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Your Reference:

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Andrew Berger / Joanna Blair
c/- Australian Government Solicitor
50 Blackall Street
BARTON ACT 2600

Dear Sirs

Montara Inquiry - PTTEPAA's well integrity and remedial system actions

1 PTTEPAA:

- (a) regrets that the Montara H1 uncontrolled release event occurred and trusts that the lessons learned from it will be a valuable contribution to the Australian Oil and Gas industry and its participants; and
- (b) acknowledges that both its own review of the incident and the Commission of Inquiry have demonstrated a number of failings on its part and with its systems which necessitate significant remedial actions being undertaken by PTTEPAA. Principal amongst these are:
 - (i) corporate reforms to ensure a more disciplined and accountable corporate structure and culture prevails at PTTEPAA including, but not limited to:
 - (A) resolving the identified problems with PTTEPAA's systems and procedures; and
 - (B) improving the capability and competency of the personnel that PTTEPAA will engage to complete the Montara Drilling Programme; and
 - (ii) well interventions to clarify the integrity of the suspension of H1 and the other Montara wells.

2 It is important for the Commission to understand the context and background of the Incident in terms of the corporate status of PTTEPAA:

- (a) PTT Exploration and Production Public Company Limited (PTTEP) acquired Coogee Resources (now PTTEPAA) in February 2009. During the period leading up to the Incident PTTEPAA was a company in the initial stages of an integration program with PTTEP. PTTEP is a member of the broader PTT Public Company Limited, Thailand's National Oil and Gas Corporation, which is a Fortune 500 Company.

- (b) following the acquisition of Coogee Resources/PTTEPAA by PTTEP a number of integration measures were designed and rolled out. It was in the immediate post merger phase that the problematic cementing work on the H1 well occurred. PTTEPAA is aware that based on PTTEP's due diligence related to the acquisition of Coogee Resources/PTTEPAA and Coogee Resources/PTTEPAA's strong track record in terms of a proven production track record in the Timor Sea, PTTEP decided that post merger the Perth based company should operate on the basis of maintaining the status quo, with only broad oversight from the international PTTEP Group. This decision was also taken in order to ensure the optimum number of personnel and infrastructure remained in Australia, consistent with PTTEP's commitment to participate positively in the Australian oil and gas industry and its long term plan to grow its Australian based operations;
 - (c) the occurrence of the Incident has strengthened PTTEP's commitment to the integration program. PTTEP is now committed to an enhanced integration program. PTTEP is dedicated to funding, resourcing, guiding, mentoring and auditing PTTEPAA to ensure that in future PTTEPAA operates at the highest level of good oilfield practice and responsible corporate citizenship; and
 - (d) the Commission can be confident that the overall PTTEPAA organisation and operations addressed by the Inquiry represent an older pre-integration organisation that has now been substantially transformed.
- 3 The comments that follow are provided without prejudice to and without a waiver of any of PTTEPAA's rights to challenge:
- (a) the Inquiry's jurisdiction to make a finding that a person or entity is guilty of an offence (including an offence created by the *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cth)* (the **Act**) or a finding tantamount to such a finding of guilt or that the Inquiry was not properly and lawfully conducted on the basis of "no blame"; or
 - (b) the Inquiry's jurisdiction to include the recommendation that PTTEPAA's licence be reviewed,
- in the Inquiry's final report.
- 4 On 23 September 2009, PTTEPAA engaged the services of AGR Petroleum Services (**AGR**) to assist it review its well operations and to update its procedures and systems. Certain actions that PTTEPAA raised with the Inquiry as being remedial actions it proposed to implement were in fact developed by PTTEPAA with the assistance of AGR.
- 5 During the Inquiry PTTEPAA advised the Inquiry that:
- (a) it had commenced undertaking certain of the Actions listed in the Action Plan referred to in 7 below; and
 - (b) one of the purposes of Mr Jacob attending the public hearings was to ensure that PTTEPAA learnt from the Inquiry and ensured that all necessary remedial actions identified during the Inquiry process were implemented by PTTEPAA following the Inquiry.
- 6 PTTEPAA acknowledges that the Commission's draft findings contain valuable information to ensure that the strongest standards and practices are applied and adhered to by participants in the Australian oil and gas industry. PTTEPAA and the Commission are completely aligned in this respect.

