

**In the matter of the  
Commissions Of Inquiry Act 1950**

**Commission of Inquiry Order (No. 1) 2011**

**QUEENSLAND FLOODS COMMISSION OF INQUIRY**

**Witness Statement of Pier Westerhuis**

Chief Executive Officer

Ensham Resources Pty Ltd (ACN 011 048 678)

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	Description	Date
PW-1	Statement of Pier Westerhuis	12 May 2011
PW-2	Environmental Authority No. MIN102573611	20 April 2011
PW-3	Environmental Authority No. MIM8000086202	27 August 2010
PW-4	Application for a Draft Transitional Environmental Program	7 December 2010
PW-5	Certificate of Approval No. MAN11139	10 December 2010
PW-6	Application to Amend TEP 11139	5 January 2011
PW-7	Certificate of Approval No. 11280	5 January 2011
PW-8	Application to Amend TEP11280	31 January 2011
PW-9	Certificate of Approval No. MAN12039	11 February 2011
PW-10	Letter from Ensham Resources to DERM	13 December 2010
PW-11	Letter from DERM to Ensham Resources	4 July 2011
PW-12	Emergency Directive	1 February 2008
PW-13	Emergency Directive	15 February 2008
PW-14	Application for a Draft Transitional Environment Program	29 February 2008
PW-15	Certificate of Approval No. EMD001-08	6 March 2008
PW-16	Amended Certificate of Approval No. EMD 001-08	28 April 2008
PW-17	Amended Certificate of Approval No. EMD 001-08	2 June 2008

## Witness statement of Pier Westerhuis

This written statement is provided in response to a Requirement dated 13 September 2011 to provide a written statement, under oath or affirmation, to the Queensland Floods Commission of Inquiry ("**Commission**") pursuant to section 5(1)(d) of the Commissions of Inquiry Act 1950 (Qld).

I, **Pier Westerhuis**, Chief Executive Officer of Ensham Resources Pty Ltd (ACN 011 048 678) ("**Ensham Resources**"), c/ Level 18, AMP Place, 10 Eagle Street, Brisbane in the State of Queensland, state on oath as follows:

### Position Description

1. I am the Chief Executive Officer for Ensham Resources. I have worked for Ensham Resources since 1 June 2002 and have been in my current position as Chief Executive Officer since 1 December 2008.

### Background

2. Ensham Resources is the operator of the Ensham Mine, an open cut coal mine, for and on behalf of its owners. The Ensham Mine is located approximately 40 km east of Emerald in Central Queensland.
3. The Ensham Mine is jointly owned by Idemitsu Australia Resources Pty Limited (ACN 010 236 272); J-Power Australia Pty Ltd (AC N 002 307 682); Bligh Coal Limited (ACN 101 186 393); and LG International (Australia) Pty Ltd (ACN 002 806 831) ("**Ensham Joint Venture Parties**").
4. The Ensham Mine:
  - (a) has been operational since 1993;
  - (b) sells coal to various customers in Japan, Korea, India, China and other countries; and
  - (c) currently has a workforce of approximately 200 Ensham employees and a further 300 contract staff.
5. I previously provided a statement to the Commission dated 12 May 2011 ("**P Westerhuis First Statement**"). The P Westerhuis First Statement was provided in response to the Commission's Requirement dated 6 May 2011. A copy is annexed hereto and marked '**PW-1**'.

### Flood-related concerns at the Ensham Mine

6. The Commission has requested a brief description of the main flood-related concerns at the Ensham Mine (for example — hazardous waste and contaminants at the Mine, effect of flood on the downstream environment, discharge requirements).
7. The Ensham Mine holds an Environmental Authority dated 20 April 2011 (Environmental Authority No. MIN102573611) (the "**Current EA**"), a copy of which is annexed hereto and marked '**PW-2**'. The Current EA was issued by the Department of Environment and Resource Management ("**DERM**") as an administrative amendment to incorporate changes to the Environmental Protection Regulation 2008.

