WOODWARD: That was 1987. It closed in 1986 and the SPCC started issuing notices for remediation. Remediation works were commenced in 1998 and completed in 1993. The objective of the remediation at that time was to make the land suitable for industrial and commercial use and open space. It was not proposed at that stage to make it available for residential development. The contaminated material was collected from the site and put in an area of the land which was capped with impervious clay and there were other measures to prevent the escape of groundwater from that area. In 1999 the Government became the owner of the majority of this precinct and the former Glad factory was sold off as a separate concern.

The EPA has done an assessment of the land contamination and has made a declaration, under the Contaminated Land Management Act, that the land area for precinct "B" which is the old Union Carbide site does not pose a significant risk of harm to human health or the environment for its current approved use, that is, for industrial and open space. We are aware that there is currently a proposal for a redevelopment of the site for residential purposes and in order for that to be approved the site would require more stringent cleanup to be able to comply with requirements for residential purposes. At the moment the site is suitable for industrial and open space and does not need any further clean up for that purpose, but for residential purposes does need to go through further cleanup.

In addition to the land side of it, tidal exchange through the area that was reclaimed that had contaminated material in it, has resulted in the sediments of part of the bay becoming contaminated with a range of chemical wastes, most notably dioxin. In 1995 the EPA directed the Waterways Authority as owner of the bay and the sediments to ascertain the nature of the contamination of the bay and to develop a remedial action plan. There has been quite a number of investigations and studies into the degree of contamination of the sediments both prior to 1995 and since then. I am aware that there is a detailed list of those studies included in the submission provided by the Waterways Authority.

In December 1998, the Environment Protection Authority [EPA] determined, on the basis of the available information, that parts of Homebush Bay adjacent to precinct B and also precinct C, did pose a significant risk of harm to the environment and/or human health and the EPA also declared the site to be a remediation site under the Contaminated Land Management Act. What that means is that the site is posing a significant risk of harm, as it is at the moment, and therefore something needs to be done about that, irrespective of development or anything else—unlike which precinct B is not posing a significant risk of harm at the moment.

The Hon. IAN COHEN: Does that mean that the EPA has placed a remediation order on the site? I understand that you are obliged by law to pursue that path.

Mr WOODWARD: Yes, the EPA has made it a remediation site under section 21.

The Hon. IAN COHEN: That is a remediation order? Has that been done?

Mr WATSON: Declared a remediation site, sorry. No.

The Hon. IAN COHEN: Is that the same as a remediation order?

Mr WOODWARD: At this stage it has only been declared a remediation site. The EPA has not issued an order to actually clean up the site. We could do that, but under the legislation we have two options. One is to issue an order to do things, or there is an opportunity for voluntary remediation.

The Hon. IAN COHEN: It was my understanding that when an area represents a risk of significant harm that you have an obligation at law to pursue that path of placing an order. Am I wrong in that regard?

Mr WOODWARD: That is not correct. We also have an opportunity of going down the path of having a voluntary remediation agreement under the Contaminated Land Management Act. The objective is the same, that is, that if there is significant harm, it needs to be cleaned up and we will ensure that it is cleaned up—there are two paths: one is voluntary to the same standards; the other, if people do not want to do it voluntarily, we issue an order. It is the same conclusion.

The Hon. Dr BRIAN PEZZUTTI: Does it bind the Crown?

Mr WOODWARD: Yes. With the Government's purchase of that site, the Government committed \$21 million to clean up the dioxin contamination in the bay sediments. That will require an environmental impact statement [EIS] process. We have provided the requirements. With the EIS process, the Director of Planning New South Wales issues director's requirements, which are needed to be followed in respect of the EIS process for conducting the EIS. The EPA has provided requirements to New South Wales Planning for what needs to be taken into account in the EIS. They have been included in the planning director's requirements for the EIS.

We have provided those for both—the sediments and also for the land development issue. Finally, precinct C is the Rhodes Developments land at the point of the peninsula. This land was formerly owned by Allied Feeds who had a flour mill on the site. It is contaminated because wastes and contaminated soil from the Union Carbide site adjacent to it were, for quite a few years, used to fill part of the land, including land that was reclaimed into the bay on the point. Hence that area is contaminated. The water side of that is consistent with what I just said about the water and sediments adjacent to precinct B. In other words, that has been declared as posing a significant risk of harm, and that is part of the \$21 million that the Government has committed to clean up that site.

CHAIR: Are the areas of water shown on the maps provided to the Committee this morning form part of precinct B in fact the responsibility of the Waterways Authority?

Mr WOODWARD: That is right. The Waterways Authority owns the water and the sediments adjacent to precinct B and precinct C. They have committed to undertake the cleanup of all that. Just to be clear, referring to precinct A there is a consultant's report saying that of the water and sediments are okay. If it turns out that we determine that is not okay and require remediation, the remediation may need to be paid for by Orica, because that is lead and phthalate sediment that is in the water.

CHAIR: That is if it turns out to be lead, but, if it turns out to be the dioxins from precinct B, it would be the responsibility of precinct B—in other words, the Waterways Authority.

Mr WOODWARD: That is right. Studies have been done that indicate that the extent of the dioxin contamination does not extend that far.

The Hon. IAN WEST: I understood you to say that the \$21 million allocated by the Government was for bay sediment and not for remediation of the land. Is that so?

Mr WOODWARD: That is correct.

The Hon. IAN COHEN: You indicated that various studies have been undertaken. Were those studies conducted under the auspices of the EPA, independent or part of the developer's program of proving an area safe? Who has undertaken those studies?

Mr WOODWARD: There has been quite a mixture of studies.

Mr WATSON: Perhaps it would be best if we take that question on notice and provide you with the full details of the studies.

The Hon. IAN COHEN: That would be appreciated.

CHAIR: Perhaps you could tell us who did the studies and whether or not the EPA had a review process.

The Hon. IAN COHEN: As part of that you could advise the Committee whether or not the Orica sediment analysis report will be made available to the local community. You may care to take that question on notice.

Mr WOODWARD: We are happy to take that question on notice. There has been no remediation of the land site in precinct C, unlike precinct B. The EPA has determined that in its current state the site does pose a significant risk of harm to human health and/or the environment. That is, the land side of precinct C on the point currently poses a significant risk of harm.

The Hon. IAN COHEN: Is this the fill area of the Allied Feeds mill site?

Mr WOODWARD: That is right. If nothing happens on that site there will be a requirement for each to be cleaned up anyway. If there is a residential development, as is proposed, it would need to be cleaned up to a more stringent level to satisfy that. That is a potted summary of those sites and how the main elements fit together. I would like to talk about the role of the EPA and the legislative framework. To some extent I am in your hands as to how much you want to hear about this, in terms of timing.

The Hon. Dr BRIAN PEZZUTTI: You are responsible for issuing the order to clean up. Do you give guidelines to scoping about what is the likely development? If the developers say they propose to use the land for industrial purposes and council says it will never approve industrial use, but would be a waste of their time. If the developers say they propose to use land for residential purposes and the council says it will not have another house erected there—which is what the previous council said—what is the company to do? Does the company spend a lot of money cleaning up to residential quality never to get approval, and waste all its money because you have given the order to clean up consistent with such approval? If the company has to do it once for industrial purposes and, because council will not approve industrial usage, do it again for commercial usage; and again for what is startlingly obviously going to happen there, which is residential. What will stop that merry-go-round?

Mr WOODWARD: I think this is one of the real advantages of the new Contaminated Land Management Act. Rather than saying as a blanket requirement that it all has to be cleaned up to the highest standard, the Act takes account of the land use. It largely puts the original decision with the proponent to say what the proponent wants to do. If the proponent wants to develop for industrial use, there are criteria for that; if the proponent wants to develop for residential use there are criteria for that. Yes, it will cost more money for residential development, but that is a commercial decision for the company to make.

The Hon. Dr BRIAN PEZZUTTI: In other words, you set the standard and you police it?

Mr WOODWARD: Yes, and there is a public process throughout all of that, because we are also linked, through our legislative process, with the planning process. In the past there were separate government agencies doing assessments and that sort of thing, but not linked. Now, through the Integrated Developmental Approvals legislation, the EPA is linked in with the planning process. As I mentioned before in respect of the director's requirements, we give our directors's requirements to Planning and they consolidate those and others and give them to the proponent.

CHAIR: Planning New South Wales at the end of that organisation's evidence this morning tabled copies of those requirements, which include your letters and advice to it. The Committee has incorporated that.

Mr WOODWARD: The proponent goes away with one document containing the set of requirements, and prepares the EIS. The EIS then goes to Planning and the public is able to make submissions on it. It goes on public display. The EIS comes to the EPA, copies of the public submissions come to EPA as well. EPA then provides Planning with what is called the general terms of approval. At the very early planning stage if EPA is not going to licence it because of some concern, rather than people spending millions of dollars going through all the planning process, getting approval only to find later on when they apply for their EPA licence, EPA says no and they have wasted all that money, we have to make a commitment during the planning process whether or not we will licence it. If we say we are able to licence it we are required to provide the general terms of approval that we would apply to the licence. That then goes through the planning process and the planning consent is issued. If we say we would not licence it, the planning authority is not able, by law under that legislation, to issue a planning consent.

