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Registry:	Superannuation Fund v BHP Group Ltd VICTORIA REGISTRY - FEDERAL COURT OF AUSTRALIA	



Sia Lagos

Registrar

#### **Important Information**

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## <u>Amended</u> Defence to the Second <u>Third</u> Further Amended Consolidated Statement of Claim

No. VID 649 of 2018

Federal Court of Australia District Registry: Victoria Division: General

# VINCE IMPIOMBATO AND KLEMWEB NOMINEES PTY LTD (AS TRUSTEE FOR THE KLEMWEB SUPERANNUATION FUND)

Joint Applicants

BHP GROUP LIMITED (ACN 004 028 077)

Respondent

In response to the Second Third Further Amended Consolidated Statement of Claim dated 16 October 2024 25 March 2025 (**23FACSOC**), the Respondent pleads as follows.

<u>Amendments in double underline reflect those amendments made in the Amended Defence</u> to the 3FACSOC, which was filed on 27 June 2025 pursuant to leave granted on 24 June 2025.

Filed on behalf of (name & role of party)		BHP GROUP LIMITED (ACN 004 028 077), Respondent		
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## NOTE

- A. Unless otherwise stated, terms defined in the <u>23</u>FACSOC have the same meanings when used in this <u>Amended</u> Defence to the <u>23</u>FACSOC.
- B. Headings and definitions are adopted from the <u>23</u>FACSOC for ease of reference and are not treated as part of the pleadings.
- C. For the avoidance of doubt, the Respondent does not plead to the headings or definitions employed by the Joint Applicants and in particular does not plead to (and does not admit) headings or definitions which incorporate characterisations of conduct.
- D. In this <u>Amended</u> Defence, where the Respondent pleads that it "*Does not know and therefore does not admit*" an allegation:
  - (1) "due to the unavailability of BHP Brasil representatives", it does so on the basis that it does not have access to instructions from Randolph, Wilson, Zweig, Beck, Fernandes, Ferreira, Cardoso, or Ottaviano, due to ongoing criminal appeal proceedings in Brazil, and/or continuing exposure to potential criminal liability in Brazil.
  - (2) "due to it concerning a Samarco management matter", it does so on the basis that the allegation concerns a matter which was the responsibility of the management of Samarco Mineração S.A. (Samarco), and is not within the knowledge of the Respondent, in the circumstances referred to at paragraph 48(c) below.

## A. THE JOINT APPLICANTS AND GROUP MEMBERS

- 1. It does not plead to paragraph 1 as it makes no allegation against the Respondent.
- 2. It admits subparagraph 2(a), but does not plead to subparagraph 2(b) as it makes no allegation against the Respondent.
- 3. As to paragraph 3, it:
  - (a) as to subparagraph 3(a), says that the entity formerly known as BHP Group Plc and BHP Billiton Plc, referred to in subparagraph 3(a)(ii), is now known as BHP Group (UK) Ltd, and otherwise does not plead to the subparagraph as it makes no material allegation against the Respondent;
  - (b) as to subparagraph 3(b), does not plead to the subparagraph as it makes no material allegation against the Respondent; and
  - (c) as to subparagraph 3(c), denies that the Joint Applicants or Group Members have suffered loss or damage as pleaded in the subparagraph.
- 4. It does not know and therefore does not admit paragraph 4.

## B. BHP LTD

5. It admits paragraph 5.

## C. BHP LTD'S CONTINUOUS DISCLOSURE OBLIGATIONS

- 6. It admits paragraph 6.
- 7. It admits paragraph 7.

## D. BHP PLC

- 8. As to paragraph 8, it:
  - (a) says that at all material times up to around 22 November 2018, BHP LSE
     Shares were traded on the LSE under the designation "BLT";
  - (b) says that at all material times up to around 22 November 2018, BHP JSE Shares were traded on the JSE under the designation "BIL"; and
  - (c) otherwise admits the paragraph.

## E. BHP GROUP

## E.1 DLC Structure and Management

- 9. As to paragraph 9, it:
  - (a) says that BHP Ltd and BHP Plc operated under the DLC Structure at all material times from 29 June 2001 to 28 January 2022; and
  - (b) otherwise admits the paragraph.
- 10. As to paragraph 10, it says that:
  - (a) as to subparagraphs 10(a) and 10(b), it admits that at all material times from 29 June 2001 to 28 January 2022, BHP Ltd and BHP PIc operated with identical boards of directors which comprised the same individuals and a single unified management team, including the BHP GMC (as defined);
  - (b) as to subparagraph 10(c), it:
    - i. admits that at all material times from 29 June 2001 to 28 January 2022, clause 3.1(a) of the DLC Structure Sharing Agreement provided that where the 'Equalisation Ratio' (as defined in that agreement) was 1:1, a holder of one 'BHP Ordinary Share' and a holder of one 'Billiton Ordinary Share' shall, as far as practicable:
      - A. receive equivalent economic returns; and
      - B. enjoy equivalent rights as to voting in relation to 'Joint Electorate Actions' (as defined in that agreement);
    - ii. otherwise denies the subparagraph; and
  - (c) otherwise admits the paragraph.

## E.2 Persons alleged to be officers of BHP Ltd

- 11. As to paragraph 11, it:
  - (a) admits subparagraph 11(a);
  - (b) admits subparagraph 11(b);
  - (c) as to subparagraph 11(c):
    - admits that Randolph was an executive officer of the Respondent for the purposes of ASX Listing Rule 19.12 (as in force during the Relevant Period) at all times from the start of the Relevant Period up to but excluding 1 May 2013; and

- ii. admits that Randolph was an officer of the Respondent for the purposes of ASX Listing Rule 19.12 at all times from 1 May 2013 to 10 May 2013.
- 12. As to paragraph 12, it:
  - (a) admits subparagraph 12(a); and
  - (b) denies subparagraph 12(b).
- 13. As to paragraph 13, it:
  - (a) admits subparagraph 13(a);
  - (b) admits subparagraph 13(b); and
  - (c) as to subparagraph 13(c):
    - admits that Wilson was an officer of the Respondent for the purposes of ASX Listing Rule 19.12 at all times from 10 May 2013 to the end of the Relevant Period; and
    - ii. otherwise denies the subparagraph.
- 14. As to paragraph 14, it:
  - (a) admits subparagraph 14(a); and
  - (b) denies subparagraph 14(b).
- 15. As to paragraph 15, it:
  - (a) admits subparagraph 15(a); and
  - (b) denies subparagraph 15(b).
- 16. As to paragraph 16, it:
  - (a) admits subparagraph 16(a);
  - (b) admits subparagraph 16(aa) and says further that Fernandes remained, as he had been from about December 2012, an alternate member of the Samarco board of directors; and
  - (c) denies subparagraph 16(b).
- 16A. As to paragraph 16A, it:
  - (a) says, as to subparagraph (a), that:
    - i. during the Relevant Period, Ottaviano was the Vice President Planning,
       Iron Ore from the start of the Relevant Period until about September

2014 and then the Vice President of Strategy, Development & Planning, Iron Ore until the end of the Relevant Period;

- ii. it otherwise denies the subparagraph; and
- (b) denies subparagraph 16A(b).
- 16B. As to paragraph 16B, it:
  - (a) admits subparagraph 16B(a); and
  - (b) denies subparagraph 16B(b).
- 16C. As to paragraph 16C, it:
  - (a) admits subparagraph 16C(a); and
  - (b) denies subparagraph 16C(b).
- 17. It admits paragraph 17.
- 18. As to paragraph 18, it:
  - (a) admits the paragraph in respect of the Relevant Period insofar as it applies to:
    - i. Randolph from 8 August 2012 to 10 May 2013; and
    - ii. Wilson from 10 May 2013 to 9 November 2015;
  - (b) says further that the definition of "aware" under ASX Listing Rule 19.12:
    - i. operates in respect of information which an officer "has, or ought reasonably to have come into possession of the information in the course of the performance of their duties as an officer of that entity"; and
    - ii. only applies to information which the officer "has", or which the company has, and which thereby ought reasonably to have come into the possession of the officer, within the terms of ASX Listing Rule 19.12; and
  - (c) otherwise denies the paragraph.

## F. BHP'S SAMARCO ASSET

- 19. It admits paragraph 19.
- 20. It admits paragraph 20 and says further that while, during the Relevant Period, the Respondent had a business unit with primary responsibility for the Respondent's iron ore business, that business unit did not have sole responsibility for all of the activities or functions of the Respondent's iron ore business.

- 21. As to paragraph 21, it:
  - (a) says that, during the Relevant Period, the Respondent's iron ore assets comprised:
    - the "Western Australia Iron Ore" or "WAIO" business, which included various mines, transport and operation assets located in Western Australia; and
    - a 50% ownership share in Samarco, owned via a subsidiary within the BHP Ltd corporate group, BHP Brasil; and

Annexure A to this <u>Amended</u> Defence shows the relevant corporate structure for the holding of BHP Brasil's interest in Samarco during the Relevant Period.

- (b) otherwise admits the paragraph.
- 22. As to paragraph 22, it:
  - (a) as to subparagraph 22(a):
    - i. refers to paragraph 21(a)(ii);
    - ii. says that in 1984, the Respondent acquired Utah Marcona Corp. and as a result of that acquisition, acquired an indirect 49% share in Samarco;
    - iii. says further that, from 1 July 2013, Samarco was an equity accounted investment in the BHP consolidated financial statements; and

## Particulars

FY2014 Annual Report.

FY2015 Annual Report.

- iv. otherwise denies the subparagraph; and
- (b) as to subparagraph 22(b):
  - i. admits that in its 2014 annual report, BHP described its interest in Samarco as one of its 19 "core assets"; and
  - ii. otherwise denies subparagraph 22(b); and
- (c) denies subparagraph 22(c).
- 23. It admits paragraph 23.

- 24. It admits paragraph 24.
- 25. As to paragraph 25, it:
  - (a) as to subparagraphs 25(a), 25(aa), 25(ab), 25(b) and 25(c), says that:
    - i. at times there were unequal numbers of Samarco board members appointed by Vale and BHP Brasil;
    - ii. alternate members did not have the right to vote at meetings when their respective serving members were present; and
    - iii. otherwise admits the subparagraphs; and
  - (b) as to subparagraphs 25(d) and 25(e), says that:
    - it admits that Samarco's board of directors had responsibility for setting company strategy, overseeing company performance and overseeing management;
    - ii. responsibility for managing Samarco's operations (including the Fundão Dam) rested with Samarco's executive functions as assisted and advised by its management team, including the geotechnical department (hereafter referred to as "Samarco management"); and

Samarco's most senior executive function is referred to as the "Executive Board" and is comprised of Samarco employees.

- iii. it otherwise denies the subparagraphs.
- 26. As to paragraph 26, it:
  - (a) says that:
    - i. it admits subparagraph 26(a);
    - as to subparagraph 26(b), Ashby was a serving member of the Samarco board of directors until about April 2012;
    - iii. it admits subparagraph 26(c);
    - iv. as to subparagraph 26(d), Zweig was an alternate member of the Samarco board of directors from about December 2012;
    - v. it admits subparagraphs 26(e)-(g);

- vi. as to subparagraph 26(h), Campbell was an alternate member of the Samarco board of directors between about December 2010 and April 2012, but stepped down from the role around December 2011;
- vii. as to subparagraph 26(i), Slaven was an alternate member of the Samarco board of directors between about November 2008 and December 2010;
- viii. as to subparagraph 26(j), Nogueira was an alternate member of the Samarco board of directors from about July 2009 to about April 2012;
- (b) says that each of the persons referred to in subparagraphs 26(a) and 26(c)-(g)
   (the BHP Brasil Appointees) was appointed to the Samarco board of directors
   by BHP Brasil during part of the Relevant Period;
- (c) says that the appointment of the BHP Brasil Appointees to the Samarco board of directors occurred pursuant to a Shareholders' Agreement entered into between BHP Brasil and Vale and the By-Laws of Samarco; and

Samarco Shareholders' Agreement between BHP Brasil Ltda and S.A. Mineração da Trindade – SAMITRI dated 29 June 2000 and the By-Laws of Samarco.

- (d) otherwise admits the paragraph.
- 27. As to paragraph 27, it:
  - (a) says that during the Relevant Period, certain committees provided advice or information directly to Samarco's board of directors; and
  - (b) otherwise admits the paragraph.
- 28. As to paragraph 28, it:
  - (a) says that the committees referred to in the paragraph had the roles pleaded (among other roles);
  - (b) says further that the F&S Committee, Operations Committee and P4P Project
     Committee were committees of the Samarco board of directors; and
  - (c) otherwise does not know and therefore does not admit the paragraph, due to the unavailability of BHP Brasil representatives.

- 28A. As to paragraph 28A, it:
  - (a) says, as to subparagraph 28A(a):
    - that, pursuant to the terms of the Shareholders Agreement, the Executive Board was an independent executive board elected by Samarco's board of directors, and members of the Executive Board were required to not have any employment or professional relations with either of BHP Brasil, Vale or Affiliates (as that term is defined in the Shareholders Agreement);
    - ii. that the Samarco executive board reported to the CEO of Samarco; and
    - iii. it otherwise admits the subparagraph; and
  - (b) <u>admits subparagraph 28A(aa);</u>
  - (c) says, as to subparagraph 28A(b), that it refers to paragraph 25 and subparagraph 28A(a)(ii) above, and otherwise denies subparagraph 28A(b); and
  - (d) <u>admits subparagraph 28A(c)</u>.
- 28B. As to paragraph 28B, it:
  - (a) admits that:
    - i. Samarco's management of the tailings storage facility concerns a Samarco management matter;
    - ii. the Samarco Dams Committee (or Comitê de Barragens da Samarco or CBS) was a committee of the Executive Board and assisted the Executive Board in discharging its responsibilities in relation to the Fundão Dam;
    - iii. the geotechnical department at Samarco was referred to as the Gerência Geral de Geotecnia (or GGGT) and reported to the Executive Board; and
    - iv. the Gerência de Geotecnia de Barragens (or GGB) was a subdepartment of the GGGT; and
  - (b) otherwise denies the paragraph.

GGGT Proposal on Samarco's Dams Management Governance, BHP00017051 28C. As to paragraph 28C, it:

- (a) admits subparagraph 28C(a) and says further that:
  - i. during the Relevant Period, the ITRB provided advice or information directly to Samarco management, including the "Dams Committee" (a committee of the Executive Board) and Samarco's geotechnical department;
  - ii. the ITRB was composed of experienced geotechnical consultants appointed by Samarco management to provide independent technical review of tailings storage facilities, including their design, operation, monitoring and maintenance and closure;

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ITRB Report No.3 to Samarco management, October 2011, p 4.

