# **EDUCATION AND HEALTH STANDING COMMITTEE**

# INQUIRY INTO THE CAUSE AND EXTENT OF LEAD POLLUTION IN THE ESPERANCE AREA

# TRANSCRIPT OF EVIDENCE TAKEN AT PERTH WEDNESDAY, 6 JUNE 2007

# **SESSION ONE**

# **Members**

Dr K.D. Hames (Acting Chairman)
Mrs D.J. Guise
Mr T.K. Waldron
Mr M.P. Whitely
Dr G.G. Jacobs
Mr P. Papalia

# Hearing commenced at 9.02 am

STEWART, MR COLIN ANDREW Chief Executive Officer, Esperance Port Authority, examined:

MATIJASEVICH, MR JAMES MICHAEL Chairman, Esperance Port Authority, examined:

The ACTING CHAIRMAN: The member for Wanneroo, who is part of this committee, is ill and will not be with us today. This committee hearing is a proceeding of Parliament and warrants the same respect that proceedings in the house itself demand. Even though you are not required to give evidence on oath, any deliberate misleading of the committee may be regarded as contempt of Parliament. Have you completed the "Details of Witness" form?

The Witnesses: yes.

**The ACTING CHAIRMAN**: Did you understand the notes at the bottom of the form?

The Witnesses: Yes.

**The ACTING CHAIRMAN**: Did you receive and read an information for witnesses briefing sheet regarding giving evidence before parliamentary committees?

The Witnesses: Yes.

**The ACTING CHAIRMAN**: Do you have any questions relating to your appearance before the committee today?

The Witnesses: No.

The ACTING CHAIRMAN: For your information, we were originally scheduled to ask questions for two hours this morning. We have decided to extend that to three hours and I understand you are comfortable with that extension of time. We have a few questions to ask. The TV cameras will be here for the first five minutes, which must be just about up. Our first question relates to the Magellan proposal. In relation to the port's weekly planning meeting minutes of 28 September 2004, there is an item under planning 4.1 concerning the chief executive officer's report on the capital works approval process being underway, stating "provision of shore-based crane for berth 2 was critical". The same item goes on about Trevor Watters' visit, highlighting PPEs and potential locations to store lead. Why was the shore-based crane berth seen as critical for the export of lead? Did that happen - I gather it did not - and what arrangements were put in place?

**Mr Stewart**: The shore-based crane we are referring to was the shore-based crane for the Ravensthorpe nickel project. This was related to giving us the ability to handle the containers that the BHP Billiton Ravensthorpe nickel project was going to generate and also the ability to handle the sulfur that BHP Billiton was going to operate with.

**The ACTING CHAIRMAN**: You will notice the immediate departure of my research officer when you said that, which suggests to me that she has information that suggests otherwise in relation to previous submissions.

**Mr Stewart**: The other potential implication for the Magellan project was that the Magellan project was always predicated in those days on them shipping lead concentrate out of the port for about 18 months to two years and then they would be moving from lead concentrate to lead ingots. Obviously, the ingots would require shore-based lifting gear to get them on and off the vessel and it

seemed to us self-evident that if the Ravensthorpe nickel project shore-based crane came on line we then had better ability to handle ingots when the ingots came on line, nominally in 2007. That was the gist of my comments at that meeting in 2004.

**The ACTING CHAIRMAN**: I will just move on to the next question. I may come back to that when that information is available. Did you ever assess the appropriateness of the loading facilities at Esperance for smaller bulk carriers of lead?

**Mr Stewart**: No, there was no formal assessment done on the size of vessels. We handle a range of vessels for nickel and lead and for a variety of products, so vessel size to us was not a major issue.

The ACTING CHAIRMAN: In retrospect?

Dr G.G. JACOBS: It ended up being critical.

The ACTING CHAIRMAN: It ended up being a major issue.

**Mr Stewart**: Once we became aware that these particular small vessels - these are the Spliethoff vessels we are referring to - created problems, it was not only the whole factor of their size it was the hold configuration. They are box holds rather than the standard holds with wing tanks. Once we became aware that those vessels created problems - not specifically due to size but the hold configuration - that is when we took action to ban the future use of those vessels for handling lead concentrate.

**The ACTING CHAIRMAN**: Are you aware that those same vessels are loaded in Townsville without issue?

Mr Stewart: I am unaware of that.

**Dr G.G. JACOBS**: The loading of the MV *Lemmergracht* on 11 and 12 December 2006 - a memo from Trevor Watters to Patrick Scott suggested that the loading and the event of 12 December were totally unacceptable. Why was it deemed that this loading was unacceptable, mindful of the fact that this very vessel had previously been at the port in October and contributed significantly to some of the problems with dust?

[9.10 am]

Mr Stewart: The vessel when it previously visited the port had generated problems for us. We brought to the attention of Magellan and, more particularly, Magellan's ship brokers that these sorts of vessels were inappropriate. As it turned out, that vessel had already been chartered for another cargo. In fact, after it left Esperance, to the best of my knowledge it went and discharged its lead concentrate in China. It then returned to the east coast where it picked up a load of new containers for the nickel project and brought a full load of empty containers into Esperance. These were brand-new containers for the Ravensthorpe nickel project. Once those containers had been discharged, it picked up a cargo of lead concentrate, again out of Esperance, for China. At the time, we became aware that this vessel had created some problems for us. That charter, if you like, from the east coast to Esperance had already been committed. I guess what we said to Magellan was that, all right, on the basis that it is already coming back into Esperance with a load of empty containers, we would be prepared, on a one-off basis, to allow it to come, but under no circumstances was this style of vessel to visit the port in the future.

The ACTING CHAIRMAN: For that particular load, knowing that there were reports from the first loads of workers being covered in dust when that ship was being loaded, did you put any requirements on Magellan to ensure the moisture content of the ore?

Mr Stewart: We certainly discussed and worked through that issue with Magellan in that we needed to take particular care in trying to ensure that the moisture of the product was at an appropriate level. Yes, there was a lot of discussion leading up to the second vessel. This vessel

was potentially going to be another problem and we needed to leave no stone unturned to try to address that.

**Mr P. PAPALIA**: You said that after the ship's first visit, you determined that you would not accept those ships any more. You then decided that you would allow one more visit by that type of ship.

Mr Stewart: Because it was already coming back.

**Mr P. PAPALIA**: Were there any other visits or exports utilising that type of ship?

**Mr Stewart**: In and out of Esperance?

Mr P. PAPALIA: Yes.

**Mr Stewart**: I think the *Lemmergracht* is owned by a Netherlands-based company. They have a series of those ships on the Australian coast. We have had those ships visit us many times for various cargoes.

**Mr P. PAPALIA**: With regard to lead exports, did you use the box hull-type vessels? How many times did you use them?

Mr Stewart: We used that particular fleet of "gracht" ships twice, to my knowledge.

**The ACTING CHAIRMAN**: Did you not say that there was more to it?

Mr P. PAPALIA: That is to the best of your knowledge?

**Mr Stewart**: Look, I would have to check, but to the best of my knowledge we only handled the "gracht" ships twice. I would have to go back to our records to double-check on that.

**Mr T.K. WALDRON**: You said that you discussed the moisture etc with Magellan. Knowing that there had been a problem, did you take any other steps at the port itself to try to overcome the problems you knew about with loading that ship?

**Mr Stewart**: We certainly looked at increasing the water sprays at various points and making sure that all those water sprays were fully operational. We had been trialling the Polo Citrus Australia dust suppressant. That was certainly installed and we made sure that it was all working appropriately. I guess I keep coming back to the point that we were constantly working with the company to endeavour to ensure that it was presenting a product to us at a moisture level that made it possible for us to handle.

**The ACTING CHAIRMAN**: Coming back to the loading of lead in ships of that size in Townsville, they have a telescopic chute and an apron and they have real-time dust monitors, which is far in excess of what you had at that port for the proper management of the dust. Obviously, from what you said earlier, you are not aware of what they do for loading lead at other ports.

Mr Stewart: No, not in detail. I am aware of the ports around the coast that handle lead concentrate. To that level of detail, no, I was not aware. One thing we had experience of over the years from loading products, and particularly in the case of iron ore, was that when we first loaded iron ore through the port of Esperance a lot of attention was paid to dust. In those days we had a telescopic chute. The shipments of iron ore from Esperance from 1994 to 2002 went over that same ship loader. We had a telescopic chute on that ship loader. We used that and lowered the telescopic chute right down into the hold. We had the ability to go right into the hold. We found on the first shipment that that created problems for us, because as well as taking the ore right down into the hold, it was taking a lot of air with it. You had an ore stream with air flowing down the chute. That air has to escape. We found that air was coming out of the hold. We learnt from that that in the case of iron ore and to a certain extent in the case of nickel concentrate, we found from our operating experience that it was better to not have these particular telescopic chutes right down into the hold but to have them just inside the hatch combing, because that limited the amount of air you were introducing into the hold. With hindsight, could we have trialled some other methods? We

may be able to. As I say, from reasonably long experience, we found that practice worked quite well.

**The ACTING CHAIRMAN**: Yet in Townsville they do not have dust escaping. They have real-time monitors and airflow samplers. They do not have problems.

Mr Stewart: I understand what you are saying, but we did not have that level of monitoring.

**Dr G.G. JACOBS**: Colin, I will just quote to you from a memorandum of 13 December 2006, which was the day after the two-day loading of the *Lemmergracht* on 11 and 12 December. The memo is from Trevor Watters, who is the general manager of strategic planning for Magellan, to Patrick Scott. In the last paragraph before "actions" it states -

A meeting at the Port with Colin Stewart, Ian Harrod, Ron Padgurskis, Dave Jameson and I -

That is, Trevor -

was held at 9:30am on the 12<sup>th</sup> to review the loading and take steps to prevent a recurrence. They stressed that this event was totally unacceptable and was liable to turn the operators opinion of Magellan concentrates from preferred product (which it was initially) to the same as nickel.

Can you explain the concept of "preferred product" and the implication of the operator's opinion of Magellan concentrates turning from a preferred product to the same as that of nickel?

[9.20 am]

Mr Stewart: There are a couple of very distinct differences between nickel concentrate and lead concentrate. As most people would be aware, nickel concentrate often has a distinct odour - a xanthate odour - that causes concern in the town and the workplace. Lead concentrate does not have that same odour and, for us, that was a big positive. I stress that all ore concentrates vary in their characteristics. In the main, nickel concentrate has a propensity to, what we call, lump up. It oxidises and forms lumps. The lumps tend to damage equipment and do not flow freely. A bad shipment of nickel concentrate is what we call lumped up and it is a real problem for everybody to handle. There are a lot of equipment shutdowns and belt drifts, and a lot of things go wrong. The lead concentrate is a product that flows freely and does not give employees the same level of problems as some nickel shipments. In that sense, for us it was a preferred product to handle.

Another characteristic of lead concentrate is that it is free flowing. When products are loaded onto a conveyor belt, we like them to flow freely and not damage the equipment. Another aspect of the nickel concentrate that is a negative compared with lead concentrate is that it is a sulfide ore. Sulfides tend to be very corrosive and cause a lot of wear and tear on and corrosion of the equipment. The employees not only load the ships, but also maintain the equipment, and they do not like handling product that has the potential to damage the equipment, either through wear or corrosion. Therefore, on balance, the employees think that lead concentrate is a better product to handle.

**Dr G.G. JACOBS**: When your refer to "preferred product", are you referring to issues around the ease of loading?

Mr Stewart: Correct.

**Dr G.G. JACOBS**: You are not referring to dust creation issues?

**Mr Stewart**: It is a better product to handle. We recognise that with some of the early shipments there were problems with ship size. From my experience in talking to employees and walking around the site during the occasional lead shipment, the general consensus is that it is a good product to handle.

**Dr G.G. JACOBS**: The term "totally unacceptable" was not used to describe the dust that was settling as far as the cars outside the wharf offices, but it was used to describe the ease of loading.

**Mr Stewart**: And dust. It was totally unacceptable to have a shipment as dusty as that was. I was away from Esperance for that particular shipment. I got a phone call - I cannot remember what time of the day it was - briefing me on the very bad shipment. There was a lot of concern among the employees that the shipment was far dustier than we would have liked.

**Dr G.G. JACOBS**: That was the second time that had occurred. That particular issue occurred in October with the same vessel -

Mr Stewart: Correct.

**Dr G.G. JACOBS**: - and that was unacceptable too.

Mr Stewart: Correct.

The ACTING CHAIRMAN: I come back to the first question. I have a copy of the port's "Weekly Planning Meeting" minutes and page 2 refers to the importance of the crane. Item 4.1 refers to Colin Stewart's report that the capital works approval process was underway and that the provision of a shore-based crane for berth 2 was critical. It seems from this document that all the issues relating to that were lead related.

Mr Stewart: I repeat that the purpose of that crane was, first and foremost, for the Ravensthorpe nickel project. One of the things in putting together our capital works justification was the potential use of that crane by a third party. At that point, Magellan's project brought some justification for that capital works expenditure because of the potential for another use for that crane; that is, loading ingots in 18 months to two years. The minutes are not verbatim, but they indicate that I would have been saying to the staff that this all fits nicely into the context. We would be handling concentrate for about 18 months and, at that point, Magellan's business plan was quite clear that it would move to ingots in two years. By that time the crane would be in place and we could handle the ingots. One of the issues that the employees brought to my notice was that whether if they were to handle concentrates, they could be guaranteed that when the time came they would be handling ingots, or whether the ingots be sent through to Fremantle that has the crane capacity. I was able to say to them that by 2007 we would have a crane and would be able to compete for that trade for the ingots.

The ACTING CHAIRMAN: Was it considered to transport lead in containers?

Mr Stewart: No.

**The ACTING CHAIRMAN**: In March 2005, a delegation from the port went to the Magellan site because of concerns that loading at the port would involve the product passing through 12 transport points, along nine different conveyors, to reach the ship's hold. Only three of those conveyors are fully enclosed and a number of the components of the loading system are exposed to the elements making it virtually impossible to avoid the escape of dust generated in transporting concentrate.

You would be aware of this document. It goes on to say the degree to which the prill product - another name for it - may break down to form hazardous lead impregnated dust, is impossible to quantify without testing the prill form under similar conditions. It also noted that the dangers are significantly different to those of nickel. A trial of the product occurred in April and the prill was broken down as a result of transport. Why did this export go ahead?

**Mr Stewart**: From our point of view, while the prill was an added advantage to the handling of the product -

**The ACTING CHAIRMAN**: What do you mean by "prill"?

**Mr Stewart**: I guess it is small balls - prill is fertiliser. When you buy a bag of fertiliser more often than not it is in the form of little balls.

The ACTING CHAIRMAN: Little pellets.

**Mr Stewart**: What they were trying to achieve was a prill. The word "pellet" was somehow used to describe this product. Prill is what we handle. We handle fertiliser prill and sulfur prill. In the industry that I am in, "prill" is clearly a smallish ball. To us, prill is about moisture control.

