

Legislative Assembly Education and Health Standing Committee

Additional Questions requiring answers provided by the Standing Committee to the Esperance Port Authority

1. Preface

We received a facsimile from Dr Jeannine Purdy on 2 May 2007 requesting answers to an enclosed a list of questions from the Legislative Assembly Education and Health Standing Committee. Dr Purdy confirmed in this correspondence that only those questions that were not covered at the hearing should be responded to in writing and that the time frame given by the Chairman was 14 days from receipt.

Accordingly, we provide herein answers to questions 18 - 26 inclusive and in addition we provide further answers to questions 5, 6, 8, 11 and 15, in accordance with requests made at the hearing in Esperance on 2 May 2007.

2. Answers

2.1 Question 5: How many complaints had been received?

- (a) The Authority has an electronic complaints register in which it records all complaints from both residents and employees.
- (b) The Authority has had a number of complaints about nickel odour over the years. The electronic register of complaints reflect those of both residents and employees for the dates between 1 January 2001 to present (see attachment "5.1").
- (c) It appears that there is only one complaint about lead and this is a 2007 complaint that concerns the possibility of lead contamination of a rainwater tank.
- (d) The Authority takes the complaints about dust emissions and odour very seriously.
- (e) In 2001 the Authority, together with Port users, funded a study into nickel odour.
- (f) That report recommended the following procedures, all of which were implemented:
 - instillation of an odour scrubber;
 - implementation of procedures to investigate odour incidents;
 - the ability to postpone shipping upon receipt of significant odour complaints;
 - continuation of lime trials;
 - main office to keep odour log; and
 - nearby residents to keep odour log.

- (g) From time to time there were further complaints about odour and the Authority instigated a workshop between itself and industry to discuss Heavy Metal Handling, entitled "Beyond the Mine Site". A copy of that report is attached and marked "5.2".
- (h) The Authority advised industry within the context of that workshop that it had a zero odour policy. The workshop produced a comprehensive plan to achieve that aim. This plan is set out in the attachment numbered "5.2".
- (i) The Authority noted within the workshop that the Health Department had provided advice that the levels in the rainwater tanks were not a health risk. However, as the community perceived it as a risk, eradication of dust and odour was essential.

2.2 Question 6: There is evidence before the Committee not only that local residents of Esperance had raised about nickel dust from the Port for many years, and that these concerns had been confirmed by the Port, for example, in letters ranging from January to August 2004, stating that the nickel level in rainwater tank was higher than the Australian Drinking Water Guideline. Why did you, just one month later on 28 September 2004, seek to amend the Port's licence so that lead carbonate 'would be exported through our existing nickel handling system'?

- (a) In a further answer to this question, the Authority states that it had been advised by the Department of Health through the Department of Environment that the Nickel levels detected in the rainwater tanks at this time were not considered a health risk and that the nickel levels were a result of historical events.
- (b) The Authority believed that its continuous improvement of its dust handling system would prevent future dust emissions of nickel and lead.
- (c) Attached and marked "6.1" is a media statement from the Department of Environment dated 22 January 2004 which confirms the above understanding and states amongst other things:

"Current loading practices at the Port are effective in controlling dust emissions and results of dust monitoring by the Esperance Port Authority have shown very low levels of dust in areas near the Port."

2.3 Question 8: Why did the Esperance Port Authority accept lead concentrate for export through the Port when it was aware of the failure of the existing system to contain dust?

- (a) The Authority refers to its answer to Question 6 above and maintains that they do not consider that there was a failure of the existing system to contain dust.
- (b) However, the Authority notes that they were always very conscious of the need to ensure lead dust was contained and voluntarily took the following suppression measures to ensure this:
 - (i) Prior to accepting lead concentrate for export through the Port, the Authority underwent considerable improvements, not only for the handling of lead concentrate, but also for nickel.