8. The Current EA provides for the controlled release of mine affected water to the receiving environment.
9. The main flood-related concerns for the Ensham Mine are:
  - (a) the risk of impact to mining operations in a flood event in the Nogoia River and its catchment. Ensham has flood protection levees to a design specification to withstand a 1,000 year Average Recurrence Interval ("ARI") flood event at the Ensham Mine as referred to in paragraph 13 of the P Westerhuis First Statement;
  - (b) the risk of impact of restriction to access as occurred in the 2010/2011 flood event. As stated in paragraph 6 of the P Westerhuis First Statement, a river crossing which provides access to the Ensham Mine was overtopped during the 2010/11 flood event. Ensham intends to construct a single-lane bridge to provide access across the Nogoia River during flood events, subject to receiving any necessary approvals;
  - (c) the residual flood water from the 2008 flood event which is stored on site, and which was also contributed to by incident rainfall and run off from the 2010/11 wet season. At the commencement of the 2010/11 wet season, approximately 9,000ML of flood water from the 2008 flood event was stored in the A Pits that are located on the southern side of the Nogoia River. The water quality of the remnant 2008 flood waters in the A Pits has been continually monitored, and the water quality monitoring results in December 2011, showed that the level of contaminants in that water did not exceed the EA trigger levels for release except for electrical conductivity. While it is difficult to be precise, I understand that following the 2010/11 wet season, approximately 20,000ML of water remains in the A Pits; and
  - (d) limitations on the ability of the mine to release stored flood and run-off water to the Nogoia River under the EA in circumstances where the flow in the Nogoia River provides sufficient dilution to protect the environment. This is further discussed in paragraphs 40 to 46 below.

#### **Flood preparedness in advance of the 2010/2011 wet season**

10. The Commission has requested information on flood preparedness activities undertaken by Ensham Resources in advance of the 2010/11 wet season at the Ensham Mine, including whether any particular activities were undertaken as a response to the forecast of an above-average rainfall wet season, or any government communications regarding that forecast.
11. Following the 2008 flood event, the Ensham Mine Flood Recovery Project has been undertaken and included the removal of most of the water which inundated the mine, stability monitoring, dragline repair, mud disposal, and the repair and construction of flood protection levees and other essential infrastructure.
12. Ensham Resources has undertaken the following works to ensure risk of the accumulation of large volumes of flood water in the mining pits at the Ensham Mine is minimised in the future:
  - (a) Increasing the level of mine flood protection provided by the levees to the 1,000 year Average Recurrence Interval, at a cost in excess of \$40 million. This upgrade in flood protection levees was approved by DERM on 24

December 2009 and by the Nogoia River Flood Plain Board on 19 August 2010. The levee banks prevented flood inundation of the mine site from the Nogoia River during the 2010/11 flood event.

- (b) Reduction in the effective catchment areas of the mine pits by upgrading catchment diversions around the mine site.
13. This infrastructure will substantially reduce the risk of future flooding of the Ensham Mine.
14. Improvements to site water management, release capability and monitoring have also been implemented at the Ensham Mine by:
- (a) constructing an approximate 9km large diameter HDPE Pipeline linking the northern section of the mine to the mine water reticulation system, at a significant cost and due to be completed in late 2011;
  - (b) 'in-stream' real time water quality monitors installed upstream and downstream of the site;
  - (c) pumping installations in place for release of water from A Pits and northern pits (B, C and D Pits) to facilitate release of water from the mine during high rainfall events at up to 300ML per day, at a cost of approximately \$6 million;
  - (d) flow meters to be installed on all release points for accurate water release quality dilution management; and
  - (e) installation of scour protection works at the discharge points, where required in the Nogoia River.
15. Ensham received no formal communications from the government regarding the forecast above-average rainfall wet season in December 2010.
16. Ensham Resources undertook a program of personal communication and consultation with key stakeholders in the region regarding its Transitional Environmental Program ("TEP") discussed in paragraphs 33 to 36 below.