**The ACTING CHAIRMAN**: When was it a small ball?

**Mr Stewart**: When we went to the mine site in 2005, they were producing, albeit at a slow rate, what I call a prill through an agglomerator. I could call it an agglomeration. It was a concentrate that they were endeavouring to turn into a prill.

**The ACTING CHAIRMAN**: Your report to the board on 21 March states that at the time of the visit by the port delegation, the agglomerator had only recently been available to Magellan and it would turn the lead concentrate into a prill or pebble-like product.

**Dr G.G. JACOBS**: Did you see it operating?

Mr Stewart: Yes, we did.

**Dr G.G. JACOBS**: Did you see the product?

Mr Stewart: Yes.

**The ACTING CHAIRMAN**: I saw pictures of the agglomerate and it did not look like small balls, but large balls - about this size.

**Mr Stewart**: It varies from the size you demonstrated down to a small concentrate-type product. It was a range and certainly not a uniform size. In our view it was a concentrate and they were endeavouring to change the texture. We had doubts that it would work.

**The ACTING CHAIRMAN**: It did not work, did it?

Mr Stewart: No.

**The ACTING CHAIRMAN**: Did that change your attitude?

**Mr Stewart**: No, because, as I said in our evidence at a previous hearing, we were talking about a concentrate. We were fundamentally talking about a concentrate. The handling of a concentrate involves a number of features that make it better or worse. The fundamental feature is getting the moisture control right.

[9.30 am]

Mr P. PAPALIA: The question I have regarding prills is related to the Riseborough report, on which you placed some weight when assessing the process prior to going ahead with it and when you justified the safety measures that you implemented. The report refers to the product being in prill form. We have received other submissions from significant stakeholders who went ahead on the assumption that the product would be in prill form. However, it was never really in the prill form that you described or in the form that we understand. Did you notify the board when that agglomeration process did not work? Did you feel compelled to notify the Department of Environment and Conservation or any other authority?

Mr Stewart: Certainly at the board level we discussed that the product had broken down in transit. One of the people on the delegation to Wiluna was the then chairman of the port authority board, a person who had 15 years of experience in the port both as a board member and as chairman. He was very familiar with the nature of the products we handled. I talked with him and some of the other Wiluna delegation members about concerns as to how that product would handle and whether it would reach Esperance in a prill form. We talked very openly about it. He was particularly experienced in those sorts of matters, both in his own working career and as a long-term serving member of the port. We talked about it with him and the board. I have no doubt in my mind that we would have talked to DEC in Albany about it. Do we have a paper trail to prove that? I do not

believe that we have. However, there is little doubt in my mind that due to the interest in the product from a variety of parties, not the least of whom was DEC, we would have mentioned it.

The ACTING CHAIRMAN: That takes me back to a previous question that I asked about the concern of port workers. The product passed through 12 transfer points on nine different conveyors to reach the ship, with only three of those fully enclosed. We inspected the port and saw the product. We have a picture of the prill form. I am sure you would have seen that picture before. I ask the committee clerk to pass the picture to members of the gallery. Your workers were reassured after having seen that picture about handling the product; however, as soon as it arrived at the port, it was no longer in that form. Did that reinvigorate the concerns of the port workers?

Mr Stewart: It did not reinvigorate their concerns. The employees that I went to the site with saw this product. The delegation included operation employees, representatives from management and a member of the board. We all discussed the potential for this product to break down. It arrived at the port in a broken down form - in other words, it was no longer in prill form. There are a variety of sizes of prill in the picture, as has been pointed out. When it arrived, there was a lot of interest to see how it flowed over the conveyer belt. We had to put it over a conveyor to get it into the storage shed. That conveyor went through three or four transfers. It went well. It loaded into the shed well. Although I did not go into the shed because we did not want any more people in the shed than was necessary, everybody who was on site that particular day said that it was a good product because it was not dusty. It had the right sort of moisture level and handled well. Did we have robust debate with our employees about the nature of the product? We certainly did. I thought that was healthy. We received a lot of feedback from employees about their concerns or otherwise about the product.

**The ACTING CHAIRMAN**: The product that we saw in the shed was nothing like the product in the picture.

Mr Stewart: The product that you saw in the shed had been in the shed for at least three months.

The ACTING CHAIRMAN: It was powder in parts, but it was certainly much finer than sand, for example.

Mr P. PAPALIA: I have a follow-up question with regard to personnel concerns. I refer to your submission. Your occupational health and safety health committee, which consisted of operational staff, put together a report on the proposal following a meeting on Tuesday, 15 March 2005. The committee had a lot of concerns. I will read out a couple of their concerns because they are relevant. They said that the risk posed by the escape of lead product dust from a partially enclosed bulk loading system was significantly different from those resulting from nickel concentrates. Another part of the report states that experience with loading nickel concentrate has shown the difficulty in containing dust produced within the port, and that significantly measurable amounts are apparent in the seabed sentiments and reported beyond the boundaries of the port. Your report refers to that OHS report and states that through the process of consultation or whatever action was taken afterwards, the authority ultimately addressed the concerns of operational staff and the transfer of lead was able to commence in keeping with the authority's high standards. What did you do, because as far as I can see, the process that you used to load nickel was used to load lead.

**Mr Stewart**: From the time we committed to handling lead over the shipping circuit, we engaged as I recall at least two if not three employees on a casual basis to work constantly on improving the shipping circuit. Without going into a lot of detail, some of the conveyors that were coming out of that shed at that stage were not fully enclosed. We went about fully enclosing a couple of the conveyors that were not already enclosed. We did a lot of work on sealing the shed, mainly with corrugated iron and the like. Over a couple of months a dedicated crew carried out constant work on that shipping circuit.

**Mr P. PAPALIA**: The conveyer belt on the wharf leading to the ship loader is still not contained, is it?

**Mr Stewart**: Correct. That conveyer has been in that form of operation since 1993. It has never had a floor. We have loaded many products over many months. Our dust monitoring, our trend monitoring, was not showing a dramatic change in the trend of the dust that we were measuring around the port.

**Mr P. PAPALIA**: That is the monitoring that takes a year to get back to you?

**Mr Stewart**: On a normal basis, it does not, no.

**Dr G.G. JACOBS**: I refer to the issue of equipment. After it became evident that birds had died from lead poisoning, an inspection was done on 1 February 2007. We have documentation that refers to gaps between the floor and the wall in the old Western Mining shed in which you were storing lead. As the member for Peel said, no changes were made to the conveyer belt and the floor of the conveyer belt. The photographs that were taken on the second site inspection on 1 February 2007 show deficiencies in the shed.

Mr Stewart: The holes along that particular side of the shed were, in large part, created by the reconstruction of the shed and from putting in the footings for the new shed that has been built over the existing shed. That damage was created during construction activity. It is important to point out that although the cladding of the shed comes down to ground level, immediately inside the shed is what we call a concrete retaining wall. The lead is not up against the tin; it is up against the concrete. Although we took immediate steps to repair that when it was brought to our attention by DEC, from our point of view there was little chance of lead escaping from the holes because there was a concrete wall between the shed and the corrugated iron.

**Mr T.K. WALDRON**: I refer to the conveyor belts. An undated lead export implementation task document lists you as being tasked with replacing the belts on CV5 and CV7 to reduce the carry back and, therefore, spillage during ship loading. The comment listed is dated 12 May 2005. It states, "Estimated to be \$10 000 each for CB 5 and CB 7. CB 3 would be approximately \$50 000, and the cost may not be warranted." Was the work on CB 5 and CB 7 completed?

[9.40 am]

Mr Stewart: It was.

**Mr T.K. WALDRON**: When was that completed?

Mr Stewart: I could not give you the date, but the belt was certainly audited and replaced.

Mr T.K. WALDRON: Did that make a difference?

**Mr Stewart**: It did. The quality of belts certainly can help.

Mr T.K. WALDRON: Thank you for that.

**The ACTING CHAIRMAN**: Just on questions that we have already asked, but there is uncertainty as to what the answer was, I want to raise two things. First, did you advise DEC that the agglomeration did not work, and did you tell the board that you had advised DEC's Albany office that the agglomeration did not work?

**Mr Stewart**: I certainly advised the board, and I believe a submission from one of our previous board members confirms that he was advised, so I believe I did advise the board.

**The ACTING CHAIRMAN**: Did you advise that board member that you had advised DEC?

**Mr Stewart**: I really cannot recall having that conversation. As I say, we have no paper trail to say that we did advise the DEC. I have spoken to my environmental officer. She, like me, believes we did, by a telephone call.

**Dr G.G. JACOBS**: If I may call you Jim, Mr Matijasevich, because I find that easier, what is the net debt policy of the state government with reference to limiting infrastructure at the port? Can you comment on that?

**Mr Matijasevich**: I cannot answer that.

**Mr Stewart**: I can probably help. Net debt is part of the policy of not particularly this government, but all governments, as I understand it. It is the level of debt that the state believes is acceptable. How can I best explain how it impacts on Esperance? Perhaps I will not try to answer that now, because I will probably not give as clear an answer as I would like, so I will take that on notice, if I may. Reams of paper have been written on this, Dr Jacobs. I will get you a more concise answer on what net debt means. It certainly is a problem that not only the ports, but I guess government agencies in general need to deal with.

**Dr G.G. JACOBS**: I suppose where we are coming from is that we want to understand how that impacts on the Esperance port and the port authority in its operational issues, and also on its infrastructure and engineering issues and the changes and other things that need to be done.

**Mr Matijasevich**: I think it is important, if I may just comment on that, to remember that we are handling product for customers. With any improvements that we make, our policy currently is to ensure that the state does not keep tipping money into these things, because our customers are the ones who are benefiting from it, as you can see from their balance sheets. So, our objective when we are looking for funds to improve things, is to work with our customers.

**Dr G.G. JACOBS**: Do you mean charging your customers appropriately?

Mr Matijasevich: Correct.

**Mr Stewart**: I have just had a brain freeze on the net debt, Dr Jacobs. I just cannot get my mind around it. It was not a question that I was expecting, so I have not done my homework.

**The ACTING CHAIRMAN**: That is okay. You can provide that later. The Polo Citrus dust suppressant appears to have been installed only after some 15 shipments, in November 2006, after the first report of a major dust problem with loading the lead carbonate. Can you comment on the delays in the implementation of this apparently critical measure?

Mr Stewart: We spent a lot of time researching and talking to our clients about what an appropriate type of dust suppressant would be. We certainly were keen to trial the Polo Citrus. It was a matter of convincing our clients that it was not going to in any way impact on their products and introduce material that would create problems downstream at the smelter, or whatever. Therefore, we took our time to get that approval, or that agreement, in place. It was also a fact of physically getting the product into Esperance, and getting the spray network set up, so it took time; it really did. Prior to that happening, as I said, we were not experiencing major dust problems with the handling of lead. When we experienced that shipment on 10 or 11 October last year, that certainly heightened our efforts to install the Polo Citrus.

**The ACTING CHAIRMAN**: We have heard reports that Polo Citrus does not work as a suppressant for lead carbonate dust.

**Mr Stewart**: It was not as successful as we had been led to believe by the providers of the dust suppressant.

The ACTING CHAIRMAN: What did you notice that made you say that it was not successful?

**Mr Stewart**: Concentrate, by nature, is a very dense product, so the Polo Citrus was not able to infiltrate the material as well as we would have liked. It certainly works well with an ore like iron ore, or in a quarry situation, where you are talking about much larger particles that make it easier for the spray to actually infiltrate the ore steam.

**The ACTING CHAIRMAN**: The understanding we have is that it caused the product to stick to the belts. Is that something you noticed?

**Mr Stewart**: It had the potential to do that, certainly. If you sprayed it on, and it did not soak into the product, and you are adding moisture to the outside of that product, it could have created that problem, yes.

**The ACTING CHAIRMAN**: But you do not know whether it did or it did not?

**Mr Stewart**: I personally was not aware that that happened, but I am certainly aware that it would have been a problem.

The ACTING CHAIRMAN: Members, I am now going to go off on a tangent from our list of questions. We are talking about dust minimisation and monitoring. I want to go through the issue of the reports that came via the testing of your dust monitoring equipment. I have a series of emails that have been provided by you and are between Shelly Gastry, who works with the port, and the laboratory that was testing the results of that monitoring. I want to link those in with your board meetings, because we have copies of your board meetings during this time. This will take a little explaining. First in terms of the series of emails - we will be talking to ARL at a later date about those reports - we understand that there was lot of going backward and forward to see why some results had been delayed. I want to go through the sequence of results as they became available to you. The December 2005 result was the one that was delayed. You may remember that ARL sent it off to CSIRO and was waiting for the result to come back, and it was delayed. That result was not received until 23 October. The first result received was the July 2006 result. That was received on 12 September. The July 2006 result quite clearly showed elevated lead in the dust monitors in DG 9 and DG 10 - not hugely elevated, but certainly elevated. The first result was received on 12 September. The next board meeting after that advice was received by Shelley Grasty is 25 September, so there was easily enough time for that to be discussed. However, not only was it not reported to the board at that meeting that there had been an elevated level, but the word "lead" did not even appear in your agenda for the whole of that 25 September 2006 meeting. I mean, this is some three months before the bird deaths, and lead is not even mentioned. That is the first result that came back.

The next results that came back were in October. On 23 October, you got those long-delayed results back from December 2005, and they showed, again, elevated levels. Previously, DG 9 and 10 had been 150 and 240, compared with the others being less than one, one, 28, 14, one, and so on.

That July one was 152.40. The December one came back in with D9 being 690. Also back at that meeting was the September 2006 result, so they had fixed their system of getting results back by then! The September 2006 result came back on 23 October. You had both of those back, and that, too, showed an elevated level of 240 and 620 - that is the October figure. It was still elevated levels, if you get my point.

The next meeting after the 23 October meeting was on 9 November. It was a good two weeks later. There was plenty of time to go through it. Again, there was no mention at that meeting of the high lead levels from December 2005 and September 2006. Therefore, you had had three consecutive readings that showed at least one monitor, mostly two monitors, that had elevated levels. At the same time, the abnormal dust register indicates that on 10 October 2006, which was when you loaded the small vessel -

[9.50 am]

Mr Stewart: Correct.

**The ACTING CHAIRMAN**: - and it was reported that there was dust all over the workers.

Mr Stewart: Yes.

**The ACTING CHAIRMAN**: At that November meeting, there was no mention whatsoever to the board of any of those incidences recorded in the notes of the minutes that we have here before us.

The final result that came back was the long-delayed one from March 2006, which was seen as a critical result because it had significantly elevated levels in two of those monitors. You got that report on 17 January 2007, which was after the bird deaths. You knew by then that there had been lots of bird deaths. There was also a dust incident on 11 December loading another ship. You knew all of those things.