- (ii) The Authority reclassified all concentrates handled by the Port into a new category, titled heavy metals.
- (iii) The Authority undertook a comprehensive and complete revision of the "Heavy Metals Loading Procedure- PR026" and the "Heavy Metals Sampling Procedure- PR047". This implemented strict new guidelines to all personnel, including contractors, agents, shippers and clients.
- (iv) The Authority developed a new procedure and system "Requirements for Entering Classified Dirty Areas- PR078".
- (v) The Authority developed new in depth training courses and undertook complete retraining of all Esperance Port Authority personnel, contractors and client representatives in relation to the newly developed and revised procedures for the handling of all heavy metals.
- (vi) The Authority made modifications to berth 2 amenities building to compliment PR078 to provide a Dirty/ Clean room area to prevent the carriage of any heavy metals into eating areas or outside the berth area.
- (vii) The Authority purchased new personal protective equipment to support the newly developed and revised procedures. This included engaging external training providers to train all Esperance Port Authority personnel in the correct use and maintenance of the new personal protective equipment.
- (viii) The Authority established a comprehensive system for disposal and cleaning of personal protective equipment ("**PPE**"):
 - All disposable PPE was to be returned to the mine site for disposal, as the Authority made the decision that it was not appropriate to have local disposal in deep burial at the Esperance Shire Recycling Centre.
 - All reusable PPE clothing are contracted to Esperance Laundry Services for cleaning, with the cleaning residues put through an industrial filter to collect the contaminants.
 - All other reusable PPE (hard hat, dust masks etc) are cleaned by the user at the designated "dirty room" and restored for future use.
 - The Authority provided all operational personnel, with an additional set of steel cap boots, solely designed for work in dirty areas only, which do not leave the site.
- (ix) The Authority reclassified certain port areas and created restricted access areas in which strict guidelines were required to be met prior to entry.
- (x) The Authority introduced a new contractor (Mader) to provide a better heavy metals residue cleaning system. This was the Wet Vacuum Sweeping. In addition the contractor was to clean after the departure of every delivery and after the completion of ship loading heavy metals. All residues collected were to be returned to the respective heavy metals storing shed for future out loading.

- (xi) The Authority introduced a new policy to restrict all vehicle access to the heavy metals areas during out loading operations. Only the Authority's service vehicles were allowed to be used from the Supervisor's building through to the immediate end of berth 2 during any out loading operation of heavy metals.
- (xii) The Authority established a testing system for employees and put procedures in place to deal with an increase in employee's blood levels due to exposure. If this occurred the procedure would be implemented to lower any elevation back to the lowest level.
- (xiii) The Authority commenced trial testing of a new dust suppression system, Polo Citrus, into its out loading system at the tail end of CV2.
- (xiv) The Authority fabricated an extension chute for the berth 2 ship loader loading chute.
- (xv) Also at this time the Authority was addressing the following improvements and awaiting approval or funding:
 - installation of Polo Citrus system to CV 2 and CV3;
 - spill tray to the ship loader;
 - in line product moisture determination units for installation to the port's in and out loading system at CV2 and CV3;
 - new modified ship loader loading chute- specifically designed to out load heavy metals;
 - upgrade to CV2 out loading gallery
 - an expanded water settlement sump at the receival site.
- (c) As a result of all of these improvements the Authority believed that it had created a safe system equipped to handle the export of lead concentrate.
- (d) Attached and marked "8.1" is a Heavy Metals Handling Report that was presented to the Board on 9 November 2006.

2.4 Question 11: Three monthly air monitoring results are required to be collected by the Authority under its licence and reported to DEC annually:

- **Why was the report provided on 31 October 2006 incomplete?**
- **If it was due to the commercial provider of analysis of dust gauge monitoring taking 11 months to complete the analysis, why didn't the Authority use another provider?**
- **What responsibility did the Authority have to monitor and act on these reports throughout the year?**
- **If very high levels were recorded in a timely way, is it satisfactory for the Authority to simply hold these until the annual report to DEC?**