#### **Consultation with DERM regarding the Environmental Authority**

17. The Commission has requested with respect to the Environmental Authority in force at the Ensham Mine for the 2010/2011 wet season:
- (a) whether the Ensham Mine operator had any concerns arising from the drafting and negotiation of it and consultation between Ensham Resources and the Department of Environment and Resource Management (**DERM**);
  - (b) any inability on the part of Ensham Resources to comply with its terms;
  - (c) any risks to safety or the environment caused by its terms;
18. The EA that was in force during the 2010/2011 wet season is Environmental Authority No. 8000086202 dated 27 August 2010 ("**Previous EA**"), a copy of which is annexed hereto and marked '**PW-3**'. The EA was issued by DERM in response to an application made by the Ensham Joint Venture Parties to amend the environmental authority to include additional mining leases and additional surface area under the mining leases on 11 October 2006.

19. Ensham Resources held no concerns with respect to its dealings with DERM in the process of drafting and negotiating of the Current EA and the Previous EA by DERM. However the conditions of both the Current EA and the Previous EA impose electrical conductivity ("**EC**") limits for mine water discharges which effectively prevent release of the large quantities of water collected in mining pits during the 2008 and 2010/11 wet seasons.
20. Ensham complied with the conditions of the Previous EA during the 2010/2011 wet season. Ensham does not consider there are any risks to safety or the environment arising from the terms of the EA.
21. Both the Current EA and the Previous EA impose restrictions on the release of mine affected water. As a consequence, it was necessary to make an application to DERM for a Transitional Environmental Program ("**TEP**") following the 2010/11 flood event to authorise the controlled release of limited volumes of water (also known as dewatering) from mining pits at the Ensham Mine. Details regarding a series of TEP's that were approved by DERM following the 2010/11 flood event are set out in paragraphs 22 to 28.

#### **Transitional Environmental Program**

22. The Commission has requested with respect to any TEP or ED applied for, granted or refused relating to the Ensham Mine during the period 1 October 2010 to 30 July 2011:
  - (a) the reason precipitating the TEP or ED and his opinion as to whether the TEP or ED was effective in resolving that issue;
  - (b) any concerns arising from the terms of the TEP or ED;
  - (c) any non-compliance with the TEP or ED, and, if so, any actions taken by DERM in response to that non-compliance;
  - (d) to the knowledge of Ensham, any adverse effects to drinking water quality, any plant or animal species, any industry or agriculture, the environment or public health that occurred as a result of discharge of water under the TEP or ED.
23. DERM did not issue any Emergency Direction's relevant to the Ensham Mine as a consequence of the 2010/11 flood event.
24. Between the 2<sup>nd</sup> and 5<sup>th</sup> of December 2010, the Ensham Mine experienced rainfall in excess of 200 mm resulting in flooding in active mine pits and the cessation of mining in the affected pits. Most of the water storage for the mine is located on the southern side of the Nogoia River in the A Pits. A temporary pipeline traversed the existing haul road crossing to allow the transfer of water from the Northern pits to the storage on the southern side. As the water level in the Nogoia River had risen above the existing haul road, and temporary pipeline, Ensham did not consider that it was safe at this time to transfer water trapped in the northern pits to the southern storages.
25. As outlined in paragraph 19 the Previous EA imposed restrictions on the release of mine affected water. Such restrictions did not allow for the controlled release of the volumes of water that were trapped in mine pits as a consequence of the 2010/11 flood event. It was necessary therefore, for Ensham to make an application to DERM for a Transitional Environmental Program ("**TEP**") to authorise the controlled release of water.