We go to the next meeting on 6 February, and, again, the board minutes showed no evidence of any of those issues being discussed with the board. It is almost like the tea party on the *Titanic*: the issues of great significance not being a significant part of the board minutes and discussions. If you read through that, you will notice that there is no mention of those incidences in there. I did not say they did not discuss lead because that was when they were discussing bird deaths.

Mr Stewart: Firstly, we will get on to the bird deaths issue. When the bird deaths first started occurring in Esperance, we certainly had discussions with the shire environmental health officers and the DEC. Their request to us was that we put up signs on the little ornamental lakes around the port perimeter at the entrance to the port because the authorities at the time believed that the bird deaths were related to the long dry spell that the state was experiencing and that water may have been contaminated. Our first interaction with the Department of Environment and the shire council with regard to the bird deaths was to put signs around our water areas. We had no idea at that stage, and somewhere in the system there is an email to the effect from the Department of Environment suggesting at that stage that there was no link to the port with the bird deaths. We were not associating the bird deaths -

**The ACTING CHAIRMAN**: Mr Stewart, that is not the question I am asking.

**Mr Stewart**: I realise that, but I am just saying that, as you are indicating that at our February meeting and the like we were not raising the issue of lead in the context of bird deaths, because at that stage we had no belief that they were related.

**The ACTING CHAIRMAN**: Mr Stewart, that is not the point I am making. Tell me: when did you raise the issue with the board? When did you raise with the board the issue of those dust events, both the results from the monitoring and the results from the -

**Mr Stewart**: Look, I would have to refer to the board agendas concerned. I am relying on - there are attachments. Have you got the full agendas that we submitted to the board or have you got the minutes?

The ACTING CHAIRMAN: Yes, I do.

**Mr Stewart**: Because the agendas generally have a report from the environmental officer that I would have thought would have covered that, but it -

The ACTING CHAIRMAN: In the attachments, the environmental report - it does not say - but there is an issue in the environmental status report of November 2006 saying "dust shipments on 10 October and 29 October". There is no mention there made of the results coming back from those lead dust monitors. Nevertheless, you just need to go to the board meetings and see what was discussed at the board meetings. I refer, for example, to the 19 December meeting, at which you had had the results come back from two of those monitor things and the high-dust incidents reports. I am trying to get this through: what awareness did the board have of those issues, and what discussions did you have in bringing it to the board's attention? Because the 19 December chief executive officer's report talks about "leave accruals", "proposed board meetings for 2007" and updating. So, the board requests that they be "updating or developing items as they occur", "summary of discussions with Plectrum Petroleum", "discussions with United Utilities", "the CEO provided details of the heavy metal workshop conducted at the port recently", so that had been done in order to go through issues relating to nickel and lead. They were advised that "odour and dust

would not be tolerated by the port." "The exporters have undertaken to take remedial action to rectify problems with their product." And that is it.

**Mr Stewart**: Are they the minutes of the meeting that you are referring to?

**The ACTING CHAIRMAN**: Yes, they are the minutes of the meeting.

**Mr Stewart**: I think that the minutes of the meeting need to be read in the context also of the agendas that were put forward to the board. Every attempt was made to keep the board informed with information as to what was going on in and around the port. In my opinion, and I guess as CEO it was always my ultimate judgement as to how much information you provide to a board. I mean, it is a tricky call.

**The ACTING CHAIRMAN**: Surely you would provide clear evidence to them that on the only three results that you had from dust monitoring that was supposed to show you whether lead was escaping from the port there was a yes - lead was escaping from the port.

Mr Stewart: Look, there was no doubt that lead was escaping from the port. We were aware of that. You put that in the context of, I guess, what we were trying to achieve at the time to minimise dust, and what was occurring in and around the port at the same time. I guess we were trying to come to terms with where and how this lead was escaping from the port, as was nickel. I refer the committee to the fact that the Port Authorities Act requires the port to operate in a way that minimises environmental impact - minimises environmental impact. We were trying to see what those trends were telling us and how we were going to go about minimising that impact. That was coming down to things such as better dust control, better moisture control and engaging our clients to get them to understand that we had to do it better. That was what we were trying to achieve. The meeting on 4 December was all about letting the clients know that we could not continue to handle their product if they did not present it to us in a form that was at an appropriate odour level and an appropriate moisture level. A whole lot of things were constantly going on from my perspective that were certainly focused on trying to reduce impact - to minimise impact.

**The ACTING CHAIRMAN**: You were exporting what you know to be a particularly dangerous product, yet you did not think it was reasonable to tell the board that your dust results had come back showing that it was escaping the port.

[10.00 am]

**Mr Stewart**: At the same time, the August results, as I recall, when we had handled probably as many tonnes as we had handled in any given month, were as low as they had ever been. So there was debate amongst us about why in some months we were getting low levels and in other months we were getting higher levels.

**The ACTING CHAIRMAN**: Which August was that? I have read out to you the results that you got back.

**Mr Stewart**: I think August '06.

The ACTING CHAIRMAN: There is no result in your information.

**Mr Stewart**: Okay; somewhere in our system we have results for August '06, and August was a particularly busy month for the lead shipment. I think it was one of our biggest months and it is my recollection - I do not have the figures in front of me - that August showed a very low level

**Mr P. PAPALIA**: Based on what you just said, can I just clarify whether you consider lead to be, in retrospect, a lot more dangerous than you considered at the time of deciding to go ahead with the process, and also at the time of these spillages? Did you not think that it was sufficiently dangerous a product to notify the authorities and notify the town that they had been exposed potentially to lead dust?

**Mr Stewart**: To answer your question, yes, we certainly considered it to be a product that had to be handled with a lot of care. There is no better evidence than the number of experts that we engaged to give us advice, and the employees advice, on the nature of the product we were handling. There was a variety of people who I think we reported to, who I am sure have reported to the previous hearing, that we engaged to tell us what we could find out about this product and how best to handle it.

**Mr P. PAPALIA**: So when you had spillages, that advice did not cause you to feel that you needed to advise the board or to tell the people in the town, or to do anything other than to try to figure out how not to let it happen again.

**Mr Stewart**: When we had what we call operational spillages - and operational spillages happen within the operations area - if I was reporting to the board constantly on when we had operational spillages, be it for lead, be it for nickel, be it for fertiliser, be it for whatever, that would be reporting -

Mr P. PAPALIA: Yes, but this was lead.

**Mr Stewart**: Yes, this was lead but, as I said, we believed that our procedures, our operations and the fact that when we became aware there was a dust event, for example, we shut down. The employees and the shipping officer and the shipper's representative immediately took steps to try to get on top of the problems that had been created.

**The ACTING CHAIRMAN**: Did you ever tell the board that those dust monitors had recorded high levels of lead and where they were, where those levels were that people recorded in particular monitors?

**Mr Stewart**: The particular dust monitors? I would have to take that on notice but I believe we would have done, yes.

**The ACTING CHAIRMAN**: I can tell you that I cannot find it in the information that you have provided us.

Mr Stewart: Okay.

The ACTING CHAIRMAN: I am sorry, that is not necessarily true. It is possibly in those detailed meetings that you had, particularly later, so it is not fair for me to say that without being sure, so I retract that.

Dr G.G. JACOBS: Colin, I think the line of argument of the Chairman is essentially how much the board knew and how much you actually informed them or did not inform them of the whole issue of the handling of lead through the port, and what your responsibility was to them. You said that perhaps it is very difficult because you cannot actually inform them of every event, every spillage on the port or whatever. But as the member for Peel has said, we are dealing with lead and perhaps the potential of an important environment spill as well as operational spills that may affect the workers themselves. I suppose with your pending step down at the end of July, the question for the board that is remaining is: what is their responsibility, what is their issue of accountability if in fact they were not kept informed of the issues and were almost more than surprised because they actually were not informed along the way? We see issues in the minutes that we find difficult to see how they were kept informed about the pending issues and the eventual event, which has environmentally significantly affected the town. So, I suppose, with you leaving and they are there as members of the board, the three remaining, the question is: how much had you informed them along the way and what is their responsibility in all this? They could well say, "The CEO didn't tell us. We didn't know what was going on down at the wharf. We couldn't in an informed way contribute to the decisions of what happened there."

**Mr Stewart**: I will go back to my earlier comment: it is a fine line between keeping the board informed and, as the Chairman has read out, we have pretty full agendas, lots of information, lots of

things happening in the port. I, as the CEO, take full responsibility for keeping the board informed. I believed I was keeping the board informed. With hindsight, and given what has happened with the whole lead debate, could they have been kept more informed? Without doubt. But at the time I believed I was doing what I thought was my job to keep the board informed at a level that gave them a big-picture understanding of what was going on in the port, given that there was a helluva lot of other things going on. To put some context into that, I think it is referred to somewhere in some other submissions that in May-June last year, 2006, the board undertook an organisation review. An organisation review, amongst other things, was looking at improving the way we, the management, were presenting information to the board. That review was called on the basis, or was organised on the basis, that it was recognised that the port was getting busier. The port had a lot on its plate, and it was desirable that we review the board paper structure - the information we provided. So we were moving from a system that had been in place for probably 10 years into a whole new way of getting information to the board. One of the things that sticks in my mind from the advice I was getting at that time is that it was important to provide information to the board - not necessarily detail; information - so the board can make a considered opinion on good, robust information. There is a difference between information and detail. Would I have gone down to the level of detail as to each individual dust monitor in the port? Probably not. Would I do it now? Without doubt. But it is a fine line.

Mr T.K. WALDRON: Could I just ask a question of Jim?

Mr Matijasevich: Yes.

**Mr T.K. WALDRON**: Just looking at the minutes, you came on board as chairman, I know you were at the September '06 meeting, from then on.

Mr Matijasevich: Yes.

Mr T.K. WALDRON: Were you aware, as chairman of the board, of the high readings?

Mr Matijasevich: I was not aware of the high reading. What we were aware of was the question that kept coming up, the monitoring of the employees. I was aware that the employees were being tested regularly for lead and that their results were within acceptable levels. I would like to back up a bit on what Colin said. When I got there, one of the things that struck me, aside from the Stuart Hicks report, was that Colin, in his capacity as CEO, was batting, he was bowling, he was wicketkeeping and I think on Sunday mowing the lawn! There was then and there still is a need to have a structure in place that complements what is happening with the growth of the port. I think overall the reaction to the change, going from a corner deli store to a Myers, is a process that everybody is going through and requires even further and more attention, even outside the issues that we are talking about here.

**Mr T.K. WALDRON**: I understand, and I understand what Colin said, and what you said about Colin everyday and you are busy etc. However, you were not aware as chairman. In hindsight, do you think you should have been aware at that stage?

Mr Matijasevich: Possibly so, but the thing is that when I arrived there, the first thing you do when you arrive in a new position, after reading that you are port of the year in 2003 etc, as I was told when I joined, the first thing you focus on are those things that are part of your background. Possibly that is what I did. Whilst I have always dealt with the environment, it has never been one of my paramount areas. I do not have great experience in that area, but I have experience in other areas, and I suppose my main focus when I got there was the structure report and the adequacies that were needed to be brought to the port to make it operate in a manner that would complement what was happening.

[10.10 am]

**The ACTING CHAIRMAN**: Can I just go further than that? You came on board in September. I notice you were chair on 25 September, 9 November and 19 December. There were three meetings

at which you were not aware that there was an issue of bird deaths related to the port. In those same three months, results were coming back showing elevated dust levels in monitors. On 10 October and 11 December, there were dust plume events. Almost no time was spent in any of those meetings on lead, other than talking about workers from the port and issues to do with special protective devices and so on. They were the contents of those three meetings. So you had no briefing at all, separate from the board, as chairman, to say, "We've got disturbing results that have come back to us about escape of lethal dust from the port"?

**Mr Matijasevich**: No, but I hark back to the focus that was put on the thing, because we had just been through this process of the Stuart Hicks report. We were trying to streamline board papers, because they were coming in about that thick. There were a number of issues that we wanted to tackle, including access to the port and so on.

**Mr P. PAPALIA**: This may be for both of you. Noting that you were aware that when you had operational spillages nickel got into the town, it appears to me that, as the Chair has identified, when you discussed the operational spillages you had it was all focused on your staff as opposed to the town that surrounded you. Did it not occur to you that there was potentially a threat to the people in the town as a result of what happened?

**Mr Stewart**: Not based on the blood lead level readings we were getting back from our own employees, who were at the coalface, so to speak. That is not only the people actually loading the ship; there were a lot of operational people in and around the port on any given day, so we were seeing the blood lead levels as being a pre-eminent or important way of monitoring what was actually happening.

**The ACTING CHAIRMAN**: But they were all wearing protective clothing.

**Mr Stewart**: Not necessarily. If I happened to drive down to the port on a day that they were loading a ship, provided I did not go into the operations area, I was not wearing PPE. I was just wearing my normal hardhat and safety glasses and the like, but I certainly was not kitted out.

**The ACTING CHAIRMAN**: Were you having regular blood tests yourself?

Mr Stewart: Yes; me and all staff.

**Dr G.G. JACOBS**: Jim, you have said you are a new board chairman, and environmental issues are not your strong suit, if you like. In your letter to the residents of 24 April, you stated that you had initiated the review of the port's handling and loading operations. Can you tell us the results of that review?

Mr Matijasevich: That letter was dated when?

Dr G.G. JACOBS: 24 April.

**Mr Matijasevich**: Can you repeat the question?

**Dr G.G. JACOBS**: Basically, you told us that you had initiated a review of the handling and loading operations at the port. I am asking for the results of that review.

**Mr Matijasevich**: The review is being conducted as we speak, as I understand.

Mr Stewart: That is correct. We have engaged a number of firms. We have engaged environmental experts to carry out an audit of our system. We have a couple of engineering firms looking at the engineering issues associated with our system. We have occupational health and safety experts reviewing how we can improve that side of our operations. We have also engaged Professor Jack Ng to go through the whole toxicology of what we have been handling and the likes. There is a whole series; there is not one overarching review. We are looking at a whole series of events and the way we operate.

**Dr G.G. JACOBS**: Can I ask Jim, because of his engineering background, what are the engineering tasks that are needed to better manage dust in the port, in his view?

Mr Matijasevich: Some of the things they are doing are enclosing the conveyors that are not enclosed; wherever there is potential for dust, having negative dust pressure areas and the like; and making sure there are spillage trays. Whatever you are handling, whether it is lead, nickel or iron ore, all these aspects have got to be cleared up so that the spillage and the potential for dust getting into the air are virtually eliminated.

**Mr P. PAPALIA**: The Riseborough and Associates report that was given on 23 March 2005 said that too. It recommended that installing catchment pans under the ship loading conveyors needed to be fast tracked. It stated that the installation of vacuum system piping to the ship loader was a priority.

**Mr Matijasevich**: I think a lot of those things have been done. I am talking about extending it to other areas. There are some areas where -

Mr P. PAPALIA: It refers to catchment trays under the ship loading conveyor.