- (b) admits subparagraph 28C(b);
- (c) as to subparagraph 28C(c), it admits that the ITRB:
  - was one of the mechanisms used by Samarco to seek to mitigate the risk of failure of Samarco's tailings storage facilities including the Fundão Dam; and
  - ii. was described as a "critical control" in respect of that risk in certain BHP risk documentation throughout 2012 to 2015; and
- (d) otherwise denies the paragraph.
- 29. As to paragraph 29, it:
  - (a) admits that, from July 2011, Ferreira regularly attended meetings of the Operations Committee (a committee of the Samarco board of directors);
  - (b) says further that Ferreira was a contractor of BHP Brasil, and worked in the Iron
     Ore Brazil business unit; and
  - (c) otherwise denies the paragraph.
- 30. As to paragraph 30, it:
  - (a) admits that, from at least 2012:
    - i. in respect of the Operations Committee (a committee of the Samarco board of directors):

- A. Fonseca and Nogueira attended at least two meetings, held in March and November 2012; and
- B. Fernandes and Ferreira regularly attended meetings from March 2012;
- ii. in respect of the F&S Committee (a committee of the Samarco board of directors):
  - A. Nogueira attended at least one meeting, held in March 2012;
  - B. Fernandes regularly attended meetings from March 2012; and
  - C. Cardoso regularly attended meetings from August 2014;
- iii. in respect of the P4P Steering Committee (a committee of the Samarco board of directors), until its disbandment in 2014:
  - A. Nogueira attended at least two meetings, held in January and March 2012;
  - B. Ferreira regularly attended meetings from January 2012; and
  - C. Fernandes regularly attended meetings from May 2012;
- iv. in respect of the Remuneration Committee (a committee of the Samarco board of directors):
  - A. Randolph regularly attended meetings until February 2013; and
  - B. Wilson regularly attended meetings from April 2013;
- v. in respect of the Audit Subcommittee (a subcommittee of the Samarco board of directors), which became the Audit Committee (a committee of the Samarco board of directors) after June 2014:
  - A. Lynch regularly attended meetings from March 2012; and
  - B. Cardoso regularly attended meetings from November 2012;
- vi. in respect of the Performance Management Subcommittee (a subcommittee of the Samarco board of directors):
  - A. Fonseca regularly attended meetings until May 2012;
  - B. Ferreira regularly attended meetings from February 2012; and
  - C. Fernandes and Cardoso regularly attended meetings from May 2012;

- vii. in respect of the Capital Projects Subcommittee (a subcommittee of the Samarco board of directors):
  - A. Fonseca regularly attended meetings until May 2012;
  - B. Ferreira regularly attended meetings from February 2012; and
  - C. Fernandes and Cardoso regularly attended meetings from May 2012;
- viii. in respect of the Risks Subcommittee (a subcommittee of the Samarco board of directors), from its establishment in around June 2014:
  - A. Fernandes, Ferreira, Cardoso and Corless regularly attended meetings; and
  - B. Lynch and Victor did not attend meetings;
- in respect of the Samarco Programa de Projetos Estruturantes (Structural Projects Program) (PPE), from its establishment in around November 2014:
  - Fernandes attended at least one meeting, held in November 2014; and
  - B. Ferreira and Jacques regularly attended meetings; and
- x. Ferreira attended at least twofour closure meetings of the ITRB, held in April 2013<u>and</u> February<u>July and November</u> 2014;
- (b) refers to subparagraph 29(b) above and says further that each of the below individuals worked in the Iron Ore Brazil business unit:
  - Fernandes was an employee of BHP Billiton Metais S/A during the Relevant Period until 1 September 2014 and of BHP Brasil from 1 September 2014;
  - ii. Cardoso was an employee of BHP Billiton Metais S/A during the Relevant Period and held the role of Finance Manager for BHP Brasil from around the start of the Relevant Period;
  - iii. Nogueira was an employee of BHP Billiton Metais S/A;
  - iv. Fonseca was an employee of BHP Billiton Metais S/A and was the Manager of Iron Ore Operations for BHP Brasil until around June 2012;
  - v. Jacques was a contractor engineer for BHP Brasil during the Relevant Period; and

- (c) otherwise denies the paragraph.
- 30A. As to paragraph 30A, subject to receiving particulars clarifying the allegation, it admits that, during the Relevant Period, various persons employed by BHP in the Iron Ore Business reported directly to one or more of the persons referred to in paragraphs 11 to 16C of the <u>23</u>FACSOC.

## FA. BHP RISK AND AUDIT FUNCTIONS

## FA.1 Audit functions

- 30B. It admits paragraph 30B.
- 30C. It admits paragraph 30C.
- 30D. It admits paragraph 30D.
- 30E. As to paragraph 30E, it:
  - (a) admits subparagraph (a); and
  - (b) <u>as to denies</u> subparagraph (b), it:
    - i. <u>admits that each six months formal reports containing summary</u> information about risk and audits were produced by the RAA audit function and sent to the BHP GMC for information purposes; and
    - ii. otherwise denies the subparagraph.

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Beaven Statement at paragraph 24, 30, 50.

## FA.2 Risk functions

- 30F. It admits paragraph 30F.
- 30G. It admits paragraph 30G.

## FB. PANEL REPORT

- 30H. As to paragraph 30H it:
  - (c) refers to and repeats paragraph 64(a) and 64(b) below; and
  - (d) otherwise admits the paragraph.
- 30I. As to paragraph 30I, it:
  - (a) says that BHP Brasil, Vale and Samarco jointly retained Cleary, Gottlieb, Steen
     & Hamilton (CGSH) to investigate the causes of the collapse of the Fundão
     Dam, and CGSH engaged the Panel; and

- (b) otherwise admits the paragraph.
- 30J. As to paragraph 30J, it:
  - (a) refers to and repeats paragraph 30K below;
  - (b) says that the Panel Report was made public on 29 August 2016; and
  - (c) otherwise admits the paragraph.
- 30K. As to paragraph 30K, it:
  - (a) admits that the Panel Report contains conclusions reached by the Panel as to the immediate causes of the failure of the Fundão Dam, including the conclusions alleged at paragraph 30K(b) of the 3FACSOC;
  - (b) says that the conclusions reached by the Panel as to the immediate causes of the failure of the Fundão Dam represented the opinion of Panel members;
  - (c) says further that those conclusions:
    - were reasonable conclusions to draw on the basis of the investigation and analysis undertaken by Panel members following the collapse of the Fundão Dam; and
    - were reached on the basis of analysis which did not exist during the Relevant Period;

The conclusions reached by the Panel as to the immediate causes of the failure of the Fundão Dam were determined by reference to knowledge that the Dam had collapsed.

The conclusions reached by the Panel regarding the cause of the Fundão Dam failure would not have been reached prior to the failure of the Fundão Dam, for <del>at least</del> the following reasons:

(1) For its purposes of investigating the failure of the Fundão Dam, the Panel carried out (i) a comprehensive assessment of the history of the Fundão Dam and its construction; (ii) advanced laboratory testing, consisting of simple shear tests, specialised triaxial tests, Bender element tests and special efforts to obtain undisturbed samples of the slimes; (iii) additional field testing to measure shear wave velocity and shear strength; (iv) sophisticated computer modelling using FLAC with a NorSand material model; and (v) a detailed slimes mass balance analysis. The methods adopted and analyses described by the Panel in the Panel Report and its Appendices were significantly more detailed and sophisticated than would typically be conducted or was required for a safety review of an operating tailings dam, including for the purposes of the periodic reviews carried out by the ITRB and the reviews such as those carried out by independent geotechnical consultants and geotechnical staff engaged to advise Samarco in relation to the Fundão Dam and its stability.

- (2) The Panel created a bespoke computer model with which it assessed the stability of the Fundão Dam (the "Model"). The Panel assembled the Model utilising the information available from before the failure of the Fundão Dam, and additional information collected or determined through extensive post-collapse field and laboratory testing. The Model assembled using that data indicated that the Fundão Dam was stable with a peak instability ratio of 0.5, which represents a minimum factor of safety of 2 against a stability failure. As stated by the Panel, the Model developed on the basis of the contemporaneous data and subsequent field and laboratory testing "would not bring the stress state of the tailings to an unstable condition, and would not account for the flow failure observed on November 5, 2015.": Panel Report, Appendix I, page I-27.
- (3) The Panel utilised assumptions or parameters which were adopted by the Panel on the basis of hindsight knowledge that the failure of the Fundão Dam had occurred, and were beyond the range of assumptions and parameters which would have been selected without that hindsight knowledge. In particular, following the steps set out at particular subparagraph (2) above, the Panel adjusted the Model to reflect assumptions that (i) regions the Panel previously designated as isolated slimes were actually composed of interbedded slimes, and where continuous slimes layers could feasibly

exist, they did; and (ii) the strength of those interbedded slimes layers was lower than the peak strength of predominantly slimes layers adopted by the Panel based upon the tests and field work it carried out.

- (4) Even with those assumptions and parameters, the Model indicated that the Fundão Dam would not be expected to collapse. The Panel "force[d]" the Model to indicate a collapse would occur by imposing additional displacements of the top of the slimes layer: Panel Report, Appendix I, page I-36. This imposition of additional displacement of the slimes layer was an input to the Model, rather than a process predicted by the Model.
- (5) The forced displacement of the slimes layer in the Model was explained by the Panel as a mechanism described in the Panel Report as lateral extrusion of slimes. The potential for lateral extrusion of slimes to occur, and to trigger a liquefaction failure of a tailings dam, was not well recognised prior to the failure of the Fundão Dam and the Panel's work.
- (d) says further that the Panel did not make factual findings;
- (e) refers to 32, 33, 35, 36, 38B(b), 39(a), 39A, 40(a), (aa) (ab), (b), (d), (ea), (f),
   (g), 41(aa), (b), (c), 42(a), (b), (c), (da), (e), (i), (j), 43(b), and (fb) <u>BHP's</u>
   <u>responsive pleas to each of the "further matters" referenced in paragraph</u>
   <u>30K(b)(iii) of the 3FACSOC</u>; and
- (f) otherwise denies the paragraph.

## G. THE FUNDÃO DAM

#### G.1 Design, location and construction of the Fundão Dam

- 31. As to paragraph 31, it:
  - (a) admits that, in October 2005, BHP announced the approval of the Third Pellet Plant Project at the Germano Complex, which would increase Samarco's annual iron ore pellet production capacity by 7.6 million tonnes to 21.6 million tonnes per annum (assuming production at full capacity or 100% basis);
  - (b) says further that neither the Respondent nor BHP Plc invested their own funds in the Third Pellet Plant Project; and

- (c) otherwise denies the paragraph.
- 32. It admits paragraph 32.
- 33. It admits paragraph 33.
- 34. It admits paragraph 34.
- 35. It admits paragraph 35.
- 36. It admits paragraph 36.
- 37. It denies paragraph 37.
- 38. It admits paragraph 38.
- 38A. As to paragraph 38A, it:
  - (a) admits subparagraph 38A(a);
  - (b) says, as to subparagraph 38A(b), that:
    - i. it admits that the fourth pellet plant commenced producing iron ore pellets in the March quarter of 2014;

ii.	following the March quarter of 2014, the total production volumes of iron
	ore by Samarco were as follows:

Quarter Ended	Iron ore production (kt)
March 2014	2,281
June 2014	3,068
September 2014	3,426
December 2014	3,764
March 2015	3,586
June 2015	3,737
September 2015	3,739
December 2015	1,665

BHP Billiton Operational Review for the Year Ended 30 June 2014 (page 18).

BHP Billiton Operational Review for the Year Ended 30 June 2015 (page 13).

BHP Billiton Operational Review for the Year Ended 30 June 2016 (page 12).

iii. it otherwise denies the subparagraph.

## G.1A Design and safety requirements and storage capacity

- 38B. As to paragraph 38B, it:
  - (a) says, as to subparagraph 38B(b) that it;
    - admits the crest of the starter dam was to be raised to an elevation of 830 metres;
    - ii. admits that the Operation Manual dated 28 June 2007 recorded that the crest of Dike 1 was to be elevated to 920 metres; and
    - iii. otherwise denies the subparagraph;

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## Operation Manual dated 28 June 2007, page 7 (BHP00009183)

- (b) otherwise admits paragraph 38B.
- 39. As to paragraph 39, it:
  - (a) admits subparagraph 39(a) and says further that drainage conditions are dynamic and can be expected to change over time;
  - (b) as to subparagraph 39(b), says that:
    - i. the design of the Fundão Dam was revised over time;
    - design changes regularly occur through the construction and use of major tailings dam facilities, such as the Fundão Dam;
    - iii. the location and proportion of sand tailings and slime tailings deposited at the Fundão Dam was a matter to be managed by Samarco management (including the Executive Board) in light of ongoing advice received from experts (such as the ITRB); and
    - iv. it otherwise denies the subparagraph;
  - (c) as to subparagraph 39(c), says that:
    - the manner in which the Fundão Dam was operated was a matter to be managed by Samarco management (including the Executive Board) in light of ongoing advice received from experts; and
    - ii. the specifications for the operation of the Fundão Dam (as documented in the Operations Manual or other Samarco management documents)

was the responsibility of Samarco management (including the Executive Board) in light of ongoing advice received from experts; and

- iii. it otherwise denies the subparagraph.
- (ca) as to subparagraph 39(ca), says that:
  - i. matters regarding (1) the design, documentation and analysis of the raising of the Fundão Dam; (2) changes to the Original Design throughout its lifecycle; and (3) their adequacy, were operational requirements and matters to be managed by Samarco management (including the Executive Board) in light of ongoing advice received from experts by reference to the specific tailings dam site and prevailing conditions; and
  - ii. it otherwise denies the subparagraph;
- (d) as to subparagraph 39(d), says that:
  - minimum beach width is an operational requirement set by the designer of the dam but that there is generally no fixed minimum beach width for operational upstream tailings dams and no set beach width which ensures safety and stability;
  - maintenance of a minimum beach width does not guarantee safety or stability of an upstream tailings dam nor does reduction in beach width of itself indicate instability or a decrease in safety or stability;
  - iii. maintenance of the beach width was a matter to be managed by Samarco management (including the Executive Board) in light of ongoing advice received from experts; and
  - iv. it otherwise denies the subparagraph;
- (e) admits subparagraph 39(e) and says further that the appropriate level of monitoring and parameters being monitored are:
  - i. specific to site conditions;
  - ii. typically determined by the dam designer and informed by identified failure modes and risks based on expert opinion;
  - iii. dynamic, and evolve in response to changing conditions; and
  - iv. matters to be managed by Samarco management (including the Executive Board) in light of ongoing advice received from experts; and

- (f) denies subparagraph 39(f);
- (g) as to subparagraph 39(g), says that:
  - Samarco's approach to tailings management was managed by Samarco management (including the Executive Board) in light of ongoing advice received from experts by reference to the specific tailings dam site and prevailing conditions; and
  - ii. it otherwise denies the subparagraph.
- 39A. It admits paragraph 39A.
- 39B. It does not plead to paragraph 39B as the paragraph does not contain any allegation of material fact concerning BHP.

## G.2 Problems as at 8 August 2012

- 40. As to paragraph 40, it says that:
  - (a) as to subparagraph 40(a), it:
    - admits that problems had emerged with the Fundão Dam prior to 8 August 2012;

## Particulars

Papers tabled before the Samarco board of directors on 22 July 2009 record that, in or around April 2009, shortly after the Fundão Dam commenced operation, seepage flows appeared on the downstream slope of Dike 1 of the Fundão Dam near the main underdrain (the **Piping Incident**, as referred to in the 2<u>3</u>FACSOC) (Samarco Board Meeting No. 77, Board Meeting Report, pp 50-51).

See particulars subjoined to paragraph 40(b)(i).

*Further particulars may be provided after <del>discovery and/or</del> lay and expert evidence.* 

 ii. says that those problems had been addressed by Samarco management as they emerged;

## Particulars

Minutes of the meetings of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 22 July 2009 and 2 December 2009 record that the cause of the Piping Incident was identified as arising from a failure of the main underdrain of the Fundão Dam and, by December 2009, the Samarco board of directors accepted the various corrective measures proposed to be implemented by Samarco management in relation to the failure of the main underdrain which had been mutually agreed by several geotechnical experts following an investigation and report (Samarco Board Meeting No. 80, Board Meeting Minutes, 2 December 2009). (See also: Samarco Board Meeting No. 77, Board Meeting Report, pp 51-53; Presentation to the Samarco Board, Fundão Tailings Dyke 1: Incident and Recovery Plan, July 2009; Samarco Board Meeting No. 77, Board Meeting Minutes, 22 July 2009; Samarco Board Meeting No. 80, Board Meeting Report).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 12 May 2010 record that the Samarco board of directors was informed in May 2010 that the remedial actions in relation to the Piping Incident (which followed all recommendations made by Vale, the Engineer of Record, the ITRB and Andrew Robertson) had been completed (Samarco Board Meeting No. 85, Board Meeting Report; Presentation to the Samarco Board, Update of Fundão Tailings Dam, 12 May 2010; Samarco Board Meeting No. 85, Board Meeting Minutes, 12 May 2010).

