

In the matter of the  
Commissions Of Inquiry Act 1950

Commission of Inquiry Order (No. 1) 2011

**QUEENSLAND FLOODS COMMISSION OF INQUIRY**

**Supplementary Witness Statement of Pier Westerhuis**

Chief Executive Officer

Ensham Resources Pty Ltd (ACN 011 048 678)

**QFCI**

Date:

6/10/11 JM

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Exhibit Number:

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### Table of Annexures

	Description	Date
PW-1	Statement of P Westerhuis to the Queensland Floods Commission of Inquiry	12 May 2011
PW-2	Second Statement of P Westerhuis to the Queensland Floods Commission of Inquiry	26 September 2011
PW-3	TEP Fact Sheet	undated
PW-4	Location Plan	3 October 2011

## **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:

1. I 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 of the P Westerhuis First Statement is annexed hereto and marked 'PW-1'.
2. I provided a second statement to the Commission dated 26 September 2011 ("P Westerhuis Second Statement"). The P Westerhuis Second Statement was provided in response to the Commission's Requirement dated 13 September 2011. A copy of the P Westerhuis Second Statement is annexed hereto and marked 'PW-2'.
3. The purpose of this statement is to provide to the Commission copies of the following documents that were referred to in the P Westerhuis Second Statement but not annexed to that statement:
  - (a) Annexed hereto and marked 'PW-3' is a copy of the TEP Fact Sheet referred to in paragraph 34 of the P Westerhuis Second Statement; and
  - (b) Annexed hereto and marked 'PW-4' is a copy of a location plan dated 3 October 2011 which shows the location of the infrastructure referred to in paragraph 14 of the P Westerhuis Second Statement.

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

**Dated 5th October 2011**

**Signed and declared** by Pier Westerhuis at  
Brisbane in the State of Queensland  
this 5th day of October 2011

Before me:

Signature of person before whom the  
declaration is made

Si

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

Exhibit PW-1  
to the statement of Pier  
Westerhuis

## **Statement by Pier Westerhuis**

I, Pier Westerhuis of Ensham Resources Pty Ltd (ACN 011 048 678), Level 18, AMP Place, 10 Eagle Street, Brisbane in the State of Queensland (also known as Peter Westerhuis) state as follows:

1. I am the Chief Executive Officer for Ensham Resources Pty Ltd (ACN 011 048 678) (**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.
2. I have been required to provide this statement by the Queensland Floods Commission of Inquiry (**Commission of Inquiry**) by notice dated 6 May 2011 and as attached to this statement.

### **Background**

3. 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.
4. The Ensham Mine is jointly owned by Idemitsu Australia Resources Pty Limited (ACN 010 236 272); J-Power Australia Pty Ltd (ACN 002 307 682); Bligh Coal Limited (ACN 101 186 393); and LG International (Australia) Pty Ltd (ACN 002 806 831), (the **Ensham Joint Venture Parties**).
5. 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.

### **Impact of the 2010/2011 flood events on the Ensham Mine site**

6. The Ensham Mine did not suffer any flood inundation from the Nogoa River and its tributaries during the 2010/2011 flood event as referred to by the Commission of Inquiry in its letter of 6 May 2011, other than a river crossing access which was overtopped. However, increased levels of surface water were generated on the Ensham Mine site due to heavy rain fall events prior to and during this period.
7. More generally, the extensive regional flooding impacted the Ensham Mine in the following ways:
  - (a) restricted the delivery of goods and services to the Ensham Mine and its accommodation camp for many months following the 2010/2011 flood event;
  - (b) restricted coal railings from the Ensham Mine to the Gladstone Port for a number of weeks due to rail infrastructure damage; and
  - (c) restricted access to and from the Ensham Mine and the accommodation camp for Ensham employees and contractors due to the river crossing access to the Ensham Mine being cut-off by floodwaters for approximately six weeks.

### **Impact of the January 2008 flood event on the Ensham Mine site**

8. On 19 January 2008, the Emerald area experienced a flood event which inundated parts of the Ensham Mine.
9. The floodwaters overtopped the then existing levee banks at the Ensham Mine during the January 2008 flood event in a number of places. Three mine pits were inundated, which resulted in the Ensham Mine suffering significant loss and damage including the limitation of open cut coal operations. The event resulted in a consequent loss of income as well as damage to equipment including a dragline.
10. The January 2008 flood event flooded a substantial area around the Ensham Mine in the floodplain of the Nogoa River and its tributaries.