**Mr Stewart**: On the actual ship loader itself, up on the ship loader, rather than what we call a spill tray. There are spill trays and catchment pans. The spill tray is to stop product falling off the underside of the conveyor belt onto the berth deck and potentially into the ocean, but then there are also catchment trays underneath the spill trays.

**Mr P. PAPALIA**: The ones I was referring to are under the conveyor that runs the whole length of the wharf.

**Mr Stewart**: We call that a total enclosure, or a floor, or whatever you like.

Mr P. PAPALIA: Jim has said that a total enclosure is something he would aim for.

**Mr Stewart**: That is where we are trying to head.

**The ACTING CHAIRMAN**: What do you mean "trying to"?

**Mr Stewart**: It is a major engineering task we are talking about.

**Mr Matijasevich**: We have got people looking at it now, and we have to cost it. It is a process we are going through; it does not just happen.

**Mr P. PAPALIA**: Is it true that there are superior dust minimisation measures for the loading of iron ore, such as closed materials loading system and negative pressurisation as opposed to covered but not enclosed loading systems for lead and nickel?

**Mr Stewart**: Correct. The iron ore system was built in 2002; the nickel system and the lead system were built in 1991-92. The current lead and nickel system was initially used for iron ore, and then when Portman went to increase its throughput, we had to build a new system for them, and that is certainly a much better system.

**Mr P. PAPALIA**: We have a better system for handling iron ore than we have for lead?

**Mr Stewart**: Correct; in an environmental impact situation, yes.

**Mr P. PAPALIA**: Why did the port replace high volume with dust gauge sampling in November 1995 after a year of handling iron ore? We got that from the annual environmental report in 2006.

**Mr Stewart**: The high-vol samples in those days were not identifying that we were experiencing a lot of difficulties with the management of iron ore. The high-vol systems were put in for the iron ore project, and they were seen as monitoring dust that could be adequately replaced by the dust gauges.

**The ACTING CHAIRMAN**: Comments by the CSIRO on the static dust monitors made complaints about the static dust monitors. They could not properly test the amount of dust, because it was falling off. There was so much dust on the grills, I suppose it is, that it was falling off. Are you aware of that?

Mr Stewart: I am totally unaware of what you are alluding to.

**Mr P. PAPALIA**: We are interested in finding out how you test the lead concentrate for moisture content, because we have talked to Brambles, and they said they did not do it; you did it. We note that you are very particular about the moisture content having to be a certain percentage for safety with the shipping and also for dust suppression, so how do you test it?

**Mr Stewart**: The most accurate method of testing is to take a sample. You weigh a sample of defined size and record the weight. You put it into an oven and drive all the moisture off, and then you weigh it after you have done that and you can tell the difference between the product that went in and the product that came out, and the difference is the moisture level.

[10.20 am]

**Mr P. PAPALIA**: Did you do that every time you received a shipment?

**Mr Stewart**: Every time we received a train? No.

Mr P. PAPALIA: How did you normally measure the moisture?

**Mr Stewart**: There is a number of ways to measure moisture. The most tried and true way was purely by people handling it when they were unloading the train, be it Brambles or whoever. They could determine if the moisture level was not right - if it was dusty. If it was dusty, the moisture was not correct. To meet our obligations for shipping, we had to test the transportable moisture limit, which required us to put it through that oven process. There is technology available called a tensiometer that gives a much more accurate instant reading, but it is not as accurate as the oven method.

**Mr P. PAPALIA**: Part of your argument for approval of the whole process was that the product had to be moist during transfer to the port and during the process of loading, and the moisture content would be between seven per cent and nine per cent. How did you know it was that level?

**Mr Stewart**: When it was being loaded out of the mine site, the mine site was informing us what it was measuring out of the mine site by way of moisture.

**Mr P. PAPALIA**: Did you just assume that 950 kilometres later it still had the same moisture level?

**Mr Stewart**: Inevitably, some moisture is lost in transit. That was the balance we were trying to get. It would be shipped up there at nine per cent or 9.5 per cent and we would give the mine feedback when it arrived as to what its moisture level was like.

The ACTING CHAIRMAN: I return to a question I asked earlier. The CSIRO submission says that an initial examination of the filters took place on 28 March 2006. That is the sample that was delayed. That revealed that many of the filters were overloaded and that much of the material had fallen off the filters, which would give inaccurate results. That was the issue with these dust monitors. How on earth are they supposed to tell how much lead dust there is when there is so much falling off the filters?

**Mr Stewart**: I am really struggling to understand what CSIRO is alluding to. The static dust gauges that we had out there are gauges. I am not sure why it is referring to filters. I would have to take it on notice.

**The ACTING CHAIRMAN**: I will follow that up with the CSIRO myself.

**Mr Stewart**: I would like to run it past my environmental officer, who is much more familiar with it.

**Mr T.K. WALDRON**: When you are testing the lead, you spoke about the oven test and the fact that it may be dusty etc. Did workers handle it to test it? Did you do a test by hand to see whether there was moisture there?

**Mr Stewart**: Would they have physically picked it up in their hands?

Mr T.K. WALDRON: Yes.

**Mr Stewart**: I doubt it, but I cannot guarantee that that is the case. When our guys went to do sampling during loading and they had to take a sample out of the ore stream, they were kitted out with heavy duty surgical gloves.

**Mr T.K. WALDRON**: Is that what we wore when we went through?

**Mr Stewart**: You would have probably worn the cotton inspection gloves, as we call them, not the heavy duty sampling gloves. About four or five different types of gloves are available.

Mr P. PAPALIA: They are impermeable ones.

**Mr Stewart**: When the guys are in the shed doing work, sampling and that sort of stuff, they wear either rubber gloves, heavy duty surgical gloves or heavy duty riggers gloves, and then there are the basic inspection gloves if people are expected to be handling the product.

The ACTING CHAIRMAN: We wore the cotton gloves.

**Mr Stewart**: They are for people going in there not expecting to do any work - just having an inspection.

**The ACTING CHAIRMAN**: Did you know that lead dust goes straight through them?

**Mr Stewart**: That is why they would not be issued to people who were physically working with the product.

The ACTING CHAIRMAN: I said to the worker who took us through that the lead looked particularly dry. He immediately dug a hole in the ore with his hand, about six or eight inches deep, and said that it was pretty dry. I subsequently did the same. When I took the gloves off, I had ore dust all over my hands. It would suggest that that is a regular method of testing to see the moisture content. It is loaded in two sequences, is it not? It comes via the hopper, through the conveyor belt into the shed. A second phase of loading takes it from the shed, where it might wait two or three weeks - I understand that is a fairly standard time - and then goes out through a different conveyor system to the port. When it is in that shed, what then happens in terms of managing the moisture? It would seem to me that the outside would have to dry and hence your workers' action in saying, "Hang on a sec; I'll check" and digging a hole from the outside. It may well be much moister inside. I presume that there is some mixing arrangement. Is that how it works?

**Mr Stewart**: That can happen. If it is determined by the operators that the product looks to be quite dry, the contractors will turn it over a bit before they start loading. To my knowledge, on the odd occasion it was determined that it was quite dry and attempts were made to put some water on it. It was physically hosed down to increase the moisture.

**The ACTING CHAIRMAN**: Do you have sprinklers in that shed?

**Mr Stewart**: We did not have sprinklers in that shed. We relied on hoses to add moisture.

**The ACTING CHAIRMAN**: Is that method of digging a hole the standard method for seeing whether the lead is moist?

**Mr Stewart**: One of the ways of looking at the product is by going in and physically inspecting it. Experienced operators would fairly quickly be able to tell the difference between a product that is on the edge of being too dry or too moist. They are handling it on a regular basis. They understand it.

**The ACTING CHAIRMAN**: Whose responsibility is it to determine the moisture in that shed? I understand that BIS was responsible for that product until it gets onto the conveyor. Is that the conveyor unloading it or the conveyor to the ship?

**Mr Stewart**: Brambles Industrial Services load it into the shed and then load it out of the shed in a contractual sense. I do not think it is correct to say that it is responsible for the moisture level.

**The ACTING CHAIRMAN**: I am asking who is responsible for the product in the shed.

Mr Stewart: Ultimately, the shipper's declaration for goods is the declaration under which the owners of the product, Magellan, tell us its understanding of the moisture level in the product that is to be loaded. That needs to be put together to present to the ship so the ship knows the level of moisture of the product it is loading. That was a pivotal document to tell us what the owners of the product knew to be the moisture level. We also double-checked on that ourselves by inspecting the product and making observations as to whether it had dried out in the shed.

**The ACTING CHAIRMAN**: If it said it was 8.5 per cent or nine per cent and it travels 900 kilometres and it is 8.5 per cent when it gets there, then it sits in the shed for three and a half weeks sometimes and dries out further, are you responsible for getting that moisture level back up to the level that it should be or did you take responsibility?

**Mr Stewart**: We, in cooperation with the mining company, would have made that judgement if it needed more water added to it. Did we physically do that? No. It was generally done by the representatives of the mining company on site if there was a concern that it might have been at too low a level.

**The ACTING CHAIRMAN**: So were they on site for every occasion when you did a loading?

**Mr Stewart**: The mining company had a representative on site.

The ACTING CHAIRMAN: In an email dated 4 August 2005, the port's environmental consultant advised BIS, the transport company, that the product was under Brambles control until the product was on the unloading belt. Also in a report dated 12 October 2006 concerning the loading of the ship on 10 October 2006, it is recorded that the product representative would not allow Brambles to wet the product in the shed because of problems with the transportable moisture limit. Could you please confirm which agency managed the moisture content of the lead concentrate in the shed? I have sort of asked that question already.

**Mr Stewart**: Ultimately, until the product hits the outloading conveyor, it is Magellan's concern. As a provider of port services to them, we were obviously also very conscious of the need to manage moisture. We were interacting with the mine to try to ensure the moisture levels were in that fine line between being not too dry so they are dusty and not too wet so they exceeded the moisture limits for transport. There was a lot of operational interaction between the mining company, the mining company representatives and us to get that moisture level right.

[10.30 am]

**The ACTING CHAIRMAN**: There might be a pile sitting there for three and a half weeks. The product inside might have the moisture content that you want, but it is dry on the outside, so on occasions you mix it all in together. What evidence do you have that the moisture from the good bit transfers adequately to the dry bit on the outside?

**Mr Stewart**: Practice; we have done it on a number of occasions. When you blend them together, you can generally get it under control. Obviously, there were occasions when a dry product came over the system, and that is when we had a dust issue and the operator shut down. We were getting dust, so we shut down, went back into the shed and worked with the Brambles people to blend up some more product, waited for a train to come in from the mine that had adequate moisture and blended that in with the product and then recommenced loading. At times we were shut down for many, many hours while that took place.

The ACTING CHAIRMAN: Remembering the knowledge that dust has come out of that shiploading event, does it not strike you as possible that that dry dust on the outside did not in fact absorb the moisture from the rest of it, and that when you dropped it from a distance into a ship with wind blowing, those fine particles of dust that had not absorbed the moisture could blow away? If I mixed together some slightly moist sand and some extremely fine dry sand and then an hour later poured it out while blowing a fan through the side of it, I bet that the fine dust would still blow out of that mixture. Does it not strike you now as possible that that has happened?

**Mr Stewart**: Our experience is that once we blended it, there was certainly a very marked reduction; in fact, the primary measure we use for monitoring dust control was visible dust. If we blended it properly, the visible dust issue immediately ceased, and that was a condition under which we restarted loading. With the dust control, the blending, the addition of water and the increased water on our circuit, we brought the dust levels under control.

**Dr G.G. JACOBS**: Colin, that seems to me to be a very subjective type of operation rather than an objective one. It is like suck it and see. We will do a bit of blending and see how much dust we get and then if we do, we will have to do it again and physically get a hose and pour some water on it.

**Mr Stewart**: "Subjective" is a word that you choose to use. We have very experienced operators who, in some cases, have been working with nickel concentrate for 10 or 15 years. They are experienced in making judgements on whether or not the product is in a form that we can handle safely with minimal dust. I would argue that it was more than subjective. The guys on the coalface had a pretty good understanding of what was necessary to handle a product.

**Dr G.G. JACOBS**: There were times when you did the moisture test and took samples while the loading was taking place?

**Mr Stewart**: The product is being constantly sampled and measured while the loading is taking place.

**The ACTING CHAIRMAN**: And yet you knew at that time from the dust monitoring reports that dust was escaping.

**Mr Stewart**: Yes. We knew some dust was escaping, yes.

**Mr T.K. WALDRON**: To clarify, Colin, you are saying that when the guys who have had experience with nickel and lead over time were in the shed mixing it with the front-end loader, they could get it to a stage at which, through their experience, they knew that the moisture would not cause visible dust when loaded?

**Mr Stewart**: Correct, because once we recommenced loading, if there was visible dust, we would have to stop and go through the whole process again. As I said, on occasions that required us to await the arrival of the next train coming down from the mine.

Mr T.K. WALDRON: To mix it more moist?

**Mr Stewart**: I think it is fair to say that the shipping logs quite clearly demonstrate that when we have had dust events and dust was seen, the first line of attack was to make sure that all the sprinkler systems were working to maximum capacity and to introduce more water onto the shipping circuit. If that was still failing to control it, we shut down and went back into the shed.

Mr T.K. WALDRON: When there was dust in the readings from the monitors etc, did you assume that that was dust from when you had started to load and there was visible dust and then you stopped, or did you think that dust must have been getting out somewhere else or that it was invisible dust?

**Mr Stewart**: I guess with hindsight, and even at the time we were debating amongst ourselves where this dust was coming from. Certainly, ship loading was potentially a primary cause. We were loading ships only once every three to four weeks, but we were handling trains every day. The trains were transiting the town. Was it in that process that it was happening? We were, step by step, trying to work out where the dust was potentially escaping from. I guess we will all be a bit wiser when we have seen the benefits of our very thorough environmental audit.

Mr P. PAPALIA: Was a ring spray system installed on the ship loader shed?

Mr Stewart: Yes.

**Mr P. PAPALIA**: Was it operational?

Mr Stewart: Yes.

**Mr P. PAPALIA**: When was it installed?

**Mr Stewart**: I would have to take that on notice.

**Mr P. PAPALIA**: Was it before you commenced any lead shipments?

**Mr Stewart**: I believe it would have been, but I could not be categorical about that.

**Mr P. PAPALIA**: Can you confirm it? The reason I ask is that your consultants' report prior to commencing this process stated that that system should be operational prior to the trial shipment.

**Mr Stewart**: I would be surprised if it was not. The chute already had most of the equipment on it, and I would be surprised if it was not installed for the first shipment. I think we have photos of the first shipment when it was operational.

**Mr P. PAPALIA**: That is all right; just let us know.

**The ACTING CHAIRMAN**: There is one other thing that we would like you to provide information on. Do you know of occasions on which it was required that there be mixing of the product in the shed because it was too dry? Do you know when that would have happened? Would it have been recorded?