The Hon. HENRY TSANG: In earlier submissions the council was seeking a co-ordinated approach with regard to a consultant's report or an independent report from the applicants. They thought that perhaps the EPA could get an overall independent report. Is it likely that you could have a co-ordinated effort so that the residents and the council would have some co-ordinated approach to look at what is happening in regard to remediation.

Mr WOODWARD: I think there is probably some frustration in the community about this, largely because at the moment we are in the middle of a process where there are proposals for urban development and remediation, but all the information is not out on the table. When people go through the EIS process, that process has to take into account all the requirements of the EPA and others and that will no doubt be a very thick and weighty document that will in fact draw it all together. I think that when the EIS's are out on public display that will achieve the goal of having all that information co-ordinated and out for public consumption. While all the bits and pieces are around at the moment, I think that will satisfy that desire.

The Hon. HENRY TSANG: So you will work with, and support, the council in dealing with the concerns of residents?

Mr WOODWARD: Yes.

The Hon. IAN WEST: Obviously, the communities are concerned about the issue of a master plan and what will happen not only on the Rhodes Peninsula but in the Parramatta River area and the whole of that particular basin. Are you aware of any overall plan? Secondly, is there any involvement of the Healthy Rivers Commission inquiry into the bay sediment or Parramatta River contaminated areas? Lastly, can you elaborate on what you say on page 16 of the submission from the Director-General, Lisa Corbin, in regard to (d), (e) and (f), and in particular (e), the risks to future residents?

Mr WOODWARD: In terms of dealing with the first of those, about the investigations and co-ordinated approach for the sediments and contamination in the water around that area, the studies that have been done and are being done for the EIS I think will provide sufficient information in terms of knowing the extent of contamination there and proposals for cleanup and what the future quality will be compared to the various goals for fishing, swimming and whatever people want to do in the river, and then that will feed into the planning process.

The Government has established a Catchment Management Board for Sydney Harbour and the Parramatta River, so there is a co-ordinated approach to looking at the whole of the river system. That board does have representatives of councils—in fact, it is chaired by a councillor—and it has representatives of the community and government agencies. So the EPA is on that catchment management board, and that is providing objectives and plans for the river. In fact, there are plans due to go out on public submission within the next few months.

I think within that context the Healthy Rivers Commission would be just adding another layer of organisation on this, and I am not sure that that would necessarily achieve a large amount at the moment. The Healthy Rivers Commission does have a set of priorities established by the Government in terms of looking at whole river systems across New South Wales, and it has its work program. I think there was a particular focus on Georges River and Botany Bay because there has not been as much attention and investigation on that. There has been, and is, quite a focus and quite a lot of money spent on Sydney Harbour, so I think it was thought that there were more immediate priorities for the Healthy Rivers Commission.

As to your question about the terms of reference and page 16 of the submission, and particularly (e), which relates to any risk to existing and future residents, that has been part of the primary focus of the EPA's legislation, and our activities are the protection of human health and also the environment—so, the fish and so on as well. We have liaised very closely with New South Wales Health, particularly in relation to human health impacts. That is why we declare sites as either posing a significant risk of harm to human health and the environment or, alternatively, not posing a significant risk of harm. Does that answer your question on that one?

The Hon. IAN WEST: Not completely on the Healthy Rivers Commission issue, but I hear what you say. On that last point, in regard to the risk to future residents as an issue that

must be considered in the site audit statement, I am thinking specifically about the issue of some sort of indemnity bond or something that will allow residents to have some feeling of security as to the ability to identify a polluter that has the appropriate length of pocket and can be appropriately sued should the audit statements be found to be incorrect.

Mr WOODWARD: I think the Contaminated Land Management Act does deal with that reasonably well in that, in terms of process, when a site is being cleaned up there has to be an assessment to see whether that has met the goals that were predicted in the first place. So that is checked and then goes through an assessment process. In terms of any site auditor's statements, there is a requirement for financial indemnity to be covered in that. I am not quite sure of the exact amount, but it may be in the order of \$10 million or \$20 million. If there ends up still being contamination later on, then of course the Contaminated Land Management Act does provide all of the powers to require any further works or investigations in future as well. But the aim of the whole process is to ensure that that does not happen.

CHAIR: And that goes back to the original polluter.

Mr WOODWARD: Indeed.

CHAIR: The New South Wales legislation is different from that in other States in that responsibility lies not just with the current owner but goes back to whoever polluted the area.

Mr WOODWARD: That is exactly right. The legislation provides for a hierarchy. So that the original polluter is the first one to pay. That is retrospective, and that is quite innovative. Then the hierarchy goes through to the current owner and notional owner.

CHAIR: That is something of an indemnity as well.

Mr WOODWARD: Yes.

The Hon. Dr BRIAN PEZZUTTI: To the purchaser of land like that, does not the buyer beware principle apply?

CHAIR: Not in this case, no.

Mr WOODWARD: Not necessarily for contaminated land under the Contaminated Land Management Act.

The Hon. Dr BRIAN PEZZUTTI: But what if you declare it to be contaminated? What if I say, "I have a dip site on my land," and declare that as part of the sale, can I at some stage pass on that responsibility?

Mr WOODWARD: You can do that in terms of a contractual arrangement. The EPA is mainly concerned about making sure that things are cleaned up where there is a problem. If there is a contractual arrangement that makes it quite clear that the owner is going to pay to clean it up, that is fine. If there is any doubt or concern about that, the EPA has, by way of this legislation, the power to go straight to the polluter in the first place.

CHAIR: Even though the site may have sold four times on.

Mr WOODWARD: And require the polluter to pay.

The Hon. Dr BRIAN PEZZUTTI: So have you tried to go back to Union Carbide or CSR?

Mr WOODWARD: Union Carbide has a problem because of the state of the current company, which does not exist in Australia, and the Government has made that commitment already through a commercial arrangement in terms of that.

The Hon. Dr BRIAN PEZZUTTI: I am aware of that.

Mr WOODWARD: But, as I said before, in terms of the Orica one, even though Waterways might own the water and sediments beside, if Orica was the polluter, the primary liability would lie with Orica for the cleanup of those sediments, if that is required.

CHAIR: I am looking at timeframes for the EIS process. You have said that you had issued, through the Department of Planning, requirements for some of these blocks of the EIS to be done. What sort of timeframe do you anticipate to get all these completed and signed off by your department? Is it a one-year, two-year or three-year process? What I am getting at is that it is not going to happen by the time that the Committee is due to report, is it?

Mr WOODWARD: Through the planning process and this integrated development approvals process, the EPA is locked into timeframes that are included in the legislation for providing advice back. If the EPA does not provide advice back, there is a deeming provision that essentially covers that. So, in essence, the EPA is locked into the timeframes.

CHAIR: But some of that process has not started yet, such as on the Meriton site.

Mr WOODWARD: That is right.

CHAIR: So you do not know as yet when they are likely to put their application in.

Mr WOODWARD: No. It is up to the proponent as to when it wants to lodge the EIS.

CHAIR: And it could be a year before they even lodge it.

Mr WOODWARD: Yes, and obviously we have no control over that.

The Hon. IAN COHEN: What is the EPA's position on the forms of remediation proposed, be it the direct thermal desorption or indirect thermal desorption process, in light of the persistent organic pollution convention that says you cannot destroy POPs waste and create dioxins? Could you comment on the EPA's position on that?

Mr WOODWARD: The difficulty for us here is that we have not got a proposal at this stage, because that will come through the EIS, but I will try to answer your question.

The Hon. IAN COHEN: Could I suggest that there has been indirect thermal desorption and that there is also a proposal on certain areas of the site to do direct thermal desorption which, as I understand it, will create dioxins in the incineration process.

Mr WOODWARD: We have yet to come to a conclusion on that. What we have said is that there are the two proposals, and we have not got all the information because it has not been provided at this stage. So, obviously, it has to be qualified. In terms of the indirect method, yes, we have some experience of that. That was used at the Olympic site for treating much more heavily contaminated material there, and that has proved that that can be done successfully and that the dioxin that is there can be treated.

The Hon. IAN COHEN: That is the indirect method.

Mr WOODWARD: That is the indirect method. In terms of the direct method, we know that that is being used in the United States of America, Canada and in parts of Europe. It is not being used in Australia to our knowledge, so we will be looking for a lot of information on that. The proponents have said to us, "We are thinking of direct thermal dissorption. Is the EPA going to knock that on the head—because if you are we do not want to spend a lot of money looking at it." We did some preliminary work, and our response to the proponents was, "We do not have an objection in principle to that, but we need a lot of detail and so on." So, on that basis, we understand that one of the proponents is looking seriously at direct thermal.

