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## ESPERANCE HEALTH ISSUES - CONDEMNATION OF GOVERNMENT

### *Motion*

**The ACTING SPEAKER (Mr P.B. Watson):** The member for Esperance.

**DR G.G. JACOBS (Roe) [4.13 pm]:** Correction, Mr Acting Speaker. I have the view that maybe the electorate should be called Esperance, but it is in fact called Roe, after the first Surveyor General of Western Australia, John Septimus Roe.

**Mr E.S. Ripper** interjected.

**Dr G.G. JACOBS:** Yes, Treasurer, Nyabing is in the Shire of Kent, which is in my electorate.

**Mr E.S. Ripper:** Make sure you look after that town.

**Dr G.G. JACOBS:** I will, with the help of the Treasurer. I move -

That the government be condemned for its lack of action in handling health issues in Esperance relating to lead pollution.

A press release of 9 March highlighted to the community a problem that had probably been known for some time by certain authorities but which only became common knowledge after the press release. Around 4 000 nectar-eating birds died around Esperance between 7 December 2006 and 2 January 2007 and the Department of Environment and Conservation had been unable to determine what killed them. The birds were mostly yellow-throated mynas, wattle birds, New Holland honeyeaters and silvereyes, plus some seagulls and pigeons. In February a further 185 bird deaths were reported, mostly of purple-crowned lorikeets. The Department of Environment and Conservation said that it had determined that a number of birds that were tested had died of lead poisoning. It was then obviously a concern in the community, because most people understand the issue of lead at least in a small way. They understand the danger of lead in petrol, paints, old plumbing, car batteries and also, in times gone by, in pencils. Liver analysis of the samples of birds in both the first and second group of deaths showed very high levels of lead. The death of the birds was without doubt due to lead toxicity. I am sure that you have been to the beautiful town of Esperance, Mr Acting Speaker (Mr P.B. Watson). It is almost as beautiful as Albany although less windy, I would suggest, despite what the member for Cottesloe would say about my hometown.

The most likely source of lead in Esperance is the lead carbonate that has been exported through the port of Esperance for more than 18 months. The issue of lead in petrol has been discounted, because that has been outlawed, as has lead in house paints. There are no other obvious sources of lead in the community of Esperance. It has been recognised by the port and by the Department of Environment and Conservation that the source of lead in the birds is most likely the lead carbonate ore exported through the port. The operation is conducted by a company called Magellan, which exports lead carbonate mined in an area 30 kilometres west of Wiluna, 950 kilometres north of Esperance. The ore is trucked to Leonora in kibbles. A kibble is a small container with a loose cover, which I will talk about shortly. The kibbles are then transported on flat-top rail wagons to the port of Esperance. The kibble is lifted off the flat tray of the wagon and turned upside down, pouring the ore into a hopper. At the port the lead carbonate is then elevated through a covered conveyor belt into a shed, where it is stored awaiting export by sea. The ore is moved to the ship's hold via a covered conveyor belt. This operation occurs some four times a year, and the amount of product varies between 5 000 and 10 000 tonnes per shipment. Since April 2005, 130 000 tonnes of lead carbonate has been exported through the port of Esperance. Lead carbonate is a white-bluish particulate matter. The particulate matter is very fine. It measures 20 microns. For the members who have biological knowledge, a red blood cell measures about two microns, so we are talking about a very fine powder.

**Mr M.W. Trenorden:** Is there obvious dust in the hopper process and the conveying process?

**Dr G.G. JACOBS:** I will get to that shortly when I talk about the dust monitoring sites and the dust monitoring that is done by the port and overseen by the Department of Environment and Conservation. I will have some obvious questions about that. After this announcement, the port recognised that there was a problem and it responsibly suspended operations last Monday after some encouragement from not only the people who live in that area but also the member, who said that lead could not be gambled on. It is such a significant heavy metal and pollutant that operations needed to be suspended if the port was the most likely source, which many authorities agreed it was.

The next day the Department of Environment and Conservation put a prevention order on the Esperance Port Authority. The reason for the notice was that a condition of pollution is likely to arise or has arisen and the Esperance Port Authority has done or is likely to have done an act in contravention of sections 50A or 50B of the

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Environmental Protection Act. Section 50A is headed "Causing serious environmental harm" and section 50B is headed "Causing material environmental harm". I will not read those sections to the house, but that was the reason for the prevention order.

**Dr J.M. Woollard:** Did that then stop the transportation?

**Dr G.G. JACOBS:** That prevention order put a stop to any movement of the product, including transport of the product to the port and the export of the product from the port. It suspended all movement of the product, which I believe was the responsible thing to do.

I will work through the epidemiology of this lead issue in order to try to bring some science to it. There is always a concern amongst the population that we will engender some panic and that a lot of the accounts will be driven by emotion rather than science. I can understand the population's concern. The source of lead in the birds is most likely - it can be scientifically proven - to have come from the lead that was being exported through the port. While the Minister for the Environment is in the chamber, I commend the department of the environment for the work it is doing. It has taken up the issue of lead isotope fingerprinting. Any ore body or any product - in this case, lead - has a particular isotope make-up. Isotope 204 is naturally occurring, but lead contains other isotopes, such as 206, 207 and 208. These are natural breakdown products that occur in a natural product. The ratio of isotopes is a fingerprint of the particular characteristic of that source. It can be matched. If the isotope ratios within the ore and the ratio of the radioisotopes of the lead in the bird match, there is scientific evidence that that is the source. I am disappointed that the results will not be forthcoming this week; apparently, they will not be forthcoming until next week.

The second part of the equation relates to the mode of transmission. If we can determine the source of the lead, how did the lead get to the birds? Also, if the lead got to the birds by that particular mode of transmission, is it possible for that mode of transmission to transmit that substance to the human population? It is most likely that the mode of transmission - investigations are still being carried out by the Department of Environment and Conservation - is airborne. It is likely that that very fine 20-micron particulate dust becomes airborne. The prevailing winds - although Esperance is not as windy as Albany, it has very significant winds, particularly in the afternoon, and they can blow from the south, east or north-east - were likely to have caused the lead to dust the environment. They also dusted the vegetation and the flowers of that vegetation. Most of the affected birds are nectar-feeding birds. The department of environment is scientifically working through these steps, but it looks like the dust became airborne, was blown onto the vegetation, the vegetation was ingested by the birds through eating the nectar and the birds were poisoned, showing very high toxic levels in most cases.

The next issue concerns the risk of transmitting the lead to the human population, particularly children, through that same mode of transmission, though obviously not from human beings eating nectar from flowers. I was a little disappointed - I have been saying this for some days - about the Department of Health's announcement in the same press release of 9 March headed "Lead poisoning responsible for mass bird deaths". The last bit of the paragraph of that press release referred to the DEC saying what it would do, while the WA Director of Environmental Health, Jim Dodds, said that the health department had not seen any evidence to suggest the general population had been exposed to any health risk. I have put forth my argument to the chamber and repeated it over a number of days. Mr Acting Speaker, if you presented to my doctor's surgery clutching your chest, I would clinically suspect a heart attack. What would happen if I said to you, "Mr Acting Speaker, you're not having a heart attack, you have no risk of having a heart attack and you're not having a heart attack" before I read the ECG or before I saw the blood tests and read the troponin levels, which indicate damage to heart muscle? For the health department to stand up three days after the pathologist released the results about lead poisoning in the birds and say that there was no risk to the health of the people of Esperance was irresponsible. Its comment was unfounded. It had no evidence.

The next question we must ask is: what evidence does the health department have that the human population has not received doses of lead? It is important that the health department work through that process in order to reassure the population. I have spoken about panic, emotionalism and scaremongering, but I suggest that lead is such a serious issue that we need to reassure the population.

Those most at risk are children under the age of five and pregnant women. The only responsibly scientific way to reassure the community is to conduct lead level tests on appropriate sections of the population. Last week a Department of Health advisor visited Esperance and told me that the department would wait for the Department of Environment and Conservation to conduct its isotope study to determine that the source of lead was coming from the ore that was going through the port. It also wants to wait for the visual aerial scanning. Environmentalists have the facility, via a whiz-bang electromagnetic-type device that is installed in an aeroplane that flies over a region, to identify the dusting lead areas in a town. That would provide important mapping of the areas of Esperance in which the dust has lodged. However, the Department of Health has decided to wait for

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the DEC to do its work and has suggested that if people are concerned about this matter they should see a doctor and ask for a blood test. Appropriate sampling must be undertaken to reassure the population. After blood tests have been analysed, the authorities can tell people that it has taken a good sample of the population in appropriate areas. I suggest that the appropriate areas are the downwind areas of the port. Given that the bay faces east, that includes Wireless Hill and Bostock Street, which is south of the port. It also includes the whole of the esplanade region, the West Beach area, which is at the back of Wireless Hill, the central business district, Crossland Street and the Taylor Street Tea Rooms. Basically, I am talking about all the areas within two kilometres of the port.