### **Mitigation measures undertaken after the 2008 flood event**

11. On 14 April 2008, the Deputy Premier and Minister for Infrastructure and Planning declared the Ensham Mine Flood Recovery Project to be a Prescribed Project under the *State Development and Public Works Organisation Act 1971*. This declaration was to assist the Ensham Mine in minimising delays in statutory approvals required for the project and allow the reinstatement of the mine as quickly as possible.
12. 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.
13. By the 2010/2011 flood event occurred, further works were undertaken to extend the existing mine flood protection levees and increase the levee design specifications to withstand a 1,000 year Average Recurrence Interval (ARI) flood event. This upgrade in flood protection levees was approved by DERM on 24 December 2009 and by the Nogoa River Flood Plain Board on 19 August 2010.

### **Studies undertaken by Ensham Resources to assess the impact of flood mitigation measures**

14. In support of its various applications for permission to extend and modify the levees, in particular for the purposes of providing up to and including 1 in 1000 ARI flood protection levees for the Ensham Mine, the following technical reports were obtained by Ensham Resources:
  - (a) "Ensham Mine Proposed Levee Banks , January 2008 Flood Event Assessment", prepared by Kellogg Brown & Root Pty Ltd, dated 17 June 2008;
  - (b) "Ensham Central Project - Revised Mining Methodology, Flood and River Morphology Impact Assessment", prepared by Kellogg Brown & Root Pty Ltd, dated 10 August 2009;
  - (c) "Ensham Mine - Raising of original Downstream Levee Banks, Flood Assessment", prepared by Kellogg Brown & Root Pty Ltd, dated 10 August 2009;
  - (d) "Ensham Mine Flood Levees, Design Report for the proposed C Pit levee and Proposed upgrade of Existing B Pit Levee", prepared by Kellogg Brown and Root Pty Ltd Consulting Engineers and Douglas Partners, Consulting Geotechnical Engineers, dated 17 September 2009 (Technical Report);

- (e) Independent review by [REDACTED] Sun Water, of the Technical Report, dated 22 September 2009;
  - (f) Independent review by [REDACTED] Golder and Associates Pty Ltd, of the Technical Report, dated 18 September 2009.
15. Earlier studies were obtained by Ensham Resources but the most recent and relevant studies are as set out in paragraph 15.

**Formal relationships between Ensham Resources and the Central Highlands Regional Council regarding preparation and response to floods**

16. There is no formal relationship between Ensham Resources and the Central Highlands Regional Council regarding the preparation and response to floods, however from time to time Ensham Resources has had contact with the Central Highlands Regional Council on flood matters, by way of example see paragraph 18 and 19.

**Communication with the Central Highlands Local Disaster Management Group before, during or after the 2010/2011 flood events**

17. Ensham Resources participated in two teleconferences with the Central Highlands Local Disaster Management Group. Other participants included management personnel from other mine sites and representatives from a range of government agencies. Information was shared in relation to potential and actual flood impacts and what assistance may be available.
18. At this time Ensham Resources offered the use of its accommodation camps for displaced residents of Emerald and surrounding areas, including the use of helicopter transport.

12 May 2011



**CHIEF EXECUTIVE OFFICER,  
ENSHAM RESOURCES PTY LIMITED**



Exhibit PW-2  
to the statement of Pier  
Westerhuis

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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
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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

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### **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.
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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 Nogoa 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 Nogoa 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 Nogoa 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 Nogoa River under the EA in circumstances where the flow in the Nogoa 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 Nogoa River Flood Plain Board on 19 August 2010. The levee banks prevented flood inundation of the mine site from the Nogoa 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 Nogoa 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 Nogoa 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 Nogoa 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 Nogoa 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  $\mu\text{S}/\text{cm}$ , 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 Nogoa 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  $\mu\text{S}/\text{cm}$  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  $\mu\text{s}/\text{cm}$ . 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 Nogoa 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 Nogoa 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.