All I can say at the moment is that we do not have an in-principle decision to say, "No, we would not approve that. Don't even bother looking at it." But we need a lot more information to be convinced that all the national and international protocols for dioxin and other organic chemicals can be treated to acceptable levels before we would approve it.

The Hon. IAN COHEN: What are acceptable levels? I have two issues here. One is rapidly reducing constantly historically. The second is that you mentioned before everything from 2,4-D and 2,4,5-T and chlorophenols and chlorobenzenes, yet assessments—for example, with consultant parametrics—are limited to dioxin. Are we not somehow missing the point—because you yourself mentioned that a number of other intractable chemicals need to be dealt with? Is that issue going to be adequately covered, given that you are using dioxin as the baseline there?

Mr WOODWARD: We are not just using dioxin. We have made that clear, particularly through the director's requirements. In fact, we have 30 pages of director's requirements that go through a vast range of chemicals. Dioxin, I think, is going to be the primary one, and that is where there has been a major focus. For many of the pollutants there are national guidelines for what is called investigation levels for pollutants. The goal during the EIS process is for the proponents to remediate the sediments or the land to meet those investigation levels. If they meet those levels, that is fine for those particular chemicals. If they do not meet those levels, that does not necessarily mean that that is not acceptable. That then triggers a much more rigorous assessment and risk assessment process to determine whether it is acceptable or not.

The investigation levels are international levels that really say, "If you are above this level, you really need to investigate a bit more." So, by definition, if you are below that, in essence you meet the requirements. In the case of some chemicals, like dioxin, there are no investigation levels that have been set. So it then has to go through another process. It will take some few minutes for me to go through this, if you are happy to do that.

CHAIR: Could you table that information?

Mr WOODWARD: It is set out in our submission at page 13. It talks about dioxin numbers, about where there were not investigation levels, where there are no standards in Australia, and then they have used very stringent levels that were available in the United States as a guide. That was the guide that was put out in the call-for-tender documents. There are also risk assessments that have been done on the bay.

The Hon. IAN COHEN: Could you also address two further matters: firstly, any proposed testing of nearby houses on roof dust and topsoil; and secondly, whether you are aware that dioxin is currently seeping through the concrete bentonite wall into the waterway and how that is being addressed?

(The witnesses withdrew)

(Lunch adjournment)

MATTHEW TAYLOR, Chief Executive Officer, Waterways Authority of New South Wales, 169 Sutherland Street, Paddington, and

ROLAND JOHN WHITTELL-WEBB, Project Officer for Homebush Bay remediation works, Waterways Authority of New South Wales, 8 Meredith Place, Frenchs Forest, sworn and examined:

CHAIR: Are you conversant with the terms of reference of this inquiry?

Mr TAYLOR: Yes, I am.

Mr WHITTELL-WEBB: Yes, I am.

CHAIR: The Committee has received a submission from the Waterways Authority. Would you like that submission to be included as part of your sworn evidence?

Mr TAYLOR: Yes, I would.

CHAIR: If at any stage during your evidence you should consider that in the public interest certain evidence or documents you may wish to present to the Committee should be seen or heard only by members of the Committee, we would be willing to accede to your request and continue in camera. However, I advise that the Parliament has the ability to override that decision, although it has never done so. What you like to make an opening statement?

Mr TAYLOR: The Waterways Authority is responsible for the ownership of the bed of Sydney Harbour, which obviously includes Homebush Bay, and as such is responsible for ensuring the clean up any contamination that may be on the bed of the bay. That is not to say that the Waterways Authority did it, which it did not, but it is responsible for doing something about it where such contamination is found.

For many years it has been well known that the bed of Homebush Bay is contaminated, not just by the other things that are around Sydney Harbour but by dioxins, furansnes, organochlorines and a whole range of other organic substances which were the byproducts of chemical manufacturing on Homebush Bay in the 1930s, 1940s and 1950s and which leached into Homebush Bay from those properties.

As a result of that contamination, the predecessor of the Waterways Authority, which was the Office of Marine Safety and Port Strategy (which later became the Office of Marine Administration), in 1995 undertook a series of studies, which followed on from studies done earlier by the Maritime Services Board. The Office conducted more studies, set up an expert panel of a range of people with expertise in the area of contaminated sediments, and in 1995 set about starting the process which we now see hopefully coming to fruition.

During that process it was recognised that if we could also clean up some of the dryland sites alongside Homebush Bay it would be a synergistic sort of thing and a plus for government, for the people of Sydney generally, and for the environment of course. Along the way, a couple of years ago, the so-called Lednez site on Homebush Bay, which was the site of much of the chemical production some decades ago, was obtained by the Government from the then owners and has become part of this project.

We are now in a situation where we have a contract with Thiess to remediate not only the bed of the bay but the dryland on a 10-hectare size part of Homebush Bay peninsula itself. At one stage we had hoped to include in this project—and, indeed, had intended in the tender to include in this project—the so-called BT site, which is at the northern end of the peninsula,

also known as the Allied Feeds site. After a lot of discussion and encouragement with BT, the then owners, they agreed to come with us and to remediate their site, which was also contaminated by dioxin run-off from the Lednez site.

However, during the process of the tender documents going out and the call for detailed proposals, BT decided to sell their site to a third party, Meriton, and that occurred. Because Meriton were going down a different track, we had to proceed, and are proceeding, not with Meriton but in the knowledge of what they are doing, and hopefully when they get all their ducks in a row we will be able to work with them to remediate the whole of that site. The details are set out in the submission, and I would be happy to answer any questions you may have.

CHAIR: Mr Whittell-Webb, do you wish to add anything?

Mr WHITTELL-WEBB: I wish to add one small point as to how we became the owners of the Lednez site. It was really a practical problem: even if we dug up the contaminated sediments, where would we process them? We did not have a dryland processing site. So that was a large factor in our decision to take on ownership of the Lednez site and, as Matthew said, do two things at once.

CHAIR: My understanding of the process that you would have had to go through and that you obviously have to go through now on the land that has water over it is that you will need to firstly establish the extent of the contamination, then dam it off, get rid of the water, dry out the land, and then treat the silt exactly as you would on dryland.

Mr WHITTELL-WEBB: Essentially, yes. The process on dry land is the same.

CHAIR: Okay.

Mr TAYLOR: The extent of the contamination is known so we do not have to establish that. It will be tested and assessed and retested but we know where it is. It is simply a matter of putting in a wall—

CHAIR: Drain it and then process it and then put back clean stuff and let the water come back.

Mr TAYLOR: Yes.

The Hon. IAN COHEN: I am interested IN the level of contaminant known. What are Waterways' remediation targets for the bay?

Mr TAYLOR: The targets are based on a number of things: the World Health Organization standards and others, the New South Wales Health guidelines, and so on.

The Hon. IAN COHEN: Have you released the specific standards that you will be aiming at?

Mr TAYLOR: Sorry—have we reached them?

The Hon. IAN COHEN: Have you released that? Have you stated that that will be the standard?

Mr TAYLOR: No. The standard of clean up will depend on the EIS and the remediation action plan and the EPA's direction as to what that level should be. We do not know for certain what it will be. We know what the World Health Organization standards are

and what New South Wales Health has told us, and that information will guide the EPA eventually in telling us what the standards should be.

CHAIR: So you put up a proposal and then it is up to the EPA to say that that is good enough or it is not good enough.

Mr TAYLOR: No, Thiess will. For instance, New South Wales Health has told us that we should be guided by a world standard of one to four picograms of dioxin per kilogram of body weight per person. In other words, if you had more than one to four picograms per kilogram body weight you would be at the limit of an acceptable dioxin level.

CHAIR: That is inside your body.

Mr TAYLOR: Yes. One picogram is one thousand thousand millionth of a gram so it is not a great deal. Indeed, we understand the background level of dioxin in the environment is about that anyway.

The Hon. IAN COHEN: There are environments that, from various industrial usages, have that background level so I suppose that is a compromise on dioxin that does not necessarily have a safe lower threshold in any circumstances. The World Health Organization has made that position which is now reduced to one to four.

Mr TAYLOR: It was 10.

The Hon. IAN COHEN: Yes. Does that mean that you will be adhering to that position on the sediments in the bay in a clean up?

Mr TAYLOR: As I said, it will all depend on the risk assessment that Thiess is carrying out and the ultimate decision by the EPA. I do not know what it will be. The level of contaminants in the sediments will probably be down to about one part per billion.

The Hon. IAN COHEN: So Waterways as an organisation will not be getting an independent assessment—you will be relying on the developers' expert assessment. Is that the situation?

Mr TAYLOR: The EPA will be relying on them, yes.

The Hon. IAN COHEN: Will you be looking at, for example, dealing with that similar—I am not quite sure. Are you saying that at one point you have a certain level but at another point it is still to be assessed by Thiess' experts and by the EPA? I am not sure whether you are actually declaring a level that you find acceptable.

Mr TAYLOR: That is correct, we are not declaring a level.