**Mr M.J. Cowper:** What about Dempster Street where you live?

**Dr G.G. JACOBS:** Absolutely. One cynic said that the only reason that I am passionate about this issue is that I live about 400 metres from the port. Cynicism is a part of politics, but ultimately the most important thing is the health of the population. Nobody in this place and nobody from Magellan Metals, the mining company that puts this product through the port, would argue that. The Esperance Port Authority has a good reputation when it comes to environmental issues. It exports approximately eight million tonnes of iron ore. An \$11 million shed that has covered conveyor belts houses the iron ore. That system almost negates the dust issue in Esperance. We do not have red beaches or red water because big efforts have been made to keep everything enclosed. Big manual vacuum cleaners are used to clean up areas around the port. From an environmental perspective, the port authority has done a great job. The death of birds in the region reminds me of the old days when coal miners took caged canaries into the mines to determine if the air was foul. The death or illness of the canaries was a trigger for the miners to get out of the mine.

I want to talk about the lead poisoning issue. Warnings about lead poisonous products extend as far back as the second century BC. Early victims of lead toxicity were mainly lead workers and wine drinkers.

Several members interjected.

**Dr G.G. JACOBS:** Some members here would have been in trouble!

Lead was added to wine because it had a sweet flavour and because it counteracted the astringent flavour of the tannic acid in the grapes. Lead-sweetened wine contained as much as 20 milligrams of lead per litre. When we talk about rainwater levels we are talking about 20 micrograms, with a micro being one millionth of a gram. Twenty milligrams of lead per litre of wine was an important part of the diet of upper class Romans. Lead poisoning in children was recognised a century ago. The first reports of lead poisoning in Australian children occurred in Brisbane in 1892. Those reports were greeted with widespread disbelief that lead toxicity could afflict children. Although the disease reached epidemic proportions, there was considerable doubt that lead was the cause. Many homes in Brisbane were built on raised piles and had large wooden enclosed verandas that served as play areas. The rails were painted with white lead, which chalked and powdered in the hot Brisbane sun. The cause of the epidemic, which was established 12 years later in 1904, was paint that contained lead. The use of lead paint in households was banned in Brisbane in 1920.

I will talk a little about the toxicology of lead. Lead is a negative charged ion that binds strongly to products and proteins. Proteins also make up enzymes. Enzymes are necessary for the chemical reactions in our bodies. The most important aspect is the central nervous system. Much of the toxicity in lead is due to the distortion of the enzymes and the structural proteins. That has significance for children because of their developing brains. Protein is put down as the brain is growing and developing. The other issue is that lead mimics the calcium in the body and competes successfully with calcium for binding sites. When calcium is substituted for lead, the body does not have the normal processes that form neuronal signalling; that is, sending electrical messages along neurones in the brain. It affects the transmission of nerve impulses and neurotransmitter release. In our brains we have gaps between one nerve cell and the next. They are like spark-plug gaps. Messages have to get across the gap. The message or electrical chemical goes on the nerve. It is a process that allows it to trigger off the next nerve cell. Lead affects that neurotransmitter substance that causes the triggering of the next nerve cell. The clinical aspect - or how it manifests in a person - is two-fold and affects adults and children. Lead poisoning in adults can affect their blood pressure, nervous system and kidneys. Children are much more sensitive to lead than adults for several reasons. Children's exposure is increased by their universal hand-to-mouth activity. In the modes of transmission that I was talking about concerning the airborne carriage of lead particles through the population, birds get it through nectar but children get it through hand-to-mouth activity. Often young children spend a lot of time on all fours and with their hands in their mouth. As we know, they tend to sample their environment by putting items in their mouth. If we tested their toys, play equipment and the carpet or floors or other surfaces that they come into contact with, we would find that when they put their hands in their mouth they are actually absorbing in their gut highly soluble lead carbonate. Birds and children absorb lead carbonate through their gut. A child's gut absorbs more lead than an adult's, and children are therefore more vulnerable to

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the risk of developing central nervous system problems than adults, who have a mature central nervous system. The symptoms of acute lead toxicity in children are called ataxia. The symptoms of ataxia in a child are clumsiness and staggering, followed by headache and behavioural changes. It might be difficult for members to recall detecting behavioural changes in their children, but those with young children would know that there are many variables involved in detecting such changes. How do people know, for instance, that their child is not just exhibiting bad behaviour, attention deficit hyperactivity disorder, a variant of Asperger's syndrome or any other behavioural issue?

**Mr M.J. Cowper:** Too much red cordial.

**Dr G.G. JACOBS:** Yes, as the member for Murray suggests, having had too much red cordial. These signs can in fact indicate the early onset of encephalopathy, which may go on to produce symptoms such as reduced consciousness, stupor and convulsions.

**Mr D.A. Templeman:** Isn't lead permanently in the body?

**Dr G.G. JACOBS:** Yes.

**Mr D.A. Templeman:** So there is no way that it can be excreted?

**Dr G.G. JACOBS:** Essentially, lead accumulates in the body. There are methods for managing lead poisoning and for extracting some of the lead from the body. In fact, the cornerstone of lead toxicity management is the termination of exposure. No doubt we all agree with that. That is why the port of Esperance and the Department of Environment and Conservation acted responsibly in saying that they must stop airborne dust occurring. The termination of exposure is important. Obviously, wiping down and cleaning surfaces is important, which means inspecting homes and surveying all other possible sources. There is also chelating agents, which are agents that trap, bind and inactivate lead in the body. There are a couple of chelating products. There is calcium disodium edathamil, or EDTA, which was the preferred method until recently. It is an oral agent and can bind and reduce the amount of residual lead in the body. There is another agent called succimer. It has another unpronounceable name, even to me, of dimercaptosuccinic acid. That is also an oral agent, and both agents will reduce elevated blood lead levels to between 40 and 50 per cent of its baseline.

**Mr M.J. Cowper:** You have just stumped the Hansard reporter.

**Dr G.G. JACOBS:** I will give her the notes afterwards.

After treatment has concluded, which is five days in the case of EDTA and 19 days after succimer, body pools tend to equilibrate and blood lead levels begin to rise again, often requiring a repeat course.

I apologise for the lecture, but the issue here, other than toxicology, is lead levels and the level of lead that is considered dangerous. Of course, that is a contentious issue even now. The accepted level for the general population is 10 micrograms per decilitre. In fact, the sampling that has been done in Esperance has not revealed thus far in the general community any level above 10 micrograms per decilitre. However, BHP Billiton Ltd had an experience of sampling conducted in part of Broken Hill, but it was not until doctors in the town suggested testing in another area downwind of the operation that startlingly different results were produced. It is therefore very important to conduct sampling in the appropriate risk areas. It is very important to conduct sampling of hundreds of children in a wide area of Esperance, not just sporadic sampling throughout the geographic area, to get some useful information about the pattern, geography and mapping of that potential pollutant in the population.

I want to talk now about issues surrounding the monitoring and likelihood of dust as an airborne pollutant. The port applies for and the Western Australian Department of Environment and Conservation issues an amended environmental licence to transport this lead product through the port, and there are certain criteria attached to the licence. I want to add to this debate the issue of the conditions for the control of air pollution. It is interesting to note that the special licence for this product refers to multiple products. There is hematite, or iron ore, nickel, lead and sulfur. Sulfur will soon be backloaded through the Port of Esperance from the nickel operation in Ravensthorpe to its big chemistry set just out of Ravensthorpe to make sulfuric acid for assisting in the extraction of nickel from laterite ore. There are therefore four products in the port of Esperance to which the environmental licence pertains. The air pollution control conditions include controls for dust management. Paragraph A1 of the licence on dust management states -

The licensee shall operate according to the Esperance Port Authority Environmental Management Plan.

There are then some general issues about dust generation control, which state -

The licensee shall employ routine maintenance and housekeeping practices to ensure that there is no accumulation of waste or raw materials in or around the premises which may lead to the generation of airborne dust.

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The licence refers to dust-conveyor transfer points, as dust can be transported into ships by inverting the kibble and putting it into a hopper in the shed. The licence further states -

The licensee shall maintain enclosures on all belt to belt transfer points to minimise dust problems associated with spillage . . .

The licensee shall use and maintain belt scrapers in the optimum working position at all conveyor transport points at all times.

The licensee shall maintain dust collection/extraction equipment . . .

It goes on to refer to dust suppression and the use of water to dampen the product. It refers to the raw material storage, dust collectors and feed hopper loading. Under "Feed Hopper Loading", it states -

The licensee shall ensure that measures are taken so that no fugitive dust emissions escaping from the sheds from feed out hopper loading operations cross the boundary of the premises.

Without pre-empting the results of any investigation by the minister's department, I suggest that there are 20 microns of particulate matter in a kibble that is lifted off a truck. It then goes to a hopper that is essentially in the open. It is a three-sided cover, but there is a certain opening that the kibble goes into, and the kibble is inverted totally into the hopper. I suggest that that is one of the major areas in which we could run into issues regarding the generation of significant airborne lead carbonate.

I will talk quickly about the dust monitoring gauges throughout the regions and the results thereof. There are some issues about the age of the shed. In fact, the port authority is the first to admit that. It is storing Magellan Metals Pty Ltd's product in a shed that is quite old. It is by no means airtight. Pigeons can fly in and out of it. In fact, there are some splits in the walls of the shed, and that has been recognised. As I speak, however, the port is engaged in an operation whereby it will build a new shed over the top of the old one. That is proceeding as I speak. That is in recognition of the fact that the storage could be done in a better way to reduce the potential for airborne dust emissions from lead carbonate.