26. Ensham Resources on behalf of the Ensham Joint Venture Parties made an application for a Draft TEP on 7 December 2010, a copy of which is annexed hereto and marked 'PW-4'. The purpose of the draft TEP was to allow for the controlled discharge of mine water to the Nogoia River and Boggy Creek during high flow events, to enable the mine to recommence operations. The release of waters under high flow conditions was proposed to dilute the releases and allow for natural "flushing flow" to occur through the downstream receiving waters. The discharge conditions included end of pipe limits, specified discharge locations and monitoring requirements.
27. The Draft TEP was approved by DERM on 10 December 2010 (Certificate Approval No. MAN11139) ("**TEP11139**"). A copy of (Certificate Approval No. MAN11139 is annexed hereto and marked 'PW-5'. The approved TEP11139 applied for the period until 27 May 2011.
28. Subsequent applications for amendment of the TEP were made by Ensham Resources on behalf of the Ensham Joint Venture Parties, and approved by DERM, to enable flood waters to be released in a controlled manner during high flow conditions, the TEP as follows:
- (a) an application to amend TEP 11139 was made on 5 January 2011 primarily to include the release of water with an electrical conductivity ("**EC**") limit of 8500  $\mu\text{S/cm}$ , a copy of which is annexed hereto and marked 'PW-6';
  - (b) the application to amend TEP11139 was approved by DERM on 5 January 2011 (Certificate Approval No. MAN11280) ("**TEP11280**"), a copy of Certificate Approval No. MAN11280 is annexed hereto and marked 'PW-7';
  - (c) an application to amend TEP11280 was made on 31 January 2011 primarily to reduce the minimum flow rate required in the Nogoia River for release, a copy of which is annexed hereto and marked 'PW-8'; and
  - (d) the application to amend TEP11280 was approved by DERM on 11 February 2011 (Certificate Approval No. MAN12039) ("**TEP12039**"), a copy of Certificate Approval No. MAN12039 is annexed hereto and marked 'PW-9.
29. Ensham Resources has no concerns arising from the terms of the series of TEP's approved by DERM for the site.
30. As to the effectiveness of the TEPs, they enabled the release of approximately 7000 ML, however remnant water remains in A pits, refer to paragraph 46 below.
31. In December 2010, there were a limited number of results that were recorded above the EC release limit of 4000  $\mu\text{S/cm}$  under the TEP. These results were reviewed against the EC of samples collected from downstream monitoring points on corresponding dates. Results show that the EC levels recorded at downstream monitoring points were below the applicable EC release limit at these locations. On 13 December 2010, Ensham Resources notified DERM in accordance with condition 15 of TEP11139, that EC was recorded at 4700  $\mu\text{S/cm}$ . A copy of the letter to DERM dated 13 December 2010 is annexed hereto and marked 'PW-10. In a letter dated 4 July 2011, a copy of which is annexed hereto and marked 'PW-11', DERM confirmed that no further action was required to be taken by Ensham Resources in relation to the notified monitoring results.



32. I do not consider that there have been any adverse effects to drinking water quality, public health or the environment as a result of discharge of water under the TEPs referred to in paragraph 28 above.
33. Prior to making the TEP application on 10 December 2010, Ensham Resources undertook a program of personal communication and consultation with key stakeholders in the region regarding the proposed TEP conditions. Those stakeholders included:
- (a) Capricorn Conservation Council;
  - (b) Fitzroy Basin Association;
  - (c) Central Highlands Regional Council;
  - (d) Isaac Regional Council;
  - (e) Rockhampton Regional Council; and
  - (f) Immediate downstream land holders.
34. On 8 December 2010, I caused a TEP Fact Sheet to be sent by email to the key stakeholders regarding the objectives and actions to be carried out under the proposed TEP.
35. Following the email that was sent on the 8 December, Ensham staff and I followed up each recipient of the email by telephone to discuss the content of the TEP Fact Sheet and any address any concerns the key stakeholders may have had in relation to the proposed TEP. The feedback from the stakeholders was generally supportive of the proposed TEP, and Ensham Resources considered that there was an understanding that the proposed TEP would minimize the risks of environmental harm through significant dilution of mine affected water afforded by the high rainfall flows available in the Nogoa River.
36. Ensham Resources also provided updates on the mine water releases carried out under the approved TEP on its website.

#### **Comments on the process for grant of the TEP**

37. The Commission has requested a description of any concerns arising from the process of applying for and being granted or refused any TEP or ED, including:
- (a) Ensham Resources's knowledge of the process in advance;
  - (b) the transparency of the process;
  - (c) the speed of the process;
  - (d) the considerations taken into account or not taken into account;
  - (e) the reasons given for any decision;
  - (f) consultation with relevant stakeholders;
38. Ensham Resources has no concerns in respect of the process of applying for and being granted the relevant TEPs referred to in paragraph 28 above.