The Hon. IAN COHEN: I guess what I am asking is that if you have remediation targets, being the authority that has some expertise in dealing with the Harbour floor bed.

Mr WHITTELL-WEBB: Perhaps if I can muddy the waters a little further—no pun intended—there is no defined level for dioxins in sediments under Australian legislation and, indeed, I think in very few parts of the world.

The Hon. IAN COHEN: There are now World Health Organization levels.

Mr WHITTELL-WEBB: So in that circumstance to determine what is safe, the relevant authority—in this case the EPA—would consider what is known as a risk-based assessment. That assessment tries to determine what level of exposure will end up with no

observable effect or the lowest observable effect on the human population. In doing that, one of the inputs to that risk assessment is the World Health Organization standard of a maximum of four picograms per kilogram. Having determined that, then there is a matter of chasing down the food chain to determine how much we can end up with in our food and in turn how much we can end up with in the sediment.

It is not very cut and dried; you will not open a book and find the answer. It is a rather rigorous scientific risk assessment process. We are working very closely with Health, the EPA and Fisheries to provide all the information we can to assist them in their deliberations. However, as Matthew said, at the end of the day we do not determine that. It is the EPA, with the advice of the experts available to it, that will determine at what level the sediments must be remediated.

CHAIR: It was indicated to us this morning that if they do not have in-house experts they will employ them.

Mr WHITTELL-WEBB: I am sure they will.

Mr TAYLOR: They will have to.

The Hon. IAN COHEN: Would it be reasonable to say that you will be looking at world's best practice, the practice in America, for example, as a benchmark?

Mr WHITTELL-WEBB: Yes, absolutely.

The Hon. IAN COHEN: What proportion of the contaminated bay area will be cleaned up?

CHAIR: Can I just clarify a statement that the Hon. Ian Cohen made? Is America the world's best practice?

The Hon. IAN COHEN: It is what I have been told. There are examples in America where it is.

CHAIR: I thought you were making the statement that what they do is world's best practice.

The Hon. IAN COHEN: I am told that. I will not necessarily be held to that, but that is what I understand is the case. I am simply wondering whether you will be adhering to that. Can you tell the Committee what proportion of the contaminated bay area will be cleaned up? What percentage of the bay area is involved?

Mr TAYLOR: Again, that depends on the remediation action plan that Thiess produces for the EPA and their approvals. Basically, in one of the attachments to our submission there should be a map that shows you where the highest concentrations are. They are close up against—there are a few spots elsewhere—the sea wall of the two land sites, Allied Feed and Lednez.

The Hon. IAN COHEN: Do you have a strategy for dealing with the mangrove areas?

Mr TAYLOR: We did not have any mangroves—at least, very few—on our site. In fact, I do not think there are any, are there?

Mr WHITTELL-WEBB: No. If you are talking about the mangroves off the Orica site, the contaminants in those sediments are quite different to the ones we are dealing with

adjacent to the Lednez and BT sites. So they will not figure in our calculations; we do not expect that at all.

The Hon. IAN COHEN: I guess a bit further back in history reclamation of the literal zone was progressively carried out in front of the Union Carbide and Allied Feed sites at the instruction of the Maritime Services Board. The Maritime Services Board owned the land at the time that reclamation occurred. It constructed a new seawall and approved the material to be used in the reclamation activity. I understand that the actual reclamation was mainly carried out by Union Carbide. The bay in that area became contaminated while under the ownership of what was then MSB at the time.

Mr TAYLOR: It would have been leased to Timbrol. (see explanatory note 1)

The Hon. IAN COHEN: Where does that leave the responsibility for that Seawall, the concrete bentonite wall, as I understand it? I have been told that several community groups are concerned that there is leaching coming under that wall into the bay.

Mr TAYLOR: As I understand it, the old MSB did give those approvals but in those days we did not have the legislation that we now have and people did those sorts of things without knowing what it was they were doing, essentially. As a result of that, the action of filling in that site and reclaiming part of the bay caused the contamination. Under the current regulations the responsibility is with the owner of the site. The owner of that site has now passed from Lednez to the Government so the Government is now responsible for the clean up of the dry land site, which it owns. Also, being the owner of the bed of the bay, it is responsible for that as well. Meriton, which is now the owner of the site at the north, the Allied Feed site, is responsible for cleaning up that site because it is the owner. It did not do the contamination but it is the owner and therefore it is responsible.

The Hon. IAN WEST: Waterways is more than just the owner of the bay, is it not? Are you not the custodians of the river?

Mr TAYLOR: No. We own the total bed of the harbour, including Parramatta River up to the weir. We do not think of ourselves as the custodian. There are too many other people involved.

The Hon. IAN WEST: So you consider yourselves the owners of—

Mr TAYLOR: The bed.

The Hon. IAN WEST: —the bed.

Mr TAYLOR: Yes. In legal terms it is equivalent to normal dry land real estate. We own title to the bed of the harbour on behalf of the Government. See explanatory note 2.

The Hon. IAN WEST: So you are the owners of Homebush Bay.

Mr TAYLOR: Correct.

The Hon. IAN WEST: And Parramatta River.

Mr TAYLOR: Correct.

The Hon. IAN WEST: Are any discussions taking place about some sort of overall master plan that may involve the Healthy Rivers Commission?

Mr TAYLOR: No.

The Hon. IAN WEST: Do you see any problem with having some sort of overall master plan?

Mr TAYLOR: No problem but I do not see the need for it. A whole raft of people are already responsible for the things that go on. As you know, Waterways owns the bed. A total catchment committee has been set up to look after the catchment and what goes into the harbour. Sydney Water is responsible for testing the cleanliness of the water. The EPA has licensing powers over people who put stuff into the harbour. A whole raft of people are responsible for these things and, recognising that there were a number of people with different responsibilities for Sydney Harbour, a couple of years ago the Government appointed a Sydney Harbour manager to pull it all together. I do not know what you are driving at, whether you are driving at cleaning up the bed of the harbour in toto.

The Hon. IAN WEST: I am trying to comprehend how, in Homebush Bay, there is this segment. There is Homebush Bay, which is part of the waterway.

Mr TAYLOR: Yes.

The Hon. IAN WEST: And then there are three segments on the eastern side of Homebush Bay, cut into three slices, of which we are saying that we can, not in an overall way but in some small piecemeal way, remediate little bits of it. I am having difficulty understanding how we get the shellfish and the fin fish to swim only in certain parts of Homebush Bay and Parramatta River. I am having difficulty understanding how the sediment does not shift.

Mr TAYLOR: It does not.

The Hon. IAN WEST: It does not?

Mr TAYLOR: No. We could show you that if we had all the data with us. Tests were done in the 1980s.

CHAIR: Any questions you want to take on notice and send us supplementary information, please do so.

Mr TAYLOR: We can produce those for you. There are probably three major sets of test core samples taken over the past 20 years. The latest one, which Thiess would have done a couple of years ago or a year ago, indicate that there have been marginal changes. However, there is no mass movement of the dioxin. Some contaminants move around but dioxin goes down there and stays there. It does not deteriorate like other things. It just stays there so you have to get it out but it does not move around.

The Hon. IAN WEST: I am no expert in that area. It sounds interesting to me.

Mr TAYLOR: The fish do the moving around.

The Hon. IAN WEST: Of a measurement of contamination, you indicated that the World Health Organisation and the New South Wales health guidelines talked about certain measurements in the human body as to contamination.

Mr TAYLOR: Yes.

The Hon. IAN WEST: I am trying to understand how you measure the soil sediments and relate them to the contamination in human bodies. Are you going to do some sort of random samples of all the residents in the area as to what their levels of contamination are and that there be some futuristic measurement taken? If you are talking about the sediment

contamination and using some guideline that relates to sediment, I can understand it being a measurement taken from the river sediment, but we were talking about World Health Organisation contamination in humans and I cannot relate the two, to make a measurement at a particular point in time.

Mr TAYLOR: I hope I can answer your question. Given the WHO recommendation of up to four picograms per kilogram body weight—anything above that is dangerous.

The Hon. IAN WEST: In a human?

Mr TAYLOR: In a human, yes. Given that, the experts, the scientists, can determine how could dioxin get into the system from Homebush Bay. The only way it could get into the system from Homebush Bay is if you eat the fish that are there. They start off by knowing what is dangerous or what they think is dangerous to the human body, which is the number of picograms, and through that they work down to the fish and they determine—it is some time since I read this—if you eat one fish a week out of Homebush Bay for the next 30 years you may start reaching that level of dioxin from that particular source. Then there is a one in God knows how many thousands or millions that you might get some sort of defect or cancer out of it.

They relate that down to the fish and then some other experts look at the fishes' grazing habits on the bottom of the bay and they say that these fish do not live in the bay all the time, they spend most of their time out of it and they come into the bay and they graze the contaminated bit and they may stay there for a day or so and graze the bit that is not contaminated and then buzz off again. In order to make sure that that one fish a week for 30 years is at such a level in itself that it is not going to hurt humans, they arrive at a level of contamination that they can accept and average overall for the bay at so many parts per billion, possibly one or two parts per billion, of dioxin in sediments as the maximum allowable. So you have to get a level that is down to that. Does that make sense? Is that about right?