See particulars subjoined to paragraph 40(b)(i).

Papers tabled before the Samarco board of directors on 4 April 2013 record that the Samarco board was informed that, "One of the important points of the ITRB report refers to the reliability of the spillway galleries (main and secondary) of the Fundão Dam and based on routine inspections as well as on the results of monitoring using the instruments installed inside the galleries, it was concluded that it is prudent to plug these galleries" (Samarco Board Meeting No. 110, Board Meeting Report, p 30). [BHP00007866]

*Further particulars may be provided after discovery and/or lay and expert evidence.* 

- iii. says further that, on or around 8 August 2012, Samarco management informed the Samarco board of directors that the ITRB had held its last inspection and meeting in May 2012 and its main conclusions and recommendations included:
  - A. that the tailings disposal operation system, including the Fundão Dam, was adequate; and
  - B. the tailings governance model presented was considered adequate;

Papers tabled before the Samarco board of directors on 8 August 2012 record a summary of the ITRB's reported conclusions and recommendations (Samarco Board Meeting No. 108, Samarco Board Meeting Report).

- iv. says further that it is routine for tailings dams to be monitored to identify and address problems (such as the problems referred to above); and
- v. says further, as to subparagraph 40(a)(i), that:
  - A. it admits the subparagraph;
  - B. by December 2009, the Samarco Board accepted the various corrective measures proposed to be implemented by Samarco management in relation to the Piping Incident, which had been mutually agreed by several geotechnical experts; and
  - C. in May 2010, the Samarco Board was informed that the remedial actions in relation to the Piping Incident (which followed all recommendations made by Vale, the Engineer of Record, the ITRB and Dr Andrew Robertson) had been completed;

## Particulars

The particulars at subparagraphs 40(a)(ii) are referred to and repeated.

*Further particulars may be provided after <del>discovery and/or</del> <i>lay and expert evidence.* 

- vi. says further, as to subparagraph 40(a)(ii), that:
  - A. it admits the subparagraph;

- B. in around October 2012, the ITRB noted it was "pleased with the considerable effort that had gone into numerical modelling of the gallery remediation at Fundão, and also by the extent to which quality assurance has been performed on the remedial jet grouting"; and
- C. in around April 2013 both the Main and Secondary Galleries were plugged, which was reviewed and accepted by the ITRB; and

The particulars at subparagraphs 40(b)(i) are referred to and repeated.

ITRB Report No. 6 dated April 2013 (BHP00110288) p. 2, 7-8.

*Further particulars may be provided after <del>discovery and/or</del> <i>lay and expert evidence.* 

- vii. says that, save as addressed in subparagraphs 40(a)(i) to 40(a)(vi) above, it does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (aa) as to subparagraph 40(aa), it says:
  - as to subparagraph 40(aa)(i)(A), that it admits that in May 2009 Dr Andrew Robertson reported that "a number of the elements of the FD1 design had not been constructed" and that "the dam was not being operated in accordance with the Operating Manual";

#### Particulars

## May 2009 Robertson Report (SAMARCO-000008038) p. 3.

- ii. as to subparagraph 40(aa)(i)(B), that it admits that:
  - A. ITRB Report No. 4 dated May 2012 stated that "The original problems with the main gallery were related to: 1. Poor construction ... 2. Problems due to settlement and associated joint displacement";

B. ITRB Report No. 5 dated October 2012 stated that the ITRB's inspection of the secondary gallery "show[ed] effects of poor construction"; and

#### Particulars

ITRB Report No. 4 dated May 2012 (BHP-000186735) p. 4; ITRB Report No. 5 dated October 2012 (BHP-000159595) p. 18;

- iii. as to subparagraph 40(aa)(i)(C), that it:
  - A. admits that some deficiencies in Samarco management's quality assurance (QA) and quality control (QC) processes were identified following investigations into the Piping Incident;
  - B. says that the QA/QC program developed by Samarco management and Pimenta de Avila in relation to the remediation of the Main and Secondary Galleries was reviewed and agreed to by Dr Andrew Robertson in around April 2011, and in around October 2012 the ITRB noted that it was "pleased with the... extent to which quality assurance has been performed on the remedial jet grouting"; and
  - C. does not know and therefore does not admit whether 'as built' reports relating to the Fundão Dam were available by 8 August 2012;
- it admits subparagraph 40(aa)(ii), and refers to subparagraphs 40(a) and 40(a)(i)(v);
- v. it admits subparagraph 40(aa)(iii), and refers to subparagraphs 40(a) and 40(a)(ii)(vi);
- vi. that, save as addressed in subparagraphs 40(aa)(i) to 40(aa)(v) above,
   it does not know and therefore does not admit the subparagraph due to
   the unavailability of BHP Brasil representatives and/or it concerning a
   Samarco management matter;
- (ab) as to subparagraph 40(ab), it:
  - admits that there were shortages of storage capacity for tailings, in particular slimes;

 says that Dr Andrew Robertson described the shortages as "chronic" in April 2011;

#### Particulars

April 2011 Robertson Report (BHP-000196456) p. 3.

Options to increase short-term storage capacity were reviewed in 2011 by both Dr Andrew Robertson and the ITRB and by the ITRB (at which by that point Dr Robertson was a member) in 2012: April 2011 Robertson Report (BHP-000196456) p. 12; ITRB Report No. 2 dated July 2011 (IMP.100.001.0125) p. 1; ITRB Report No. 3 dated November 2011 (BHP00227371) p. 11-12; ITRB Report No. 4 dated May 2012 (BHP-000186735) p. 3.

 iii. says that Samarco management had short, medium and long-term tailings storage capacity plans in place, including a long-term plan from at least December 2008;

## Particulars

December 2008 Robertson Report (BHP00212192) p. 17; April 2011 Robertson Report (BHP-000196456) pp. 15-17; ITRB Report No. 2 dated July 2011 (IMP.100.001.0125) p. 1; ITRB Report No. 3 dated November 2011 (BHP00227371) p. 11-13; ITRB Report No. 4 dated May 2012 (BHP-000186735) p. 3-4.

By August 2009, Samarco management had established the Samarco Dams Committee to manage the 'recovery' to normal operating conditions with contingency provisions, as well as establishing the ITRB, appointing Pimenta de Avila as the Engineer of Record, and adding personnel to the Samarco geotechnical department: November 2010 Robertson Report (SAMARCO-000008188) p. 3-4;

 iv. says further that by November 2012, the available capacity of Samarco's existing tailings dams was sufficient to support operations up to 2017; and

#### Particulars

By November 2012, Samarco management was considering (among others) plans to raise the Fundão Dam to elevation 940m, which was expected to provide capacity for about six years (BHP Presentation "Risk Snapshot Samarco Operations" November 2012 (BHP-000186421).

- v. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter.
- (b) as to subparagraph 40(b), it:
  - admits that, by 8 August 2012, certain changes had been made to the Original Design of the Fundão Dam;

#### Particulars

As recorded in a report prepared by Pimenta de Ávila for Samarco management, initially, the Fundão Dam consisted of two dike structures made of compacted dirt for the containment of tailings (Pimenta de Ávila "Fundão Tailings System Summary Report", July 2009, pp 2-3).

Papers tabled before the Samarco board of directors on 22 July 2009 record that, in response to the Piping Incident, Samarco took corrective actions for the repair of one dike (Dike 1) (Samarco Board Meeting No. 77, Board Meeting Report, p 49).

As recorded in a report prepared by Geoestável for Samarco management, the corrective actions included the construction of a stabilising berm downstream, the lowering of the reservoir upstream of Dike 1, and the construction of an itabirite block fill at the base of the downstream slope (Laudo Técnico de Segurança – Ano 2011 – Disposição de Rejeitos no Vale do Córrego Fundão – Unidade de Germano" dated June 2011, pp 6-7).

As recorded in a report prepared by Pimenta de Ávila for Samarco management, in response to a settlement observed in the Main Gallery in August 2010, Samarco constructed the new Dike "1A", located upstream of the previous temporary Dike 1A. The slope of the new Dike 1A was reinforced in January 2011 (Pimenta de Ávila "Memória de Cálculo, *Projecto de Alteamento do Novo Dique 1A", February 2011, p 2).* 

As recorded in a report prepared by Geoestável for Samarco management, in January 2011, following investigations of the Main and Secondary Galleries, Samarco hired specialist companies to repair leaking joints in the Secondary Gallery and to rehabilitate the foundation of the Main Gallery through jet grouting. The works were completed in August 2012 (Geoestável Report "Laudo Técnico de Segurança – Ano 2012 – Disposição de Rejeitos no Vale do Córrego Fundão – Unidade de Germano", dated July 2012, revised August 2012, pp 10-13).

ITRB Report No. 5 to Samarco management, October 2012, states words to the effect that the ITRB was pleased with the considerable effort that had gone into numerical modelling of the gallery remediation at Fundão, and also by the extent to which quality assurance had been performed on the remedial jet grouting (ITRB Report No. 5, October 2012, p 2).

*Further particulars may be provided after discovery and/or lay and expert evidence.* 

- says that design changes regularly occur through the construction and use of major tailings dam facilities, such as the Fundão Dam;
- says that a common feature of major tailings dam facilities that are constructed and then used is that the nature of the use of the facility varies from its initial or original design, which is what occurred in relation to the Fundão Dam;
- iv. refers to and repeats subparagraph 40(a) above; and
- v. says, as to subparagraph 40(b)(i):
  - A. that it admits that the Base Drain, which was the primary structure for the drainage of tailings from Dike 1 on the Original Design, was sealed in around November 2009;
  - B. that:
    - a. the decision to seal the Base Drain was made by Samarco management in consultation with experts

including the Engineer of Record, the ITRB, and Dr Andrew Robertson;

- b. the Samarco Board was advised by Samarco management in December 2009 that the remedial actions undertaken following the Piping Incident (including the sealing of the Base Drain) "will assure the safe and normal operation of the Fundão dam, returning it to its initial operating conditions and assuring it the useful life for which it was designed"; and
- c. following completion of these remedial actions (and sealing of the Base Drain), the Samarco Board was advised by Samarco management in May 2010 that "no abnormality at Fundão dike 1 [had] been observed after operation was resumed";

## Particulars

Samarco Board Meeting Report No. 80 December 2009 (BHP00108188) p. 118-120; Samarco Board Meeting Report No. 85 May 2010 (BHP00144704) p. 95-96; November 2010 Robertson Report (SAMARCO-000008188) p. 4.

*Further particulars may be provided after discovery and/or lay and expert evidence.* 

- vi. as to subparagraph 40(b)(ii), it:
  - A. admits that the internal drainage was redesigned to incorporate an upstream blanket drain at around elevation 826m and that this became the primary structure for drainage of tailings from Dike 1;
  - B. says that a blanket drain was proposed by Dr Andrew Robertson in around May 2009, as an alternative if the Base Drain could not be restored to service;

#### Particulars

May 2009 Robertson Report (SAMARCO-000008038) p. 7; vii. it admits subparagraph 40(b)(iii);

#### Particulars

November 2010 Robertson Report (SAMARCO-000008188) pp. 4, 8-9; April 2011 Robertson Report (BHP-000196456) p 11.

viii. it admits subparagraph 40(b)(iv)<u>, and says further that construction of</u> the Overflow Channel was necessary to establish a connection between reservoirs and enable excess water to be decanted through the Secondary Gallery, in order to enable continued tailings disposal while the Main Gallery was under repair;

#### Particulars

April 2011 Robertson Report (BHP-000196456) p 2, 10, 27<u>; August 2010 AMEC Report (SAMARCO-000008271)</u> p 5, 8; November 2010 Robertson Report (SAMARCO-000008188) p 3-5, 8. Further particulars may be provided after <del>discovery and/or</del> lay and expert evidence.

- it otherwise does not know and therefore does not admit subparagraph
   40(b) due to the unavailability of BHP Brasil representatives and/or it
   concerning a Samarco management matter;
- (c) subparagraph 40(c) is not used and therefore BHP does not respond to it;
- (d) as to subparagraph 40(d), it:
  - admits that, between the deposition of tailings into the Fundão Dam commencing in December 2008 and 8 August 2012, the size of the Fundão Dam increased;
  - admits that, by 8 August 2012, some tailings from Vale's iron ore operations near the Germano Complex had been deposited into the Fundão Dam;
  - iii. refers to and repeats subparagraph 40(a) above; and
  - iv. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (da) it admits paragraph 40(da);

- (e) subparagraph 40(e) is not used and therefore BHP does not respond to it;
- (ea) it admits subparagraph 40(ea), and says further that:
  - i. the Samarco Board was informed in December 2009 that while Dike 1A would receive both sand tailings and slimes, they would be "*in separated areas created for this specific purpose, to handle the tailings mass balance*";

Samarco Board Meeting Report No. 80 December 2009 (BHP00108188) p. 119;

Further particulars may be provided after discovery and/or lay and expert evidence.

- ii. it refers to subparagraph 40(b)(ii), (iii) and (iv);
- (f) it admits subparagraph 40(f), and refers to and repeats subparagraphs 39(d),
   40(a)(iii) and 40(b)(iii) above;

## Particulars

Geoestavel, "ALTEAMENTO DAS BARRAGENS DE GERMANO E DE FUNDÃO PARA ELEVAÇÃO 940m – FASE I RELATÓRIO COMPLEMENTAR DO PROJETO CONCEITUALEM ATENDIMENTO AOS COMENTÁRIOS DO ITRB" dated January 2013 (BHP00217125) p. 19-20.

- (g) as to subparagraph 40(g), it:
  - i. refers to and repeats subparagraphs 40(a) to 40(b) and 40(ea) above;
  - ii. admits that the internal drainage system of the Fundão Dam was altered from the system contemplated by the Original Design; and
  - iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (ga) as to subparagraph 40(ga), it:
  - admits that the matters referred to in subparagraphs (i) to (v) of subparagraph 40(ga) appeared in reports issued to Samarco management by external consultants;

ii. says further that those reports, and other documents, contained statements qualifying and/or contextualising those matters;

## Particulars

<u>As to the statement in subparagraph 40(ga)(i), it says that this</u> <u>comment was made in the context of construction scheduling for</u> <u>tailings facility development and did not specifically relate to the</u> <u>Fundão Dam.</u>

As to the statement in subparagraph 40(ga)(ii), it says that this was a point-in-time opinion provided by Dr Robertson in respect of Samarco's tailings facilities generally (not specifically the Fundão Dam) and the opinion is not repeated in the next report issued by Dr Robertson in April 2011, which stated that "Samarco [had] been responsive to the recommendation made in the previous Auditor's report. There [had] been a substantial reduction in the high risk items identified in the previous Auditor's report". Further, the November 2010 Robertson Report did not recommend that operations cease at the Fundao Dam.