The dust generation control is obviously aided by the fact that the ore has a cover over it. However, under the amended environmental licence, the licensee shall, when necessary and feasible, moisten the stockpiles of bulk materials prior to handling. When I talked to one person who was involved in generating the product, he said, "We must be very careful. If we use too much water, we can't put it in the hold of the ship because we get a corrosive reaction between the product and the hull of the ship." The licence states -

The licensee shall minimise dust emissions generated by wind whipping of any open stockpiles by either:

- (i) maintaining stockpiles in a damp condition; or
- (ii) sealing stockpiles to prevent dust lift off.

I recognise the product is in a shed, but quite a few people - not just me - believe that the storage within the shed could be improved, and that is recognised by the port authority. The port authority has a great history. In 2003 it was voted Australian port of the year, and I commend it for that. The port authority believes, as do I and other members of this place today, that it is very important to make sure that this operation is safe for the community of Esperance.

In the time I have left I will talk about some of the dust monitoring results. Part of the licence requirements is that dust monitoring be performed. Dust monitoring pertains to lead in particular, but it is also involved with hematite, which is the iron ore component, nickel and sulfur. There are dust monitoring gauges. These gauges are deposition gauges. They measure the amount of dust that is deposited on the gauge. They are read every month and give a figure of milligrams per square metre per 30 days.

I will deal with quality control. The Esperance Port Authority commenced dust gauge sampling in November 1995 - that is long before the lead came along - for the iron ore product. Now it has been extended to those other three products that I mentioned: sulfur, nickel and lead. The monitoring generally takes place four times a year; for example, monitoring took place in November 2005, February 2006, May 2006 and August 2006. The quality control is dust gauge monitoring, and it has been undertaken in accordance with Australian Standards 2922 and 3580, which refer to the guide for siting of the sampling unit, in the first instance, and the methods of sampling, in the second instance; deposited matter; gravimetric method; and total solid - in this case total lead solid pertaining to this lead issue.

I will deal with the sample of locations. The seven dust gauge sample locations were the Esperance Bay Caravan Park; the Esperance Port Authority office; 37 Bostock Street, which is up on Wireless Hill behind the port; the Taylor Street Tea Rooms, which many people have probably visited - certainly my Liberal colleagues

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know where the Taylor Street Tea Rooms are; 38 Crossland Street; 1 Albany Close, which is behind the hill where the West Beach estate is -

**Mr D.A. Templeman:** Where is Crossland Street?

**Dr G.G. JACOBS:** It is downtown a little. It is back further towards the west from Dempster Street. There is The Esplanade and Dempster Street, and back another block almost is Crossland Street. It is almost all that downtown area.

**Mr M.J. Cowper:** Up near the school?

**Dr G.G. JACOBS:** Yes. There is also, of course, 63 The Esplanade. Dust gauge samples collected by the port authority were submitted to the Analytical Reference Laboratory (WA), which prepared and analysed the samples of hematite, nickel, lead and sulfur. I will share with the house table 6, which deals with the lead monitoring results concerning lead milligrams per square metre per month. In fact, it is interesting to note that in February 2006 the level in DG4 at the Taylor Street Tea Rooms was 42. To put that in context, the other sites of those seven had levels of two, six, three, one, less than one and five milligrams per square metre per month. DG4, at the Taylor Street Tea Rooms, recorded a level of 42. In May 2006, the levels were: DG1, less than one; DG2, one; and DG3, 28. I point out to the member for Murray that DG3 is at Bostock Street, which is up behind the port. A lot of concerned residents have convened a meeting for Monday evening at the Esperance Civic Centre to get some information and to talk about their concerns. I have invited some officials from the minister's department, and I hope that they can attend that meeting. At 37 Bostock Street, the levels in May 2006 were less than one, one, 28, 14, one, less than one, and two. In comparison, in May 2005 the levels were 0.9, 3.5, 1.3, 0.2, 0.5, less than 0.1 - still very low. I believe that those levels should have rung some alarm bells for someone. One could say that that was a bad day, but it matters not whether that bad day was due to the prevailing winds, whether the ship was being loaded or whether the kibbles were being loaded off the truck and turned upside down into the hoppers. There were particularly high levels in those regions that could have significantly dusted the community with lead carbonate. There was evidence in the dust monitoring zones at the Taylor Street Tea Rooms and on Bostock Street that that was happening.

**Mr M.J. Cowper:** At what location in Esperance were the deceased birds found?

**Dr G.G. JACOBS:** They were found mostly in the Bostock Street region, which is behind the hill. In fact, Michelle and Hugh Crisp, who live on Bostock Street, were the first to alert the community to the bird deaths. They noted a significant number of bird deaths, so much so that they woke up one morning thinking it was very quiet because the normal bird noises were not evident. On investigation, they found that many birds had died, and the deaths continued. In fact, in the second spate of bird deaths, lorikeets were found in the playground of the Nulsen and Esperance Primary Schools. The principals of the primary schools rang me and told me that the gardeners had found 50 dead purple-crested lorikeets in the schoolyard.

**Mr M.J. Cowper:** I am sorry; I am trying to proffer a suggestion. You are talking about the deposit levels on the monitoring system. If they are tested once month, they are obviously cleaned every month and that allows for the calculation to be done. How long has lead been exported from the port, and is it possible that there has been an accumulation that has perhaps washed down the hill into some sort of water supply?

**Dr G.G. JACOBS:** Yes, that is possible, and we will have to wait for the results of the significant testing that is being done by the minister's department. Those regions could have been affected. However, the results of the monitoring are gathered on a quarterly basis but are calculated over 30 days. Yes, there could have been an accumulation. The answer to the member's question is that the export of lead from the port has been going on since April 2005. That is nearly two years.

There needs to be a review of the monitoring process and an analysis of some of the results, which would have rung alarm bells, so that the department that overviews the results could have determined whether the port authority was complying with the conditions of its licence. Monitoring was being done, but was someone making an assessment of the results, which stand out in this table because they are significantly different from the previous results? Significant issues with the possible lead pollution in the town of Esperance need to be considered. We may have to review the whole issue of lead particulate export from the port of Esperance. It is almost unbelievable in the twenty-first century that bird deaths were the barometer for whether the environment was being polluted. They were the first marker that there was something very wrong. I know that there are issues about the source of the lead, but I do not think that any reasonable person would suggest that it is not the lead carbonate that is being exported from the port, because there is no other obvious source. It is likely that it was an airborne mode of transmission, but the results of the testing done by the minister's department will throw more light on that. It was obvious from the dust monitoring gauges at some sites that there was a problem. There needs to be a review not only of whether that monitoring is being done, but also of who is overseeing the results and whether those people should have known that there could have been a problem with the results from

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DG3 or DG4. We must look at the monitoring process. We must look at the overview role of the Department of Environment and Conservation, how it monitors the process and the measures it adopts to correct the problem.

Members of the community, including me, have had to walk the Department of Health through the processes, which is very disappointing. The basis for the department not conducting tests is that it might panic the troops. I suggest that the troops are already panicked. There is significant concern in the community. In that situation the health department needs to be on the front foot and create a call centre for people to get advice. It needs to create an easy method whereby people can have their children tested for lead and have someone collate the results. Even now the health department is saying that there is a free sampling service and it is fine if people want to have their kids tested. Blood samples need to be taken of children and pregnant women who live in areas downwind from those dust monitoring gauges, so that those results can be mapped and those people can be reassured that they do not have high lead levels in their blood. I expect that there would not be high lead levels. I certainly hope that there would not be high lead levels. However, that is not the point. It is a bit like British justice: not only must it be done, but also it must be seen to be done. Those results need to be collated to reassure the population that things are being done and to back up the health department's statement that there is no risk to the human population.

Another issue is rainwater. Because the water in Esperance is so mineralised and no-one drinks it, everyone, including me, has a rainwater tank. Interestingly, when I made my last trip home during the parliamentary recess, my wife pointed out very clearly that I was not to drink the rainwater, and neither were the kids, and that the rainwater had to be tested. Again, the authorities were on the back foot. It was said that if people wanted their rainwater tanks checked, they could let the shire know and someone would take a sample of rainwater and test it. I suggest that the collection of samples has to be more organised than that, particularly in the downwind areas of the dust monitoring zones, which is similar to the population issues. In fact, all those tanks should be checked in a uniform way and be part of a program. Somebody should take a lead in that program and collate the results.

Approximately 60 samples have been taken by the shire and six of them showed lead levels that were above the Australian drinking water standard of .01 milligrams per litre, which is 10 micrograms per litre. Somebody should be managing the response to those tests by providing advice on what should be done with the rainwater tanks. For example, is it necessary for people to empty their tanks?

I note that the Esperance Port Authority has suggested that people do not drink rainwater from their tanks and has advised them that it will provide fresh bottled water free of charge. That action is to be commended. However, it should be part of a program taken on board by the Department of Health to obtain an overall picture of what is happening to avoid a sporadic poor sample. Not everybody is covered. The next issue will be whether there are lead deposits on people's roofs and when the next rain comes whether the lead will wash into the rainwater tanks. It is important to have an advice centre, whereby somebody can take the initiative to inform people on what they should do in this situation. We need to do better.