### **Details of the new Fitzroy Model conditions**

39. The Commission has requested details of how the new Fitzroy Model Conditions negotiated during 2011, or any other discussions with DERM, will resolve any issue raised above in 3, 4 or 5.
40. The Draft Fitzroy Model Conditions ("Draft Model Conditions") that were released by DERM in August 2009 provided more restrictive water release conditions at mine sites located in the Fitzroy Basin Catchment, particularly as regards end of pipe release limits for EC.
41. The Draft Model Conditions were incorporated into the Previous EA that was issued by DERM on 27 August 2010 and are contained in the Current EA.
42. Since the release of the Draft Model Conditions, I understand that DERM has engaged with the industry (via the Queensland Resource Council ("QRC")) to undertake a review of the Model Conditions. It is my understanding that one of the key objectives of the review was to consider ways to make the model conditions flexible enough to minimise the need for TEP's to be the only option for mine operators to carry out controlled release of mine waters collected during major rainfall events.
43. I understood that DERM was aiming for the revised model conditions ("New Model Conditions") to be released in August 2011. This timing was said to enable companies to apply on a site-by-site basis for relevant amendments to their current environmental authorities to negotiate a workable set of conditions (based on the New Model Conditions) that are supported by background monitoring and data.
44. It is my understanding that the new Model Conditions are yet to be finalised by DERM.
45. Ensham Resources will continue to work with DERM so that the New Model Conditions will assist to maintain a water balance at the site during the wet season.
46. The Model Conditions however do not deal with the legacy issue of large quantities of water collected in mining pits during the 2008 and 2010/11 wet seasons. Therefore, it is necessary for a further application to be made for a TEP to facilitate the controlled release of flood waters remaining in the active mining pits to be released in a controlled manner to the Nogoia River. The objectives of the TEP are to ensure that Ensham Mine can recommence mining operations in A Pit, which has been used for temporary water storage since 2008 and restore water balance to the mine, using the new model conditions.

### **Impact of the new Fitzroy Model Conditions**

47. The Commission has requested an explanation as to whether the new Fitzroy Model Conditions negotiated during 2011 are advantageous or disadvantageous to Ensham Resources in the management of water, contaminants and hazardous waste at the Ensham Mine, the downstream environment and safety issues.
48. As stated in paragraphs 40 to 46 above.

### **Account of Ensham Resources de-watering efforts after the 2008 flood event**

49. The Commission has requested a brief account of Ensham Resources' de-watering efforts after the 2008 flooding.

50. Under the authorities set out in paragraph 52 to 55 the Ensham Mine was authorised to discharge flood waters from the 2008 flood event into the Nogoia River and Boggy Creek. In the period 3 February to 9 September 2008 the mine discharged approximately 138,000 ML of flood water. To minimise potential impact on the environment, Ensham Resources purchased approximately 70,000 ML of water allocation from the Fairbairn Dam, using Temporary Transfer from allocation holders. This water was released from Fairbairn Dam, flowing past the Ensham Mine to provide dilution of released flood water and maintain downstream EC levels consistent with conditions of the TEP.

#### **Approval process for the de-watering of the mine after the 2008 flood event**

51. The Commission has requested an account of assistance given to Ensham Resources by DERM to de-water the mine pits after the 2008 flooding, and any negotiations ;with DERM regarding further discharge to water.
52. Following the 2008 flood event, the Environmental Protection Agency ("EPA") issued an Emergency Directive on 1 February 2008 to discharge mine affected water from Pits B, C and D until 15 February 2008 in accordance with conditions, a copy of which is annexed hereto and marked 'PW-12'.
53. The EPA issued a second Emergency Directive on 15 February 2008, to discharge mine affected water from Pits B, C and D until 29 February 2008 in accordance with conditions, a copy of which is annexed hereto and marked 'PW-13'.
54. Ensham Resources made an application for a Draft TEP on 29 February 2008 to remove flood waters that entered mining pits A, B, C and D in the 2008 flood event, a copy of which is annexed hereto and marked 'PW-14'.
55. EPA approved the application for Draft TEP on 6 March 2008 (Certificate Of Approval 001-08). A copy of Certificate Of Approval 001-08 is annexed hereto and marked 'PW-15'. Amendments to this TEP were subsequently approved by DERM on 28 April 2008 and 2 June 2008. A copy of Amended Certificates Of Approval 001-08 dated 28 April 2008 is annexed hereto and marked 'PW-16'. A copy of Amended Certificate of Approval 001-08 dated 2 June 2008 is annexed hereto and marked 'PW-17'.