- (a) In reference to Mr Stewart's answers to the inquiry we attached the email trail between the Authority and the laboratory (see attachment "11.1") and add that there were many telephone conversations in addition to these emails.
- (b) Further, the Authority provided the samples to the laboratory in accordance with the Authority's usual procedure and time frame.
- (c) Normal practice on receiving the results of some or all samples of dust or benthic level monitoring that require the testing of all the following concentrates: lead, nickel, sulphur and Haematite is 4 weeks. This is not to be confused with blood monitoring results which can take from 3 days to 2 weeks.
- (d) The laboratory who received the Authority's samples then sent the October samples to the government analysis body CSIRO for testing.
- (e) The Authority followed up with these results on numerous occasions.
- (f) Subsequently, the laboratory informed the Authority that they were still waiting on the samples from the CSIRO and therefore they were unable to supply results in any timely fashion. The delay of the results was not the fault of the Authority.
- (g) The Authority decided to remain with the same laboratory for the remainder of the year for the following reasons:
 - (i) there is a limited number of laboratories in Western Australia that specialise in the testing of Haematite. As testing for Haematite was a requirement of the Authority's licence, they were restricted to which laboratories they could use, until the Department of Environment and Conservation removed this requirement from the Authority's licence; and
 - (ii) the Authority considered it prudent to maintain consistency in the laboratory and the laboratory's techniques in undertaking analysis of the samples during an annual reporting period. This would also allow for scientific consistency of the results.

2.5 Question 15: If the reason for the lead in the harbour is, as the Port claims, due to the flooding of the wash down sump, by the storm that hit Esperance in January, why hadn't this been cleaned in preparation for bad weather?

- (a) Esperance recorded 184.2 mm of rainfall over the 24 hours to 9 am on 5 January 2007. This was the highest measurement ever recorded.
- (b) Esperance recorded a wind gust of 60 knots (111 km/ hr). This was the highest January wind gust on record.
- (c) The Oldfield River Bridge, located 85 km east of Esperance along South Coastal Highway, was closed because the entire 30 metre eastern abutment was washed away.
- (d) A storm of this nature magnitude was not reasonably predictable, and accordingly the possible overflow of the sumps was not foreseen.

- (e) Following the storm event the Authority took action to develop procedural instructions titled "pre-storm checklist", which outlined actions to be taken at the Port in preparation for storms and large rain events in the future.

2.6 Question 18: We have been told that the proposal to relocate the Esperance Port was part of the community consultation workshop in Esperance relating to 30 year the BHP Billiton Ravensthorpe Nickel Project. We were also told that the Esperance Port Authority opposed that proposal. Is this correct? What is your view now?

- (a) We are not of the opinion that the relocation of the Esperance Port was raised as a part of the BHP Ravensthorpe Nickel project community consultation workshop and therefore we can deny the claim that the Authority opposed such a proposal at this community workshop.
- (b) We can say however, that the idea of relocating the port has been raised by some members of the community at various and different forums over the last 15 years. However, the Authority has always taken the view that the relocation of the Port cannot be justified on economic reasons.
- (c) This is still the view of the Authority.

2.7 Question 19: We have been told that because workers at the port did not have high lead levels this was used as a justification of why there were no earlier concerns about the potential lead pollution. When Port employees are involved in the movement of the lead carbonate I presume they are protected to the same extent that members were when we visited the lead carbonate facility last night. Is that correct? When were these protective procedures implemented at the Port?

- (a) The Authority's employees have always been provided with Personal Protective Equipment ("PPE").
- (b) The Authority is constantly upgrading the PPE as equipment and standards change.
- (c) The introduction of lead concentrate to the Port certainly resulted in the Authority reviewing PPE and enhancing the equipment provided prior to the receipt of any lead into the Port.
- (d) The levels of the employees handling lead were within acceptable ranges and these employees were monitored very closely. Reason would suggest that to assess the danger of a product you would monitor the employees who were in the lead sheds and handling the lead on a regular basis. Subject to any other data, these employees results should be definitive of the risk.
- (e) However, the Authority did not just monitor the employees, they were also collecting data from outside the port, in accordance with the Authorities environmental licence. When it became apparent that this data was not complementing the employees data, the Authority choose to act and voluntarily stopped all the lead transportation through the Port.

2.8 Question 20: Have nickel levels in marine sediment samples taken from the nickel loading wharf since 2002 exceeded national guidelines?