As to the statement in subparagraph 40(ga)(iii), it says:

- (a) <u>in his December 2008 Report. Dr Robertson noted that the</u> <u>Samarco geotechnical department had been</u> <u>"considerably expanded" and had "an appropriate level of</u> <u>staffing... taking into consideration the large number of</u> <u>geotechnical structures for which they are responsible";</u>
- (b) in his November 2010 Report, Dr Robertson noted that Samarco management was "keenly aware" of his concerns and had established the Samarco Dams Committee to manage the 'recovery' to normal operating conditions with contingency provisions, as well as establishing the ITRB, appointing Pimenta de Avila as the Engineer of Record, and adding personnel to the Samarco geotechnical department;

- (c) in his April 2011 Report, Dr Robertson noted that:
  - *i.* <u>the reorganisation of Samarco's geotechnical</u> <u>department was "an advance over the prior</u> <u>management structures"; and</u>
  - ii. <u>Samarco management was to be complimented</u> on "the effectiveness and efficiency" of its "stateof-the-art" instrumentation and monitoring system, and Dr Robertson was "satisfied that visual monitoring observations by Samarco staff are being diligently performed, instruments are being regularly read (automated or manual) and results are processed in a timely manner with triggers and warnings when alert and action levels are reached. Samarco are able to identify and respond to monitoring and instrument results in a timely manner":
- (d) <u>ITRB Report No. 4 dated May 2012 noted that the</u> <u>increase in staff in Samarco's geotechnical management</u> <u>team was "positive".</u>

As to the statement in subparagraph 40(ga)(iv), it says that the ITRB Report No. 3 dated November 2011 stated that the ITRB had reviewed the options presented by Samarco management to address the slimes short range storage needs, and considered that two of those options were feasible. Further, the ITRB Report No. 3 noted that the "probability of [dam] failure is very low".

As to the statement in subparagraph 40(ga)(v), it says:

(a) <u>the ITRB recommended that Samarco develop and</u> <u>implement contingency measures to address the risk of</u> <u>gallery failure, including development of an emergency</u> <u>decant gallery (also called an auxiliary spillway) with</u> <u>installation to occur as soon as possible and in any event by</u> <u>December 2012;</u>

- (b) ITRB Report No. 5 dated October 2012 stated:
  - *i.* <u>the ITRB was "pleased to note the progress that</u> was being made with the installation of the Auxiliary spillway":
  - *ii.* <u>then current observations of the galleries did "not</u> <u>indicat[e] any specific area of distortion sufficient to</u> <u>cause severe distress";</u>
- (c) <u>the Main and Secondary Galleries were plugged in April</u> <u>2013, which was reviewed and accepted by the ITRB (see</u> <u>subparagraph 40(a)(vi)(C) above);</u>
- (d) <u>ITRB Reports No. 3 and No. 4 did not recommend that</u> operations cease at the Fundão Dam and noted that the <u>"probability of [dam] failure is very low".</u>

<u>See:</u> December 2008 Robertson Report (BHP00212192) p. 3-4, 4-6, 14; May 2009 Robertson Report (SAMARCO-000008038) pp. 7-8; November 2010 Robertson Report (SAMARCO-000008188) pp. 3-4, 7, 12-13; April 2011 Robertson Report (BHP-000196456) pp. 3-4, 15-16; ITRB Report No. 3 dated November 2011 (BHP00227371) p. 4, 6, 9, 10, 11-12, 13-14; ITRB Report No. 4 dated May 2012 (BHP-000186735) p. 1, 4-5; ITRB Report No. 5 dated October 2012 (BHP-000159595) p. 2-3, 8, 18.

Further particulars may be provided after discovery and/or-lay and expert evidence.

- iii. refers to subparagraphs 40(a) to 40(g) above and 40(gb) below; and
- iv. otherwise denies the subparagraph.
- (gb) as to subparagraph 40(gb), it:
  - i. denies subparagraph 40(gb)(i) and says that;
    - ITRB Report No. 2 dated July 2011 indicated that the 826m
       Blanket Drain "will be raised along the abutment", but did not specify when this was to occur;
    - B. a report issued by Pimenta de Avila in May 2012 recommended the construction of abutment drains when the Fundão Dam had

reached elevation 920m, on the basis that such drains would be beneficial for the stability of the Fundão Dam at that future elevation;

- ii. <u>says.</u> as to subparagraph 40(gb)(ii), it:
  - A. <u>it</u> admits that Dr Andrew Robertson and the ITRB recommended development of a Fundão Buttress Dam in 2011, both noting that this would serve to provide additional storage and stability;
  - B. says that:
    - in ITRB Report No. 9 dated February 2014, the ITRB had concluded that "building a reinforcement structure for the Fundão Dam is not a necessity on the grounds of the existence of a risk management system based on the continuous use of instrumentation already in place, monitoring and pari passu analyses"; and
    - 2. by April 2014, the BHP Brasil representatives on the Samarco Board were informed at a Samarco Pre-Board meeting of the "Cancellation of the Fundão Dam Phase I project given the understanding that the reinforcement of the Fundão Dyke (the buttress project) will not be required";
  - C. <u>it</u> admits that in November 2011, the ITRB recommended "development of an alternative slimes disposal facility in case of performance problems at the Fundão facility at any time between now and 2018";
  - D. says that the following month, in December 2011, the Samarco Board approved an assignment of Samarco's easement in the Brumado valley to Vale in exchange for an assignment of Vale's easement in the Mirandinha valley to Samarco, for the purpose of "deliver[ing] larger available disposal volume", and was advised by Samarco management that operational features foreseen by Samarco for the proposed Mirandinha Dam were "in line with recommendations from the ITRB"; and
- iii. otherwise denies the subparagraph;

ITRB Report No. 9 dated February 2014 (BHP00215626) p. 2, 5; Samarco Pre-Board Meeting presentation "Samarco – Project Portfolio" dated 1 April 2014 (BHP00073543) p. 6; and Samarco Board Meeting Minutes dated 8 December 2011 (BHP00014914) p. 6.

- (h) subparagraph 40(h) is not used and therefore BHP does not respond to it;
- (i) it admits subparagraph 40(i) as at November 2011 in relation to a potential failure of the Main or Secondary Galleries, but says that Samarco did have emergency action plans in place to cover a hypothetical global break of the Fundão Dam, which were created and updated by Pimenta de Avila between December 2007 and October 2015;

# Particulars

*Emergency Action Plan – Fundão Dam dated 21 December 2007 (BHP00021372);* 

Emergency Action Plan – Fundão Dam dated 6 March 2008 (BHP00261723); and

Emergency Action Plan – Fundão Dam dated 6 October 2015 (BHP00211665).

- (ia) it admits subparagraph 40(ia);
- (j) it admits subparagraph 40(j) and says further that:
  - in or around 2012, Samarco management engaged an outside consulting firm, YKS (a company with experience in relocating communities impacted by construction projects) to conduct a study regarding the alternatives for the Bento Rodrigues community; and
  - ii. the study, which was reported to the Samarco board of directors in the papers tabled for the August 2013 meeting, concluded that "*resistance to relocation (individual or group) and encouraged leaving of the area is high and risks can bring serious impacts on social, economic, environmental aspects as well as on Samarco's image*"; and

# Particulars

Samarco Board Meeting No. 113, Board Meeting Report, p 35.

- (ja) as to subparagraph 40(ja), it:
  - admits that in June 2012 Samarco responded to a question asked by BHP Group HSEC, in the context of a "Significant Dams Risk Review", for a description of the maximum foreseeable loss (MFL) to Samarco for the risk of dam failure by stating that the MFL was assessed to be USD \$10.9 billion on the basis of an assumed 5 years' disruption in production at Samarco (Samarco Significant Dams Risk Review MFL);
  - ii. <u>says that MFL is a risk management tool used to assess the impact</u> <u>sustained by an organisation in the plausible worst-case scenario for a</u> <u>risk, whereby all risk controls are assumed to be ineffective;</u>

Document titled 'BHP Billiton Interview May 2012 Rev01' (BHP00213659); Master Glossary of BHP Billiton Terms (BHP00129735) p 26-27.

- iii. says that the Samarco Significant Dams Risk Review MFL:
  - was a worst-case scenario assessment which assumed that all risk controls in relation to Samarco's tailings dams were ineffective;
  - was a point in time assessment which differed substantially from other MFL assessments prepared by Samarco, including another MFL assessment provided by Samarco to BHP Iron Ore Risk & Governance in June 2012, in relation to the risk of "critical failure of dam operation" which assigned an estimated MFL of \$1.983 billion (representing BHP's half share of Samarco) on the basis of an assumed 2 years' disruption in production at Samarco;

# Particulars

Email from Flavia Maria de Melo Silveira to Ben Arnold dated 29 June 2012 (BHP00049694): attachment to same, being Samarco's June 2012 Risk Register (BHP00049695).

 was not representative of the MFL assessments attributed to the risk of "critical failure of dam operation" or "rupture of Germano and Fundão tailing dams" at Samarco in reports provided to BHP's Group RAC and/or BHP's Iron Ore Business Risk and Audit Committee during the Relevant Period;

# **Particulars**

During the Relevant Period, the assessments of BHP's share of the MFL in relation to the risk of "critical failure of dam operation" or "rupture of Germano and Fundão tailing dams" at Samarco reported to BHP's Group RAC and/or BHP's Iron Ore Business Risk and Audit Committee within BHP were as follows:

- a. <u>Risk Management Report to Iron Ore BRAC dated</u> <u>August 2012 assigned an MFL of USD 1.983 billion to</u> <u>"critical failure of dam operation" (BHP-000135964);</u>
- b. <u>Group Risk Profile to Group RAC (endorsed by GMC)</u> <u>dated October 2012 assigned an MFL of USD 2 billion to</u> <u>"rupture of Germano and Fundão tailing dams"</u> <u>(BHP00151870):</u>
- c. <u>Risk Management Report to Iron Ore BRAC dated</u> January 2013 assigned an MFL of USD 1.983 billion to <u>"critical failure of dam operation" (BHP00132257);</u>
- d. <u>Group Risk Profile to Group RAC (endorsed by GMC)</u> <u>dated May 2013 assigned an MFL of USD 2 billion to</u> <u>"rupture of Germano and Fundão tailing dams"</u> (BHP00152966);
- e. <u>Risk Management Report to Iron Ore BRAC dated</u> <u>August 2013 assigned an MFL of USD 1.190 billion to</u> <u>"critical failure of dam operation" (BHP00154139);</u>
- f. <u>Group Risk Profile to Group RAC (endorsed by GMC)</u> dated October 2013 noted a "Level 6" tailings dam risk event at Samarco, which based on the Severity Table in "GLD.017 Risk Management" dated 20 May 2013 equated to a financial impact of between USD 1 – 2.5 billion (BHP00002126; BHP00062041);</u>

- g. <u>Risk Management Report to Iron Ore BRAC dated</u> <u>February 2014 assigned an MFL of USD 1.190 billion to</u> <u>"critical failure of dam operation" (BHP-000190883);</u>
- h. <u>Group Risk Profile to Group RAC (endorsed by GMC)</u> <u>dated May 2014 noted a "Level 6" tailings dam risk event</u> <u>at Samarco, which based on the Severity Table in</u> <u>"GLD.017 Risk Management" dated 11 November 2013</u> <u>equated to a financial impact of between USD 1 – 2.5</u> <u>billion (BHP00002150; BHP00266581);</u>
- i. <u>Risk Management Report to Iron Ore BRAC dated</u> <u>August 2014 assigned an MFL of USD 1.190 billion to</u> <u>"failure of Samarco tailing dam" (BHP00003028);</u>
- j. <u>Risk Management Report to Iron Ore BRAC dated</u> <u>February 2015 assigned an MFL of USD 1.190 billion to</u> <u>"critical failure of tailing dam operation" (BHP00144676);</u>
- k. <u>Risk Management Report to Iron Ore BRAC dated</u> <u>August 2015 assigned an MFL of USD 1.190 billion to</u> <u>"critical failure of tailing dam operation" (BHP-000112841).</u>
- iv. <u>says further that the document containing the Samarco Significant</u> <u>Dams Risk Review MFL included the following relevant contextual</u> <u>information about the risk of dam failure at Samarco:</u>
  - the probability of the risk of the Germano and Fundão dams rupturing had reduced since a risk assessment was undertaken in 2010 due to a "significant improvement in preventative controls and instrumentation now in place for the dams. The dams' management was, in this period, reinforced in a general way ... The adoption of methodology of FMEA ... also contributes to reduce the probability";
  - the "severity level" was estimated according to various criteria, including (inter alia) "Financial: 100 – USD 50 million – USD 250 million". The severity level estimated in the range of USD 50 million to USD \$250 million assumed the reasonable effectiveness of existing and tested mitigating controls;

# <u>GLD.017 Risk Management dated 8 March 2011</u> (BHP00039519) p 6.

- 3. <u>Samarco was implementing programs to reduce the risk of dam</u> <u>failure, including Samarco's tailing disposal program;</u>
- 4. <u>Samarco had several controls in place to manage the risk of dam</u> <u>failure;</u>
- 5. <u>Samarco's dams were designed pursuant to Brazilian and</u> international standards and their safety classifications were prepared in compliance with Brazilian laws;
- 6. <u>the ITRB provided "independent review and oversight of the</u> <u>tailings storage facility design and operational management</u> <u>including risk management issues</u>" and annual independent <u>audits were conducted to meet applicable Brazilian legislation;</u>
- 7. <u>the assessment by independent geotechnical consultant Angela</u> <u>Kupper, in 2011, which found, inter alia, that Samarco's tailings</u> <u>structures were "at an adequate level of safety … operated and</u> <u>monitored in a satisfactory manner, consistent with international</u> <u>standards"; and</u>
- v. <u>otherwise denies the subparagraph.</u>
- (k) as to subparagraph 40(k), it:
  - refers to and repeats <u>paragraphs 39 and 44</u>, and subparagraphs 40(a) to 40(j<u>a</u>) above;
  - ii. says that, on or about 8 August 2012, the Samarco board of directors was informed by Samarco management that the ITRB considered that the tailings disposal operation system was adequate and the tailings disposal governance model presented was adequate; and

# Particulars

See subparagraph 40(a)(iii).

iii. denies the subparagraph.

# G.3 Problems as at 30 November 2012

- 41. As to paragraph 41, it refers to and repeats paragraph 40 above and says further that:
  - (a) as to subparagraph 41(a), it:
    - i. refers to and repeats paragraph 40 above; and
    - ii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
  - (aa) as to subparagraph 41(aa), it:
    - admits that, in about November 2012, a sinkhole appeared in the tailings overlying the Secondary Gallery;
    - ii. says further that Joint 18, which had caused the sinkhole, was undergoing repair by December 2012;

#### Particulars

Samarco Mineraçáo S.A., "Comitê de Barragens da Samarco -CBS - 1ª Reunião 2013 Revisão 0", November 6, 2013, p 64

- iii. otherwise, and save as set out at paragraph 40(b)(i) above, does not know and therefore does not admit the paragraph, due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (b) as to subparagraph 41(b), it:
  - admits that, in or around September 2012, the left abutment of the Fundão Dam had been realigned from the Original Design by setting it back at the left abutment;

## Particulars

ITRB Report No. 5 to Samarco management, October 2012.

Samarco management internal presentation "Relocação do eixo da cota 855m", 6 September 2012.

- ii. says further that the ITRB was advised by Samarco management of changes in the location and orientation of Fundão Dam 1 (also referred to as 'Fundão Dike 1') to reduce stresses applied to the Secondary Gallery and the ITRB concluded that:
  - A. this change appeared to be necessary and appropriate; and

B. the ITRB would review the design at its next meeting; and

# Particulars

ITRB Report No. 5 to Samarco management, October 2012, p 19.

Further particulars may be provided following evidence.

- iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (c) as to subparagraph 41(c), it:
  - i. refers to and repeats subparagraphs 40(ea), 40(f) and 41(b) above; and
  - ii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (d) as to subparagraph 41(d), it:
  - i. admits that the Operations Manual for the Fundão Dam was not updated to address the Setback;

# Particulars

Operations Manual, 28 June 2007. Operations Manual, 31 March 2011. Operations Manual, 6 July 2012.

operatione manual, e eary 2012.

- ii. refers to and repeats subparagraph 39(c) above; and
- iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter; and

# (da) as to subparagraph 41(da):

- i. <u>admits that a Failure Modes and Effects Analysis ("FMEA") was</u> <u>conducted by Samarco management and external consultants in around</u> <u>August 2012;</u>
- ii. <u>says that the FMEA analysed different possible causes of failure of the</u> <u>Fundão Dam, for the purpose of risk assessment and mitigation;</u>

- iii. <u>admits that one possible cause of dam rupture identified by the FMEA</u> <u>was insufficiency of the internal drainage system;</u>
- iv. <u>says that the FMEA did not draw a conclusion about the probability of</u> <u>global rupture of the Fundão Dam in any given year, whether on the</u> <u>basis of insufficient internal drainage or otherwise;</u>
- v. <u>says that the FMEA was an analytical tool used by Samarco</u> <u>management to prioritise risks from highest priority to lowest priority;</u>
- vi. <u>says that the Panel Report concluded that the immediate cause of the</u> <u>Fundão Dam failure was static liquefaction, which was assigned a</u> <u>probability of 1 < 10 % chance of occurring in the FMEA; and</u>
- vii. <u>otherwise denies the subparagraph.</u>
- (db) it admits subparagraph 41(db); and
- (e) as to subparagraph 41(e), it:
  - refers to and repeats <u>paragraphs 39 and 44</u>, and subparagraphs 41(a) to 41(d<u>b</u>) above; and
  - ii. denies the subparagraph.

# G.4 Problems after 30 November 2012 and prior to 27 August 2014 up to an including 31 December 2013

- 42. As to paragraph 42, it refers to and repeats paragraphs 40 and 41 above and says further that:
  - (aa) as to subparagraph 42(aa), it:
    - i. refers to and repeats paragraphs 41(a)-(e) above; and
    - ii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
  - (a) as to subparagraph 42(a), it:
    - admits that certain problems had emerged with the Fundão Dam during the period 30 November 2012 to 27 August 2014<u>31 December 2013;</u>

# Particulars

As recorded in an ITRB Report to Samarco management, a sinkhole was identified on the left abutment at the Secondary Gallery in November 2012, and a longitudinal crack was

*identified in the Main Gallery in January 2013 (ITRB Report No. 6, April 2013, pp 6-7).* 

As recorded in VOGBR technical reports to Samarco management, resurgences were identified at Dike 1 between August 2013 and January 2015 (VOGBR, "Germano – Geral, Barragem do Fundão, Sistema de Drenagem, Drenagem Interna Complementar Relatório Técnico – Memorando" dated December 2014; VOGBR, "Germano – Geral, Barragens de Germano e Fundão, Plano de Fechamento Relatório Técnico" dated August 2015, pp 17-18).

<u>Saturation of slope and ponding of water occurred in March 2013</u> <u>at EI. 855m on the left side of the Dam: Samarco Mineracao S.A.,</u> <u>"Samarco Dam Committee – CBS – 1<sup>st</sup> Meeting 2013 – Review</u> <u>0", November 6, 2013, page 65.</u>

Further particulars may be provided after discovery and/or lay and expert evidence.

 ii. says that those problems had been addressed by Samarco management as they emerged, and the Samarco board had been given reassurances by Samarco management in relation to various problems;

# Particulars

Papers tabled before the Samarco board of directors on 7 December 2012 confirmed that all geotechnical structures presented safety factors higher than 1.5 and 1.4, which demonstrated the adequate stability of the structures (Samarco Board meeting, 7 December 2012, BHP32683143).

Papers tabled before the Samarco board of directors on 14 August 2013 confirmed that every structure in the tailings disposal system was functioning properly and the behaviour of the dams was highlighted as positive in the last ITRB report (April 2013 meeting), (Samarco Board meeting, 14 August 2013, PAN-00139463).

As recorded in ITRB Reports to Samarco management, in response to the November 2012 sinkhole at the Secondary Gallery, Samarco carried out an inspection to confirm points of water infiltration and blocked the Secondary Gallery at one of the flutes or bellmouths. Further to this action, Samarco developed a design for the plugging of the Secondary Gallery (ITRB Report No. 6, April 2013, p 6). The plugging of the Secondary Gallery was completed in 2013 (ITRB Report No. 7, September 2013, p 9).

As recorded in an ITRB Report to Samarco management, in response to the January 2013 longitudinal crack in the Main Gallery and in light of analysis of the results of a stress and strain study on the Main Gallery which Samarco had undertaken in around May 2012, Samarco decided to seal and deactivate the Main Gallery (ITRB Report No. 6, April 2013, pp 6-7). As recorded in a Samarco Dams Committee paper, the plugging of the Main Gallery was completed at the end of 2013 (Samarco Dams Committee 3rd Meeting Ref. 2013).

As recorded in an ITRB Report to Samarco management, due to the plugging of the Main and Secondary Galleries, further flood routing was required in addition to the Auxiliary spillway. To address this, Samarco engaged external engineering company BVP Engenharia to design and build a fourth spillway (**Fourth Spillway**) (ITRB Report No. 6, April 2013, p 7).

Papers tabled before the Samarco board of directors on 4 April 2013 record a summary of the ITRB's reported conclusions, including that it was prudent to plug the Secondary Gallery and Main Gallery. The papers also confirmed that that all of the ITRB recommendations had been or were in the process of being implemented to allow the results to be presented to the ITRB members in April 2013 (Samarco Board Meeting No. 110, Board Meeting Report, p 30).

Papers tabled before the Samarco board of directors on 4 December 2013 record an overview of "the main projects in execution to reduce the risk level" for the Fundão Dam, including construction of the Fourth Spillway (Samarco Board Meeting No. 114, Board Meeting Company Report, 4 December 2013, p 25). As recorded in a VOGBR report to Samarco management, Samarco implemented a drain to address a resurgence that appeared in the left abutment of Dike 1 at El. 855m in or around August 2013, and another drain to address a second resurgence and longitudinal cracks at the left abutment of Dike 1 at El. 860m in or around November 2013 (VOGBR, "Germano – Geral, Barragem do Fundão, Sistema de Drenagem, Drenagem Interna Complementar Relatório Técnico – Memorando" dated December 2014, pp 17-18).

As recorded in a VOGBR report to Samarco management, in response to two small resurgences which were identified in late 2014 at El. 950m and January 2015 at El. 955m at the right shoulder of Dike 1, Samarco developed a specific recovery project for treating resurgences, which culminated in corrective measures for these resurgences (VOGBR, "Germano – Geral, Barragens de Germano e Fundão, Plano de Fechamento Relatório Técnico" dated August 2015, pp 17-18).

Further particulars may be provided after discovery and/or lay and expert evidence.

- iii. refers to and repeats subparagraph 40(a)(iv) above;
- iv. says further that, between 30 November 2012 and <u>31 December</u> <u>2013</u>27 August 2014, the Samarco board of directors was variously informed by Samarco management that the dams were stable, operating satisfactorily or functioning properly and that the ITRB considered that dam management was well-controlled; and

#### Particulars

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 7 December 2012 record that Mr Terra reported to the Samarco board of directors: "the risk assessment focused on the dam operation is being carried out based on the methodology of FMEA, Failure Modes and Effects Analysis, validated by the ITRB", "The assessments of the operating risks are performed every quarter for all of the tailings containment and water storage structures. All of dams operate routinely, with adequate freeboard (difference between the water level in the dam and the crest of the dam), and safety factors above the minimum limits established by Brazilian and international technical standards" and "in 2012, the dam safety audit reports have been officially registered pursuant to Brazilian legal requirements... All of dams were considered stable, based on the stability expert opinions according to external audit reports" (Samarco Board Meeting No. 109, Board Meeting Report; Samarco Board Meeting No. 109, Board Meeting Minutes, 7 December 2012).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 4 April 2013 record that Mr Terra reported to the Samarco board of directors: "All of the projects planned for execution in 2012 were duly implemented and are operating satisfactorily" and "The flood crest is being periodically updated and the freeboard of the dams is within the limits of the remaining freeboard limit, along all rain season". It was noted that while a Risk Matrix for the Fundão Dam developed as part of the FMEA risk evaluation identified that 16 of the 45 "failure modes" were "above the risk level considered tolerable" (associated with the internal drainage system and spillway), the risks would be reduced with the implementation of a number of projects expected to conclude in December 2013 (for example, plugging the Main and Secondary Galleries and extending the auxiliary spillway). In addition, it was noted that all of the ITRB's recommendations had been or were in the process of being implemented (Samarco Board Meeting No. 110, Board Meeting Report; Samarco Board Meeting No. 110, Board Meeting Minutes, 4 April 2013).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 14 August 2013 record that Mr Terra reported to the Samarco board of directors: "Every structure in the Tailings Disposal and Water Storage Systems are functioning properly [sic] and the behavior of the dams was highlighted as positive on the last ITRB report (april/2013 meeting). The report reads: "The monitoring presented indicated no risk condition for the safety of the dams"". (Samarco Board Meeting No. 113, Board Meeting Report; Samarco Board Meeting No. 113, Board Meeting Minutes, 14 August 2013).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 4 December 2013 record that Mr Terra reported to the Samarco board of directors: "Based on the recommendations and conclusions of the group of consultants of the ITRB, in the last meeting held in August 2013, all of the structures of the tailings disposal systems are operating accordingly" (Samarco Board Meeting No. 114, Board Meeting Company Report, 4 December 2013; Samarco Board Meeting No. 114, Board Meeting Minutes, 4 December 2013).

- v. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (b) as to subparagraph 42(b), it:
  - i. refers to and repeats subparagraph 40(b) above;
  - admits that during the period 30 November 2012 to <u>31 December</u> <u>2013</u>27 August 2014, certain changes had been made to the Original Design of the Fundão Dam;

# Particulars

The construction and operation of the Overflow Channel, which was open between February 2011 and July 2012 and between July 2013 and December 2013: AMEC Earth & Environmental, "Independent Review Report - Samarco - Germano Area - Dams and Tailings Facilities", August, 2010.

<u>The drainage features listed at particulars to paragraph</u> <u>42A(f)(iv).</u>

*Further particulars may be provided after service of the parties' expert evidence, to the extent necessary.* 

iii. admits that the changes included implementing the Setback and plugging the Main and Secondary Galleries; and

Design changes in the period 30 November 2012 to <u>31</u> <u>December 2013</u> <u>27 August 2014</u> included:

- as recorded in an ITRB Report to Samarco management, the implementation of the Setback to reduce stresses applied to the Secondary Gallery, which stated words to the effect that the ITRB considered it to be necessary and appropriate (ITRB Report No. 5, October 2012 p 19).
- as recorded in an ITRB Report to Samarco management, the plugging of the Secondary Gallery in 2013 (ITRB Report No. 7, September 2013, p 9).
- as recorded in a Samarco Dams Committee paper, the plugging of the Main Gallery in 2013 (Samarco Dams Committee 3<sup>rd</sup> Meeting Ref. 2013).
- as recorded in a VOGBR Safety Technical Report to Samarco management, the partial construction of additional drainage as the Fundão Dam expanded, including the construction of a drain in the left abutment of Dike 1 in August 2013 to treat a resurgence and a second drain to treat an upwelling observed in November 2013, and extension of existing drains at elevations of 855 and 866m in 2014 ("Germano – Geral, Barragem Fundão, Avaliação de Estabilidade Laudo Técnico de Segurança, Relatório de Inspeção de Segurança Regular", pp 8–9).

Further particulars may be provided after discovery and/or lay and expert evidence.

- iv. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (c) <u>subparagraph 42(c) is not used and therefore BHP does not respond to it;</u> as to subparagraph 42(c), it:
  - i. refers to and repeats subparagraph 42(a) above;
  - ii. admits that in or around July 2014, there was seepage at the right abutment;

iii. says that in September 2014, the Samarco board was informed by Samarco management that the dam management for the short term was considered well controlled by the ITRB; and

#### **Particulars**

In papers provided to the Samarco Board for the 19 September 2014 Board meeting, the Board was told that the dam management for the short term was considered well controlled by the Independent Tailing Review Board (ITRB).

- iv. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (d) subparagraph 42(d) is not used and therefore BHP does not respond to it;
- (da) admits subparagraph 42(da);
- (daa) says, as to subparagraph 42(daa), that it:
  - i. admits that a FMEA was conducted by Samarco management and external consultants in around May 2013;
  - ii. refers to and repeats the matters set out at subparagraphs 41(da)(ii) –
     (vi) above;
  - iii. otherwise denies the subparagraph.
- (db) as to subparagraph 42(db), it:
  - i. admits that fieldwork for an audit of Samarco was conducted by the RAA audit function in or around July 2013 (**FY 2014 audit**);
  - admits that the FY2014 audit identified a Priority 2 finding for "Deficiencies in the construction of starter dams" which concerned deficiencies in Samarco's Quality Control and Quality Assurance processes which allowed certain construction defects to occur during the construction of the Fundão Dam;
  - iii. says that a Priority 2 finding was lower than a "P1 rating" (which required immediate management attention), was a moderate control weakness which had the potential of becoming serious if not remediated and was not unusual;
  - iv. otherwise denies the subparagraph.

# The FY2014 audit report, page 6.

- (e) as to subparagraph 42(e), it:
  - i. refers to and repeats subparagraphs 41(b) and 42(a) above;
  - admits that the Setback remained in place between 30 November 2012
     and <u>31 December 2013</u>27 August 2014; and

# Particulars

ITRB Report No. 8 to Samarco management, January 2014, p 4; ITRB Report No. 12 to Samarco management, 6 April 2015, p 3.

- iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (f) as to subparagraph 42(f), it:
  - i. refers to and repeats subparagraphs 40(b)(iii) and 42(a)(iv) above; and
  - ii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (fa) as to subparagraph 42(fa), it:
  - i. <u>admits that ITRB Report No. 7 recorded that Dike 1 crest was at El.</u> <u>870m;</u>
  - ii. <u>otherwise does not know and therefore does not admit the</u> <u>subparagraph due to it concerning a Samarco management matter.</u>
- (g) subparagraph 42(g) is not used and therefore BHP does not respond to it;
- (h) as to subparagraph 42(h), it admits there were breaches of the Minimum Beach
   Width requirement between 30 November 2012 and 31 December 2013 and
   says further that: recorded in the 994 Report:

Date	Right abutment	Left abutment
July 2013	<del>151</del>	<del>142</del>
August 2013	<del>13</del> 4	<del>163</del>

September 2013	-	<del>176</del>
October 2013	-	<del>191</del>
January 2014	<del>150</del>	<del>103</del>
February 2014	-	<del>190</del>
March 2014	<del>148</del>	<del>191</del>
<del>May 2014</del>	<del>18</del> 4	<del>160</del>
<del>June 2014</del>	-	<del>135</del>
<del>July 2014</del>	<del>196</del>	<del>175</del>
August 2014	-	<del>150</del>

994 Report, Table 61 data entitled "Evaluation of the minimum beach in the regions of the Right and Left Abutments of the Fundao Dam" (Source: SAMARCO) (IMP.100.001.0026), page 266

- i. says that the maintenance of the Minimum Beach Width was no guarantee as to the safety or stability of the Fundão Dam;
- ii. <u>it</u> refers to and repeats subparagraphs 39(d), 40<del>(f)(b)(iii)</del> and 42(a)(iv) above; and
- iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (i) as to subparagraph 42(i), is not used and therefore BHP does not respond to it:
  - i. refers to and repeats subparagraphs 40(b)(ii), 40(b)(iii), and 42(a)(iv) above; and
  - ii. admits that the internal drainage system of the Fundão Dam was altered from the system contemplated by the initial or original design;
  - iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (j) as to subparagraph 42(j) is not used and therefore BHP does not respond to it:

- i. refers to and repeats subparagraphs 40(b)(ii), 40(e)(i) and 42(a)(iv) above;
- ii. admits that, in or around January 2014, the ITRB recommended the installation of additional drains; and

ITRB Report No. 8 to Samarco management, January 2014, p 5.

- iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (ja) as to subparagraph 42(ja), is not used and therefore BHP does not respond to it;:
  - iv. admits that a "Failure Modes and Effects Analysis" (FMEA) was conducted by Samarco management in around July 2014;
  - v. says that that FMEA does not state that the assessed risk was for "any given year";
  - vi. says that a FMEA for a tailings dam is a form of analysis used to identify possible modes of failure in order to facilitate the mitigation and minimisation of risk;
  - vii. admits that, in the FMEA referred to in subparagraph (i) above, Samarco management allocated a probability "8" to a rupture caused by a failure of the internal drainage system assuming an unlikely scenario of no controls in place whatsoever, and a probability "8" was defined as "25 < 50% chance of occurring";
  - viii. otherwise does not know and therefore does not admit the subparagraph, due to it concerning a Samarco management matter;
- (jb) as to subparagraph 42(jb), is not used and therefore BHP does not respond to it:
  - i. says that construction of an El.860m Blanket Drain had begun by 20 November 2014;
  - ii. says that Samarco installed more drainage over the course of the dam's life in response to specific, discrete issues at various locations;

- iii. otherwise does not know and therefore does not admit the subparagraph, due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter.
- (k) subparagraph 42(k) is not used and therefore BHP does not respond to it;
- (I) subparagraph 42(I) is not used and therefore BHP does not respond to it;
- (la) as to subparagraph 42(la) it:
  - i. <u>admits that a FMEA was conducted by Samarco management and</u> <u>external consultants in around November 2013;</u>
  - ii. <u>refers to and repeats the matters set out at subparagraphs 41(da)(ii) –</u> (vi) above; and
  - iii. <u>otherwise denies the subparagraph.</u>
- (m) as to subparagraph 42(m), it:
  - i. refers to and repeats subparagraph 40(j) above; and
  - ii. otherwise admits the subparagraph; and
- (n) as to subparagraph 42(n), it:
  - refers to and repeats <u>paragraphs 39 and 44</u>, and subparagraphs 42(<u>a</u>a) to 42(m) above; and
  - ii. otherwise denies the subparagraph.

# G.4A Problems after 31 December 2013 and up to and including 31 July 2014

# <u>42A.</u> As to paragraph 42A, it refers to and repeats paragraphs 40 to 42 above and says <u>further that:</u>

- (a) as to subparagraph 42A(a), it:
  - i. refers to and repeats paragraphs 42(aa)-(n) above; and
  - ii. <u>otherwise does not know and therefore does not admit the subparagraph</u> <u>due to the unavailability of BHP Brasil representatives and/or it</u> <u>concerning a Samarco management matter;</u>

# Particulars

<u>Seepage and cracks arose on the slope of left abutment at El.</u> <u>845m in June 2013: ITRB Report No. 8, January 2014, p 6.</u> <u>Seepage occurred at the right abutment in July 2014: ITRB</u> Report No. 10, July 2014, p 5; VOGBR Recursos Hidricos e <u>Geotecnia Ltda., "Technical Safety Report – Regular Safety</u> <u>Inspection Report". 4 September, 2014, page 11.</u>

<u>Cracking, slope movements and saturation occurred in August</u> <u>2014 at the left abutment: Samarco Mineracao S.A., "Cracking</u> <u>Inspection – Monitoring and Inspection Process September</u> <u>2014", 29 August 2014, p 3.</u>

<u>As recorded in a VOGBR report to Samarco management,</u> <u>Samarco implemented a drain to address a resurgence that</u> <u>appeared in the left abutment of Dike 1 at El. 855m in or around</u> <u>August 2013, and another drain to address a second resurgence</u> <u>and longitudinal cracks at the left abutment of Dike 1 at El. 860m</u> <u>in or around November 2013 (VOGBR, "Germano – Geral,</u> <u>Barragem do Fundão, Sistema de Drenagem, Drenagem Interna</u> <u>Complementar Relatório Técnico – Memorando" dated</u> <u>December 2014, pp 17-18).</u>

<u>As recorded in a VOGBR report to Samarco management, in</u> response to two small resurgences which were identified in late 2014 at El. 950m and January 2015 at El. 955m at the right shoulder of Dike 1, Samarco developed a specific recovery project for treating resurgences, which culminated in corrective measures for these resurgences (VOGBR, "Germano – Geral, Barragens de Germano e Fundão, Plano de Fechamento Relatório Técnico" dated August 2015, pp 17-18).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 2 April 2014 record that Mr Terra reported to the Samarco board of directors: "The dam management for the short term was considered well controlled by the Independent Tailing Review Board" and "The main projects related to the dam system were the subject of the last Independent Tailing Review Board (ITRB) event, and in a general view those projects were considered wellconceived" (Samarco Board Meeting No. 115, Board Meeting Company Report, 2 April 2014; Samarco Board Meeting No. 115, Board Meeting Minutes, 2 April 2014).

(b) as to subparagraph 42A(b), it:

- i. <u>refers to and repeats subparagraphs 40(b)(ii), 40(b)(iii) and 42(a)(iv)</u> <u>above;</u>
- ii. admits that, in or around January 2014, the ITRB:
  - 1. <u>observed seepage in the left abutment of the Dam;</u>
  - recommended that the installation of one or more additional drainage blankets and abutment drains be considered by Samarco management;

#### <u>Particulars</u>

# <u>ITRB Report No. 8 to Samarco management, January 2014,</u> <u>p 5.</u>

- iii. <u>says that the recommendation that the matters referred to in</u> <u>subparagraph (b)(ii)(2) be considered by Samarco management was</u> <u>consistent with the changing nature of tailings dams over time; and</u>
- iv. otherwise denies the subparagraph;
- (c) <u>as to subparagraph 42A(c), it:</u>
  - i. <u>refers to and repeats subparagraphs 40(b)(ii), 40(b)(iii), and 42(a)(iv)</u> <u>above:</u>
  - ii. <u>admits that the internal drainage system of the Fundão Dam was altered</u> <u>from the system contemplated by the initial or original design; and</u>
  - iii. <u>otherwise does not know and therefore does not admit the subparagraph</u> <u>due to the unavailability of BHP Brasil representatives and/or it</u> <u>concerning a Samarco management matter.</u>
- (d) <u>it admits subparagraph 42A(d);</u>
- (e) <u>as to subparagraph 42A(e), it:</u>
  - i. <u>admits that a FMEA was conducted by Samarco management and</u> <u>external consultants in around July 2014;</u>
  - ii. refers to and repeats the matters set out at subparagraphs 41(da)(ii) –
     (v) above;
  - iii. says that the Panel Report concluded that the immediate cause of the Fundão Dam failure was static liquefaction, which was assigned a probability of 0.1 < 1 % chance of occurring in the FMEA; and</li>
  - iv. otherwise denies the subparagraph.

- (f) <u>as to subparagraph 42A(f), it:</u>
  - i. repeats and relies upon subparagraph 40(gb)(i):
  - ii. <u>says that construction of an El.860m Blanket Drain had begun by 20</u> <u>November 2014:</u>
  - iii. <u>says that Samarco installed more drainage over the course of the dam's</u> <u>life in response to specific, discrete issues at various locations;</u>
  - iv. <u>otherwise does not know and therefore does not admit the</u> <u>subparagraph, due to the unavailability of BHP Brasil representatives</u> <u>and/or it concerning a Samarco management matter.</u>

# <u>Particulars</u>

(i) a buried drain was installed in April 2013 at El. 855m on the left abutment of Dike 1;

(ii) a buried drain was installed in November 2013 at El. 860m on the left abutment of Dike 1;

(iii) a rockfill trench wrapped in geotextile was constructed in June 2013 on the left abutment to convey water collected from the El.855m drain and El.860m drain across the plateau of the Setback:

(iv) an open channel was constructed in December 2013 to extend the left abutment rockfill trench as the plateau of the Setback was raised;

(v) a Vale toe drain was constructed in September 2013 to June 2014 at the toe of the Fabrica Nova Waste Pile; and

(vi) an inverted drain was constructed in July 2014 at El. 855m on the right abutment.

- (g) as to subparagraph 42A(g), it
  - i. refers to and repeats subparagraph 42(a) above;
  - ii. <u>admits that in or around July 2014, there was seepage at the right</u> <u>abutment;</u>
  - iii. <u>says that in September 2014, the Samarco board was informed by</u> <u>Samarco management that the dam management for the short term was</u> <u>considered well controlled by the ITRB; and</u>

In papers provided to the Samarco Board for the 19 September 2014 Board meeting, the Board was told that the dam management for the short term was considered well controlled by the Independent Tailing Review Board (ITRB).

- iv. <u>otherwise does not know and therefore does not admit the subparagraph</u> <u>due to the unavailability of BHP Brasil representatives and/or it</u> <u>concerning a Samarco management matter;</u>
- (h) as to subparagraph 42A(h), it:
  - i. refers to and repeats paragraphs 39 and 44, and subparagraphs 42A(a) to 42A(g) above; and
  - ii. <u>otherwise denies the subparagraph.</u>

# G.5 Problems from <u>27 August 2014 onwards</u> after 31 July 2014 up to and including <u>20 November 2014</u>

- 43. As to paragraph 43, it refers to and repeats paragraphs 40 to 42<u>A</u> above, and says further:
  - (a) as to subparagraph 43(a), it:
    - i. refers to and repeats paragraph 42<u>A</u> above;
    - ii. refers to and repeats subparagraph 43(g)(ii) below; and
    - iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
  - (b) as to subparagraph 43(b), it:
    - i. says that cracks were observed at the Setback near the left abutment of the Fundão Dam in late August 2014 during a routine inspection by Samarco management;

# Particulars

Report prepared by Pimenta de Ávila for Samarco management, "Germano Geral, Programa de Disposição de Rejeitos, Inspeção de Campo, Relatório de Inspeção do Sistema de Disposição de Rejeitos Feita em 04 de Setembro de 2014", p 4.

- ii. refers to and repeats subparagraph 40(a)(iv) above;
- iii. refers to and repeats subparagraph 43(g)(ii) below; and
- iv. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (c) as to subparagraph 43(c) is not used and therefore BHP does not respond to it;:
  - i. says that Pimenta was an external consultant to Samarco, reporting to Samarco management;
  - ii. says that reports by Pimenta dated 15 September 2014 and 22 December 2014 refer to inspections of the Fundão Dam by Pimenta in or around September, October and December 2014;
  - iii. says that the Pimenta report dated 15 September 2014 contained words to the effect that Samarco <u>had</u> immediately built a reinforcement embankment at the foot of the slope of the retreat, and made recommendations including that piezometers be installed and observed daily to measure liquid saturation; and

Report prepared by Pimenta de Ávila for Samarco management, "Germano Geral, Programa de Disposição de Rejeitos, Inspeção de Campo, Relatório de Inspeção do Sistema de Disposição de Rejeitos Feita em 04 de Setembro de 2014,", pp 4, 6.

otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;

(d) as to subparagraph 43(d) is not used and therefore BHP does not respond to it;:

i. refers to and repeats subparagraph 43(g)(ii) below; and

- ii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (e) as to subparagraph 43(e), it:

- admits that, on or about 20 November 2014, the ITRB prepared a report to Samarco management (ITRB Report No. 11), which stated words to the effect that:
  - A. analysis of the cause of the cracks observed on 26 August 2014 suggests it was caused by a circular rupture passing through the tailings below the compacted region of the elevation dikes which had been elevated over an area of possible lower resistance material with a high phreatic surface;
  - B. the area should be filled as soon as possible in order to return the axis to its design position, that the required volume was approximately 2 million m<sup>3</sup> and could be filled with cyclone material and/or dry tailings, that Samarco estimated that one year would be required to fill the area, and that the ITRB recommended every effort be made to complete the work on a priority basis; and

ITRB Report No. 11 to Samarco management, 20 November 2014, pp 10-11.

- ii. relies on the full terms and effect of the ITRB Report No. 11;
- iii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (f) as to subparagraph 43(f), it:
  - i. says that:
    - A. ITRB Report No. 11 stated words to the effect that Samarco estimated it would take one year to complete filling in the Setback to return the axis to its design position; and
    - B. ITRB Report No. 12 stated words to the effect that infilling and realignment of the Setback would be completed after other drainage works were undertaken;

# Particulars

ITRB Report No. 11, page 11.

ITRB Report No. 12, page 3.

- ii. refers to and repeats subparagraph 43(g)(ii) below; and
- iii. otherwise does not know and therefore does not admit the subparagraph due to due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (fa) as to subparagraph 43(fa), it:
  - i. refers to and repeats subparagraph 43(g)(ii) below;
  - ii. otherwise does not know and therefore does not admit the subparagraph due to the unavailability of BHP Brasil representatives and/or it concerning a Samarco management matter;
- (faa) it admits subparagraph 43(faa);
- (fb) it denies subparagraph 43(fb);

# <u>Particulars</u>

The Respondent refers to and repeats subparagraph 42A(f) and its particulars and the particulars to subparagraph 42(a)(ii) above.

Further particulars may be provided following evidence.

- (fc) it admits subparagraph 43(fc);
- (g) as to subparagraph 43(g), it:
  - refers to and repeats <u>paragraphs 39 and 44</u>, and subparagraphs 43(a) to 43(f<u>c</u>) above;
  - ii. says further that, from <del>27</del> August <u>31</u> July 2014 to the end of the Relevant Period, the Samarco board of directors was repeatedly informed by Samarco management that the ITRB considered that dam management was well-controlled and that the ITRB recommendations had been or were being implemented; and

#### Particulars

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 19 September 2014 record that Mr Vescovi reported to the Samarco board of directors: "The dam management for the short term was considered well controlled by the Independent Tailing Review Board (ITRB)" and "The main projects related to the dam system were the subject of the last Independent Tailing Review Board (ITRB) event, and in a general view those projects were considered well-conceived" (Samarco Board Meeting No. 117, Board Meeting Company Report, 19 September 2014; Samarco Board Meeting No. 117, Board Meeting Minutes, 19 September 2014).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 10 December 2014 record that Mr Terra reported to the Samarco board of directors: "Dam management for the short term was considered well controlled by the Independent Tailing Review Board (ITRB)" and "84% of the actions recommended by the ITRB in its last report had been implemented with the remaining 16% of recommended actions on track" (Samarco Board Meeting No. 119, Board Meeting Company Report, 10 December 2014; Samarco Board Meeting No. 119, Board Meeting Minutes, 10 December 2014).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 15 April 2015 record that Mr Terra reported to the Samarco board of directors: "Short term planning, as well as studies on physical dam stability and flood periods are on schedule. Dam management was considered well controlled by the Independent Tailing Review Board", "tailings systems are safely protected at a surplus of 23 percent above the safe reference" and that 37% of the actions recommended by the ITRB had been concluded with the remaining 63% of recommended actions on schedule (Samarco Board Meeting No. 120, Board Meeting Company Report, 15 April 2014; Samarco Board Meeting No. 120, Board Meeting Minutes, 15 April 2015).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 5 August 2015 record that Mr Terra reported to the Samarco board of directors: "For the tailing operations all planning, as well as studies on physical dam stability and flood periods, are on schedule. Dam management was considered well controlled by the Independent Tailing Review Board" and that 46% of the actions recommended by the ITRB had been concluded with the remaining 54% of recommended actions on time (Samarco Board Meeting No. 121, Board Meeting Company Report, 5 August 2015; Samarco Board Meeting No. 121, Board Meeting Minutes, 5 August 2015).

iii. otherwise denies the subparagraph.