There may be a case for unsealed particulate lead carbonate matter not to be transported through the port. Perhaps there is a better way to transport that material from the mine to the end user; for example, in a sealed not open container. It would overcome the problem of containing this particulate matter, which is a difficult call.

The ultimate aim is to protect the community. Above all else, that is paramount. The cynics say that I am very passionate about this issue because I live only 400 metres from the port and it affects me. It is my home and my electorate. It has been my home since I was seven years old and, like the rest of the community, I have concerns about my kids' health. That issue must be paramount in this project. I hope that I can take part in the deliberations of all the authorities whose ultimate aim is to protect the people in the Esperance region.

**DR S.C. THOMAS (Capel)** [5.14 pm]: It is not my intention to spend a lot of time adding to the member for Roe's comments. I am probably one of the few members of Parliament who has dealt with a lead outbreak, although not related to humans. It is not an uncommon condition in a lot of animals. There have been some interesting case studies on this issue. One case that comes to mind occurred in Donnybrook. A group of steers were grazing in a paddock on which old batteries had been dumped. Batteries contain a high content of lead. It was interesting to monitor the symptoms of those animals and the time frame in relation to the diagnosis.

As much as we like to give the Minister for Health, the Minister for the Environment and a few other ministers a hard time, I recognise that the testing process for lead levels takes time. To come up with a diagnosis is a relatively slow process.

In most cases involving larger mammals, in which I include humans and, of course, their size varies, the first sign of high lead levels is neurological. The first thing I notice in animals with a high lead content is an apparent lack of coordination, developing into apparent blindness and eventually resulting in death. In this situation the

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symptoms are extreme and obviously are associated with a very high dose of lead. That is not the situation in Esperance. Birds, being a much smaller species and having a more rapid metabolism, will rapidly demonstrate symptoms from a low dose. Therefore, it would be expected to find the symptoms in birds before dead birds are found. However, the sheer rapid metabolism of birds means that the lead is processed very quickly. I suspect some interesting results from brain pathology will be forthcoming, because that is the most common indication that lead toxicity is involved. The testing comes later and it is a relatively slow process.

It is incumbent upon the government to get the isotope testing carried out as quickly as possible. With every toxic problem, the most important process is to establish the cause of the toxin. Assuming it is lead and, although the lead levels are high, I have not heard a statement to the effect that the cause of the bird deaths in Esperance has been definitively put down to high lead levels. At this stage, high lead levels are associated with the bird deaths because a number of them had a high lead level. I am waiting for the definitive diagnosis which might require isotope processing of the lead and more brain pathology to make sure that high lead levels is the cause of the disease.

One message I give to people in the area is to not panic. The member for Roe said that panic has already set in. I urge the Esperance people to not panic. At this stage I am not aware of any incident of low toxicity in the symptoms demonstrated by the people of Esperance. They require a testing processing and more work needs to be done, but we do not want wholesale panic in the town. I am sure, given his medical background, the member for Roe is doing all he can to continue to put pressure on the government to make sure that a testing program is in place. I am sure people in the Esperance region will take comfort from the member for Roe, who has an understanding of what is going on and will make sure that the processes are put in place as quickly as possible.

The government must ensure that the isotope testing is carried out as quickly as is feasibly possible to isolate what lead is involved and to make sure that what they are dealing with is lead from the port and not from other sources. In days gone by lead was a common toxin.

**Mr R.C. Kucera:** Or water pipes.

**Dr S.C. THOMAS:** Water pipes were made out of lead. The members of more senior years than I are nodding. I wonder whether they are nodding because they are asleep or perhaps they have suffered the effects of lead toxicity.

**Mr R.C. Kucera:** I recall that every winter the ducks would die from excessive lead.

**Mr M.W. Trenorden:** That was up my way. The textbook says the first thing is to panic; second, to shoot; and, third, ask questions.

**Dr S.C. THOMAS:** I stand corrected. Panic, shoot and ask questions. The member will fit in well in Zimbabwe.

**Mr M.J. Cowper:** The member for Avon's comment about lead poisoning was a bit different from what we are talking about.

**Dr S.C. THOMAS:** The member for Yokine's comment was also. I will not give their comments any credibility. It illustrates the facetiousness that occasionally occurs in this place.

**Dr G.G. Jacobs:** It upsets me that I have to talk the health department and environment health people through the process when they should have all the knowledge of public health and epidemiology. Why do I have to walk them through the fact that they need to do some good studies on lead? How do I get across the fact that they need to match the lead? This issue started in late November or early December. The result of the tests came out on 3 March, and then 18 days passed -

**Dr S.C. THOMAS:** I thought that the first major group of dead birds was discovered in late December.

**Dr G.G. Jacobs:** Absolutely, but the diagnosis did not come out until 3 March.

**Dr S.C. THOMAS:** I thought the member said November. The dynamics of this outbreak are intriguing. I was in Esperance not long before it happened. I left just before the new year. There had been floods, and not long after the floods a massive number of dead birds were discovered. That intrigues me as well, because I thought that we would find a constant rate of bird deaths. We are dealing with a dust particulate emission that is settling on trees and wherever else the birds roost. Most of the birds that died initially were nectar-eating species. They take in very little water, and they do not eat seeds. They live off the high sugar content of the nectar. If the dust was settling on the plants, it would be expected that we would see deaths at a low level on a continual basis, because lead has been going through the port for a long time, has it not?

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**Dr G.G. Jacobs:** Yes, it has, but the loading operation of the ships might happen only every three months. That would exclude the period over Christmas. There might be one operation in November or December and then it would skip three months.

**Dr S.C. THOMAS:** It would happen every three months, but one would still expect a constant rate. The other interesting thing is that it happened after a long downpour of rain. It is relatively heavy particulate matter, so one would think that the water would pick it up and drive it down.

**Dr G.G. Jacobs:** Deaths did actually occur before the rain.

**Dr S.C. THOMAS:** The big death numbers were after the rain, but there might have been some beforehand. However, that needs investigation. I will not take up everybody's time expounding the possibilities for that. However, there is the possibility of other interactions and environmental factors being at play here. It is important that the member for Roe keep up his extremely good work in this debate and stay on the backs of the various government departments. He is doing an excellent job and we hope that he continues it. We urge the government to confirm the source of contamination as quickly as possible. It has been a bit tardy on that, but I am sure the member for Roe will keep on the job. We must impress upon the people of the Esperance district that they should not panic at this stage. In my opinion, they are not at death's door and this is not an issue to panic about. It is time for cautious concern, not a state of panic.

**DR J.M. WOOLLARD (Alfred Cove) [5.23 pm]:** Although the member for Capel urges people in Esperance not to panic, if I were a mother living in that area, I would be very worried at the moment. This has been going on for quite some time. It appears that there has been a time lag in putting research and studies into effect so that the government can give proper reassurance to the community. The minister said yesterday that there are 2.5 full-time equivalent phlebotomists in Esperance and any concerned people can go to those people and have blood samples taken. The member for Roe and the community are asking for a proper, randomly controlled trial. Maybe the problem is that the various government departments have their budgets and do not want to go outside those budgets. Maybe the government should be talking to the department of public health at Sir Charles Gairdner Hospital or Curtin University and bringing some epidemiologists into this potential medical emergency, to help the government design a trial in which a proportion of the population from the affected area is tested for lead and other chemicals, and then a proportion of a community outside that area is also tested. The control group could come from Albany, so that the results can be compared with those from Esperance. If the figures come back the same for the two areas, then the community will have some reassurance. Parents will be reassured that their children will not be affected by lead poisoning.

I feel for the parents in Esperance, in view of the large number of deaths of birds. We know that bird deaths are a good indicator of an environmental problem. If birds start dying, there is something going wrong in the area. It is the same when we see fish floating on the surface of the Swan River; we know then that something is going wrong in that river. This is not something we can treat lightly. I do not believe it is enough to send along 2.5 full-time equivalent phlebotomists and to ask people to have blood tests if they are concerned. The people who are tested may not be the people who are affected. There needs to be a random controlled testing program for people who live in Esperance and the surrounding areas, and another for a group of people who live a fair distance from that area, so that the results can be compared. The government can then tell the community in Esperance and the electorate of Roe that it has done everything possible to ensure a high standard of care and a high level of safety. I support the member for Roe and I hope that the government will support his request for a random controlled trial to ensure public safety.

**MR D.A. TEMPLEMAN (Mandurah - Minister for the Environment) [5.27 pm]:** I commend the member for Roe. He is doing exactly what any member would do in these circumstances. There is a level of concern in the Esperance community, and understandably so, and it is his right and indeed his obligation to bring that to the notice of the Parliament; that should be acknowledged. Having discussed this with the member for Roe earlier in the process of taking over as Minister for the Environment, I know that the concerns he raised and has continued to raise are important and must be addressed. I have listened to the debate this afternoon, and I acknowledge the greater wisdom of a physician on the science of lead poisoning. We have heard some background on the impact of lead poisoning and its pathways and effects on the human body. I also acknowledge the comments by the member for Capel, whose experience is as a veterinarian, that we should take this issue very seriously and ensure that the various agencies acknowledge the degree of concern in the community of Esperance. We must do everything possible to ensure that those fears are allayed. We must ensure that the department for which I am responsible does everything it needs to do to see that appropriate and effective testing is carried out and that the analysis of those tests is done as quickly as is humanly possible.