- 7 Following the Inquiry's public hearings PTTEPAA took further advice from AGR as to further actions PTTEPAA should take in order to properly address all of the matters of concern raised during the Inquiry. PTTEPAA is continuing to work with AGR and PTTEPAA's parent entity, PTTEP, to develop a comprehensive action plan designed to ensure a further well control incident does not occur at the Montara Development (**Action Plan**). A copy of the Action Plan is included as Annexure A. PTTEPAA will continue to take further advice from these entities.
- 8 The Action Plan focuses on the following 10 principal areas -
- (a) verify well integrity barriers on Montara wells H2, H3-ST1, H4 and GI-ST1;
 - (b) amend Drilling Management System documents (Well Construction Standard, Well Management Framework) to embed identified changes into PTTEPAA's safety management system;
 - (c) update contracts to ensure appropriate reporting to PTTEPAA and that third party personnel meet training requirements;
 - (d) update PTTEPAA investigation protocols to ensure independent review of well control incidents;
 - (e) lobby for collaborative engagement with NOPSA during an emergency;
 - (f) undertake pre-drilling scoping of other rigs in the region;
 - (g) replace contracted drilling personnel with competent employees and review PTTEPAA organisation;
 - (h) review and improve technical, training and competency matrices;
 - (i) improve corporate oversight by documenting corporate/subsidiary responsibilities and implementing technical and management system audits; and
 - (j) appoint a coordinator to ensure the Action Plan is implemented and establish a senior management committee (PTTEP and PTTEPAA) to oversee implementation.
- 9 PTTEPAA has terminated the contracts of engagement of all of its well construction managers and supervisors (except as mentioned below) and is in discussions with AGR about AGR supplying competent personnel to manage PTTEPAA's well integrity work outlined below in the short term. In order to ensure continuity of knowledge in relation to the work performed at the wells prior to the uncontrolled release;
- (a) Mr Duncan continues to be engaged but not as the Well Construction Manager. Mr Duncan has a limited advisory function and must work under direct supervision; and
 - (b) Mr Lindsay Wishart continues to be engaged but only for the purpose of assisting with the planned well intervention activities. He will not be in charge of these activities. Mr Wishart is no longer engaged as a Night Drilling Supervisor.
- PTTEPAA encloses a Drilling Team Organisation Chart (pre the Incident and post the Commission) as "EXHIBIT A", to demonstrate the significant change in personnel and structure that has occurred at PTTEPAA since the Incident.
- 10 Once the updating of PTTEPAA's documents and procedural work is underway and a staff competency matrix has been developed (all with the assistance of AGR and PTTEP), PTTEPAA will commence the process of employing or seconding from its parent PTTEP, a new drilling manager, senior drilling engineer and other drilling personnel, as required. The competence of

the personnel appointed to these positions will be verified using the new verification of competency standards that will be developed by PTTEPAA's parent entity, PTTEP, or a suitable agreed third party.

- 11 PTTEPAA is also in the process of developing a Drilling Operating Standard which will apply to its drilling supervisory personnel (drilling manager, drilling superintendent, drilling engineer, drilling supervisors). This standard will set out PTTEPAA's requirements with regard to:
- (a) time in field;
 - (b) attendance at HSE supervisors and legislation education courses;
 - (c) attendance at well control courses (PTTEPAA will lobby for these courses to be expanded to deal with well control design issues);
 - (d) attendance at management style courses;
 - (e) supervision of Job Safety Analysis (JSAs);
 - (f) conduct of audits; and
 - (g) ensure compliance with the well construction management system, WOMPs and drilling programmes.
- 12 PTEPAA is actively working with its parent entity, PTTEP, to set a realistic timeline for the sustainable implementation of the Action Plan. PTTEPAA is in the process of engaging an Implementation Manager whose primary duty will be to ensure that all the required changes are implemented as soon as possible but in a manner which makes them sustainable.
- 13 The materials developed under the Action Plan will be reviewed by personnel in the drilling, HR, HSE and logistics functions at PTTEP, to verify that they are suitable and sustainable
- 14 When PTTEPAA considers it has fully implemented the Action Plan an audit of the changes and their sustainability will be conducted, either by an independent team from PTTEP, who have not been involved in the development and implementation of the Action Plan, or an appropriate third party. All recommendations resulting from that audit will then be implemented.
- 15 PTTEPAA will not commence any new drilling work at the Montara site until it has satisfied itself, its parent entity, PTTEP, and the relevant regulators that it has made all changes necessary to prevent any further well control incidents of any nature whatsoever occurring at Montara.

Status of the other Montara Wells

- 16 The current status of the other Montara wells is as follows:
- (a) H2 remains suspended with MLS covered with a 508mm (20") trash cap at Boat Landing Level. Below the trash cap the 340mm (13 3/8") Pressure Containing Corrosion Cap is in place. There is a cement plug set from 160m back to 115m within the 244mm (9 5/8") casing;
 - (b) H3 ST-1 remains suspended with MLS covered with a 508mm (20") trash cap at Boat Landing Level. Below the trash cap the 340mm (13 3/8") Pressure Containing Corrosion Cap is in place. There is a cement plug set from 160m back to 115m within the 244mm (9 5/8") casing;
 - (c) H4 has had the 508mm (20") conductor tied back and cold cut approx 1m above the Mezzanine Deck. The 340mm (13 3/8") Pressure Containing Corrosion Cap is in place.

There is a cement plug set from 160m back to 115m within the 244mm (9 5/8") casing; and

- (i) GI ST-1 has had the 508mm (20") conductor tied back with a 610mm (24") section in it. Above the 610mm (24") section the 508mm (20") conductor has been cold cut 4.5m above Helideck. The top of the conductor is within the debris of the drill floor, however from previous inspections the conductor does not appear to have made contact with collapsed cantilever. The well is suspended with a 244mm (9 5/8") Pressure Containing Corrosion Cap on the 244mm (9 5/8") MLS and a 340mm (13 3/8") Pressure Containing Corrosion Cap on the 340mm (13 3/8") MLS.