# G.5A Problems after 20 November 2014

# <u>43A.</u> As to paragraph 43A, it refers to and repeats paragraphs 40 to 43 above, and says further:

- (a) as to subparagraph 43A(a), it:
  - i. refers to and repeats paragraph 43 above; and
  - ii. <u>otherwise does not know and therefore does not admit the</u> <u>subparagraph due to the unavailability of BHP Brasil representatives</u> <u>and/or it concerning a Samarco management matter;</u>

#### (b) as to subparagraph 43A(b), it:

- i. <u>says that Pimenta de Avila was an external consultant to Samarco,</u> <u>reporting to Samarco management;</u>
- ii. says that reports by Pimenta de Avila dated 15 September 2014 and 22
   December 2014 refer to inspections of the Fundão Dam by Pimenta de Avila in or around September, October and December 2014;
- iii. says that the report by Pimenta de Avila dated 15 September 2014 contained words to the effect that Samarco had, after identifying cracks at the crest of the retreat dike, immediately built a reinforcement embankment at the foot of the slope of the retreat and made recommendations including that piezometers be installed and observed daily to measure liquid saturation; and

#### Particulars

<u>Report prepared by Pimenta de Ávila for Samarco management,</u> <u>"Germano Geral, Programa de Disposição de Rejeitos, Inspeção</u> <u>de Campo, Relatório de Inspeção do Sistema de Disposição de</u> <u>Rejeitos Feita em 15 de Setembro de 2014", pp 4, 6</u> iv. says that the report by Pimenta de Avila dated 22 December 2014 contained words to the effect that the piezometer instrumentation that was recommended be installed in September 2014 to observe the state and extent of saturation was nearly fully installed in October 2014 and readings were being observed and interpreted for 2 months as at December 2014;

#### Particulars

<u>Report prepared by Pimenta de Ávila for Samarco management,</u> <u>"Germano Geral, Programa de Disposição de Rejeitos, Inspeção</u> <u>de Campo, Relatório de Inspeção do Sistema de Disposição de</u> <u>Rejeitos em 15/12/2014", pp 4.</u>

- v. <u>says otherwise does not know and therefore does not admit the</u> <u>subparagraph due to the unavailability of BHP Brasil representatives</u> <u>and/or it concerning a Samarco management matter.</u>
- (c) as to subparagraph 43A(c), it:
  - i. refers to and repeats subparagraph 43(g)(ii) above and 43A(h)(ii) below; and
  - ii. <u>otherwise does not know and therefore does not admit the</u> <u>subparagraph due to the unavailability of BHP Brasil representatives</u> <u>and/or it concerning a Samarco management matter;</u>

# (d) as to subparagraph 43A(d), it:

- i. says that:
  - A. <u>ITRB Report No. 11 stated words to the effect that Samarco</u> <u>estimated it would take one year to complete filling in the</u> <u>Setback to return the axis to its design position;</u>
  - B. <u>ITRB Report No. 12 stated words to the effect that infilling and realignment of the Setback would be completed after other drainage works were undertaken, which it described as essential and that it was important to not miss the opportunity to install this additional drainage;</u>
  - C. <u>Samarco Project 940 Execution Plan dated 25 February 2015</u> used words to the effect that the works included implementation

of internal filter drains in the embankments of the Germano and Fundao dams; and

D. <u>The 28 January 2015 email from Daviely Rodrigues Silva to</u> <u>Ferreira recorded words to the effect that work in progress</u> <u>included on drainage;</u>

# **Particulars**

ITRB Report No. 11, page 11.

ITRB Report No. 12, page 3, 5.

Samarco Project 940 Execution Plan dated 25 February 2015, Chapter 8 "Construction", pages 33-45;

<u>Email from Daviely Rodrigues Silva to Ferreira dated 28</u> January 2015 (BHP00261051);

- ii. refers to and repeats subparagraph 43(g)(ii) above and 43A(h)(ii) below; and
- iii. <u>otherwise does not know and therefore does not admit the</u> <u>subparagraph due to due to the unavailability of BHP Brasil</u> representatives and/or it concerning a Samarco management matter;
- (e) as to subparagraph 43A(e), it:
  - i. refers to and repeats subparagraph 43(g)(ii) above and 43A(h)(ii) below; and
  - ii. <u>otherwise does not know and therefore does not admit the</u> <u>subparagraph due to due to the unavailability of BHP Brasil</u> <u>representatives and/or it concerning a Samarco management matter;</u>
- (f) it admits subparagraph 43A(f);
- (g) it admits subparagraph 43A(g);
- (h) as to subparagraph 43A(h) it:
  - i. <u>refers to and repeats paragraphs 39 and 44, and subparagraphs 43A(a)</u> <u>to 43A(g)(ii) above;</u>
  - ii. <u>says further that, from 20 November 2014 to the end of the Relevant</u> <u>Period, the Samarco board of directors was repeatedly informed by</u> <u>Samarco management that the ITRB considered that dam management</u>

was well-controlled and that the ITRB recommendations had been or were being implemented; and

#### <u>Particulars</u>

Minutes of the meeting of the Samarco board of directors, and papers tabled before the board of directors, on 10 December 2014 record that Mr Terra reported to the Samarco board of directors: "Dam management for the short term was considered well controlled by the Independent Tailing Review Board (ITRB)" and "84% of the actions recommended by the ITRB in its last report had been implemented with the remaining 16% of recommended actions on track". (Samarco Board Meeting No. 119, Board Meeting Company Report,, 10 December 2014; Samarco Board Meeting No. 119, Board Meeting Minutes, 10 December 2014).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 15 April 2015 record that Mr Terra reported to the Samarco board of directors: "Short term planning, as well as studies on physical dam stability and flood periods are on schedule. Dam management was considered well controlled by the Independent Tailing Review Board", "tailings systems are safely protected at a surplus of 23 percent above the safe reference", and that 37% of the actions recommended by the ITRB had been concluded with the remaining 63% of recommended actions on schedule. (Samarco Board Meeting No. 120, Board Meeting Company Report, 15 April 2014; Samarco Board Meeting No. 120, Board Meeting Minutes, 15 April 2015).

Minutes of the meeting of the Samarco board of directors, and papers tabled before the Samarco board of directors, on 5 August 2015 record that Mr Terra reported to the Samarco board of directors: "For the tailing operations all planning, as well as studies on physical dam stability and flood periods, are on schedule. Dam management was considered well controlled by the Independent Tailing Review Board" and that 46% of the actions recommended by the ITRB had been concluded with the remaining 54% of recommended actions on time. (Samarco <u>Board Meeting No. 121, Board Meeting Company Report, 5</u> <u>August 2015; Samarco Board Meeting No. 121, Board Meeting</u> <u>Minutes, 5 August 2015).</u>

Refers to and repeats the particulars at 43(g) above:

iii. otherwise denies the subparagraph.

# G.6 Consequential Risks

- 44. As to paragraph 44, it:
  - (a) admits that a global failure of the Fundão Dam and uncontrolled tailings outflow had the potential to cause one or more of the consequences alleged in subparagraphs (a)(i), a(ii) and (b) to (e); and
  - (b) otherwise denies the paragraph.
- 45. As to paragraph 45, it:
  - (a) admits that a prolonged interruption of operations at the Fundão Dam arising from a global failure of the Fundão Dam had the potential to cause one or more of the consequences alleged in subparagraphs (a) to (d); and
  - (b) otherwise denies the paragraph.

# H. CONTINUOUS DISCLOSURE CONTRAVENTIONS

# H.1 Awareness of information and risks

- 46. As to paragraph 46, it:
  - (a) says, as to subparagraph 46(a), that:
    - the minutes of meetings of Samarco's board of directors during the Relevant Period record the BHP Brasil Appointees attending meetings in their capacity as serving or alternate members of the Samarco board as follows:
      - A. Randolph attended two Samarco board meetings;
      - B. [Deleted]
      - C. Wilson attended 11 Samarco board meetings;
      - D. Zweig attended six Samarco board meetings;
      - E. Fernandes attended 13 Samarco board meetings;
      - F. Beck attended four Samarco board meetings; and

- G. Ottaviano attended one Samarco board meeting;
- ii. that Samarco's shareholders did not hold "pre-board" meetings;
- iii. says further that BHP Brasil Appointees in their capacity as serving or alternate members of the Samarco board held "pre-board" meetings prior to a meeting of Samarco's board of directors, and that there was no formal record kept of attendance at such meetings;
- iv. says the minutes of meetings of the Samarco Board committees and subcommittees referred to at paragraph 30 during the Relevant Period record the following BHP Brasil Appointees attending meetings as follows:
  - A. Randolph attended at least 3 Remuneration Committee meetings;
  - B. Wilson attended at least 7 Remuneration Committee meetings;
  - C. Fernandes attended at least 10 F&S Committee meetings, 9
     Operations Committee meetings, 25 P4P Steering Committee meetings, 16 Performance Management Subcommittee meetings, 14 Capital Projects Subcommittee meetings, and 6
     Risks Subcommittee meetings;
- v. otherwise denies the subparagraph; and
- (b) as to subparagraph 46(b), says:
  - it does not know and therefore does not admit whether the BHP Brasil Appointees read the papers or minutes of meetings which they did not attend due to the unavailability of BHP Brasil representatives; and

# Further particulars may be provided following evidence.

- ii. otherwise denies the subparagraph.
- 47. As to paragraph 47, it refers to and repeats paragraphs 38B to 45 above and says further that:
  - (a) refers to and repeats paragraphs 38B to 45 above; [Deleted]
  - (b) <u>it admits that:</u>
    - i. minutes of meetings of the Samarco board of directors;

- reports prepared by the ITRB and/or minutes of meetings of the ITRB; and
- iii. minutes of meetings of certain Samarco board committees,

record discussion of some of the matters pleaded in paragraphs 40 to 44 above;

- (c) refers to and repeats subparagraphs 38B and 45, and says further that presentations, prepared for pre-board meetings of the BHP representatives in their capacity as serving or alternate members of the Samarco board, record discussion and/or presentation of some of the matters pleaded in paragraphs 39B to 44 above;
- (d) says further that the paragraph is pleaded in a rolled-up, conclusory and objectionable way;
- (e) says that it reserves the right to plead to the paragraph with more specificity if and when the Joint Applicants identify the specific information they allege was discussed at particular meetings of, or in the reports of, the respective boards and committees; and
- (f) <u>it otherwise denies the paragraph.</u>
- 47A. As to paragraph 47A, it:
  - (a) refers to and repeats paragraphs 38B to 47 above and paragraph 48 below;
  - (b) subject to the pleas in paragraphs 38B to 45 and 47 above, denies the paragraph.
- 48. As to paragraph 48, it:
  - (a) refers to and repeats paragraphs 38B to 45, 47 and 47A(b) above;
  - (b) subject to the pleas in paragraphs 38B to 45, 47 and 47A(b) above, does not know and therefore does not admit whether directors on Samarco's board of directors nominated by BHP Brasil had any of the information alleged in paragraph 48 due to the unavailability of BHP Brasil representatives;
  - (c) says whether Samarco had any of the alleged Safety and Capacity Information, the alleged August 2012 Information, the alleged November 2012 Information, the alleged Pre-27 August 2014 December 2013 Information, the alleged July 2014 Information, the alleged Post-August November 2014 Information, the alleged April 2015 Information, and/or information about the alleged General Consequential Risks is not determinative of whether the Respondent had that information in circumstances where:

- Samarco was an entity in which BHP Brasil (not the Respondent) owned
   50% of the issued shares;
- the BHP Brasil Appointees were appointed to the Samarco board of directors by BHP Brasil, not the Respondent;
- iii. Samarco was not controlled by BHP Brasil or by the Respondent;
- iv. Samarco was operationally independent of BHP Brasil;
- v. Samarco was operationally independent of the Respondent;
- vi. within Samarco's structure, there were two distinct tiers: the governance tier (represented by the Samarco board of directors), and the management tier (represented by the Executive Board and the management team);
- vii. the Executive Board was elected by the Samarco CEO and was independent of the Samarco board of directors;
- viii. the Executive Board was responsible for managing Samarco's day-today operations, making operational decisions and maintaining the Fundão Dam, not the Samarco board of directors (or BHP Brasil or the Respondent); and
- in discharging that responsibility in relation to the Fundão Dam, the Executive Board was assisted and advised by its management team, its own internal geotechnical experts (e.g. the Dams Committee and the geotechnical department) and, directly or indirectly, external consultants (e.g. Pimenta de Ávila and the ITRB);
- (d) says further that it:
  - i. will rely upon the definition of "*aware*" in ASX Listing Rule 19.12 for its full force and effect, including that an entity becomes aware of information if an officer of the entity has, or ought reasonably to have "come into possession of the information in the course of the performance of their duties as an officer of that entity";
  - ii. will rely upon the particular roles, obligations and duties of each of the BHP Brasil Appointees respectively as:
    - A. a director or alternate director of the Samarco board of directors;
    - B. a director or alternate director of the Samarco board of directors appointed as such by BHP Brasil; and

- C. an officer of the Respondent (where applicable);
- iii. will rely on the capacity in which each of the BHP Brasil Appointees respectively acted in the course of the performance of their duties respectively as:
  - A. a director or alternate director of the Samarco board of directors;
  - B. a director or alternate director of the Samarco board of directors appointed as such by BHP Brasil; and
  - C. an officer of the Respondent (where applicable);
- (e) reserves its position to plead additional facts once it has access to instructions from individuals to whom it currently does not have access due to the unavailability of BHP Brasil representatives;
- (f) denies that:
  - i. facts or information known to, or opinions held by, the BHP Brasil Appointees or any of them in their capacity as directors of Samarco; or
  - facts or information which ought to have been (but were not) known to, or opinions which ought to have been (but were not) held by, the BHP Brasil Appointees or any of them in their capacity as directors of Samarco,

constituted facts, information or opinions possessed by or attributable to the Respondent simply by reason that they were (where applicable) also officers of the Respondent;

- (g) says further that:
  - to the extent that the alleged Safety and Capacity Information, the alleged August 2012 Information, the alleged November 2012 Information, the alleged Pre-27 August 2014 December 2013 Information, the alleged July 2014 Information, the alleged Post August November 2014 Information, the alleged April 2015 Information, the alleged General Consequential Risks and the alleged BHP Consequential Risks constituted matters of fact, the Respondent's continuous disclosure obligations, whether pursuant to the Listing Rules or s 674 of the Corporations Act, were not enlivened in respect of:
    - A. information which the Respondent did not have (even if the company ought to have had it);

- B. information which any one or more officers of the company ought to have had, but did not have; and
- ii. to the extent that the alleged Safety and Capacity Information, the alleged August 2012 Information, the alleged November 2012 Information, the alleged Pre-27 August 2014 December 2013 Information, the alleged July 2014 Information, the alleged Post-August November 2014 Information, the alleged April 2015 Information, the alleged General Consequential Risks and the alleged BHP Consequential Risks constituted matters of opinion, BHP's continuous disclosure obligations, whether pursuant to the Listing Rules or s 674 of the Corporations Act, were not enlivened in respect of opinions which the company or one or more officers of the Respondent ought to have formed, but did not form; and
- (h) otherwise denies the paragraph.
- 49. As to paragraph 49, it:
  - (a) refers to and repeats paragraph 48 above; and
  - (b) otherwise denies the paragraph.