Isotope fingerprinting tests are currently being carried out by Professor Brian Gulson of the Macquarie University in New South Wales in association with the Commonwealth Scientific and Industrial Research Organisation. The member for Roe mentioned in his introductory comments that he wanted to see the results as

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soon as possible. We all want to see these results as soon as possible. I sought some extra information on this testing because I wanted to know how soon we will get those results. The information that was provided to me was supported by the member for Capel's comments about testing for lead and analysis of lead, particularly if it is an isotope fingerprinting regime. The information I have been given is that the testing process is highly complex. The testing is done at an atomic level and requires the use of specialised apparatus or equipment. I assure the house that the tests are being given the highest priority by Professor Gulson. We expect that it will take a week for the laboratory to produce the results once the samples have been received. The samples are being delivered to the testing facility. The tests characterise the lead samples by analysing and determining the percentage ratio of four stable isotopes in the lead sample. I am not a scientist -

**Mr P.B. Watson:** That's obvious.

**Mr D.A. TEMPLEMAN:** It may be obvious. Clearly, this whole process of analysis is highly complex. I assure the member for Roe that I will find that information and give it to him as quickly as I can.

**Dr J.M. Woollard:** I missed some of the member for Roe's explanation about the lead; maybe the member for Roe will actually answer this question. When lead is ingested in the body, does it have a half life or a full life? Because there has been a delay in the bird deaths and this testing, will that influence the results of some of those tests?

**Mr D.A. TEMPLEMAN:** I think the member is talking about whether the lead stays in the body.

**Dr J.M. Woollard:** How long is it active once it has been ingested?

**Mr D.A. TEMPLEMAN:** I asked the same question of the member for Roe by way of interjection. His answer to me was that the lead stays in the body but treatments can be taken that bind the compounds of the lead and it will therefore have less of an impact on the body in the longer term. That was my understanding.

**Dr G.G. Jacobs:** There are chelating agents that bind the lead. It is bit like a key in the lock; it binds it and activates it. From the studies done, if you use EDTA, you can reduce your blood levels by 40 to 50 per cent to suck the lead out of the body. However, there is a case that you need to repeat that process.

**Dr J.M. Woollard:** But the delay in undertaking the test does not mean that there is a delay in the actual level. It was suggested that the level of ingestion would be the same.

**Dr S.C. Thomas:** Unless you are taking those chelating agents.

**The ACTING SPEAKER (Mr G. Woodhams):** Members, the minister is on his feet.

**Mr D.A. TEMPLEMAN:** I am very happy to answer the member for Alfred Cove's questions via the support I have had from the members for Roe and Capel. I wanted to make sure that I had that information as quickly as possible. Getting those results, as previous speakers have said, is absolutely critical to our confirming the pathway of the lead and its source. The member for Roe is right; there is no doubt that we highly suspect the source of the lead. We need to confirm that through the testing that is carried out.

**Dr G.G. Jacobs:** We've actually tried to delay a public forum that is to be held on Monday night because I felt that it was too early and there needed to be time to collect some information; otherwise it will just be a gabfest. In fact, we need to get some information. An important part of the information would be to actually confirm that that is beyond doubt the source of the lead. If it is at all possible to get that result before Monday night, I think that would go a long way towards going through the scientific process with the population of Esperance.

**Mr D.A. TEMPLEMAN:** I will obviously need to follow that up and see how quickly we can get that information. The meeting being held on Monday evening is important. The member for Roe mentioned that the departmental officers have been invited to attend that meeting. I will certainly make sure that I speak to the director.

**Dr G.G. Jacobs:** You are invited, too.

**Mr D.A. TEMPLEMAN:** I have not received that invitation officially. I will make sure that the appropriate officers attend that meeting. It comes back to the issue that was highlighted by previous speakers, including the member for Roe, that the people of Esperance are given all the up-to-date information, because that will not only help in allaying fears, but also ensure that we do not have potential panic or potential hysteria being fed by lack of information. I will take on board the member for Roe's request to the departmental officers on Monday.

**Mr M.J. Cowper:** Minister, I have a document here, and I will give it to you if you wish. It is a proposal for a mine to be developed. Originally, the proposal that went before the government was for the iron ore to be exported through the Geraldton port. All the way through the document it mentions how it will be sent from Wiluna West to the Geraldton port. The minister may be able to find out for us why the Department of

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Environment and Conservation agreed to a licence out of the Esperance port. Is there any particular reason that it was not sent out of Geraldton?

**Mr D.A. TEMPLEMAN:** As the member will be aware, I have been the Minister for the Environment for just over two weeks only. Decisions relating to the Geraldton port versus the Esperance port precede my time. It is something that I will take up at a later date.

I know there are some other members who wish to speak on this matter, but I think it is important to highlight - I think the member for Roe has already done so - some of the events that led to the current situation. It is also important to highlight to the house how we are getting information to the community. There have been ongoing discussions between my office and the member for Roe recently about ensuring that appropriate information is made available to the residents of Esperance. I note that there is an information day planned in Esperance on 14 April. As a precursor to that, an information sheet has been made available to residents of Esperance, which seems to me to be quite comprehensive in that it highlights the current health advice that has been provided and outlines the environmental testing that is currently underway. As is highlighted in the information sheet, the Department of Environment and Conservation's priority is to confirm the source of the lead that killed the birds. The department has already collected over 200 samples from the Esperance town site. During his speech the member for Roe mentioned a number of sites from which samples have been taken, analysed and tested. For the interest of members, the department has taken soil, water, grass and other foliage samples from a range of sites. Isotope fingerprinting will be carried out. If the department discovers any licence breach during its investigation, it will take immediate action in line with its enforcement and prosecution policy. As was mentioned, the department and the port authority acted to suspend any further movement of lead earlier this month. Under the provisions of the Environmental Protection Act, the Department of Environment and Conservation served a section 7(3)(a) prevention notice on the port authority preventing the movement of lead through the port.

I am sure that concern about nickel has been raised. Starting today, the Department of Environment and Conservation will also ensure that it closely monitors the loading of nickel at the port. I understand that a loading is due to take place next Monday.

**Dr G.G. Jacobs:** I didn't mention nickel, because nickel is far less injurious to human health. I didn't want to jump at that shadow when we have a very significant problem with lead, which is by far the most injurious potentially to the population. We need to concentrate on resolving the lead issue. What happened to the Commonwealth Scientific and Industrial Research Organisation's mapping project?

**Mr D.A. TEMPLEMAN:** I do not have that information in front of me. I am happy to provide that information and to continue to liaise with the member for Roe.

**Dr G.G. Jacobs:** The mapping project provides information about where lead dust has deposited. Aerial technology is installed in an aeroplane and the aeroplane is flown over a region to map out the dust deposits of lead. That is called visual scanning. I have wondered where that is at, because when I contacted your office earlier, that was a major cornerstone of identifying the source and significance of the problem.

**Mr D.A. TEMPLEMAN:** I am happy to get an answer for the member as soon as I can.

I want to highlight to the house that the Department of Environment and Conservation will ensure that its officers observe the loading that takes place on Monday. That is an important element.

With regard to the department's actions, it is currently reviewing the port's licence and facilities. The member for Roe mentioned licensing issues in his comments, and that includes all materials that are shipped. The department is also reviewing the environmental approval granted to Magellan Metals. I take the point the member made about looking at the whole process from the source in Wiluna to when it is physically loaded and leaves the port. That is an important element.

It is important that the department continue to provide the people of Esperance with all the information that it can through regular media statements and by responding to questions and queries from concerned citizens and community leaders, such as the member for Roe. Regular updates and a section on frequently asked questions are available on the department's website.

I will not cover what the Department of Health is doing in response to this issue, because I am sure that the Minister for Health will cover those points during his contribution. We must provide assurances to the people of Esperance and allay their concerns. We must provide up-to-date information as it becomes available, particularly when the test results become available. I understand that preliminary results from the blood samples taken from port authority workers show that they were below safe levels. The Minister for Health will comment further on that.

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The member for Roe has appropriately raised this issue in Parliament. The assurance that I want to give as Minister for the Environment is that I will continue to ensure that the department does everything it possibly can as per its statutory and moral responsibilities to ensure that it provides easily understood, relevant and up-to-date information. The member for Roe mentioned rainwater tanks and that people need a central body to turn to for advice. That concern is valid. I was not aware of the number of residents who rely on rainwater until the member for Roe made that point. As a result of what has happened in Esperance, we must ensure that we have in place the key factors that are necessary to provide the public with a sense of confidence that everything is being done to ensure that their interests, health and safety are a priority.

*Amendment to Motion*

**Mr D.A. TEMPLEMAN:** I therefore move -

To delete all words after "That" with the view to inserting the following words -

this house recognises the seriousness of the concerns which lead-induced bird deaths have caused the people of Esperance and supports the prompt action being taken by the government and its various agencies.