**Mr Stewart**: I would have to take on notice when it actually happened.

**The ACTING CHAIRMAN**: You do have some evidence? Could you provide whatever information you have to show me the occasions when it was mixed? I presume that Brambles did the mixing when that was required, because it operated the front-end loader.

Mr Stewart: Under supervision from the Magellan rep.

**The ACTING CHAIRMAN**: Ladies and gentlemen, we will have a short break.

# Proceedings suspended from 10.37 to 10.57 am

The ACTING CHAIRMAN: Thank you, ladies and gentlemen; we will get started again.

**Mr Stewart**: I would like to confirm two things: these are photographs of the first shipment with the dust spray in operation. I expect that, by the end of the hearings, we will be able to confirm the level of information we provided to the board with regard to the dust monitoring and the like.

**The ACTING CHAIRMAN**: While we are doing this, I have information from the workshop that was held. Issues were raised in the workshop about dust. I will go through that myself again while we ask some questions. I was going to ask whether that was tabled to the board meeting, but I will do that later. We have an hour left. As usual, we have more questions than we have time for, so we will ask you to answer the remaining questions after the hearing.

**Dr G.G. JACOBS**: The port has provided this committee with a series of general report sheets completed by its staff about the problems with lead dust, spillages from the conveyor belts and leaking from the lead shed. By December 2005, a supervisor wrote to a team leading hand about the need to clean the counterweight and area around the trains. It states "Until the dust levels can be controlled with the minesite lifting the moisture levels." A few days later there was another report of a more extremely dusty product arriving by train, followed by another delivery that caused some dust problems. Were these reports related to the lead concentrate, and why did the port continue with this product given the ongoing problems with dusting and spillages?

**Mr Stewart**: I guess my first observation is that I expect my employees to bring those issues to our attention. A general report is exactly that. It immediately goes to the operations manager, who then

follows it up with the responsible people. From those reports we would have, yet again, gone back to the mining company, reinforcing issues that we were having with the product and its presentation to the mine. When it directly related to our operations, again the appropriate operations staff would have looked at whether there were faults in the system, belt scrapers or whatever was potentially causing the problems.

**Dr G.G. JACOBS**: I refer to question 26. Was the spillage of between 60 and 100 kilograms of lead into the sea reported on 11 January 2006? There is a general report sheet to support that. Was it reported to the DEC under section 72 of the Environmental Protection Act? Does it fall within your definition of "environmental spill" as provided by the port to the committee earlier when you gave evidence?

**Mr Stewart**: It would have certainly constituted an environmental spill. I would have to take on notice whether it was reported to the DEC. I cannot provide an answer right here.

**Dr G.G. JACOBS**: You would be surprised if it was not reported?

Mr Stewart: Yes.

**Dr G.G. JACOBS**: Can you give us some documentation?

Mr Stewart: What date?

**Dr G.G. JACOBS**: It was on 11 January 2006. A general report sheet of 23 February 2006 reported an accident when a bucket hit the feeder, causing the product to spill, and it caused an adjuster to break. It is reported that "Visibility is poor due to dusty conditions". Another general report of the same day reports problems with a dusty product causing dust to pour off the counterweight at conveyor 9 and that adding water did not make much difference. The supervisor's comments record that the mine had shut to work on the dust problem.

**Mr Stewart**: If we are talking about conveyor 9; conveyor 9 is the iron ore circuit. I would assume that a bucket damaging a feeder was also on the iron ore circuit; I do not think it is on the lead circuit. I will have to look at that. That was the twenty-third, on a general report sheet.

**Dr G.G. JACOBS**: It was 23 February. It appears there are a couple of report sheets for that day.

**Mr Stewart**: Certainly CV 9 is not related to the lead circuit.

**Dr G.G. JACOBS**: Supplementary to that, when it talked about the mine having to shut down to work on the dust problem, although it does not specify the mine as that of Magellan, I note that there is an unusual gap in lead trains between 1 and 12 March 2006.

**The ACTING CHAIRMAN**: I am sure the fact that that phone rang was an accident, but could people in the gallery please all make sure they have their phones turned off, thank you.

[11.03 am]

**Dr G.G. JACOBS**: Colin, is that correct? Is it in reference to the Magellan mine?

**Mr Stewart**: As I said regarding the earlier comments in your question, my feeling is that it is referring to the iron ore circuit. Certainly the iron ore companies also experience a dusty product at times. February is the driest month of the year, so it is a distinct possibility. I am only speculating because I do not have that information in front of me, but the delays in the trains from 1 March to 12 March could have been as a result of a major rain event. When major rain events occur in that part of the world, everything stops while the mine dries out and the roads dry up, but I am only speculating because I do not have the detail. That is one potential cause for a mine delay or a delay in the train and road shipments.

**Dr G.G. JACOBS**: Did the port report the abnormal lead dust emissions on 10 October 2006, which were described by the port as resulting in port personnel, ships' crews, vessels and the ship loader being covered with lead dust on 11 December 2006 and 5 March 2007, and the spill on the 5

December 2006 that took three hours to clean up? Did you report that to any agency, and when did you make these reports?

**Mr Stewart**: I believe that we would have made those reports. I would have to take that on notice to clarify exactly when and who made those reports.

The ACTING CHAIRMAN: I will use this opportunity to clarify the issue of what the board knew before. You will note that when I read through the reports, there was no mention of a discussion with the board members. I have found out since that during the workshop called "beyond the mine site" at which lots of people participated and discussed a range of issues, including dust, it was minuted that dust complaints were made on 10 October. The minutes also state "ship loading of lead concentrate, small vessel - very dusty product; very light easterly winds; port personnel ship crew vessel and ship loader covered in dust; personnel on vessel also complained of vapour from product during the loading." That was in the minutes. Was that tabled at the board meeting so that any of the board members could have read that and been made aware that there were dust issues?

**Mr Stewart**: When you say that was in there -

**The ACTING CHAIRMAN**: That was the workshop held on 4 December.

**Mr Stewart**: That was the minutes of that meeting.

**The ACTING CHAIRMAN**: Were the minutes tabled before the board members at the next meeting?

**Mr Stewart**: I do not believe that it would have been.

The ACTING CHAIRMAN: The minutes were from 4 December and the next board meeting after that was held on 19 December. At that meeting there was no mention of dust. Even though those spills and other issues relating to dust were discussed at the workshop, there was no mention of that made to the board.

Mr P. PAPALIA: Who was at the workshop?

The ACTING CHAIRMAN: It does not say.

**Mr Stewart**: Board members would not have attended that. It was an operational workshop.

**The ACTING CHAIRMAN**: Colin Stewart and Richard Grant. The port operations manager, the shipping officer, the corporate services manager, the environmental consultant, the technical consultant and the manager of Esperance for BIS were the people at the workshop.

I want to briefly jump in with a question that I had planned to ask earlier but did not have a chance to ask. I refer to the notification regarding the inspections by DEC. You will know from an article in today's paper that we read out the contents of an internal email from the port talking about the inspectors coming. It is from Shelley Grasty, who, as you know is the environmental consultant. It was sent Ron Padgurskis, who works at the port.

**Mr Stewart**: He works at the port in the capacity as an engineering consultant for us and he also represents some of the mining companies.

**The ACTING CHAIRMAN**: Copies of the email were sent to Dave Jamieson. Who is he?

Mr Stewart: He is our shipping support officer.

**The ACTING CHAIRMAN**: Trumby?

**Mr Stewart**: He is our operations manager.

The ACTING CHAIRMAN: Taffy Davies?

**Mr Stewart**: He is a BIS employee. In other words, he unloads the trains.

**The ACTING CHAIRMAN**: The subject of the email is "lead loading inspection", and it states -

Ron,

Just to let you know that we are having and inspection tomorrow during the lead loading, Daniel Endicott from DEC, and there will also be some environmental health people from the shire - Chantal Spittle and Troy Doncon. Please prep the product and make sure its not dusty!! Also, we will need to have shed doors closed during outloading.

I would like to know, firstly, is that normal practice? It is not as though there were many DEC inspections, but when there were, would you be notified of them, as a rule?

**Mr Stewart**: We would be notified that they were coming. We certainly did not have an adversarial relationship with the DEC. It told us it was coming and we reinforced with our employees the importance of doing everything that we expected them to do - to do it correctly. That was just letting people know that there would be people on site to inspect the operations on the following day.

**The ACTING CHAIRMAN**: What do you think of the double exclamation marks after "make sure it's not dusty"?

**Mr Stewart**: Reinforcement is the word that I would use. It was to make sure that people were doing it correctly. You are talking about people who are working on the site. All we were trying to do was to encourage them to adopt best practice at all times. You can read into that what you like, but I would expect my employees to be on top of the process at all times. This is just saying that they have to do it properly.

[11.10 am]

**The ACTING CHAIRMAN**: What about the comment about having the shed doors closed? Does that suggest to you that the shed doors would not normally be closed?

**Mr Stewart**: I am intrigued by that one because the shed doors were always closed on the loading of the lead circuit.

**The ACTING CHAIRMAN**: But Shelley is your environmental consultant, been there for a fair time, I understand.

Mr Stewart: Correct, yes.

**The ACTING CHAIRMAN**: It says, "Also we will need to have shed doors closed during outloading". Why would she say that?

**Mr Stewart**: I do not know. I would have to ask Shelley. I have never experienced - never been brought to my attention that the shed doors were left open, so I am at a loss to understand why that would have been put in there.

Mr T.K. WALDRON: On 11 October 2006, which was certainly to do with the loading of a small vessel with lead, another employee recorded a general report sheet about the lead dust and stated that although the water sprays that you were talking about previously were used on conveyor 3, the product was still too dusty and the Polo Citrus made the product too sticky and blocked the chute. The response, similar to the previous ones, was that the product would be monitored at the mine site for dust levels. Why did the port continue to export this product when it was obviously having trouble with the product and there were obviously issues with dust?

**Mr Stewart**: Why did we continue to handle it? Because we believed we could get on top of it. We were working, using a lot of effort and expertise, to get on top of the dust problem, not the least of which was working closely with the mining company to try to get them to appreciate the importance of presenting the product with the appropriate moisture. When those general report sheets came through, they were telling us what had already happened. We had experienced a dusty event; the supervisor of the day had shut down the operations to get on top of the dust.

**The ACTING CHAIRMAN**: I believe the member for Wagin has a question relating to funding of the port and the component of the income.

**Mr T.K. WALDRON**: Esperance is a busy port and has been a successful port. What percentage of the port's total business does lead handling make up? What percentage of your earnings would it represent and how much would that be in real terms?

**Mr Stewart**: Let me do some quick back of the envelope calculations for you.

**Mr T.K. WALDRON**: I had an idea when we spoke in Esperance that it was a small percentage.

**Mr Matijasevich**: It is a small percentage.

**Mr Stewart**: It would be in the order of - these are indications; they are not rigorously calculated figures - the total revenue from Magellan's lead going through the port - in other words, revenue raised from Magellan -would be in the vicinity of \$500 000 to \$600 000 on an annual basis, I would have thought. That is the revenue, and it is based on them putting through somewhere between 90 000 and 100 000 tonnes.

**Mr Matijasevich**: Two per cent.

**Mr T.K. WALDRON**: So, it is about two per cent of your total business.

Mr Stewart: Something in that sort of order.

Mr Matijasevich: Don't even say it!

The ACTING CHAIRMAN: Yes, why would you bother?

**Mr Matijasevich**: I know what you are going to say.

The ACTING CHAIRMAN: You have to export. If you have a product requiring export, we understand that is your job as a port to assist companies. Given the component of it, there are so many potential problems that you would want to make absolutely sure that those were covered for something that represented such a small percentage of your income.

**Mr Matijasevich**: Yes, but I also note that they fly isotopes around the world in aeroplanes as well. It is a matter of having the right protocols in place - you can handle any material.

The ACTING CHAIRMAN: Like in a container.

Mr Matijasevich: Possibly.

**Mr Stewart**: The first function as articulated in the Port Authorities Act is the ports are there to facilitate trade. That is my job.

The ACTING CHAIRMAN: I understand that.

**Mr T.K. WALDRON**: At the time, even though it is a very small percentage, you felt you were trying to address the problems to the best of your ability?

Mr Stewart: Correct.

**Mr Matijasevich**: If I can just add to this, we work to certain rules and regulations that we should follow and I believe that is what has been done.

**Mr T.K. WALDRON**: Just briefly, you said before about visible dust - that is the bottom line you would operate on at the port?

**Mr Stewart**: As prescribed by our environmental licence, we are not to allow visible dust to be escaping from the port boundary.

The ACTING CHAIRMAN: What would you say now to the concept that that should not be what the licence conditions require given that all of your workers in wearing their protective gear do it mostly to cater for invisible dust - dust that you cannot see? Certainly, when we went through the mine and through the port, having to wear the overalls and mask and all those things, it was not to

deal with dust that we could see anywhere. The dust was not being moved. It was to provide safety to us for dust that could not be seen, presumably. What would you think of the view that the licence conditions for ports need to be changed to cater for any dust escaping from the port, not just visible dust, given the potential for very low micron dust to float in the air stream without much encouragement and not be visible to the eye and yet still cause medical problems?

**Mr Stewart**: I can assure you it is a debate that both internally within the Esperance port, within the Department of Environment and within the fraternity of ports - we are collectively all trying to come to terms with what levels of impact on the environment are acceptable. Obviously, dust is an impact on the environment. How do you measure it? How do you control it? A lot of these issues come back to a land use debate. In the case of Esperance, the port was built in 1965 and I can show you photos where the immediate perimeter of the port was barren of all residences. Now we have a land use conflict, and it is not unique to Esperance. There would not be a port in Australia that does not have some level of land use conflict. It is a big debate you are opening up.

The ACTING CHAIRMAN: Rubbish tips, whatever.

**Mr Matijasevich**: I think you are suggesting, Mr Chairman, that the level of the bar has to be lifted by all parties.

**The ACTING CHAIRMAN**: Yes, I would think that is reasonably obvious if the effect on other areas is something we do not have a lot of information on. I was just seeking your view.

**Dr G.G. JACOBS**: Supplementary to the previous question about the sprinklers and conveyor 3, I asked why the port continued to export the product and you said you were working on it and working through the problems. Is it not true though that that same small vessel came back in December, with the inherent problems of loading, and that was the event that was described as unacceptable? Although you said you had been working on the sprinkler system, it was a work in progress. Nothing much happened between when the *MV Lemmergracht* came the first time and came again in December, with all the issues of dusting the cars sitting on the wharf and an operation that was described in the post-briefing report as totally unacceptable. How much work have you done between those two times if you are working on a dust suppression system that is actually not working? The Polo Citrus did not work and the sprinklers were not working to do the job. You said it was a work in progress and you were working on it and you were not going to stop the operation, but the whole thing repeated itself in December where there was a potential - and I allege significantly dusted the town again.