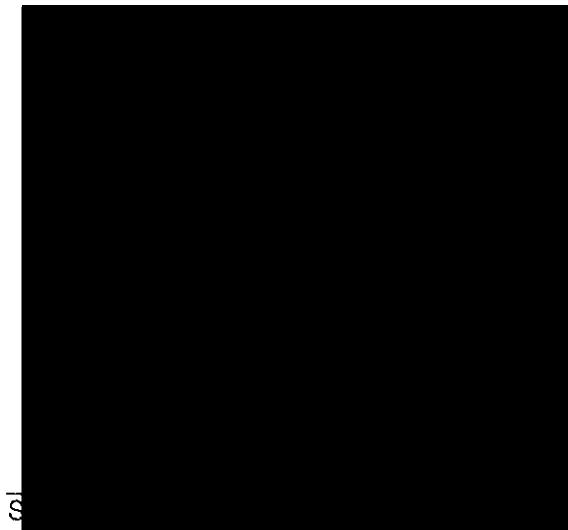
I make this statement conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act 1867 (Qld).

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:

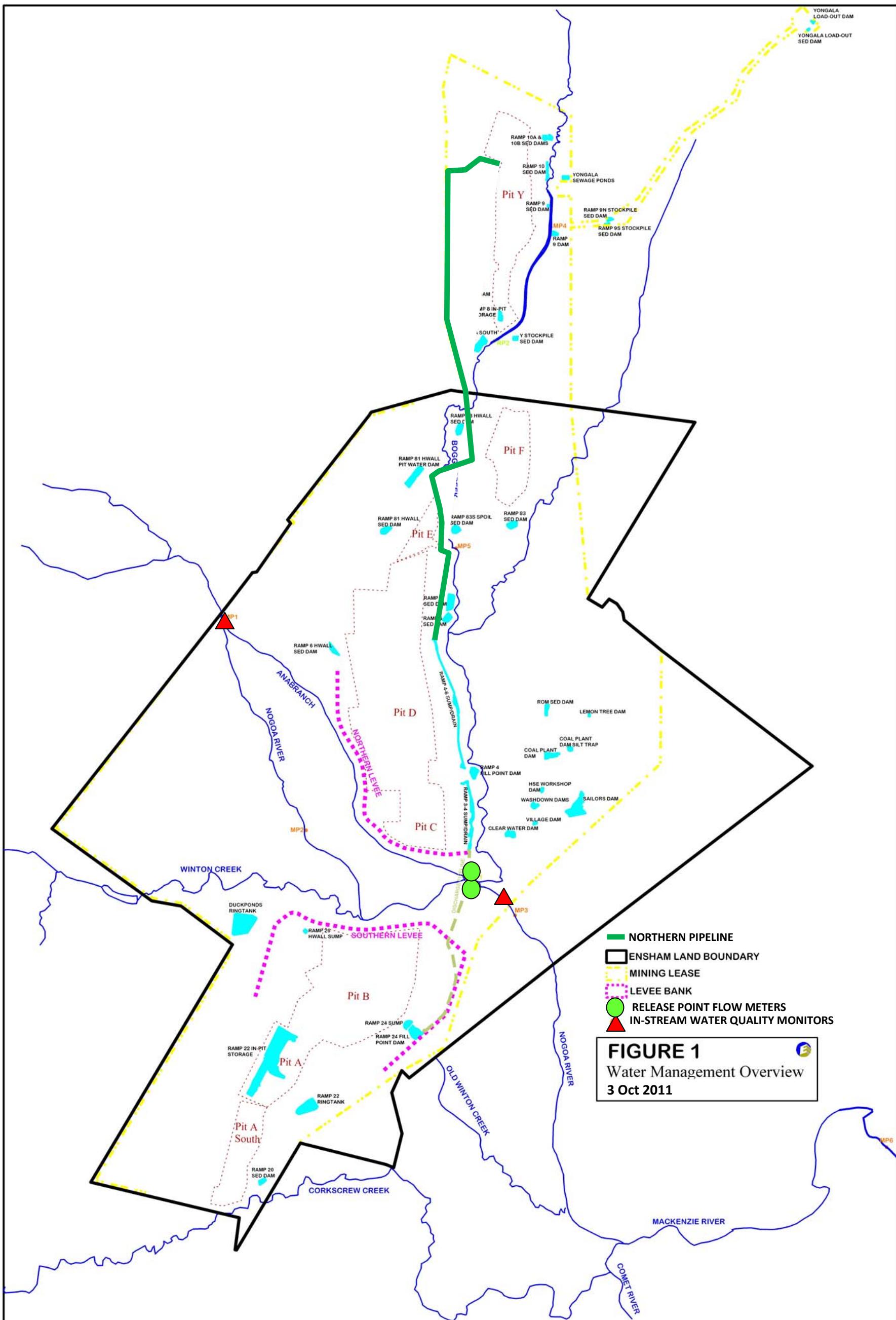
[Redacted] \_\_\_\_\_  
Signature of person before whom the declaration is made