**MS A.J.G. MacTIERNAN (Armadale - Minister for Planning and Infrastructure)** [5.50 pm]: I support the amendment that has been proposed by the Minister for the Environment and for Climate Change. I add to his comments that we certainly respect the hard work that has been undertaken by the member whose motion we are dealing with today, the member for Roe, and his diligence in pursuing this matter

**Dr G.G. Jacobs:** You were going to say Esperance, weren't you?

**Ms A.J.G. MacTIERNAN:** That is right.

However, I assure him that the government agencies, and from my perspective the Esperance Port Authority and the board of Esperance port, are extremely concerned about this development and very much take the view that they are part of the community and are there to add value to the people of Esperance and the hinterland, and of course would not want to do anything that would damage the wellbeing of that community. Their employees and families live in that community, and most of the board members also live in that community, and obviously they want to act responsibly. I set out today in a ministerial statement some of the actions that we have taken; in particular, when the report came out first thing on Monday morning, I spoke to the port authority. There was then a board meeting and, before there was any directive from the Department of Environment and Conservation, the port authority at that point decided to suspend all shipping of lead concentrate.

**Dr G.G. Jacobs:** Very responsibly, may I say.

**Ms A.J.G. MacTIERNAN:** Very responsibly, and I am pleased that the agency translated into action the concern that we shared.

I also advised today that a further decision was made last night to no longer allow the product to go into or come out of the port in an uncovered concentrate form. That means that the company will need to either containerise, bag or palletise the product. There had been previous attempts at palletising, which were not terribly successful. Although it was palletised at the mine, by the time it arrived in Esperance it had often de-palletised. The palletisation process, I gather, was fairly mechanical, and after the rather rough journey to Esperance, the product had de-palletised, which is why it was going into the port as concentrate. However, a very conscious decision has been made that it will no longer go out as unbagged, uncontained concentrate. We are and had well before this incident committed to building a new shed for the Magellan Metals Pty Ltd product, and that work will continue. We were considering the construction of a new cascading chute. However, given that the product is now required to be bulked up in some way, that will probably not be necessary.

The Minister for the Environment and for Climate Change has outlined extensively the sorts of processes that we are undertaking in looking for and finally determining the cause. We have taken a prudent line. We are presuming that the port works have caused the problem but, obviously, we must pin that down. The testing regime of both the individuals and the water tanks will continue. However, I was concerned at a report that appeared on the front page of an Esperance newspaper today. It was a very unfair and alarmist report and was irresponsibly reported by *The Esperance Express*. I believe that is its name.

**Dr G.G. Jacobs:** Yes; I haven't seen it.

**Ms A.J.G. MacTIERNAN:** It was very irresponsible. It says -

Former Occupational Health and Safety Officer Colin White said he was shocked when he was told on Monday to tender his resignation and was subsequently physically escorted from port premises.

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He said that he had been sacked for asking too many questions about lead blood test results of workers at the port. The report continues -

He said no reason was given for the demand for his resignation and that he resigned because he was afraid of losing benefits due to him.

He said that he had worked as a safety officer for 28 years. Given that Mr White has made these claims and the Esperance Port Authority was given no opportunity by the newspaper to respond to these claims before publishing them, it must be said that Mr White was a recent recruit from Queensland to the position. In the past couple of weeks he has been asked to produce various documents to support claims that he made on his curriculum vitae.

**Dr G.G. Jacobs:** I think that gentleman has a big axe to grind.

**Ms A.J.G. MacTIERNAN:** That is right, but it was an outrageously irresponsible act by *The Esperance Express*. Even our good friends at *The West Australian* who had a similar story from Mr White had the courtesy to check with the Esperance Port Authority and made a decision to not report the story. However, the reality is that Mr White was unable to produce his driver's licence. He had driven a port vehicle on and off the port site but was unable to produce his driver's licence. He finally admitted that in fact he did not have a driver's licence. He also refused to fill out the Federal Police clearance forms that are necessary to get a maritime security card. On that basis, given that the law requires that anyone with access to port facilities have a maritime security card, it was not possible to continue to employ Mr White. More questions will probably be asked about some of the claims that have been made by Mr White that led to him being employed in the first instance; however, it was certainly not tenable for the port to continue to employ him when he had confessed that he did not have a driver's licence, had been driving without a driver's licence and was not prepared to allow the port to get a Federal Police clearance for him. His claims about the blood readings for Esperance Port Authority personnel were clearly made up. There have been absolutely no readings in excess of 50 units of lead. He claimed in the newspaper report that he had seen lead levels as high as 62 units; that is a complete fabrication. The Minister for Health read into Parliament today the figures that have been recorded for personnel at the port authority, and the highest readings were between 20 and 30 units. There has therefore been no reading in excess of 30, let alone 62 that this gentleman claims to have seen. He went on to say that these reports had not been provided to the workers involved. I am advised by the port authority that that is complete nonsense. The report also states -

He confirmed reports of a large amount of lead falling from the CV3 conveyor belt to the ground which was then hosed into the ocean . . .

Again I am advised by the port authority that that is complete fantasy. The report states further -

. . . when he was told by port management that he, his wife and daughter needed to buy their own plane tickets back to their home town of Townsville, he threatened to take legal action and to contact the media.

Within two hours . . . a port manager had called and informed him the port would pay for the flights.

In fact, that never happened. I am advised by the port that when he was sacked the matter was not raised. Some hours later his wife rang the finance manager at the port and explained that they had very few resources and were unable to get back to Townsville. The finance manager sought advice from the chief executive officer, and the CEO authorised the payment on compassionate grounds

Of course, the community is entitled to be concerned, as indeed we are concerned. However, I believe it is highly irresponsible for the newspaper to print an alarmist story like this, without any attempt whatsoever to check the factuality of the story. A letter has been written to the newspaper seeking an apology. As I said, the story caused needless concern on the part of the community. We are all deeply aware of the risks associated with lead contamination, and none of us would ever seek to trivialise it. However, we believe that we can get this issue under control without there being any long-term health effects for the community. I am very confident that the port authority, the Department of Environment and Conservation and the Department of Health are all working very closely to ensure that this matter is resolved. I want to stress that the board and the staff of the Esperance Port Authority are as concerned as anyone else about this development and will take all steps necessary to ensure that it is not repeated.

**MR P. PAPALIA (Peel)** [6.02 pm]: I support the amendment moved by the Minister for the Environment and for Climate Change. I also acknowledge and commend the actions that have been taken by government ministers, as detailed this evening. However, I also point out that I have risen tonight to support the member for Roe in expressing his concerns over the potential for damage as a result of lead toxicity. I wish to confirm that the concern within government extends beyond just ministers. I have had firsthand experience of the need for

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blood testing for lead. Having served in the Special Air Service Regiment and engaged in counterterrorist training in close quarters battle in an environment in which there are potentially very high levels of lead in the atmosphere, I have had to have blood tests for levels of lead.

More pointedly, my youngest son was diagnosed with type I diabetes in April last year. As a person does when he encounters an issue like that with one of his own children, I went out to seek alternative means of approaching the problem. Members are probably aware that at the moment conventional medicine does not really know what causes type I diabetes. We heard a tragic story from the member for Roe in the last sitting of Parliament regarding one of his constituents who suffered the loss of a child through type I diabetes. We are consulting with an orthomolecular medicine specialist. One of the things we have done is test our child for heavy metal toxicity. We have identified that he had very high levels of lead in his system. There is not necessarily any evidence one way or the other whether that is related to the type 1 diabetes and whether it is directly attributable to that, although there is a lot of speculation about whether that can possibly be one of the causes of type I diabetes. Therefore, I am very familiar with the dangers associated with lead toxicity.

From what I have heard this evening, I am in support of the isotope fingerprinting being done as quickly as possible so that we can identify whether the source of the contamination of the birds in particular was the port. Speaking from experience, I caution against widespread blood testing, compulsory or otherwise, of young children, because it is a very invasive procedure, as members would probably be aware. I often find that medical professionals tend to forget that side of things when they are encouraging parents to have their kids tested in that manner. It is very invasive and could be fairly traumatic, particularly for young children. Nevertheless, if it becomes evident that the lead contamination originated in the port, I would support the member for Roe's call for appropriate areas of the town of Esperance to be tested. Once again, I support the member for Roe and acknowledge the work he has done in raising this issue, and continuing to raise it, with the government.

**MR T. BUSWELL (Vasse - Deputy Leader of the Opposition)** [6.05 pm]: I will quickly make a couple of points on behalf of the opposition. We will not support the amendment. Of course, we support the first half of the amendment that states the obvious; that is, that this house recognises the seriousness of the concerns that lead-induced bird deaths have caused the people of Esperance. That statement does not even need to be made by this house. I do not think one person in this place would dispute that. However, we cannot support the second part of the amendment, which is that we as a house - that means members of the opposition, and in particular the member for Roe - support the prompt action being taken by the government and its various agencies. I believe the member for Roe made a number of pertinent points in his speech to the Parliament today on this matter about why we cannot support that.

I do not intend to go into all those points, but I will take a few moments to acknowledge the role that the member for Roe has played as an advocate for the people of Esperance in this matter. He has worked tirelessly in recent weeks to address the concerns that his community has rightly raised about lead toxicity. He has, where possible, brought some relief and comfort to the people of his town. Of course, as he pointed out, a number of outstanding issues need to be canvassed by government. The member for Roe has asked me to remind the government of a couple in particular. The first one is that he has organised a public meeting for Monday next week in the town of Esperance to discuss this very issue. An important input that he requires for that public meeting is for the Department of Environment and Conservation to have conducted the isotope fingerprinting. I know that the minister calls himself the Minister for Climate Change, but we will call him the Minister for the Environment. Maybe the minister will heed the member for Roe's request on this point. This isotope fingerprinting is very important. It will enable the government and the community to understand beyond doubt whether the lead that is present in the birds that have died is similar to, or the same as, the lead being stored at the port of Esperance. It is very important, if possible, that that isotope fingerprinting be expedited so that those results are available for the public meeting next week. This public meeting will serve an incredibly important purpose in the town of Esperance. The member for Roe has been integral in organising this meeting, and that isotope fingerprinting is critically important.