[11.20 am]

**Mr Stewart**: You may or may not have seen the minutes of a meeting that we held with Magellan on 19 October following an event. A number of actions were undertaken by Magellan and us out of that, such as Magellan introducing a new pressure filter system at the mine, which would give it greater ability to control moisture. The mine was continuing to take moisture readings from every kibble that was sent down to the port and was reporting that back to us and the other operators in the port. The mine acknowledged that it needed to further train its operators at the mine to ensure that the product came down to the port, again, at proper moisture levels. A whole series of actions came out of that event on 11 October. We put the wheels in train to try to get a better result. That was the purpose.

**Dr G.G. JACOBS**: It was not a better result, though, Colin. It was still a disaster in December, was it not?

**Mr Stewart**: We still had problems in December.

**The ACTING CHAIRMAN**: Do you record the moisture content as it heads to the ship?

Mr Stewart: Correct.

**The ACTING CHAIRMAN**: Was the moisture content on the two occasions that that particular ship was loaded different one from the other, or different compared with other days?

**Mr Stewart**: We do record the overall moisture on all vessels. I am trying to remember which ship. There was one ship for which the moisture levels were low. I cannot recall.

The ACTING CHAIRMAN: That was earlier on.

**Mr Stewart**: It was earlier on. I cannot recall that those ships -

**The ACTING CHAIRMAN**: This was the one ship coming back on two separate occasions. You had a big dust problem on the first occasion. You said that all those discussions were held to fix that with the mining company. Do you not know, then, whether the moisture content was higher or whether the first one was low?

Mr Stewart: Look, I do not have that information in front of me.

**The ACTING CHAIRMAN**: Can you provide that for us? We want to know the moisture content prior to the loading of each of those small vessels. I think there is another question. Between 11 December and 5 March another four vessels were loaded, as I understand it. Do you know that for a fact?

Mr Stewart: That sounds right.

The ACTING CHAIRMAN: We want the moisture content of the product going to those ships and a comparison with the general moisture content of others. There is a note from your workshop from that early date in December that says that vessel selection can impact on dust during loading. Small vessels are lower in the water and, therefore, the product needs to fall further, resulting in the potential for more dust emissions. For what it is worth, that is a note from your workshop. Member for Roe, are you still going?

**Dr G.G. JACOBS**: I have a couple more questions. The final loading on 5 March 2007 also had significant problems with dust emissions. More bird deaths were again reported within days. Our records show that the deaths occurred between 7 and 10 March. Can you confirm that you were aware that there had been two major dust emission problems with the loading of lead carbonate on 11 December 2006 and 5 March 2007, and that both occasions were followed by large-scale bird deaths? Did you think that this was a coincidence? Did you suspect that there may be a connection between the emissions from your loadings and the bird deaths? Why did the port continue to export lead carbonate until 12 March 2007?

Mr Stewart: Your first question was: was I aware of those dust events? Yes, I was. Did I believe that there was any link between those bird deaths and our ship loadings? No, I did not. Why did I not? First, because, as some inquiry members would have witnessed when we were inspecting the port, we had pigeons living in the sheds and bathing in the sediment trap outside, we had Cape Baron Geese freely wandering around the port environs, and we had swallows nesting on the berth face. None of those birds were showing signs of death or distress. When those deaths occurred, we at the port were finding it extremely difficult to believe that the port operations were linked to the bird deaths. Overlaying that was the advice that I think I have already indicated to the inquiry; that is, we had had advice from the DEC and the shire suggesting that they thought at that time that the bird deaths were linked to the birds drinking contaminated water. We had no prior belief that the port operations were contributing to bird deaths. It was not confirmed until about 5 March, which was when the board took the decision that no further lead shipments would take place.

**Dr G.G. JACOBS**: You made that decision after 5 March. You made that decision on 12 March because you actually loaded -

**Mr Stewart**: Sorry, it must have been the 12<sup>th</sup>. The board meeting was on 12 March, I think. That was the first time that it was brought to our attention that there was a link between the lead carbonate at the port and the birds. That was the first time it was confirmed to us that there was a

link. That was when the board made the pre-emptive decision that no further shipments would take place. Up until that date there was a lot of debate.

**Mr Matijasevich**: Dr Jacobs, could I ask a question?

**Dr G.G. JACOBS**: No, you cannot ask a question of me.

**The ACTING CHAIRMAN**: No, I am afraid you are not allowed to ask questions of committee members. You are here for us to ask you questions. You can make a statement that might lead to us understanding that there is a question, if you would like.

Mr Matijasevich: The birds that died had lead in them, but did they die of lead poisoning?

**The ACTING CHAIRMAN**: The evidence that we have is yes, they did. More than that, there seems to be an extremely close correlation between the loading of the small ships, dust events and subsequent bird and bee deaths within the days after those events. I am getting some more information, so Dr Jacobs will ask another question.

**Dr G.G. JACOBS**: Colin, there is an email from the DEC officer in Albany dated 28 January 2007, which raised an anonymous complaint passed on by someone who is a friend of a port worker. The claim is that the port worker said that there were large spills of lead in October and December 2006, with continual spilling of the product from the conveyor belts. The response is from the port's environmental consultant. I am sorry, but this question is a bit tortuous.

**The ACTING CHAIRMAN**: You need to make sure that you are not saying anything that would lead to identifying that person.

**Dr G.G. JACOBS**: No, there is no identification of the person. In response, the port's environmental consultant emailed other port employees stating that the complaint could be made anonymously to the Department of Environment and Conservation, so that the department could handle a formal complaint through its formal system and there could be accurate details rather than hearsay. I am sure that we would all like to have that. To date, no other response to DEC on this complaint has been located in the documents provided. Did the port respond other than as outlined? On the evidence before the committee, what is said to be hearsay from a third party appears to be remarkably accurate. Would you like to comment on those comments and about those spills in October and December 2006?

**Mr Stewart**: When we heard about that anonymous complaint, we, like everyone else, would have liked to have known what the complaint was really about. Our expectation of our own employees is that if they notice a spill of significance, they will report it on one of the general report sheets. We would expect them to do that. That email seemed to be alluding to a significant spill event - we are not talking here about a dust event - that occurred over that period. We had no hard evidence from our operational people that that event had occurred. If it had occurred and it had not been reported by employees to their appropriate supervisors, I would be disappointed.

[11.30 am]

**Dr G.G. JACOBS**: These are hearsay events and both Mr Stewart and I know what it is like to live in a small town. Do you have any information that will clear up this issue, because the rumours that are circulating are an issue?

**Mr Stewart**: There is an issue with rumours. We had emails at that time that the port had wantonly pushed a wagon of lead kibbles into the ocean. We were asked to investigate it. We had a number of complaints via the DEC that were, in some cases, incidents that were totally out of left field. Reputedly, there was photographic evidence of employees shovelling lead concentrate spills into the ocean. We said that we would love to see the photos to identify who was doing it. We certainly heard the rumours and innuendo, but we never saw the evidence in the form of those photos.

**The ACTING CHAIRMAN**: It has been noted that you have lawyers giving you notes. If you want them sitting at the table, you are able to do so.

Mr Stewart: Thank you. They were endeavouring to -

**The ACTING CHAIRMAN**: I do not need to know what is in the note; it is your business. However, if you want them sitting at the table, you are able to do so.

Mr Stewart: Thank you.

**The ACTING CHAIRMAN**: What is the moisture content required by the ships?

**Mr Stewart**: The transportable moisture limit varies from shipment to shipment, but it is generally around 8.5 per cent to nine per cent.

The ACTING CHAIRMAN: I have the moisture content required for the October loading, which involved a small ship and it was very dusty. The moisture content at 9.15 am was 6.9 per cent. That is well below the required level. It slowly crept up to seven per cent at 11 o'clock, at which time loading stopped, I presume because of dusty conditions. Slowly it stayed at seven per cent and crept up to 7.2 per cent. At 4.15 there was a 50-minute delay because of dust. It slowly crept to the high sevens by 10 o'clock in the evening and the final levels were around 8.5 per cent. For most of the load the moisture level was below the required level for shipping. When the first reading was 6.9 per cent, and it was obviously miles too dry, why did not the loading of the ship stop?

**Mr Stewart**: The shipping limit is the upper limit, not the lower limit, at which you are allowed to ship.

The ACTING CHAIRMAN: I thought it was a range.

**Mr Stewart**: The shippers declaration form which is handed to us by the mining company specifies the maximum moisture limit allowed in that product when it is loaded onto the ship, not the minimum.

The ACTING CHAIRMAN: That is the range that varies between ships.

Mr Stewart: Yes.

**The ACTING CHAIRMAN**: I understand that. We are looking for the details for the December loading. We cannot locate it. Will you provide it? We might have it somewhere, but we cannot locate it at short notice.

Mr P. PAPALIA: When the port made its submission, the committee was provided with a document which was called a "Summary Presentation in October 2006" and was addressed to the port authority. I will read out what you said about it. You said that presented to the Esperance Port Authority Board, at their request, on heavy metals handling - nickel and lead - issues that demonstrate the board's proactive interest in these matters, the diligence of the authority in seeking to adopt best practice and the significant improvements made since the commencement of lead handling in July 2005.

When we initially received that document, it provided a significant amount of information. Subsequently, your legal representatives provided us with an alternative document to replace that one, claiming that it was the same document - heavy metals handling summary. However, the alternative document has far less information in it and some of the information in it contradicts the first document. What was the first document?

**Mr Stewart**: At the previous board meeting the board requested me to bring them up to date with what was happening with the heavy metal operations in the port. I asked three people within the port to provide me with a summary of the improvements we had made, the progress we are making and how things were progressing with the handling of lead and nickel. The report you have in front of you was a draft report that was put together by our environmental officer and was circulated to operational staff. Subsequently, a report was put to me by our operations manager that covered the

proactive things we were doing. I also had a report put to me by our shipping support officer. Effectively, three reports came to me from my staff leading up to the following board meeting.

Mr P. PAPALIA: The first document the committee received was, effectively, three reports.

**Mr Stewart**: There were three separate reports. One was the environmental officer's report. I also have a report that was submitted to me by the port operations manager and another report submitted to me by the shipping support officer.

**Mr P. PAPALIA**: The first report that the committee received was subsequently replaced with another summary. Was that the environmental officer's report?

Mr Stewart: Correct.

Mr P. PAPALIA: Is the information in that report valid?

**Mr Stewart**: Most of the information was very valid, yes.

Mr P. PAPALIA: In that report there are a lot of statements that contradict other information we have received. For example - and this refers to a question I asked earlier today - the water spray installed on the ship loading chute prior to lead export is not used due to fears of TML. That was a bit of information in the original document that was provided to the committee. There are a lot of things that contradict other information we have received. That is the reason that I am asking whether the original document is valid?

**Mr Stewart**: It was put together by our environmental officer who, with due respect, is a diligent officer but is not as close to the operations as the operational people. I was looking for a more detailed operational report on what was happening at the coalface to take back to the board. That was subsequently the report that did go to the board. It was put together by people at the coalface and it outlined what was happening on site. That report talks about a range of initiatives that had taken place to improve our operations.

**The ACTING CHAIRMAN**: To an extent that answers the question I raised earlier about what the board was told. The board meeting documents indicate that you provided a summary at the 9 November meeting. My comment to you was a criticism about the lack of information you provided to the board. Even in this document you do not talk about the dust results. In the first document provided to the committee you talk about lots of things to do with dust. The member will go through those now. He is not referring to the final version. It would be interesting to know what they were and were not told.

[11.40 am]

**Mr Stewart**: The document did go to the board; I have it here.

**The ACTING CHAIRMAN**: I have just received a copy. I will go through that while the member for Peel is going through the other ones.

**Mr P. PAPALIA**: Perhaps you can tell us whether you felt that the environmental officer was incorrect in the report with these particular points and why. For instance, the first point is that the concentrate was of a fine granular, rather than a prill, form; that it was solar dried; and that parts were very dry and powdery and thus prone to dust. That is in the original environmental officer's report.

**Mr Stewart**: Nothing that she is saying there is in incorrect. It is solar-dried at the mine. When it came off the filters, they were having trouble with it being too wet, so they were solar drying it to reduce the level of moisture.

**Mr P. PAPALIA**: The report also states that parts were very dry and powdery and thus prone to dust. Was the board advised about that?

**Mr Stewart**: I think that was self-evident. As a concentrate it does have the potential to dust up. In those situations, we constantly look at ways of reintroducing moisture.

**The ACTING CHAIRMAN**: I have the final version that went to the board. One of those items was deleted.

**Mr P. PAPALIA**: The next point refers to the untarping of six kibbles at a time for unloading into the hopper in place of the previous practice of untarping only one kibble as being unpractical. The report makes specific reference to that.

**Mr Stewart**: That specifically referred to nickel odour. We were of the opinion that if we opened up a wagonload of kibbles - we had six kibbles - there was greater opportunity to exhaust the nickel odour into the atmosphere.

Mr P. PAPALIA: It relates to nickel.

**Mr Stewart**: That is correct.

**Mr P. PAPALIA**: The report refers to problems with the sump filling quickly after wash-down following the unloading of a train and of creating a dust source as it dries out waiting to be collected and returned to the shed.

**Mr Stewart**: Correct. That would have been an issue that we were addressing. That was not only brought to our attention through that report; we had what we call actions generated by our maintenance system. At one stage we were cleaning out the sump on a bimonthly basis. Because of the amount of material that we were collecting, we changed the procedure so that it was cleaned out more regularly.

Mr P. PAPALIA: The board was not told of that fact.

**Mr Stewart**: It probably would not have been provided. It was not seen to be a major material issue that we were addressing.

Mr P. PAPALIA: The first report states that prior to handling the lead, the Western Mining shed was completely sealed, although general report sheets from port staff and photographs from the shire and those issued by the Department of Environment and Conservation indicate that that is not the case. You have already answered this question. The first document records improvements to only some of the conveyors and specifically states that a number of conveyors were not fully enclosed and that loading during windy conditions resulted in the product being blown from the belts onto the berth covering the ship loader. Was that reported to the board?

**Mr Stewart**: I would be surprised if the board was not aware of the nature of our system. That was telling us some of the issues that we had with our 15 to 16-year-old ship loading system.

**Mr P. PAPALIA**: The first report states that since the removal of the telescopic loading chute, it does not reach into the hatch during loading with lead and nickel falling to the berth and into the ocean when windy.

**Mr Stewart**: That is one of the issues that is inaccurate in the report. We had put an extension on the chute. There are two different types; there is telescopic chute, which is what we used to have in the mid to late 1990s, which was a chute that telescoped down, and there was an extension to the chute. We had incorporated an extension to the chute. That comment is not accurate.

**Mr P. PAPALIA**: With regard to that, we have seen photos of nickel loading, which indicate that with a small-hold ship the chute is sitting higher than the hold. Was that ever the case with lead?