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

**Exhibit PW-3**

**to the statement of Pier  
Westerhuis**



**Exhibit PW-4**

**to the statement of Pier  
Westerhuis**

# Fact Sheet



## TRANSITIONAL ENVIRONMENTAL PROGRAM

Recent weather events throughout Central Queensland resulted in more than 200mm of rainfall across Ensham's mine site.

While our upgraded flood protection levees performed well, this weather event caused significant volumes of water to be captured in our mining pits. As a result, we are unable to access the coal stock within these pits and Ensham's mining operations remain at a standstill.

Additionally, with the Nogoa River at a level very close to the January 2008 flood peak, it is not possible to safely transfer this water to our remaining long-term storage on-site.

As a result, we have applied to the Department of Environment and Resource Management (DERM) for a Transitional Environmental Program (TEP) to authorise the controlled release of limited volumes of water – also known as dewatering – from our mining pits.

The objective of the TEP is to ensure the mine can safely recommence operations and that dewatering activities can be conducted in a manner that does not harm the environment.

### Water quality

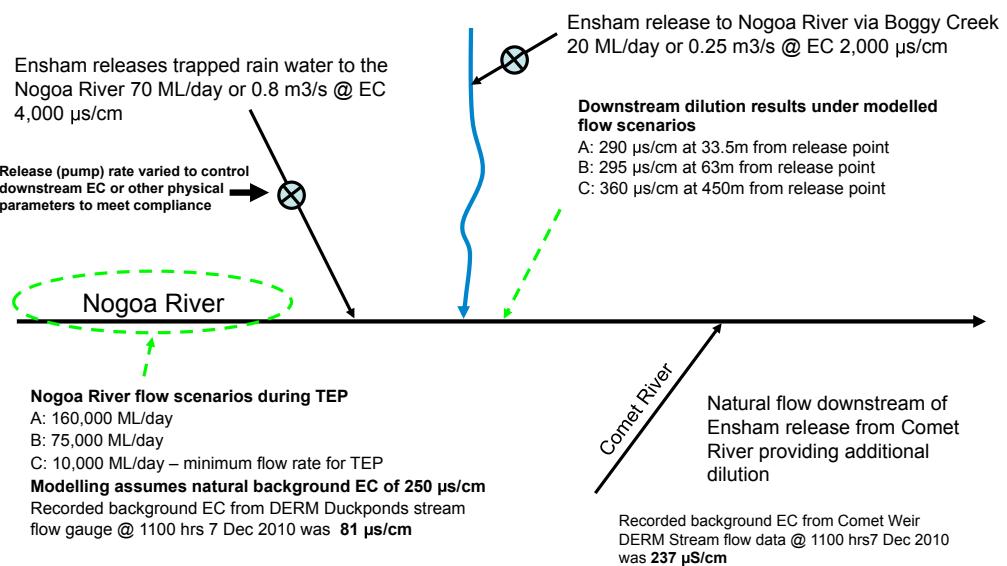
The dewatering activities proposed in the TEP will be conducted in a manner that generally meets the discharge conditions outlined in our current Environmental Authority (EA).

The water quality limits applicable to releases of water under the TEP are proposed to be consistent with the limits of Ensham Mine's current EA, with the exception of electrical conductivity and suspended solids.

While higher end of pipe limits are proposed for these parameters, a higher minimum natural flow is also proposed to ensure adequate dilution and protection of downstream water quality.

As part of our application, we have undertaken downstream water quality management modelling to ensure there will be no risk to the downstream domestic water supply and that water quality remains well within the *Australian Drinking Water Guidelines (2004)*.

### DOWNSTREAM WATER QUALITY MANAGEMENT MODEL SCHEMATIC



The diagram provides an overview of the water quality outcomes of the proposed dewatering activities.

Water quality will be closely monitored in accordance with the new DERM model water conditions, and pit water will not be released if the TEP limits will be exceeded. It is anticipated that dewatering activities will take approximately four weeks to complete.