Mr WHITTELL-WEBB: Yes, it is about right.

The Hon. IAN WEST: From my layman's understanding, that appears to be a very, very inexact science.

Mr TAYLOR: Yes, but as Roly said, these people are experts in their field. You cannot open a book and say this is the answer—a two-pound mullet.

The Hon. IAN WEST: I understand you can only go on what is available but there has to be a point when you make a decision.

Mr TAYLOR: It is a rigorous assessment with all the information there and it is worked through.

The Hon. IAN WEST: My question is really going towards the perception that people have about the future.

CHAIR: So you are saying how can people be confident in science?

The Hon. IAN WEST: How can people be confident in the science into the future? Understandably, they want some guarantees.

Mr TAYLOR: I suppose you can be as confident as you can with anything in this world that has been designed and produced by an expert in their field. There is no quick and easy answer to that question.

Mr WHITTELL-WEBB: You raise a very good point. The way scientists, and engineers for that matter, generally address the point is to be conservative in their assumptions. They try not to be too risky. Surprisingly, since I have been involved in this job there have been surveys, and new data is always coming forward giving us greater certainty. For instance, a relatively recent dietary survey of Australia enabled us to pin down better the assumptions we previously made about fish consumption. So, things are getting better but to try to make sure we do not make a slip up we are conservative in the assumptions that we make.

The Hon. IAN COHEN: I hear your discussion on that matter. I have real fears about bioaccumulation. I think that needs to be recognised. You have a lot of sedentary communities in the bay and it is rising up through the food chain. So, I do not think it is a simple X fish is going to get Y amount of toxicity in the system. I think it builds up in the air and in the biota. Given the focus on dioxin, that tends to preclude looking at a number of other chemicals, 24D, 245T, a range of chlorophenols and chlorobenzenes. I wonder about any surveys of the accumulation of chemicals in the marine fauna of the bay—have they been carried out, have there been any reports? This could show bioaccumulation, I would suggest, and also genotoxic effects of exposure to the chemicals. Has this been reported? I understand there is data, maybe with the EPA, and also with the Waterways Authority. Do you have that data and can you provide it to this Committee?

Mr WHITTELL-WEBB: Yes, there have been a couple of surveys done of fish in the bay. If I can go back to your first point about bioaccumulation, my understanding is that the World Health Organisation recommendation on tolerable daily intake takes into account the half-life of dioxins in humans. So, it takes into account that bioaccumulation factor.

The Hon. IAN COHEN: On dioxin, but not the other chemicals, which is also a factor.

Mr WHITTELL-WEBB: It is a toxicity equivalent of the family of chemicals known as dioxins. So, it is not just one compound we are talking about, it is that group of compounds put together, and the toxicity equivalent works out from that.

Mr TAYLOR: I probably should have pointed out that when we are talking about dioxins we are talking about a family of organic compounds, a whole range of stuff. The information I have is that if you destroy the dioxins, the same process will destroy those other members of the family.

The Hon. IAN COHEN: You can let us have the information from those biological reports?

Mr TAYLOR: Certainly.

The Hon. IAN COHEN: And also, I understand, from the JET report, which is of rainfall and leaching groundwater into the bay from the Allied site. I understand that was from the late 1980s. Perhaps the Committee could look at that report.

The Hon. Dr BRIAN PEZZUTTI: The responsibility for cleaning up Homebush Bay, as the owner of property you are responsible for that cleanup, are you not?

Mr TAYLOR: As the owner of the bay, yes. I missed the first part of the question?

The Hon. Dr BRIAN PEZZUTTI: As owner of the bay you are responsible for the cleanup?

Mr TAYLOR: Yes.

Mr WHITTELL-WEBB: Well, no. Excuse me.

Mr TAYLOR: Yes.

The Hon. Dr BRIAN PEZZUTTI: If you cannot find some other person to blame?

Mr TAYLOR: Yes, which we could not.

The Hon. Dr BRIAN PEZZUTTI: I understand that you were given the land in mark B, were you not?

Mr TAYLOR: Yes. You are talking about the dry land site now, are you?

The Hon. Dr BRIAN PEZZUTTI: The Brierly site.

Mr TAYLOR: I thought you were talking about the bay, which we do own.

The Hon. Dr BRIAN PEZZUTTI: You own the bay and you are only responsible for cleaning up pollution that you cannot shoot home to somebody else?

Mr TAYLOR: Basically, yes.

The Hon. Dr BRIAN PEZZUTTI: But because you became the owner of land, the Brierly site, you then assumed responsibility, not just for the land and water, but also for the stuff that went from the land to water, is that correct?

CHAIR: Because of the contractual situation.

Mr TAYLOR: Well, yes and no. You would have to go to court to prove that, I think.

The Hon. Dr BRIAN PEZZUTTI: But, effectively, you have taken that on yourself?

Mr TAYLOR: Yes, we own both sites and we are cleaning up both sites.

The Hon. Dr BRIAN PEZZUTTI: Your contribution is to clean that up. The \$20 million contribution you are making will only go part of that way. The rest of the cleanup will be done by, is it, McRoss Developments?

CHAIR: Thiess, is it?

Mr TAYLOR: Thiess and Trafalgar.

The Hon. Dr BRIAN PEZZUTTI: So they will pick up the extra cost over and above the \$20 million and in return for that they will get the land?

Mr TAYLOR: Yes.

The Hon. Dr BRIAN PEZZUTTI: Is that how you would normally go about fixing some of these problems? Obviously Brierly Investments got out of it because it could not afford to put more and more money into it. Is that how you would normally get round these problems?

Mr TAYLOR: In terms of who pays for it?

The Hon. Dr BRIAN PEZZUTTI: Yes.

Mr TAYLOR: This is the first dioxin problem we have had and, as far as I am aware, the first time we have had major difficulties with the previous owner of the land.

The Hon. Dr BRIAN PEZZUTTI: So normally you would pursue the previous owner of land or the current owner?

Mr TAYLOR: These days the developer of say the Colgate-Palmolive site or the gasworks site further up the harbour, they are required, if they cannot get the previous owner to fund it—which has never happened to my knowledge—they are responsible for paying for the cleanup of the wetland site.

The Hon. Dr BRIAN PEZZUTTI: We have known about dioxins in Homebush Bay for a long time. During the Olympics they did not want to put ferries up and down there because of concerns about stirring up the water. I think that is correct, is it not?

Mr TAYLOR: I think there were problems with wharves and depth of water. I do not think it was the stirring up as such.

The Hon. Dr BRIAN PEZZUTTI: At the time an investigation was done we found dioxins in the water then.

Mr TAYLOR: Yes, we have known about it since the 1980s.

The Hon. Dr BRIAN PEZZUTTI: Why has it taken so long for the EPA to give a cleanup order?

Mr TAYLOR: You need to ask the EPA that. I cannot speak for it.

The Hon. Dr BRIAN PEZZUTTI: How does the EPA know—

CHAIR: I think they answered that this morning. They said the EPA order depends on the level of development the developer wants to use.

The Hon. Dr BRIAN PEZZUTTI: But it only knows when it gets told. It could be in the paper for weeks and weeks, but the EPA knows nothing until somebody writes to it and tells it. How does the EPA discover these pollutants and the necessity for it to do an investigation and say you have to clean this up.

Mr TAYLOR: I am sorry to repeat myself, but you will have to ask the EPA that.

(The witnesses withdrew)

KATHRYN TERESA HUGHES, advocate and private citizen, Wollombi Road, St Albans, sworn and examined:

CHAIR: Welcome. Dr Hughes, are you conversant with the terms of reference of this inquiry and do you wish your submission to be included as part of your sworn evidence?

Dr HUGHES: Yes.

CHAIR: If at any stage during your evidence you wish to present documents or make statements only to the Committee, we will be prepared to accede to your request and resolve into an in-camera session. However, I must warn you that Parliament can override our decision and make such evidence public—not that it has ever done so. I invite you to make a preliminary statement after which we will ask questions.

Dr HUGHES: I suppose the most important thing for the Committee to understand is that my submission is made in a private capacity but I am working for PPK, which is contracted by Thiess, the remediator. I explain that in the first couple of paragraphs of my submission.

CHAIR: Not at Econeco?

Dr HUGHES: That is my private company.

The Hon. HENRY TSANG: Do you have a conflict of interest?