**Mr Stewart**: It did happen with those small ships, yes.

**Mr P. PAPALIA**: The chute did not extend into the box hold. So it was not an issue of the box hold not being contained.

**Mr Stewart**: The smallness of a ship brought about a number of problems. In fact, the photo in that report you have is of a nickel ship where the chute was above the hatch combing. If you look at that shipment, no dust was being generated.

**Mr P. PAPALIA**: That was the case with the lead ship as well?

Mr Stewart: Yes.

**Mr P. PAPALIA**: So there was an air gap between the bottom of the chute and the top of the hold?

**Mr Stewart**: Figure 4 in that report you have there was prior to the extension of the chute. I do not know when that particular photo was taken.

**The ACTING CHAIRMAN**: On that dot point, your environmental officer states that lead and nickel was falling to the berth and into the ocean when windy.

**Mr Stewart**: There is no doubt that we had nickel and lead on the berth when we were loading. There is no doubt.

The ACTING CHAIRMAN: And into the ocean.

**Mr Stewart**: We were aware that some was getting into the ocean. We were doing monitoring to determine how much was going into the ocean and we were taking remedial action to limit it. One of the things we did was build a curbing along the wall face. As I described previously, those berths were built back in the 1960s and 1970s when the berths sloped towards the ocean. We built a curbing to limit the spillage that fell onto the berth and into the ocean.

**Mr P. PAPALIA**: Jim, as a result of the briefing, were you aware that lead was spilling into the ocean and onto the wharf?

**Mr Matijasevich**: The operational aspects are not reported to us. As a board, we look at things that we have to address to give policy for Colin to pursue. Specific day-to-day incidents that occur on the wharf are not reported to us. That is reasonably normal unless somebody sees it as a crisis.

The ACTING CHAIRMAN: If I were a board member and the port was exporting a product that we knew to have significant health risks and during loading it was dropping into the ocean, where it is not supposed to be going, and we knew that benthic levels showed that it had gone there in significant quantities and onto the port and that dust monitors had showed that lead dust was getting into the town, surely I would think that those are issues that a board would want to concern itself with.

**Mr Matijasevich**: The board would want to concern itself if it were told.

**Mr P. PAPALIA**: I want to clarify one point. I refer to the chute extension of December 2006. Even with that in place, was there still an air gap?

**Mr Stewart**: I do not believe there was. I believe it did get down into the hold. The whole purpose of releasing it into the chute was to endeavour to make sure that it did get into the hold.

**Mr P. PAPALIA**: Back to the document, it states that water spray was not used. Was the officer incorrect when she said that the water spray on the chute was not used?

**Mr Stewart**: We have photos showing it being used. Was it sometimes subject to debate between us and a ship's crew because a ship's officers were conscious of TML? Certainly, there were arguments at times with them as to whether we were putting too much moisture on.

**Mr P. PAPALIA**: I understand that a ship's crew would be concerned about free surface. That is a big rollover.

**Mr Stewart**: Put it this way: we did not put water on if we did not deem it necessary. If the product was loading well and there was no dust, we would not have the sprays on.

**Mr P. PAPALIA**: So at times when you could not see dust, you did not operate the spray on the chute?

Mr Stewart: Correct. There were times when we did not operate the spray on the chute -

**Mr T.K. WALDRON**: Was that because you feared it would become too moist or was it just practice?

**Mr Stewart**: It was just running perfectly. There was no dust. Why put water on it when it was running well? As I said previously, we had problems with the product, but generally it handled very well.

Mr P. PAPALIA: The final point from the environmental officer's report states that there were problems with ship loading on 10 October 2006. The report states that if the chute was placed at an angle, less dust would be visible during loading. It also states that the product representative did not want contractors wetting down the product in the shed because of the TML and that the ship's crew had received no information regarding the product or the precautions to be used.

Mr Stewart: The ship's crew -

**Mr P. PAPALIA**: Received no information about the product or the precautions to be used.

**Mr Stewart**: Again, that is not accurate. Although we were not directly responsible for the safety of the ship's crew, they knew they were loading a lead carbonate. I am not quite sure what particularly is being referred to there.

[11.50 am]

**Mr P. PAPALIA**: Did you discuss with her the contents of her report and where you saw it as being inaccurate?

**Mr Stewart**: This came to me as a draft. I made a judgement. I had three reports to put to the board. Her report was a draft. The other two, from the operations manager and the shipping support officer, both addressed issues in a similar way. I made the judgement, as a CEO, to put the shipping officer's report in, because I thought it best addressed the issues and how we were dealing with the issues. It was a short, succinct, quarterly report that I thought was appropriate for presentation to the board.

**Mr P. PAPALIA**: So that was the report that the board received?

Mr Stewart: Correct.

The ACTING CHAIRMAN: It seems to me that that is a fairly significant event, in changing that report that was drafted to go to the board, which would have given the board a clear insight into all the issues to do with handling lead at the port. I have this final document that was sent instead. It does not cover any of that stuff. It talks about changes to do with PPEs, policy for vehicles going through areas, trialling of the dust suppression system, and fabrication of extension sheets. It talks about those issues. However, none of those dot points that have just been raised appear in the final report that you gave to the board.

**Mr Stewart**: Put that in the context that the board's pre-eminent concern, as it was evident to me over many meetings and discussions, was the health and welfare of our employees. The port's main concern was to make sure that our employees were getting appropriate training, appropriate PPE, appropriate improvements to our system, to ensure that our occupational health and safety requirements were met. A lot of what this report talks about is the things that we did to ratchet up our overall occupational health and safety performance. That, as I said from day one, was the preeminent concern of the board.

The ACTING CHAIRMAN: We are almost out of time, so I will go to the final issue we want to cover, which is the material safety data sheets. You were provided by Magellan Metals with an

MSDS dated April 2005 that classified lead carbonate as a class 9 miscellaneous dangerous good. Did you handle the product with a full understanding of that classification of a dangerous good?

**Mr Stewart**: I am trying to find my MSD sheets. Are you talking about 14 April 2005?

**The ACTING CHAIRMAN**: Yes. That classifies the lead carbonate being shipped as a class 9 miscellaneous dangerous good.

**Mr Stewart**: I am looking at the front page of that safety data sheet. It says, "lead carbonate, hazard classification not applicable". Are we looking at the same document?

**The ACTING CHAIRMAN**: The problem we have is that there were various MS data sheets.

**Mr Stewart**: There were three MS data sheets that we received.

**The ACTING CHAIRMAN**: I will move on to the next question while the research officers are looking for those documents. Were you aware that Magellan had previously provided a Chem Alert MSDS to the Department of Environment and Conservation that classified lead carbonate as a class 6.1 dangerous good; that is, as a toxic substance?

**Mr Stewart**: When was that provided? What date was that? We received three MS data sheets from Magellan.

**The ACTING CHAIRMAN**: One was in the early stages, when it was looking at exporting it through Geraldton. The point is that there were changes in classification on those MS data sheets. The ship classification was as a dangerous good, whereas on the earlier classifications provided by Magellan it was only a hazardous good.

**Mr Stewart**: The international maritime dangerous goods code - a copy of which I have in front of me here - does not classify lead carbonate as a dangerous good. In fact, it is not identified.

**The ACTING CHAIRMAN**: In fact, it does. We are having problems ourselves, because a few versions of these MS data sheets are floating around.

**Mr Stewart**: As I have said, for the inquiry's benefit, we only became aware that it was classified as a dangerous good in May this year, when we got advice to that effect.

**The ACTING CHAIRMAN**: You would be aware that we had DOCEP in here yesterday. DOCEP advised that it has reclassified it, and stated that the information given to it by Magellan in the first instance was incorrect, and that it should have been classified as a dangerous good. We also have a document in which Magellan itself lists it as a dangerous good for shipping purposes.

**Mr Stewart**: I checked with my harbour master recently. I know we went through a similar check back in 2004-05, and it was certainly not categorised under the international maritime dangerous goods code, nor the code of safe practice for solid bulk cargoes, so both those agencies were -

**The ACTING CHAIRMAN**: We will show you the Invernia copy, and the classification on that copy. We might need to do that via correspondence. We can provide you with the series of data sheets that we have, so that you can provide a comparison and provide the answer for us.

Mr T.K. WALDRON: I want to ask a final question. It seems to me that when you were handling the iron ore, the Esperance Port Authority was quite thorough and did a job in fully informing the community and involving the community in that. You have said today that the iron ore had a better system than the lead. Do you think it would be fair to say that the fact that the iron ore was handled in that way could have given the port itself and the community a false sense of security when it came to the handling of the lead? Do you think that you and the community felt that because you had been through all that stuff with the iron ore, the lead was just a follow up?

[12 noon]

**Mr Stewart**: I cannot answer on behalf of the community, but I can understand what you are saying. We, as the port, were struggling to keep people available to participate in our port

development consultative committee. We had a committee that had been running for quite some years. The interest and enthusiasm for being participants, in that community, certainly waned about 2004-05. Is that an indication that people had lost interest or had confidence in us? I cannot be categoric about that, but that was the reality.

**Dr G.G. JACOBS**: Colin, you are no doubt aware that the 9 000 tonnes on the wharf in the shed has now been classified as a dangerous good. How will that change your handling and loading practices?

**Mr Stewart**: Firstly, we will not be loading it, so it will not be going anywhere in the sense of a bulk product over the wharf. The mining company Magellan is working closely with us, the department of environment and DOCEP to come up with a way that that material can be moved out of the shed. I can assure you that it is being extremely rigorously evaluated by the relevant government agencies, Magellan and ultimately by ourselves, because ultimately the prevention notice on the handling of lead through the port of Esperance is issued on the Esperance Port Authority. Therefore ultimately, the Esperance Port Authority has to be convinced that the product can be safely moved from a bulk product into some sort of contained product, and out of the port.

**Dr G.G. JACOBS**: Much more rigorously than previously.

Mr Stewart: Without doubt.

**The ACTING CHAIRMAN**: If it had been a dangerous good in the first instance, what difference would that have made to the operation through the port?

**Mr Stewart**: My first comment is that there is a variety of dangerous goods. We handle dangerous goods and have handled dangerous goods in the past; ammonium nitrate being a case in point. We handled many tonnes of ammonium nitrate back in the early 1990s, and it was a dangerous good then. It is a much more dangerous good now because of terrorism. The dangerous good categories change with the changing standards that we, as a society, apply to them. If we were handling lead concentrate today, it goes without saying, that it would be a much more rigorous process because the goalposts have changed.

The ACTING CHAIRMAN: Yes, but regardless of the knowledge of what has happened now, if it had been labelled a dangerous good in the first instance - it is our understanding that it was for shipping purposes - even though you said that your advice is not. Our advice is contrary to that. Therefore, if you had known that on the ship it was classified as a dangerous good, would you have handled it differently in the first instance?

**Mr Stewart**: Without doubt. Without doubt there would have been a more rigorous process applied. That is without doubt.

**The ACTING CHAIRMAN**: We need to finish, I am afraid, and I have some closing statements. Those questions that we have not had a chance to ask: can we ask you to respond to those within 14 days. Also, the transcript of this hearing will be forwarded to you for correction of minor errors. Please make these corrections and return the transcript within 10 working days of mailing. If the transcript is not returned within this period it will be deemed to be correct.

I also ask, Mr Stewart, there was something that I forgot to ask for. The agendas of the board meetings were not necessarily the same as what was in the contents and sometimes there was more on the agendas. I ask you to provide a copy of the agendas of the board meetings from September 2006 onwards; that is, just the copies of the agendas. We have got the minutes, but we want the agendas that were prepared prior to the meetings to see if there is variation between the two.

I just point out that new material cannot be introduced by the corrections. I am sure that you are aware of that from last time.

Thanks for your attendance.

# Hearing concluded at 12.03 pm

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#### EDUCATION AND HEALTH STANDING COMMITTEE

# QUESTIONS FOR HEARING TUESDAY, 2 MAY 2007

### ESPERANCE PORT AUTHORITY

# The Magellan proposal

- 1. In relation to the Port's Weekly Planning Meeting minutes of 28 September 2004 there is an item under planning 4.1 concerning the CEO's report on the capital works approval process being underway stating "provision of shore based crane for Berth 2 was critical". The same item goes on about Trevor Watters visit highlighting PPE, and potential locations to store lead. Why was a shore based crane at berth 2 seen as critical in relation to the export of lead? Did this happen? What arrangements were put in place instead?
- 2. Did you ever assess the appropriateness of the loading facilities at Esperance for smaller bulk carriers for lead?
- 3. In March 2005 a delegation from the Port went to the Magellan site because of concerns that the lead loading at the Port will involve "the product passing through 12 transfer points and along 9 different conveyors to reach the ships hold. Only three of these conveyors are fully enclosed and a number of components of the loading system are exposed to the elements making it virtually impossible to avoid the escape of dust generated in transporting the concentrate. The degree to which the prill product may break down to form hazardous lead impregnated dust is impossible to quantify without testing the prill form under similar conditions". It also noted that the dangers significantly different to nickel. A trial of the product occurred in April and the 'prill' was broken down as a result of the transport. Why did this export go ahead?
- 4. The CEO's report to the Board on 21 March 2005 states that, at the time of the site visit by the Port delegation, the agglomerator had only recently been available to Magellan and that the agglomerator would turn the lead "concentrate into prill/pebble like product". Would you like to comment?
- 5. The CEO's report to the Board on 21 March 2005 also states that uncertainly about the dust from handling the product is creating OHS concerns and that an independent OH&S consultant and the dust suppressant, Polo Citrus, would address these problems. The independent consultant reported the next day, clearly basing his advice on the assumption that the product would be in "prill" form. We have another submission from a significant stakeholder which also states that the product export went ahead on the assumption that it would be in prill form. The product was certainly never a pebble-like product and the moist agglomerates broke down in transport. Did the CEO notify the Board when the agglomeration did not work?

- 6. Did the CEO advise DEC Albany office that the agglomeration did not work?
- 7. Did the CEO tell the Board that he had advised the DEC Albany office that the agglomeration did not work?
- 8. On an undated of Lead Export Implementation Tasks document list, Colin Stewart was listed as being tasked with considering replacing belts on CV 5 and CV7 to reduce carry back and therefore spillage during ship loading. The comment listed is dated 12/05/05 and states "Estimated to be \$10,000 each for CV5 and CV 7. CV 3 would be approximately \$50,000 and cost may not be warranted." Was the work on CV 5 and CV7 completed? When? Was the work on CV3 completed? Why not?
- 9. What is the nett debt policy of the State government with reference to limiting infrastructure at the Port?
- 10. The citrus dust suppressant appears to have only been installed after some 15 shipments in November 2006 after the first recorded major dust problem with loading the lead carbonate. Would you comment on the delays in implementing this apparently crucial measure?
- 11. More recently it has been reported that the polo citrus does not work as a suppressant of the lead carbonate dust. Would you comment on whether anyone knew what they were doing in relation to this product?