## TEP Conditions

The conditions of this proposed TEP are significantly different to those authorised for the dewatering that took place in 2008, including:

- significant minimum flow requirement in the Nogoa River at all times, providing enhanced dilution
- dewatering to occur over a limited timeframe – up to four weeks – while the Nogoa River is experiencing high flows
- reduced release volumes of 100ML/day compared to 2000ML/day in 2008.

Importantly, the TEP will also provide for the cessation of dewatering with enough time to allow for a significant volume of natural flow to continue

through the system, ensuring there is no impact on downstream water quality.

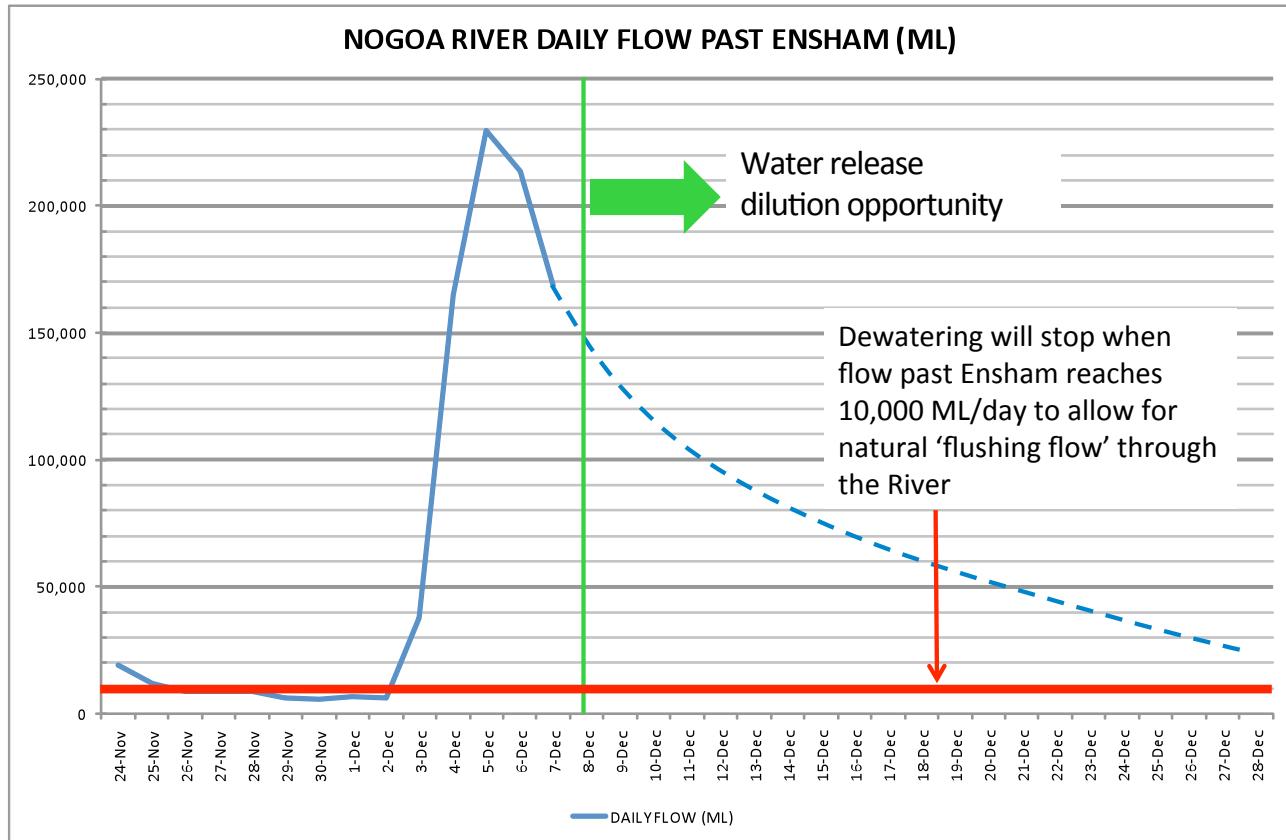
In addition, Ensham will provide all monitoring data on our website.

## Where to from here?

Ensham has commenced consultation with key stakeholders regarding our TEP application, including the Capricorn Conservation Council, Fitzroy Basin Association, Local Council's and immediate downstream landholders.

## More information

If you would like more information please contact Colin Moffatt or Nicole Buchanski at Ensham Resources.



**E n s h a m**  
R E S O U R C E S

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