Dr HUGHES: I have declared my interest. It is very good that this inquiry has been called. I have listened today to the discussion of many issues, such as dioxins, chasing numbers, chasing statistics and chasing clean-up standards and world's best practice. There is much to understand in this area and we still have not got it right at a educational level, in centres of excellence and whatever. There are some very good overseas and Australian consultants, but as far as this State having a culture of understanding pollution and remediation issues, I think we are at about 10 per cent and have 90 per cent to go. My main point is to be aware of statistics and numerical guidelines but not just to chase figures: the dioxin fin fish ban, whether it is one, 10, three or how many picograms, and what level will affect a child. We must look at an ecological framework for the clean-up and remember that risks are involved because there are always risks. That is not an industry argument—although it has been used before; “everything is a risk”. Parliament must be very careful about that. If we ask “Is there any risk?”, the answer will be “Of course there is”. It is a matter of making a social decision about the amount of risk. The basic point is that if you want to clean it up better, you will have to find more money. If we want to clean up the peninsula and bay to the new World Health Organisation [WHO] standards, we will need more money.

My other point raises a very important question for the Environment Protection Authority. I have been seeking this information for some years. The EPA has done some Sydney air shed studies. The Sydney air shed is a basin and everyone knows that pollution sits in the basin then drifts out to Windsor or wherever—it moves around. A key drainage point lies within the Middle Parramatta River drainage basin, particularly the Homebush Bay area. This is because of the lie of the land. I think it is important to put on the table whatever information the EPA or its consultants have generated in studying dioxins in the air shed—or anywhere else for that matter—even if they are incomplete. What usually happens is that the EPA or somebody else in government commissions a study, which is never peer reviewed or published—it is what we call “grey literature”;—and which just sits there. Hundreds of studies simply sit there. They might be brought up in political circles and shown to somebody but they are not in the open to be looked at or used by the professionals and education sector. I know that there are some air quality studies of dioxins in the Sydney basin—we would expect that; it is

a big industrial city—and that is very important information for comparison purposes. We must be able to get a baseline to understand what we are talking about.

The Hon. Dr BRIAN PEZZUTTI: Do you mean that some dioxins might fall out of the sky and end up in the water?

Dr HUGHES: They do.

The Hon. Dr BRIAN PEZZUTTI: Yes, but not in the same concentrations that you expect of dioxins that are produced on the ground and in the ground.

Dr HUGHES: No, not from industrial sources.

The Hon. Dr BRIAN PEZZUTTI: In other words, you try to clean up to the level that might be required by the WHO when dioxins are related not to activities on the site but to activities across the whole city.

Dr HUGHES: It is a very important point of reference because we are dealing with policy issues.

CHAIR: We must understand that it does not come back to a nil baseline: something is there already—except in the country.

Dr HUGHES: Sorry, there is no nil baseline in the country.

The Hon. Dr BRIAN PEZZUTTI: This applies to places such as Balmain and other inner-city suburbs. For instance, in Black Wattle Bay there are high concentrations of lead because of the use of lead paint. People might claim that it is all to do with cars but it has more to do with lead paint. This is also the case in Cessnock, Broken Hill and the Lake Macquarie area: they blame the smelters but it is the lead paint. When it comes to the issue of lead in the water at Homebush Bay, is there any way of identifying whether the lead is caused by the activities of Dulux or because houses were cleaned up using lead paint?

Dr HUGHES: Lead is lead. There are probably some very expensive investigative ways—perhaps the technical fellows could help you with this—of distinguishing this lead from that lead.

The Hon. Dr BRIAN PEZZUTTI: How do you distinguish the lead paint made on the Berger site from the lead paint in Black Wattle Bay, around Chippendale and so one?

Dr HUGHES: For all intents and purposes you cannot do that although it is technically possible.

The Hon. Dr BRIAN PEZZUTTI: That issue is very important for a developer or an owner on a street with little old houses that have been there since the factories were built.

Dr HUGHES: I have made several points about the baseline issue, which I concentrate on in my presentation. I read through the Committee's terms of reference, but I thought "This is what I want to say". It is very important that not only the government but the community and developers understand this issue. It is a bit intractable because we cannot do much about it, but we must try to place it in context.

CHAIR: I read an article recently that reported that lead found in the Arctic Circle was caused by foundries in England in the 12th century.

Dr HUGHES: It has to do with the transfer of pollutants globally in the upper atmosphere. That is the most fantastic topic.

CHAIR: They dated the ice and discovered that the pollution had come from England in the 12th century.

Dr HUGHES: But the DDT in the Arctic has much more modern origins.

The Hon. IAN COHEN: However, we have significant levels and perhaps the most highly polluted sites in Australia.

Dr HUGHES: One of the most.

The Hon. IAN COHEN: I understand that you have been working with the community liaison group. Is there any concern about the type of remediation that is proposed at these sites?

Dr HUGHES: Yes. Some CLG members are present and have given evidence. It is not really a consensus group that votes on whether it likes something or other, so I think we could sharpen the CLG process in that regard. However, we could say that about all consultations in New South Wales at present. Your point is that there are concerns about not necessarily the method but the day-to-day environmental management processes—mainly dust, which is a significant issue wherever there are activities such as this. My reading of the situation is that it is not about people opposing remediation—although some do because they believe the land should just lie there; (that is a valid and reasonable position)—Rather the situation is about having confidence that the people undertaking the process will do it right.

Some community members have raised the important issue of a no-dust policy—which I have written about in my submission. It is a nonsense to have a no-dust policy. What does that mean? The other gentleman working on the committee is John Pym, a senior engineer who dealt with these issues in his capacity as Director of Remediation for the Sydney Olympics site. The fact that people might think there should be no dust and that we need baseline studies that go on for 30 years indicates the amount of concern and worry in the community. The Homebush Bay site passed into urban myth years ago—you hear some pretty amazing things about it—because the information about it was closed for quite a few years. I saw confidential information that people showed me with a trembling hand when I was at the Total Environment Centre in 1986. They said, "This has been shown to us by Waterways and no-one is allowed to see it". But it is not a cover-up; it was just that there were no technologies around 10 years ago to do the job. It is governed by the speed of the technology and now it can be done. I think a lot of genuine anxiety is caused, first, by the fact that industrial cities are big and dirty and people get sick as a result—they suffer from asthma and so on—and, secondly, because people are still not confident that all the information, including studies, financial deals and so on, is on the table.

The Hon. Dr BRIAN PEZZUTTI: Even though it is "grey" information.

Dr HUGHES: That is the term used for unpublished literature—there is a tonne of it.

The Hon. IAN COHEN: I understand your position regarding the difficulty of pursuing a no-dust policy. However, in your communications with the group have you undertaken to back that up with the adequate testing of soil and of people's roofs and houses so that the community can receive assurances about leakage from whatever remediation system is chosen? Is that testing and back-up part of the community negotiation process?

Dr HUGHES: If it is put on the table by community members. Off-site monitoring is what we are discussing here.

The Hon. IAN COHEN: Has nothing been mentioned? Has there been any acknowledgement by the industry responsible of the need to undertake those checking measures?

Dr HUGHES: Nothing in detail about off-site monitoring, and the remediators have their own view about that. It is probably important for you to read the notes of the meetings at which this issue was discussed.

The Hon. IAN COHEN: You acknowledge that the no-dust policy is an impossibility so I am asking you whether there have been adequate arrangements made with the local community to check on potential escaped dust or contaminants into the local area. There must be proper monitoring so that people are at least aware of what is going on. Your logic says that it is impossible to have no dust but do you have a system to inform the remediating developers through community groups of the ways to monitor appropriately and adequately?

Dr HUGHES: I am not the mediator.

The Hon. IAN COHEN: But you are part of the process: community liaison and taking the message back to the remediators, whoever they might be, in order to protect the community.

Dr HUGHES: Yes. Those off-site monitoring issues have been discussed and I think it is very important to be clear about what has and has not been said at those meetings. I urge you also to read the notes from them.

The Hon. IAN COHEN: I will do that.

Dr HUGHES: The remediators and the health department said at the CLG meeting that the issue of dust will be handled in a certain way.

The Hon. IAN COHEN: Will there be monitoring?

Dr HUGHES: Of course.

The Hon. IAN COHEN: Of people's houses?

Dr HUGHES: Not necessarily of people's houses. A feeling was communicated at the meeting. The remediators said, "It's not our job to do that" and the health department said, "It's very difficult to do these things".

My recommendation—and I have not had an opportunity but I am planning to put that to the CLG and it is in here—is that the information such as dust in the ceiling and various studies et cetera should go to the community and something written or even put on the Net - some communication that has got some substance to inform people if they want to establish an off-site baseline before the remediation starts. The fact is that it is the increased road traffic that will cause quite a lot of pollution. It is a very difficult path to take to do a base line before and after, so there is not any consensus on that.

The Hon. IAN COHEN: There may not be consensus on it, however, and correct me if you vehemently disagree, but I understand that in terms of dioxin emissions road traffic has something like 3 per cent of dioxin emission and the main dioxin emission comes with incineration. Could you give the committee your opinion on direct thermal desorption or indirect thermal desorption as a method of dealing with the dioxins on site?

Dr HUGHES: Do you want me to comment on the thermal desorption?

The Hon. IAN COHEN: You might dispute it but I am told that 3 per cent emissions are from cars.