#### Dust minimisation and monitoring

- 12. Is it true that there are superior dust minimisation measures for the loading of iron ore, such as a closed materials loading system and negative pressurisation, as opposed to a covered but not enclosed loading system for lead and nickel?
- 13. Why did the Port replace high volume with dust gauge sampling in November 1995 after a year of handling iron ore (see Annual Environmental Report 2006)?
- 14. Can you explain how the lead concentrate is tested for moisture content at unloading?
- 15. In the DEC audit report from May 2005 it refers to Brambles managing the Nickel while the Port was to moisten the lead. Is that correct?
- 16. In en email of 4 August 2005, the Port's environmental consultant advised BIS that the product was under Brambles control until the product is on the unloading belts. Also In a report dated 12 October 2006 concerning the loading of the ship on 10 October 2006, it is recorded that the product representative would not allow the Brambles to wet the product I the shed because of the problems with TML (Transportable Moisture Limit). Could you please confirm which agency managed the moisture content of the lead concentrate in the shed?
- 17. Did the Port install the sprinklers in the old Western Mining shed in which it stored the lead?
- 18. When did you reinstall the dust control equipment in the heavy metal conveyers? Why were these removed? When were they removed?

- 19. Is it true as reported to the Board in relation to the rainwater tank monitoring (date is not clear attachment for Board meeting) that of the seven monitoring sites four are on Port employee's land? Why? Why was the proposal put that "Ongoing monitoring will continue, predominately at Port owned residences?"
- 20. Would the Port like to comment on the issue raised by CSIRO when attempting to test its dust monitor from February 2006 was that there was so much dust that it fell out of the gauge making any reading inaccurate?

# Personal Protective Equipment & Blood Tests

- 21. In item 6 of the Board meeting minutes of 28 September 2006, it is recorded that the CEO confirmed product continues to handle well with recent increases in blood lead levels investigated. It is noted that Board requested that staff be advised that inadequate or incorrect use of PPE causing adverse OHS results ultimately impacts on the bonus. What bonus is being referred to? That bonus is approved as a lump sum divided by the number of staff isn't it? Are all staff members blood tested? Who conducts the blood tests? Are the results made available to the staff?
- 22. Why did the Port advise its workers in its Basic Lead Awareness Induction that short term exposure to lead was not of concern?
- 23. Why didn't the Port distinguish male and female employee blood level reports given the lower exposure permitted for females of reproductive capacity?
- 24. Over the period from 1 April 2005 to 31 December 2006 the CONTAM (personal dust monitor) samples resulted in 9 of the 87 results were above the recommended level for lead exposure. In eight of those cases, the exceedance was attributed to people working with the led cleaning spills, unblocking conveyors or lading the material. Although those employees presumably had appropriate protective clothing and apparatus, did this not indicate to you that whenever the lead was being handled high levels of dusting was occurring? Would this not concern you in terms of the potential contamination of the areas adjoining the Port? In particular given the delays in receiving your dust monitoring analysis? Who selected the employees who would wear the CONTAM devices?

#### Particular instances of abnormal dust emissions

25. The Port has provided this Committee with a series of General Report Sheets completed by its staff about problems with lead dust, spillages from the conveyor belts and leaking from the lead shed. By December 2005 a supervisor wrote to a team leader and leading hands about the need to clean the counterweight and area around the trains - quote "Until the dust levels can be controlled with the mine site lifting the moisture levels". A few days later there is another report of more extremely dusty product arriving by train, followed by another delivery which caused dust problems. Were these reports related to the lead concentrate? Why did the Port continue with this product given the ongoing problems with dusting and spillages?

- 26. Was the spillage of between 60 to 100 kilograms of lead into the sea reported on 11 January 2006 (General report sheet) reported to DEC under section 72 of the Environmental Protection Act? Why? Doesn't it fall within your definition of an environmental spill as provided by the Port to the Committee earlier?
- 27. A General Report Sheet of 23 February 2006 reports of an accident when a bucket hit the feeder causing a product spill and caused an adjuster to break. It is reported that visibility is poor due to dust conditions. Another General Report Sheet of 23 February 2006 reports problems with a dusty product causing dust to pour off the counterweight at conveyor 9 and that adding water did not make much difference. The Supervisor's comments record that the mine had shut to work on the dust problem. Although it does not specify that the mine is Magellan, I note that there is an unusual gap in lead trains between 1 and 12 March 2006. Is the reference to the Magellan mine?
- 28. Did the Port report the abnormal lead dust emissions on 10/10/06 (described by the Port as resulting in "Port personnel, ships crews, vessel and ship loader [being] covered in lead dust."), 11/12/06 and 5/03/07 and the spill on 5/12/06 (that took three hours to clean up) to any agency? When did it make these reports?
- 29. Why does the Port's general report investigation form require abnormal noise events recorded in the register to be reported to DEC within 21 days but has no equivalent for registered abnormal dust emissions?
- 30. Why was the dusty shipment on 29 October 2006, reported to the Port's Board as part of the Environmental Status Report of November 2006, not recorded in the abnormal dust emissions register or in the shift log?
- 31. The incident of 10/10/2006 was described as the Port as involving "very dusty product" and "a small vessel" covering the Port workers, ship crew, vessel and ship loader in lead dust. In the same presentation, as part of its Beyond the Mine workshop, the Port also stated that the selection of vessels could impact on dust and refers to smaller vessels being lower in the water and the product having further to fall. That workshop was on 4 December 2006. Did the Port have any concerns about loading the same Spliethoff ship with lead carbonate on 11 December 2006?
- 32. In an email of 18 January 2007 a Port worker states that at the time of loading on 10 October, the same ship had already been accepted by the harbour master to reload in a month's time, so that the Harbour Master quote "could not refuse the vessel". Is that correct? The Port's evidence is that, relying upon expert advice, it appreciated the risks associated with lead carbonate. Can you explain the decision to reload the same ship with lead carbonate given these problems encountered and the risks to public health involved?
- 33. On 11/10/2006 another employee recorded a General Report Sheet about the lead dust and stated that although the water sprays were used on conveyor 3 the product was still too dusty and that the poly citrus made the product too sticky and block the chute. The response similar to previous ones was that the product would be monitored at the mine site for dust levels. Why did the port continue with the export of this product?

- 34. What happened as a result of the abnormal dust emissions on 10 October 2006 and 11 December 2006? Did the investigation on 18 October with Magellan reps which was recorded as being the measure taken by the Port to prevent or minimise similar events occur? What was the result? Did the "emergency meeting" with the product owners to determine the application of a "dust bind" agent recorded as being the measure taken by the Port to prevent or minimise similar events to 11 December occur? Did this happen? What happened?
- 35. Between 11 December 2006 and 5 March 2007 another four vessels were loaded with lead carbonate were they not?
- 36. The final loading on 5 March 2007 also had significant problems with dust emissions? More bird deaths were again reported within days our records show between 7 to 10 March? Can you confirm that you were aware that there had been two major dust emission problems with the loading of lead carbonate on 11 December 2006 and 5 March 2007 on both occasions followed by large scale bird deaths? Did you think this was a coincidence? Did you not suspect that there may be a connection between the emissions and the bird deaths? Why did the Port continue the export of lead carbonate until 12 March 2007?
- 37. Why was there a dust problem with the loading of the lead concentrate on 5 March 2007?
- 38. Did the Port report any of the above discharges to DEC as Section 72 Waste Discharge Notification under the Environmental Protection Act? If yes did you provide copies to the Committee? If not why not?
- 39. Did the Port report any other discharges to DEC in relation to lead?
- 40. Did the Port report any spills to the Resources Safety Division of Department of Consumer and Employment Protection? Which ones? Were copies of these reports included in the materials provided to this Committee? If not please provide.
- 41. There is an email from the DEC officer in Albany dated 28 January 2007 raising an anonymous complaint passed on by someone who is a friend of a Port worker. The claim is that the Port worker said there were large spills of lead in October and December 2006 and continual spilling of product form the conveyor belts. In response, the Port's environmental consultant emails other Port employees stating that she has asked DEC to have the quote 'original complainant to make the complain anonymously to DEC so that DEC can make a formal complaint through their formal system and we can have accurate details rather than hearsay form a 3<sup>rd</sup> party'. To date no other response to DEC on this complaint has been located in the documents provided. Did the Port respond other than as outlined? On the evidence before this Committee what is dismissively referred to as "hearsay from a 3<sup>rd</sup> party" appears remarkably accurate. Would you like to comment?

### **Board**

42. Was the Board aware of elevated benthic nickel levels since 2002? What did it do about this?

- 43. Could the Committee be provided with the list of consultants used by the Port over the last three financial years?
- 44. The Committee was advised by your legal representatives that a document provided to us as an attachment (D8) to the Port's submission was not the final version of the Heavy Metals Handling Summary that was provided to the Board in November 2006. The version originally provided was far more detailed, and made specific reference to:
  - the concentrate being in very fine granular form rather than "prill" form, that it is solar dried and parts are very dry and powdery and thus prone to dust;
  - the un-tarping of six kibbles at a time for unloading into the hopper in place of the previous practice of only un-tarping one kibble as being 'not practical';
  - problems with the sump filling quickly after wash-down following the unloading of a train and creating a dust source as it dries out waiting to be collected and returned to the shed;
  - states that prior to handling the lead the WM shed was completely sealed, although General Report Sheets from Port staff, photographs by the Shire and notices issued by DEC indicate that this was not the case;
  - Documents improvements to only some of the conveyors, and specifically states a number of conveyors are not fully enclosed, and that 'loading during windy conditions results in the product being blown form the belts onto the berth and covering the shiploader.
  - States that since the removal of the telescopic loading chute, it does not reach into the hatch during loading, with lead and nickel falling to the berth and ocean when windy.
  - States there is no overhead sprays in any heavy metal storage shed and that watering is done manually; that there is no procedures for monitoring of water content on arrival, or for watering down prior to loading out.
  - the water spray installed on the ship loading chute prior to lead export is not used due to fears of TML;
  - Details of the problems with ship loading of 10 October 2006 and states that it was found that if the chute was placed at an angle "less dust would be visible during loading" and that the product representative did not want contractors wetting down the product in the shed because of the TML; and that the ships crew had received no information regarding the product or precautions to be used.

Is that information correct?

Who saw this document? Specifically, did members of the Board see it/was its contents discussed with them?

- 45. The original attachment to the Port's submission D8 is referred to in the submission as "A summary presentation in October 2006 and Colin Stewart (CEO) to the Esperance Port Authority Board, at their request, of heavy metals handling (nickel and lead) issues demonstrates the boar's proactive interest in these matters, the diligence of the Authority in seeking best practice and the significant improvements made since the commencement of lead handling in July 2005." The reference in the index to Part D of the submission refers to D8 as "Heavy metal handling presentation 12 October 2006". The Port subsequently replaced this document with an abbreviated "Heavy Metals Handling Summary" and stated that "the Board meeting in which this presentation was given was on 9 November 2006". Could you please confirm that there was no presentation to the Board or any Board members in October 2006?
- 46. There is no reference in the substituted Summary (D8) which was tabled at the Port Board meeting of November 2006 to the issue of product not meeting specifications, but there is a great deal about dusty product in the Heavy Metals Handling Summary document originally provided. Would you agree that this indicates that the Board's discussion about the Heavy Metals Handling Summary extended beyond the issues directly raised in the substituted document?
- 47. Why was the original telescopic chute removed?
- 48. Could you comment on the Minutes of the Board meeting on 23 March 2007 which records that the CEO "indicated current exposure of the Port could be capitalised on at a later date when funding is sought for projects like the Transport Corridor upgrade"?
- 49. Could you comment on the Minutes of the Board meeting on 23 March 2007 which records that the Board had discussion concerning the options for shipping product being as ingots, pellets, or containment in bulker bags.
- 50. The minutes on 23 March 2007 record that the Board was also advised at that meeting that the same DEC officer who was involved in the original approval process relating to the transport of lead carbonate through Esperance was "commissioned... to review handling procedures with the view to finding an acceptable method for shipping the product". What did the Board think of the appointment of the same officer to handle the review who had been part of the original approval processes?
- 51. Why did the Board's Chairman advise the Esperance Community via a newspaper ad that the cause of high levels of benthic heavy metals was the result of the storm in January 2007, when very high levels had in fact been detected in October 2006?
- 52. On 15 June 2005 the Board entered into the agreement to export lead. On the same date advice was tabled from the CEO that a number of policy and infrastructure changes needed to be made for the safe handling of lead (Attachment to Board Meeting Minutes 15/6/05 Item 5.5.1). Why did the Board approve the agreement before the policies and infrastructure were in place?

Financial Profile of Port

- 53. How much is the annual budget of the Port Authority?
- 54. What is the value of goods going through the Port Authority in total?
- 55. What is the value to the Port of the handling and export of lead concentrate?
- 56. Do you know what royalties are paid on these goods to the State government? to the Federal government? Can you find out?

# Material Safety Data Sheet

- 57. You were provided by Magellan Metals with a Material Safety Data Sheet, dated April 2005, that categorised lead carbonate as a class 9 "miscellaneous" dangerous good. Did you handle the Magellan product appropriately as a class 9 miscellaneous dangerous good?
- 58. Were you aware that Magellan had previously provided a ChemAlert Material Safety Data Sheet (from the RMIT Royal Melbourne Institute of Technology) to the Department of Environment and Conservation which classified lead carbonate as a class 6.1 dangerous good, that is as a toxic substance? It also classified it as UN # 3288 a toxic solid for shipping purposes, requiring level I packaging. Subsequently, Magellan obtained a Material Safety Data Sheet for its lead carbonate from Chemical Safety Associates Inc (US) which classified it as a class 9 miscellaneous dangerous good; it also classified it as UN# 3077 an environmentally hazardous substance requiring level III packaging. Would your handling of the lead carbonate have been different if it was a class 6.1 dangerous good as opposed to a class 9? What would the differences have been?
- 59. Based on the Magellan Material Safety Data Sheet in your possession which identified its lead carbonate as a environmentally hazardous substance, did you not consider that the large number of bird deaths reported in mid December 2006 might be the result of the problems in loading the vessel with lead carbonate on 11 December 2006? Why did you not suspend the lead exports at that time? Why did you wait until there was confirmation some three months later that the bird deaths were the result of lead poisoning?
- 60. On the Lead Export Implementation Tasks document of 15 April 2005 provided by the Port, Colin Stewart was identified as tasked with sourcing a MSDS for the Magellan lead carbonate because the one in circulation 'is not the Magellan product'. Which MSDS was in circulation? Why was that not provided in the Port's documentation? Was it the Chem Alert MSDS which states that lead carbonate was a toxic substance? Did you think that Magellan's carbonate was not toxic? Why?

# Clean up after contamination

61. Where are the holding tanks for the sludge from the rain water tanks to be located? And what is the final destination for the sludge when taken from these "holding tanks"?