I believe it is also important that the house express its disappointment that the proposed mapping project to be carried out by the Commonwealth Scientific and Industrial Research Organisation cannot be implemented until at least June. Our understanding is that this is an aerial process that will enable a fairly precise map to be developed, which will give an idea of where the lead has been distributed. Again, it is an important part of the ongoing management of this process and an important part of the rebuilding of community confidence in the government and that the government is acting in the best interests of the community.

There is one other matter that I think will require further investigation when the less urgent facets of this issue are dealt with, and that is the original approvals granted to Magellan Metals Pty Ltd to take lead concentrate from the project at Wiluna. The document refers to the approval given by the then Minister for the Environment

Acting Speaker; Dr Graham Jacobs; Dr Steve Thomas; Dr Janet Woollard; Mr David Templeman; Ms Alannah MacTiernan; Mr Paul Papalia; Mr Troy Buswell; Mr Jim McGinty

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and to where the lead would be shipped from. However, the document refers to transporting lead only and exclusively from the Geraldton port. The minister may well be asked in the very near future, once the urgent crisis has passed, why approval was given in the first instance to export only from the port of Geraldton. This concentrate is now being shipped from the port of Esperance. I am in no way, shape or form wishing that this problem had been visited on the port of Geraldton. At the end of the day the problem must be dealt with. It is interesting that the approval refers to Geraldton, but the concentrate is leaving via Esperance. The opposition will not support this amendment. Can members imagine the member for Roe having to report to his community next week that he voted for a motion that said that he supported the prompt action being taken by the government and its various agencies, when he spent a significant amount of time this afternoon detailing the pain and difficulties that that very lack of action has caused for his community? It is not acceptable to members on this side of the house, and it is not something that we will support.

**MR J.A. MCGINTY (Fremantle - Minister for Health)** [6.11 pm]: Immediately following question time today, I informed the house of the most recent testing, and I have also provided a copy of it to the member for Roe. That testing indicates that some of the earlier extreme worry expressed by the people of Esperance can be alleviated somewhat. Every one of the 128 people who have been tested to date and whose results have come back are well below the acceptable level for exposure to lead. The information I then provided to the house was that every one of the 84 port workers who were initially tested were under the proposed new standard of 35 micrograms per decilitre for people working in direct contact with lead at the port. That is a more rigorous standard than that applied to the community as a whole; that is, 50 micrograms per decilitre. Interestingly, 62 of the 84 port workers at Esperance were under 10 micrograms per decilitre. That is minimal exposure for people who handle lead. The remaining 22 port workers were under 35 micrograms per decilitre. That is well below the current Western Australian occupational health and safety guideline of 50 micrograms per decilitre. Nobody came near the existing Western Australian occupational health and safety guideline. People can take a certain amount of comfort from that. I expected that the testing would show that there were far higher readings in those people who had been tested, particularly among workers who handled lead at the port of Esperance. I am particularly pleased that the two areas identified by the Department of Health - that is, children under the age of five and pregnant women - have been directly targeted and that the Department of Health has in recent days been very proactive in this area and has worked very closely with the shire. I have heard many comments from the shire president, Ian Mickel, who is very balanced in this issue and wants to work cooperatively with the government to ensure that the legitimate fears and concerns of the community have been properly addressed. The local government authority has responded very well to the circumstances confronting the people of Esperance. I was genuine when I said yesterday in this place that if there was anything that the member for Roe thought the Department of Health should be doing, my door was always open, as was that of the Director General of the Department of Health. We must ensure that we do everything we can to address the legitimate concerns of people who have seen birds die in the region and who have concerns about elevated lead levels. I extended an invitation to the member for Roe to come forward if there was anything he thought we should be doing that we were not doing, and that offer remains completely open. I hope he will come forward if he thinks there is anything that should be done.

Over recent days I have discussed the matter with people from the Department of Health. Obviously, testing the water tanks in the town was a critical issue, and the Department of Health has undertaken to meet the cost of testing any water tank that people wish to be tested. Hundreds of people have come forward, either through the shire or otherwise, to have that testing undertaken. It is only prudent that people do exactly that. However, in the light of the lower than expected lead levels in the 128 people who have been tested and whose results have come in to date, what appears to be emerging is whether nickel is a more serious threat to the people of Esperance, particularly with a further export of nickel from the port expected on 25 March.

The issue of nickel is far more complicated than lead, in both identifying it and considering the impact it will have. For people who have a nickel sensitivity, obviously quite significant issues need to be addressed. I am told that, generally speaking, it does not present a particular problem for people who do not have a nickel sensitivity. The most common adverse health effect from nickel is an allergic reaction, and generally a skin rash at the site of contact. People become sensitive to nickel when jewellery or other metallic objects containing nickel are in direct contact with the skin for a long time. Once a person is sensitised, further contact may produce a reaction. Less commonly, some people who are sensitive to nickel will have asthma attacks following exposure to nickel in food or drink or in the air. It appears that the real issue for people who have a nickel sensitivity is their reaction. People who are not sensitive to nickel must absorb very large amounts to show adverse health effects; for example, people who have been exposed to high levels of nickel through working in the nickel industry have experienced chronic bronchitis and reduced lung function. Workers who drank water containing levels of nickel 100 000 times higher than normal experienced stomach aches and effects on their blood and kidneys.

Acting Speaker; Dr Graham Jacobs; Dr Steve Thomas; Dr Janet Woollard; Mr David Templeman; Ms Alannah MacTiernan; Mr Paul Papalia; Mr Troy Buswell; Mr Jim McGinty

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Cancers of the lung and nasal sinuses have occurred in nickel industry workers who have breathed in dust containing high levels of nickel. That gives an indication of the nature of the problems that are presented from nickel exposure. However, what is still causing people in Esperance to be somewhat perplexed is that the lead readings in those 128 people who have been tested and whose results have come back to date show that every one of them has levels below that which would be regarded as acceptable, either for the general public or port workers associated with lead.

**Dr G.G. Jacobs:** Wouldn't you agree that it is really important that we sample, in a fairly uniform way rather than sporadically, children under the age of five and pregnant women in the at-risk areas around the port? I think the epidemiology of that will be much more reassuring, if nothing else, for the population. From a medical point of view, the risk and implications for nickel are a lot less significant than they are for lead.

**Mr J.A. McGINTY:** Yes.

**Dr G.G. Jacobs:** Therefore, I suggest we need to concentrate on what we know, which is that by far the most injurious pollutant in this case is lead.

**Mr J.A. McGINTY:** Yes. I agree with that. What we must do first is provide the public in Esperance with information about nickel and lead to ensure that we raise the level of awareness in the population about these issues. The priority is to target the two groups to which the member has rightly referred; namely, pregnant women, and children under the age of five. The community newspapers, and the brochures that will be handed out by the Department of Health, will inform people that if they fit into one of those groups, pre-testing is available. We will ensure that every person in Esperance who wants to be tested is tested by one means or another, whether that be through the hospital lead testing unit, general practitioners, or the staff who have gone to Esperance to work on this matter over the next few weeks.

Given the intense public interest in this matter, and the concern that people will have for their own health and the health of their children, I expect that it would be rare that a pregnant woman would not want to be tested, or that the parents of a child under the age of five would not want their child to be tested. I would therefore be amazed if there was not saturation testing of those two groups in Esperance. Saturation testing will be arguably better than random testing.

**Dr G.G. Jacobs:** Absolutely. That is what I am concerned about.

**Mr J.A. McGINTY:** Certainly, if I were a parent in Esperance and had not already had my child tested, I would have been queuing up since 10.30 am this morning to have that test done. I expect that what the member is properly concerned about will be met by the intensity of the testing. If that does not occur, we will keep revising the strategies to ensure the safety of the Esperance community. I agree with the thrust of what the member has said. The member addressed the issue of lead from both a contemporary medical perspective and, if I might say, a long historical perspective.

**Dr G.G. Jacobs:** I hope the historical part was not too long!

**Mr J.A. McGINTY:** It went back 2 000 years!

**Dr G.G. Jacobs:** But I did not go on for a long time about it!

**Mr J.A. McGINTY:** If I can perhaps put it somewhat more succinctly, the symptoms of lead poisoning depend upon the degree and length of exposure, and may be non-specific. Children with mild to moderate lead exposure - that is, less than 45 micrograms per decilitre in blood - are usually without symptoms.