Dr HUGHES: Are they Greenpeace figures?

The Hon. IAN COHEN: Yes, and that the main part in terms of dioxins generally—because you made the comment that in the roofs of houses nearby this industrial site that it could well be from traffic and I am saying that 3 per cent from cars, and the biggest emitter of dioxins is from incineration.

Dr HUGHES: Think of the past 20 years. I have spoken to Matt Ruchel from Greenpeace about that and I do not mind if it is 3 per cent, that is a great result as it used to be bigger. They may be European figures. You do not want to chase numbers too much. I am not disputing that the generation of dioxins from vehicular emissions has decreased because we have got catalytic converters and a lot of the old cars are off the road. Once again we should be asking the EPA if it has any more data on that as that is very important. Notwithstanding the source of it, the point is that you do not want people to be exposed to it. You can chase generators of pollutants all around the planet and all around the Sydney basin if you like but what you are trying to get to is confirmation that the amount of dust composition in roofs around that area may well have a significant proportion that has come from previous industrial activities. Naturally, of course!

The Hon. IAN COHEN: We are agreed on that.

Dr HUGHES: Either direct or indirect thermal desorption, I have read the information provided by the technology vendors, if you like about that. Bill Troxler gave a very detailed presentation—too detailed for some members—at the CLG meetings about the different aspects of it and basically said that the indirect thermal desorption is slower. The direct thermal, which is called by some “a big burner”—it is considered to be an incinerator by certain people—that adequate scrubbing et cetera has gone on to that, meaning that now products of incomplete combustion are not an issue. I do not know if that is correct. I have contacted my colleague in Greenpeace, Darryl, to ask him if the report they did in about 1998 is still current, and have they taken into account the modifications to the equipment. That is because if they both get put forward and there has to be an environmental impact statement, at least we want to know the status of the technology with respect to filtering out pollutants. I have not got enough information about whether those scrubbers do the job.

The Hon. Dr BRIAN PEZZUTTI: There are a number of sniffers all around Sydney.

Dr HUGHES: Sniffers?

The Hon. Dr BRIAN PEZZUTTI: That draw in air on a continuous basis and they go into filters and they store the amount of particles.

Dr HUGHES: Monitoring equipment?

The Hon. Dr BRIAN PEZZUTTI: Yes, they are called sniffers. I know that in 1994-95 somebody at the Australian Nuclear and Scientific and Technology Organisation [ANSTO] who was actually measuring the size of the particles. The importance of that is that you can breathe in particles that are smaller than one micrometer.

Dr HUGHES: I know, inspirable or respirable.

The Hon. Dr BRIAN PEZZUTTI: That is right. Obviously the ones that are not respirable are not nearly as dangerous as the ones that are respirable, in other words, the smaller ones. But it should be possible to get background material before they start the process as an experiment or a trial as a base line and then measuring it during the process which will take three years. You will get a fairly good and quick example of whether you are getting dioxins in the air, on the roof and dioxins which are breathable at a higher level and different particle size because the particle size is more important than the dust that rolls around.

Dr HUGHES: The particle size is critical because it is about whether it can really make the impact on your body.

The Hon. Dr BRIAN PEZZUTTI: Exactly. Is this being proposed? It would be a good study because it is not the only place in Sydney where we are going to find dioxins. This is one of the responsibilities of the EPA. Have you put it to the EPA that it is a good thing for them to be monitoring because they set and police the standards and surely it is a good project for them to do.

Dr HUGHES: It is a great project but they have not got any money.

The Hon. Dr BRIAN PEZZUTTI: That is a very bad excuse. If they demand that the developers pay all the costs there are some things—

Dr HUGHES: It would be terrific if it was really well designed, “no politics”, and adequately funded and it had a purpose and an outcome with public reporting through the web and letter boxing etc. That would be fantastic to get that base line whether it was in people's roofs or in the gutters or wherever.

The Hon. Dr BRIAN PEZZUTTI: I said the EPA should do it because people such as the Hon. Ian Cohen, and I am not being nasty, would distrust it if McRoss Developments or Trafalgar or anybody else did it, in spite of the fact that they paid for and got an environmental scientist of high reputation to do it they would say it was paid for by the developers and they would not trust it.

Dr HUGHES: You would need an interdisciplinary team with “no politics on the table” to design a really good study. I do not believe that that is the job of the remediator. Personally as an advocate, I believe that is the job of the State.

The Hon. Dr BRIAN PEZZUTTI: If the mediator did it the Hon. Ian Cohen would not trust it.

Dr HUGHES: I believe it is the job of the Government to fund it.

The Hon. Dr BRIAN PEZZUTTI: That is right, I agree with you completely. After all the Government is putting in \$20 million and providing the land. They are putting a large amount of money into this project already.

The Hon. HENRY TSANG: Who is to say you can trust the EPA.

Dr HUGHES: You have got to trust somebody.

The Hon. Dr BRIAN PEZZUTTI: You have got to trust somebody. Some people do not even trust the CSIRO.

The Hon. IAN COHEN: It is up to these bodies to impress upon people who are observing. Please, we are talking about proper scientific process so it is not a case of trust, it is a case of proof.

The Hon. HENRY TSANG: Thank you for declaring your interest but I still do not understand the politics of that part of your declaration. Will you explain the role of the Community Liaison Group. Who represents that group? How did it come to be formed? What is the relationship between the group and the two main residents' groups? What is the relationship between your company and the people?

Dr HUGHES: Last question first, I trade under my company so I am engaged and paid money to go and do things with that group and to read things et cetera. The people from Thiess should correct me if I am wrong, the group was established by PPK Environmental Pty Ltd who doing the Environmental Impact Statement for the development on behalf of Thiess who are the remediators. Initially, and it is quite important for everyone to realise, we had another community liaison group that ran for three years—the Homebush Bay Environment Reference Group—that I ran during the Olympic period. You can read the Terms of Reference, the consultation process and the whole range of issues that we dealt with on our web site. That group was concerned about remediation of the bay. Quite a few of the members of that group were local residents of Canada Bay or Rhodes or whatever and other people who were interested would also come and sit as observers. The Homebush Bay Environment Reference Group [HOMBERG]—

CHAIR: It was very successful.

Dr HUGHES: Always room for improvement but we had the money to do it properly and it was worth it. The idea of having a proper Reference Group with not just the consultation, with the “facilitator” who’s job includes - “We can handle them”. “How do we handle the public relations?” “How do we handle the difficult woman in the corner?” or “That bloke is a bit pokey.” It was a genuine consultation process. The idea was that there would be a bit like a HOMBERG model to try to get to and to have a good Terms of Reference that everybody understood and the Consultation Protocol that means that people cannot be rude to each other or yell and that people are treated quite well. The CLG was set up by PPK as a part of their legal requirements for the environmental impact statement under the Department of Urban Affairs and Planning requirements. That is how the group came about.

For a long time it was very fiercely resisted and finally last year when I was overseas the first meeting was called by Jo Robertson who works for PPK and who is preparing the Environmental Impact Statement. My relationship to the group, as I explained in my submission, is as an independent technical consultant to the group. Basically that means that I have got as wide a brief as I like really.

The Hon. IAN WEST: Are there any lessons to be learned from the Orica McRoss remediation process? Was it a good or bad process?

Dr HUGHES: I do not know too much about that. Therefore, the lesson to be learned is that they did not have a particularly robust communication program. I feel that they are still running and that they are frightened and it is still very much the old style developer. The lessons to be learned is that HOMBERG can be improved and keep looking at a high standard and always try to get that. For that you need education of the public service as well as of the community and the private sector. Everyone has to have a better understanding of what good consultation is like. Really important issues such as base line dust studies or the choice of technology or the amount of money that is required if you want to do it properly. If you want it cleaned up 100 per cent do you want \$500 million, \$400 million, \$120 million?

The Hon. Dr BRIAN PEZZUTTI: Nothing is too good for the people of Canada Bay.

The Hon. IAN WEST: Leaving aside the issue of the dollars, do you have any suggestions on how to try to get HOMBERG best practice? I assume the picking of a facilitator or a lead agency or a combination of both is important. Have you got any helpful ideas on how to do that?

Dr HUGHES: One of the things that made HOMBERG different to other consultative forums that have been established, say, in the past decade with which I have had experience is that HOMBERG was not the usual standard of having to have all the agencies involved sitting around the table and a couple of brave individuals, usually the most dynamic people because they can wear the difficulties. It was on an as-needs basis. We really tried to get a good mix of people in the selection process and were not frightened to put really pokey people on it. We need people to ask the really hard questions. It is openness of information. I reckon about 95 per cent of the information I wanted to table from the Olympics was tabled. I got most of what I wanted tabled. The Olympics were coming and this is what we did with it and this is where it is going to really tell the whole story and that is the lesson for those McRoss developers or anybody else. It is hard because it is more expensive for democracy, it is more time-consuming and there are maybe more risks because you might find something like remnant drums. Chemical waste destruction has cost the state of New South Wales a hell of a lot of money because they had to bring in a machine et cetera.