#### **Effects of discharge of mine waters collected in 2008 during the 2010/11 flood event**

56. The Commission has requested details of the positive and negative effects on the environment of the discharge of water from the 2008 flood out of the Mine site in 2010/11.
57. The 20,000ML of water stored at the Ensham Mine in December 2010 comprised approximately 9,000ML of water remaining from the 2008 flood inundation of the mine, plus additional water inflows from rainfall and groundwater since that time.
58. The monitoring conducted by Ensham Resources based on comparison of the monitored results with the long term background river water quality data does not indicate any environmental or other impacts, including on drinking water quality or health and safety impacts arising from the release of the stored water under the TEPs during the period December 2010 to April 2011.

#### **Current practices for managing mine affected water**

59. The Commission has requested details of any current procedures or plans for future procedures by Ensham Resources to manage water at the Mine other than by storing

it in dams or ponds, including by using desalination plants, purification procedures or any other means.

60. Ensham have examined and considered other methods of disposing of the surplus 20,000 ML of water currently stored at the mine including Reverse Osmosis desalination and use of Evaporation Ponds. Ensham considers these methods to be economically unviable for such a large volume of water, which also produce large volumes of saline brine requiring disposal.

**Practices other than water storage dams for managing mine affected water**

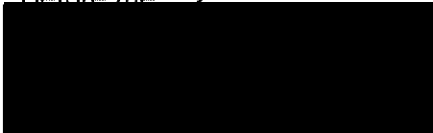
61. The Commission has requested an explanation of that which is involved in managing water at the Mine other than by storing it in dams or ponds, including by using desalination plants, purification procedures or any other means.
62. Ensham uses water around the mine for the suppression of dust associated with the conduct of the mining activities. This is achieved by the use of Water Trucks which distribute mine water by spraying it onto mine haul roads and coal stockpile areas, to limit dust generation by traffic movement. Water is also used to control dust generation throughout the coal crushing and preparation plant.
63. The water for dust suppression is taken from the site storage dams after distribution by the mine water reticulation system.
64. Approximately 1,200 ML of water is used by dust suppression at the mine each year.

I make this statement conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act 1867 (Qld).

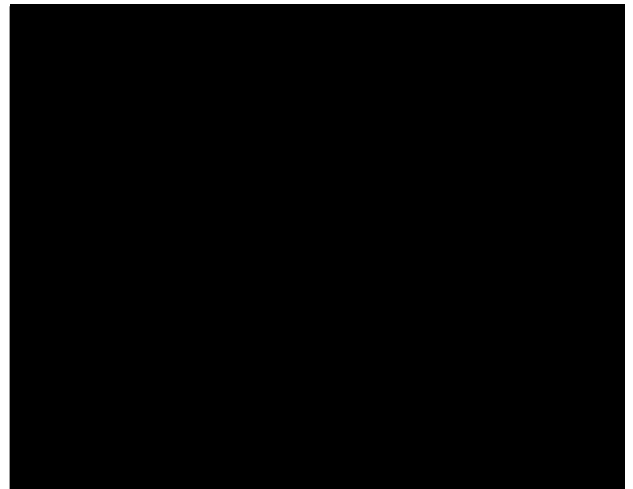
**Dated 26th September 2011**

**Signed and declared** by Pier Westerhuis at  
Brisbane in the State of Queensland  
this 26th day of September 2011

Before me:



Signature of person before whom the  
declaration is made



Signature of declarant

KELLY ALCORN - SOLICITOR

Full name and qualification of person before  
whom the declaration is made