Remedial Actions

17 Remedial actions that PTTEPAA has taken and is continuing to take to ensure the integrity of the other Montara Development WHP wells, including the suspension of the H1-ST1 Well, are as follows:

- (a) on 30 March 2010, PTTEPAA engaged AGR to:
 - (i) review the status of the other wells with regards to compliance with PTTEPAA's drilling programs (**DPs**), well construction standards (**WCS**) and good oilfield practice (**GAFP**);
 - (ii) review the operations conducted between January and April 2009 on those other wells with regards to suspension barriers put in place and the verification/testing of those barriers; and
 - (iii) provide recommendations for future well intervention on those other wells with regard to well control and safety;

(Other Wells Review).

- (b) AGR provided its report on the Other Wells Review on about 1 April 2010 (**AGR Other Wells Review Report**). A copy of the report is attached and marked "EXHIBIT B". In summary, the report:
 - (i) identified a number of areas where the other wells did not comply with the DP, WCS and GAFP;
 - (ii) noted that intervention work could not be done without first confirming that the current barriers in place are effective and that this would only be possible when the wells could be entered from the well head platform and suitable pressure containing equipment installed; and
 - (iii) noted that if the barriers in place can be proven then standard intervention work - covered by PTTEPAA's WCS- could be undertaken. If the barriers could not be proven or had failed, remedial work would be required to ensure the wells were suitable for long term suspension;
- (c) PTTEPAA also engaged AGR to conduct a review of the operations carried out between November 2009 and January 2010 with regards to the capping of the H1 Well and the abandonment of the relief well and whether such operations complied with the H1-ST1 Suspension & RW1 Abandonment Program and the H1-ST1 Annulus Capping Program (**Programs**) and WCS (**H1 Well Review**);

- (d) AGR provided its report on the H1 Well Review on 29 April 2010 (**AGR H1 Well Review Report**). In summary, the report identified a number of areas where the barriers in place with respect to the H1 Well did not comply with the Programs and WCS. A copy of this Report is included as “EXHIBIT C”;
- (e) On 3 May 2010 PTTEPAA wrote to the NTDOR and NOPSAs outlining the results from the AGR Other Wells Review Report and the proposed well barrier verification operations. A copy of the letter is attached and marked “EXHIBIT D”;
- (f) PTTEPAA is in the process of preparing a Well Barrier Confirmation Program to cover the proposed boarding of the WHP and the testing of Other Wells described below and the possible testing of H1 as a result of the H1 Well Review and the AGR H1 Well Review Report:
- (i) PTTEPAA plans to board the WHP as soon as practicable for the purposes of carrying out a program to test the suspension barriers in the Montara GI-ST1, H2, H3, H4 wells and the possible testing of the barriers in H1-ST1;
- (ii) the proposed verification process for the Montara wells GI-ST1, H2, H3-ST1, H4 is as follows:
- (A) install a PCCC running tool with a hydraulic probe onto each of the 13 3/8” PCCCs installed on the other wells;
- (B) pressure test below the 13 3/8” PCCC to confirm the integrity of:
- the 13 3/8” PCCC (on H2, H3-ST1, H4 and GI-ST1);
 - the shallow set cement plugs (on H2, H3-ST1 and H4);
 - the 9 5/8” casing (on GI ST1);
 - inflow test the 9 5/8” PCCC on GI ST1; and
 - the cement in the 9 5/8” x 13 3/8” annulus (on H2, H3-ST1, H4 and GI-ST1);
- (iii) the proposed verification process for H1-ST1 is as follows:
- visual inspection to confirm no changes and gas test in the conductor;
 - R/U test line to PCCC
 - pressure test into the PCCC to confirm the integrity of the floats, 13 3/8” annulus and the upper EZSV bridge plugs at 1800m in the 9 5/8” annulus.
- (iv) PTTEPAA is developing contingency plans for actions to be taken in the event that a leak is identified during the implementation of the testing program;
- (g) The testing of the well barriers will be conducted in accordance with the Montara WHP Well Barrier Confirmation Safety Case Revision (TM-CR-GEN-R-090-00024) (**Well Barrier SCR**). The safety case revision has been submitted to NOPSAs and NOPSAs has responded with its initial comments that PTTEPAA is currently assessing. PTTEPAA has also submitted a new WOMP to the NTDOR. The testing work will not be carried out without the prior approval of NTDOR and NOPSAs.

Concluding Comments

18 PTTEPAA is totally committed to;

- (a) the reforms outlined in this letter and the Action Plan to ensure no repeat of the Incident occurs;
- (b) contributing to the ongoing improvement of a safe and responsible operating environment for the Australian oil and gas industry; and
- (c) good corporate citizenship in the conduct of all of its operations.

In view of the above PTTEPAA respectfully requests the Commission to review and re-assess the need for and appropriateness of a recommendation to the Minister to review the Montara production licences in the final Report.

Yours faithfully



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CEO

PTTEP Australasia (Ashmore Cartier) Pty Ltd