In the old days they would probably have taken them down the back, shoved them in the landfill, covered them up and no-one would have been the wiser.

The Hon. Dr BRIAN PEZZUTTI: Would that be a problem?

Dr HUGHES: It depends on where they were buried.

The Hon. Dr BRIAN PEZZUTTI: The way they have the substance contained at the moment at site B is in a clay enclosure.

Dr HUGHES: On the Union Carbide site—that was the old one.

The Hon. Dr BRIAN PEZZUTTI: That is protected to the remediated, but at least it prevents further leaching of the site in the interim, as I understand it.

Dr HUGHES: That was the only thing they could do at that time.

The Hon. Dr BRIAN PEZZUTTI: That was best technology then. Now that they can move on from that we can fix it. I am interested in this "openness". If you are opened and you disseminate all the information that you have but you do not have the best advice about how to interpret the information you are exposed to the worst possible interpretation by a those who would declare themselves expert. You know the type, "I am an environmentalist. I can tell you this is really bad staff. It is going to kill you tomorrow." You cannot refute that because nobody knows. When you expose something that no-one knows much about, whether it is good, bad or indifferent; whether it is going to be remediated or not remediated, how do you disseminate that information without exposing yourself to enormous witchhunts and fear campaigns launched by people for worst reasons?

Dr HUGHES: This is how I would go about it and this is how I did go about it for the Olympics. This is how I would like to proceed over the next few years with this overall Rhodes development, because it involves the whole peninsula. The best example I can give you is the web site that we developed as a Community Information System, which was putting dioxin in context. Some colleagues in the environment community consider that that is trying to hide it. I think it is quite the opposite. I believe the approach I am taking is a new and different approach that has history in it as well as chemistry. It is very important. To put things in context and tell the history. I sent, with my submission, a five CD-ROM series, the oral

history that we were commissioned as part of the project to put the dioxins in context. We interviewed the chemists who mixed up the batches, et cetera.

I believe that if you put it all on the table, 10 metres of books or something like that, it does not mean anything. It is information, but it is poorly delivered. The Olympics thing was beautiful, because we had the money. I was able to bring in writers and people to enhance the information. That was not to hide it but to bring out the right information that we felt people needed. That was through our HBERG process, the user needs assessment—what are they really interested in? For example, with the dust issue, you could go to the web site and look under "science" at the section on how we dealt with the dust. That was a battle royal, an absolute battle to get that up during the Olympics.

It was incredible that we got it up because a whole lot of bureaucrats were running around who wanted to stop it. I said, "No, this is my job. I am the director and I have been paid to do this job. This is going up." I will not mention names, but there are people who are still there who said, "That should not go up. People do not understand it. You should not talk about dioxin. That is not the Government's business." It sure is the Government's business because the Government is responsible for it being there and the Government has to foot the bill for cleaning it up when there is other resource-demanding work and maybe other parts of Sydney should have that. It is a competition for funds.

I say look at that web site under "science" and "community" at how we dealt with dust issues, the old blue machine to destroy the scheduled chemical waste that was found in the drum remnants just down from the Olympic Village. People were panicking right, left and centre when there was no need to panic. It was because the people who determine the communication were journalists.

The Hon. Dr BRIAN PEZZUTTI: Yes, the vast common denominator.

Dr HUGHES: They are very important people but they need to be lifted up, too. I would say that it is information in context. You can talk about dioxins. You can also admit your mistakes, because it was not a mistake-proof exercise. There were only a couple of things that I could not get up. I still have not got up on that web site the most important thing, that is, the information on the validation of the various sections all of the Sydney Olympic site and of the scheduled chemical waste destruction machine outcome. People are worried about it and I still cannot get that up, even though it has been read and read, and approved by the engineers who did it. But the public servants are still very worried that if we put that up, somebody might "do" something.

That is not the way to get people to understand remediation, environmental management, clean ups, sign off, auditing and all those new issues. The community understands that if they go over the Sydney Harbour Bridge they do not expect it to blow up. There are a whole lot of different risk factors involved in this hazardous chemical issue. It is much more complex than standard engineering, but there are ways through it. If you do not take the first steps you will stay stuck in the 1970's. I think a lot of people are stuck in the 1970's. I consider it is a progressive position.

The Hon. IAN WEST: Will you elaborate further on the conclusion you have made at page four that overall it is considered that the value of a community health study as part of the proposed remediation process is not high?

Dr HUGHES: That is right. I believe that it is not the responsibility of the remediator to do a community health study. I believe that if any study is done, as I mentioned before, because it has wider implications it should be the responsibility of the Government, that is, through the Department of Health. But I would be very concerned to make sure that the design and scope of the study had community input; that they would not just rush away and do it; tell

everyone to go home that everything is all right. We should involve people in the design of the study. That has been done in other places on this little planet. I do not believe it is the remediator's job.

The Hon. IAN COHEN: From your comments earlier it appears to me that you are not ruling out the possibility of direct thermal desorption. How does that fit in with the persistent organic pollution [POP] convention that cannot destroy POP waste and create dioxins as part of the process? Given that, with direct thermal desorption how do you maintain enclosure on incineration?

Dr HUGHES: I have not made up my mind about issues before we know them. I am not being evasive.

The Hon. IAN COHEN: You say you have not made up your mind. Therefore, you have left the way open for the possibility of direct thermal desorption. I have asked that question, given that you have not closed off that avenue. As you will know that is a very important issue too many people, including me. Given that you have not closed off that possibility, how does that suit with the POP convention? Further, with direct thermal desorption how do you see maintaining enclosure on incineration?

Dr HUGHES: No idea. When I come to considering that I will have to spend time reading it through about whether or not there is an issue of POP or products of incomplete combustion [PICs]. I cannot answer that question because I do not have really good knowledge in my head about how good this technology could be and what is useful.

The Hon. IAN COHEN: What you are saying is that if it did in any way show that there was a situation of destroying waste in creating dioxin at all, you would not agree with that method?

Dr HUGHES: No.

The Hon. IAN COHEN: "No" you would not agree with the method, or "no" you disagree with me? I just want to be clear. I think it is fairly straightforward

Dr HUGHES: It is not clear question.

The Hon. IAN COHEN: I do not know how much more obvious I can make it. In respect of direct thermal desorption do you remain open to that? If you do, how do you deal with that principle with the POP convention, where you cannot destroy POP waste and create dioxins?

Dr HUGHES: I am still open to it because I have not yet familiarised myself with the pluses and minuses of the technology, except that I read the Greenpeace report. That is all I have read to date. You have referred to something that I probably should have read. I do not usually read conventions.

The Hon. IAN COHEN: It is a basic regulation regarding the release of dioxins into the atmosphere with a process that is dealing with other general waste.

Dr HUGHES: Obviously if it is going to result in the generation of products of incomplete combustion in the chamber, if there is going to be inadequate scrubbing—if you are saying you can never trust scrubbing that something could happen, obviously I would not be very keen.

The Hon. IAN COHEN: Would not be very keen or would not agree with that method?

Dr HUGHES: Bill Troxler, an American guy with lots of experience, came to give a presentation on different sorts of technology at the CLG. It was very interesting. The issue he raised that I thought interesting was that the indirect thermal disorption is possibly less risky because it is slower. It could take much longer, therefore the risk is increased. As he understood the direct thermal disorbers in the United States of America is that they dealt with that issue of dioxins to air satisfactorily. That was his response. To go beyond that you have to get right into the technology. You have to say, "he says the scrubbers are much better, they have this baghouse and there will not be any problems with dioxins." How good is this information? As you know, I am not an engineer. If that is proposed, I think Allied Feeds have suggested at their meeting—Meriton Apartments—that they are interested in the direct thermal disorption.

The Hon. IAN COHEN: Why?

Dr HUGHES: I don't know. Ask them.

The Hon. IAN COHEN: Is it not cost?

Dr HUGHES: Ask them. Don't know.

The Hon. IAN COHEN: No, I am asking you. You were very clear on costs as issues in terms of processes. Is it not a cost factor for the direct thermal disorption?

Dr HUGHES: I do not know. I do not know what the costs are.

CHAIR: When you say "proposed", it will be the job of the EPA to satisfy itself?

Dr HUGHES: Yes. The EPA will have to do a technology review. The National Advisory Body on Scheduled Waste did all the assessments on the hexachlorobenzones and other organochlorines—the body have done all the destruction plans. First of all they did dieldrin and the organochlorines. They did project management plans for a range of chlorinated halogens from hexachlorobenzene to pentachlorophenol, aldrin, dieldrin chlordane, heptachlor, et cetera. The technologies have to be assessed by the National Advisory Body on scheduled waste. That is a Federal step. They did that with the technology at Homebush Bay, the blue machine. That is another step, all those issues about the time, the risk, the cost, the emissions, et cetera. You have to put your faith in something.

(The witness withdrew)

(The Committee concluded at 3.15 p.m.)