- (a) The total nickel levels have at times exceeded the guidelines. However, total nickel levels are different to bioavailable levels which are the levels that indicate potential risk.
- (b) Total levels of nickel refers to the total amount of nickel present. Whereas, bioavailable nickel levels test for the amount of nickel that is actually available to be absorbed by a physiological entity.
- (c) Therefore, it is the bioavailable levels that indicate the potential extent of risk.
- (d) The Authority does not conduct bioavailable levels at first instance. However, the Authority will conduct such tests once it has ascertained that the total level is high.
- (e) Following the total levels that exceeded the guidelines (as mentioned above) the Authority tested for the bioavailable levels and ascertained that the bioavailable nickel has generally been below the guidelines indicating a low risk of adverse biological effects.
- (f) Only once did the bioavailable results exceed the guidelines and this was in May 2005. However, this was monitored and the levels decreased and have since never exceeded the guidelines.

2.9 Question 21: Is it true that the Port Authority previously used high volume dust monitors but had stopped because of the cost?

- (a) High volume dust monitors were used by the Authority in the 1990's.
- (b) Both the Authority and the DEC agreed to change to Dust Gauges as dust levels were demonstrated to be low and it was considered that the new monitors would still provide accurate trend monitoring.

2.10 Question 22: What is the definition of an 'operational spill'?

- (a) An operational spill differs to that of an environmental spill.
- (b) An operational spill refers to a spillage of a product handled by the Authority onto or into an area that enables it to be contained and cleaned up. For example a spillage onto an operational berth is considered to be an operational spill as it is onto a concrete or bitumen surface where it can be contained and has no adverse effects on the environment.
- (c) An environmental spill is a spill into the natural environment, ie the harbour.
- (d) The Authority only has an obligation to report environmental spills.

- 2.11 Question 23: Are records kept of spills that do not meet this standard? Can copies please be provided if the Authority has not yet done so?**
- (a) All operational spills are still recorded by operations personnel in the Authority's "General Report Sheet" where they can be investigated.
 - (b) If the spill is an environmental spill and therefore involved material entering the harbour, then this spill is required to be, and would have been, reported to the DEC under Section 72 of the Environmental Protection Act.
- 2.12 Question 24: Please confirm that Port Authorities are each separately incorporated and are not part of the public service?**
- (a) All the Port Authorities within Western Australia are established under the *Port Authorities Act 1999*. They are a self funded independent Statutory Authority and are subject to Corporations Law.
- 2.13 Question 25: The Port Authorities Act states that Authorities are to act in accordance with prudent commercial principles and endeavour to make profit. Has this requirement affected how the Port has conducted itself in this matter?**
- (a) While the Authority has due regard to these corporate principles, the Authority has at all times endeavoured to abide by its overriding obligation to do all that is reasonable to protect the environment and health of its employees and the community. The Authority has never intentionally compromised its obligations to the community and environment of Esperance for an increase in revenue or profit.
 - (b) The Authority customarily makes a profit, 50% of which is paid to the State Government. The remainder either goes back into the Port for refurbishment and improvements or back into the community of Esperance.
- 2.14 Question 26: Could the Authority provide copies of all forms by DEC officers who have completed the OHS induction course to allow entry into the lead carbonate storage shed (Please indicated if these documents are already included in the boxes of materials provided.)**
- (a) No DEC officer ever entered the lead storage shed prior to the Parliamentary Inquiry.
- 2.15 Question 27: In the OHS consultant's report a recommendation was made that the Authority purchase an industrial wet sweeper. Did this happen? When? How often is it used?**
- (a) The Authority did comply with this recommendation.
 - (b) Following this recommendation the Authority contracted the operation of an industrial wet sweeper.

- (c) The sweeper is used regularly, normally daily, at the Port and is on constant standby , 24 hours, when a heavy metals vessel is being loaded.

2.16 Question 28: Approval process through the DEC took only 6 weeks from application to change the licence. Did your company or any members seek support from or have any contact with any political lobbyist'?

- (a) The only correspondence relating to this matter during the application process was between the DEC staff and the employees of the Authority.
- (b) At no time was anyone else consulted or spoken to.