**Dr G.G. Jacobs:** Usually, but they may have symptoms.

**Mr J.A. McGINTY:** That is right. When symptoms do appear, they are usually non-specific and may include anaemia, loss of appetite, irritability, fatigue, abdominal pains, nausea and vomiting. The only person in Esperance who I know fits that description is the member! I am joking, Mr Acting Speaker! The symptoms of moderate to severe exposure may range from lethargy, intermittent abdominal pain or constipation, irritability and headache, to paralysis. Anaemia may occur, but it is rarely severe. These symptoms do not usually appear until levels are in excess of 45 to 50 micrograms per decilitre. Rarely, lead poisoning may also present insidiously in children with developmental delay, learning difficulties, hyperactivity or other behavioural problems. I remember that some years ago, when we were still using leaded petrol, the exposure of children to leaded petrol and high concentrations of exhaust fumes was an important issue that was raised. Adults with high lead levels are at risk of peripheral neuropathy - diminished nerve function - and reduced fertility.

I believe that the response that we have put in place in Esperance is comprehensive. All the initiatives that we would expect to be taken from a public health perspective are being taken. If the results of further testing begin

Acting Speaker; Dr Graham Jacobs; Dr Steve Thomas; Dr Janet Woollard; Mr David Templeman; Ms Alannah MacTiernan; Mr Paul Papalia; Mr Troy Buswell; Mr Jim McGinty

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to show a pattern, or if people are not presenting for testing and we believe they should, I expect that we will adjust our strategies to deal with that matter. In answer to the question from the member for Roe yesterday, I did outline what was occurring in Esperance. I also mentioned the number of expert staff who are in Esperance to deal with this matter, and the highly cooperative relationship between state government departments and the local authority, particularly in the environmental health officer area. We want to ensure that every conceivable area of concern is being addressed. When we have dealt with these sorts of public health issues in the past, the primary concern has been that the public is given full information and has full confidence that everything that should be done is being done. That is why it is important that the results of the testing be put into the public arena.

**Dr G.G. Jacobs:** Will you be collating those results so that people are aware of them? It is one thing to do the testing. However, someone needs to take the lead in collecting, collating and mapping those results.

**Mr J.A. McGINTY:** Yes. As I have mentioned, as I was about to walk into the chamber at question time - I must say a bit late, because I missed the first question - I was given information about the last batch of 31 people whose test results had come through in Esperance. Those results were then added to those earlier results. It is critically important that that information be put into the public arena.

**Dr G.G. Jacobs:** Will the addresses and locations of those people also be collated?

**Mr J.A. McGINTY:** The mapping of the results, particularly in relationship to the port and the wind plume from the port, is critical to a proper understanding of what has happened in Esperance. I assure the member for Roe that we are treating this matter with the utmost seriousness. This is a matter of public confidence and knowledge. All the testing of water tanks and blood levels, and any other form of testing that can take place, is taking place. As I understand it, a blood test cannot test for nickel exposure. However, all those matters should be put into the public arena so that if a pattern does emerge, people will be aware of it.

It is important to note that the lead levels of the workers at the port are coming in at what are generally regarded as acceptable levels, given their exposure to the lead ore that is being handled through the port.

**Dr G.G. Jacobs:** The workers at the port are monitored regularly in any case, and have been since the operation commenced. I am concerned about the people who have been innocently - forgive the expression - subjected to lead exposure. Workers go into the operation with their eyes open. They are monitored regularly by the port authority. That testing has been ongoing. My concern is the community in the vicinity of the port.

**Mr J.A. McGINTY:** That is also my concern as Minister for Health. I can say no more than that everything that needs to be done will be done. If the member thinks anything more needs to be done, he should tell me or the Director General of the Department of Health, and it will be done. We want to ensure that all the concerns are satisfied, and that people in the community are given all the information that they need to properly assess their particular risk. That should be done, and it will be done, at no cost to the people of Esperance. In light of the spectacular and disturbing death of birds in the Esperance area, which was perhaps a precursor or portent of these issues, these issues need to be properly addressed in Esperance. For the reasons that I gave yesterday in answer to the parliamentary question and also during the course of this debate, the government is totally committed to doing anything that can conceivably be done to address the issue in Esperance.

Amendment (deletion of words) put and a division taken with the following result -

Ayes (27)

Mr P.W. Andrews	Mr J.C. Kobelke	Mr A.D. McRae	Mr E.S. Ripper
Mr J.J.M. Bowler	Mr R.C. Kucera	Mr M.P. Murray	Mr D.A. Templeman
Mr A.J. Carpenter	Mr F.M. Logan	Mr A.P. O’Gorman	Mr P.B. Watson
Dr J.M. Edwards	Ms A.J.G. MacTiernan	Mr P. Papalia	Mr M.P. Whitely
Mrs D.J. Guise	Mr J.A. McGinty	Mr J.R. Quigley	Mr B.S. Wyatt
Mrs J. Hughes	Mr M. McGowan	Ms M.M. Quirk	Mr S.R. Hill ( <i>Teller</i> )
Mr J.N. Hyde	Ms S.M. McHale	Ms J.A. Radisich	

Noes (19)

Mr C.J. Barnett	Dr E. Constable	Mr J.E. McGrath	Mr T.K. Waldron
Mr D.F. Barron-Sullivan	Mr M.J. Cowper	Mr P.D. Omodei	Ms S.E. Walker
Mr M.J. Birney	Mr J.H.D. Day	Mr D.T. Redman	Mr G.A. Woodhams
Mr T.R. Buswell	Mr B.J. Grylls	Mr G. Snook	Dr G.G. Jacobs ( <i>Teller</i> )
Mr G.M. Castrilli	Dr K.D. Hames	Mr M.W. Trenorden	

**Extract from Hansard**  
[ASSEMBLY - Wednesday, 21 March 2007]  
p515b-532a

Acting Speaker; Dr Graham Jacobs; Dr Steve Thomas; Dr Janet Woollard; Mr David Templeman; Ms Alannah MacTiernan; Mr Paul Papalia; Mr Troy Buswell; Mr Jim McGinty

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Pairs

Mrs M.H. Roberts  
Mr T.G. Stephens

Mr A.J. Simpson  
Ms K. Hodson-Thomas

Amendment thus passed.

Amendment (insertion of words) put and a division taken with the following result -

Ayes (27)

Mr P.W. Andrews  
Mr J.J.M. Bowler  
Mr A.J. Carpenter  
Dr J.M. Edwards  
Mrs D.J. Guise  
Mrs J. Hughes  
Mr J.N. Hyde

Mr J.C. Kobelke  
Mr R.C. Kucera  
Mr F.M. Logan  
Ms A.J.G. MacTiernan  
Mr J.A. McGinty  
Mr M. McGowan  
Ms S.M. McHale

Mr A.D. McRae  
Mr M.P. Murray  
Mr A.P. O’Gorman  
Mr P. Papalia  
Mr J.R. Quigley  
Ms M.M. Quirk  
Ms J.A. Radisich

Mr E.S. Ripper  
Mr D.A. Templeman  
Mr P.B. Watson  
Mr M.P. Whitely  
Mr B.S. Wyatt  
Mr S.R. Hill (*Teller*)

Noes (19)

Mr C.J. Barnett  
Mr D.F. Barron-Sullivan  
Mr M.J. Birney  
Mr T.R. Buswell  
Mr G.M. Castrilli

Dr E. Constable  
Mr M.J. Cowper  
Mr J.H.D. Day  
Mr B.J. Grylls  
Dr K.D. Hames

Mr J.E. McGrath  
Mr P.D. Omodei  
Mr D.T. Redman  
Mr G. Snook  
Mr M.W. Trenorden

Mr T.K. Waldron  
Ms S.E. Walker  
Mr G.A. Woodhams  
Dr G.G. Jacobs (*Teller*)

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Pairs

Mrs M.H. Roberts  
Mr T.G. Stephens

Mr T.R. Sprigg  
Ms K. Hodson-Thomas

Amendment thus passed.

*Motion, as Amended*

Question put and a division taken with the following result -

Ayes (27)

Mr P.W. Andrews  
Mr J.J.M. Bowler  
Mr A.J. Carpenter  
Dr J.M. Edwards  
Mrs D.J. Guise  
Mrs J. Hughes  
Mr J.C. Kobelke

Mr R.C. Kucera  
Mr F.M. Logan  
Ms A.J.G. MacTiernan  
Mr J.A. McGinty  
Mr M. McGowan  
Ms S.M. McHale  
Mr A.D. McRae

Mrs C.A. Martin  
Mr M.P. Murray  
Mr A.P. O’Gorman  
Mr P. Papalia  
Mr J.R. Quigley  
Ms M.M. Quirk  
Ms J.A. Radisich

Mr E.S. Ripper  
Mr D.A. Templeman  
Mr P.B. Watson  
Mr M.P. Whitely  
Mr B.S. Wyatt  
Mr S.R. Hill (*Teller*)

Noes (19)

Mr C.J. Barnett  
Mr D.F. Barron-Sullivan  
Mr M.J. Birney  
Mr T.R. Buswell  
Mr G.M. Castrilli

Dr E. Constable  
Mr M.J. Cowper  
Mr J.H.D. Day  
Mr B.J. Grylls  
Dr K.D. Hames

Mr J.E. McGrath  
Mr P.D. Omodei  
Mr D.T. Redman  
Mr G. Snook  
Mr M.W. Trenorden

Mr T.K. Waldron  
Ms S.E. Walker  
Mr G.A. Woodhams  
Dr G.G. Jacobs (*Teller*)

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Pairs

Mr T.G. Stephens  
Mrs M.H. Roberts

Ms K. Hodson-Thomas  
Mr T.R. Sprigg

Question thus passed.