# H.2 Failure to make continuous disclosure

- 50. As to paragraph 50, it:
  - (a) refers to and repeats paragraphs 40 to 49 above;
  - (b) says further that:
    - there was no August 2012 Information, November 2012 Information, Pre-27 August 2014 December 2013 Information, July 2014 Information, Post-August November 2014 Information, April 2015 Information or Risks as alleged and in those circumstances no obligation arose to disclose that information to the ASX;
    - ii. further or alternatively, to the extent that the August 2012 Information, November 2012 Information, <u>December 2013 Information</u>, <u>July 2014</u> <u>Information, November 2014 Information, April 2015 Information or Pre-</u> <u>27 August 2014 Information, Post-August 2014 Information or Risks did</u> exist as alleged, the Respondent did not have that information and in those circumstances no obligation arose to disclose that information to the ASX;

- iii. further or alternatively, if the alleged matters pleaded in paragraphs 44 and 45 existed as alleged (which is denied), those matters constitute information which was generally available within the meaning of s 676 of the Corporations Act; and
- iv. further or alternatively, none of the Safety and Capacity Information, the August 2012 Information, the November 2012 Information, <u>December</u> 2013 Information, July 2014 Information, November 2014 Information, <u>April 2015 Information or Pre-27 August 2014 Information, Post-August</u> 2014 Information or Risks was information that a reasonable person would expect to have a material effect on the price or value of shares in the Respondent, including because relevant matters of context made the alleged information immaterial;

### Particulars

- In relation to the Safety and Capacity Information, relevant matters of context included the matters pleaded at paragraphs 39(a), 39(b), 39(d), and 39(e) above.
- b. In relation to the August 2012 Information, relevant matters of context included the matters pleaded at paragraphs 40(a)(ii) (vi), 40(aa)(iii)(B), 40(ab)(iii) and (iv), 40(b)(ii), (iii), (v) (viii), 40(ea), 40(ga)(ii), 40(gb), 40(i), 40(j), 40(j), 40(ja)(ii)-(iv) and 40(k)(ii) above.
- c. In relation to the November 2012 Information, relevant matters of context included the matters pleaded at subparagraph (<u>b</u>B) above together with the matters pleaded at paragraph <u>41(aa)(ii)</u>, 41(b)(ii) <u>and 41(da)(i)-(vi)</u> above.
- d. In relation to <u>the December 2013</u> Pre-27 August 2014 Information, relevant matters of context included the matters pleaded at subparagraph (<u>c</u>B) above together with the matters pleaded at paragraphs 42(a)(ii) and (iv), 42(da), 42(daa)(ii), 42(db)(iii) and 42(la)(ii), and 42(ja) above.
- <u>da. In relation to the July 2014 Information, relevant matters of</u> <u>context included the matters pleaded at subparagraph (d)</u> <u>above together with the matters pleaded at paragraph 42A(a),</u> <u>42A(b)(iii), 42A(e)(ii) and (iii), 42A(f)(ii)-(iii) and 42A(g)(iii)</u> <u>above.</u>

- e. In relation to <del>Post-August</del> <u>the November</u> 2014 Information, relevant matters of context included the matters pleaded at subparagraph (<u>da</u>B) above together with the matters pleaded at paragraphs 4<del>3(c)(iii),</del> 43(b)(ii) and (iii), 43(e), 43(f), <u>and</u> 43(g)(ii) above.
- <u>ea. In relation to the April 2015 Information, relevant matters of</u> <u>context included the matters pleaded at subparagraph (e)</u> <u>above together with the matters pleaded at paragraphs</u> <u>43A(b)(iii) and (iv), 43A(d)(i) and 43A(h)(ii).</u>
- f. In relation to Risks, relevant matters of context included the matters referred to in particulars (a)-(e<u>a</u>) above.
- iva. further or alternatively, in the absence of the relevant matters of context identified in (a) to (f) of the particulars subjoined to paragraph 50(b)(iv) (to the extent established), the alleged material information (to the extent established) was factually incorrect such that it did not arise or constitute "information" for the purposes of s. 674(1) of the *Corporations* <u>Act;</u>
- v. further or alternatively, even if the matters comprising the Safety and Capacity Information, August 2012 Information, November 2012 Information, <u>December 2013 Information</u>, July 2014 Information, <u>November 2014 Information</u>, April 2015 Information <u>Pre-27 August 2014</u> Information, <u>Post-August 2014 Information</u> or Risks constituted information that a reasonable person would expect to have a material effect on the price or value of shares in the Respondent (which is denied), the information:
  - A. was information that:
    - a. a reasonable person would not expect to be disclosed;
    - b. was confidential, and the ASX had not formed the view that the information had ceased to be confidential; and
    - c. comprised matters of supposition, further or alternatively was insufficiently definite to warrant disclosure,

within the meaning of ASX Listing Rules 3.1A.1 to 3.1A.3; and

B. by reason of the matters in subparagraph (<u>a</u>A) above:

- b. was not information which s 674(2) of the Corporations
   Act required to be notified to the ASX at any time prior to
   9 November 2015; and
- (c) otherwise denies the paragraph.
- 51. As to paragraph 51, it:
  - (a) refers to and repeats paragraph 48 and subparagraph 50(b) above; and
  - (b) denies the paragraph.
- 52. As to paragraph 52, it:
  - (a) says that it did not make the "Required Disclosures" (as defined), and was not required to make such disclosures; and
  - (b) otherwise denies the paragraph.
- 53. It denies paragraph 53.

# I. MISLEADING OR DECEPTIVE CONDUCT

# I.1 BHP Ltd's Statements prior to 9 November 2015

- 53A. As to paragraph 53A, it:
  - (a) admits that, during the relevant period, it published or caused to be published the BHP Billiton Charter (Charter) to the ASX;
  - (b) relies on the full terms and effect of the Charter; and
  - (c) otherwise admits the paragraph.
- 54. As to paragraph 54, it:
  - (a) admits that it published or caused to be published the BHP Annual Report 2011
     (FY2011 Annual Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2011 Annual Report;
  - (c) says further that the FY2011 Annual Report included statements that noncontrolled assets may not comply with the Respondent's standards, concerning risk factors impacting the Respondent, and disclaiming the effect of forwardlooking statements contained within the FY2011 Annual Report; and

# Particulars

#### FY2011 Annual Report pp 7-11.

# FY2011 Annual Report p 9: "...**Our non-controlled assets may not** comply with our standards

Some of our assets are controlled and managed by joint venture partners or by other companies. Some joint venture partners may have divergent business objectives which may impact business and financial results. Management of our non-controlled assets may not comply with our management and operating standards, controls and procedures (including our health, safety, and environment standards). Failure to adopt equivalent standards, controls and procedures at these assets could lead to higher costs and reduced production and adversely impact our results and reputation..."

# FY2011 Annual Report p 10: "...**Unexpected natural and operational** catastrophes may adversely impact our operations

We operate extractive, processing and logistical operations in many geographic locations both onshore and offshore. Our operational processes may be subject to operational accidents such as port and shipping incidents, fire and explosion, pitwall failures, loss of power supply, railroad incidents, loss of well control, environmental pollution and mechanical failures. Our operations may also be subject to unexpected natural catastrophes such as earthquakes, flood, hurricanes and tsunamis... Existing business continuity plans may not provide protection for all of the costs that arise from such events. The impact of these events could lead to disruptions in production, increased costs and loss of facilities more than offsetting premiums saved which would adversely affect our financial results and prospects. Third party claims arising from these events may exceed the limit of liability insurance policies we have in place...."

FY2011 Annual Report p 11: "This Annual Report contains forward looking statements... These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this

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Annual Report. Readers are cautioned not to put undue reliance on forward looking statements."

(Emphases added)

- (d) otherwise admits the paragraph.
- 54A. As to paragraph 54A, it:
  - (a) admits that it published or caused to be published the BHP FY2011
     Sustainability Report (FY2011 Sustainability Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2011 Sustainability Report;
  - (c) <u>says that the FY2011 Sustainability Report covered assets wholly owned and</u> <u>operated by BHP or operated by BHP in a joint venture operation (i.e. controlled</u> <u>assets) during the 12 months to 30 June 2011;</u>
  - (d) says further that the FY2011 Sustainability Report included a statement to the effect that non-controlled assets were not obliged to operate according to BHP Billiton standards; and

### Particulars

# BHP FY2011 Sustainability Report, pages 4 and 21

- (e) otherwise admits the paragraph.
- 55. As to paragraph 55, it:
  - (a) admits that it published or caused to be published the BHP Annual Report 2012
     (FY2012 Annual Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2012 Annual Report;
  - (c) says further that the FY2012 Annual Report included statements that noncontrolled assets may not comply with the Respondent's standards, concerning risk factors impacting the Respondent, and disclaiming the effect of forwardlooking statements contained within the FY2012 Annual Report; and

# Particulars

FY2012 Annual Report pp 7-13.

FY2012 Annual Report p 9: "...**Unexpected natural and operational** catastrophes may adversely impact our operations

We operate extractive, processing and logistical operations in many geographic locations both onshore and offshore. Our operational

processes may be subject to operational accidents such as port and shipping incidents, underground mine and processing plant fire and explosion, open-cut pit wall failures, loss of power supply, railroad incidents, loss of well control, environmental pollution and mechanical critical equipment failures... Our operations may also be subject to unexpected natural catastrophes such as earthquakes, flood, hurricanes and tsunamis... Existing business continuity plans may not provide protection for all of the costs that arise from such events. The impact of these events could lead to disruptions in production, increased costs and loss of facilities more than offsetting premiums saved, which would adversely affect our financial results and prospects. Third party claims arising from these events may exceed the limit of liability insurance policies we have in place..."

# FY2012 Annual Report p 10: "...**Our non-controlled assets may not** comply with our standards

Some of our assets are controlled and managed by joint venture partners or by other companies. Management of our non-controlled assets may not comply with our management and operating standards, controls and procedures (including our HSEC standards). Failure to adopt equivalent standards, controls and procedures at these assets could lead to higher costs and reduced production and adversely impact our results and reputation..."

FY2012 Annual Report p 13: "This Report contains forward looking statements... These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this release. Readers are cautioned not to put undue reliance on forward looking statements."

(Emphases added)

- (d) otherwise admits the paragraph.
- 55A. As to paragraph 55A, it:
  - (a) admits that it published or caused to be published the BHP FY2012 Summary Review (FY2012 Summary Review) to the ASX;

- (b) relies on the full terms and effect of the FY2012 Summary Review;
- (c) says further that the FY2012 Summary Review included a statement that disclaimed the effect of forward-looking statements contained within the BHP FY2012 Summary Review; and

# Particulars

BHP FY2012 Summary Review p 4: "This Summary Review is not intended to provide a guide as to the likely future performance of the Group. Certain statements may be forward-looking statements which are based on current expectations, beliefs and assumptions regarding present and future business strategies and environments in which the Group will operate in the future. Such expectations, beliefs and assumptions may or may not prove to be correct and are subject to a number of known and unknown risks and uncertainties that could cause actual results, performance and achievements to differ materially. The Annual Report 2012 sets out certain risk factors that may cause our results to be materially less favourable than those implied by these forward-looking statements including, for example, fluctuations in commodity prices and currency exchange rates, demand changes in major markets and government regulations. Past performance cannot be relied on as a guide to future performance."

- (d) otherwise admits the paragraph.
- 55B. As to paragraph 55B, it:
  - (a) admits that, during the relevant period, it published or caused to be published the BHP FY2012 Sustainability Report (FY2012 Sustainability Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2012 Sustainability Report;
  - (c) <u>says that the FY2012 Sustainability Report covered assets wholly owned and</u> <u>operated by BHP or operated by BHP in a joint venture operation (i.e. controlled</u> <u>assets) during FY2012;</u>
  - (d) says further that the FY2012 Sustainability Report included a statement to the effect that non-controlled assets were not obliged to operate according to BHP Billiton standards; and

# Particulars

# BHP FY2012 Sustainability Report, pages 4 and 31

- (e) otherwise admits the paragraph.
- 55C. As to paragraph 55C, it:
  - (a) admits that, on or about 20 February 2013, it published or caused to be published a transcript of its interim results investor and analyst briefing on BHP's website;
  - (b) admits that the transcript attributes the pleaded statement to BHP's CEO at the time;
  - (c) relies on the full terms and effect of the transcript of its interim results investor and analyst briefing; and
  - (d) otherwise admits the paragraph.
- 56. As to paragraph 56, it:
  - (a) admits that it published or caused to be published the BHP Annual Report 2013
     (FY2013 Annual Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2013 Annual Report;
  - (c) says further that the FY2013 Annual Report included statements that noncontrolled assets may not comply with the Respondent's standards, concerning risk factors impacting the Respondent, and disclaiming the effect of forwardlooking statements contained within the FY2013 Annual Report; and

# Particulars

FY2013 Annual Report pp 14-19.

# FY2013 Annual Report p 15-16: "...**Unexpected natural and** operational catastrophes may adversely impact our operations

We operate extractive, processing and logistical operations in many geographic locations both onshore and offshore... Our operational processes may be subject to operational accidents such as port and shipping incidents, underground mine and processing plant fire and explosion, open-cut pit wall failures, loss of power supply, railroad incidents, loss of well control, environmental pollution and mechanical critical equipment failures. Our operations may also be subject to unexpected natural catastrophes such as earthquakes, flood, hurricanes and tsunamis... Existing business continuity plans may not provide protection for all of the costs that arise from such events. The impact of these events could lead to disruptions in production, increased costs and loss of facilities more than offsetting premiums saved, which would adversely affect our financial results and prospects. Third party claims arising from these events may exceed the limit of liability insurance policies we have in place..."

# FY2013 Annual Report p 16: "...**Our non-controlled assets may not** comply with our standards

Some of our assets are controlled and managed by joint venture partners or by other companies. Management of our non-controlled assets may not comply with our management and operating standards, controls and procedures, including our health, safety, environment and community (HSEC) standards. Failure to adopt equivalent standards, controls and procedures at these assets could lead to higher costs and reduced production and adversely impact our results and reputation..."

FY2013 Annual Report p 19: "This Annual Report contains statements relating to past performance (which cannot be relied on as a guide to future performance) and also contains forward looking statements... These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this Annual Report. Readers are cautioned not to put undue reliance on forward looking statements."

(Emphases added)

- (d) otherwise admits the paragraph.
- 56A. As to paragraph 56A, it:
  - (a) admits that it published or caused to be published the BHP FY2013 Summary Review (FY2013 Summary Review) to the ASX;
  - (b) relies on the full terms and effect of the FY2013 Summary Review;
  - (c) says further that the FY2013 Summary Review included a statement that disclaimed the effect of forward-looking statements contained within the BHP FY2013 Summary Review; and

# Particulars

BHP FY2013 Summary Review p 4: "This Summary Review is not intended to provide a guide as to the likely future performance of the Group. Certain statements may be forward-looking statements which are based on current expectations, beliefs and assumptions regarding present and future business strategies and environments in which the Group will operate in the future. Such expectations, beliefs and assumptions may or may not prove to be correct and are subject to a number of known and unknown risks and uncertainties that could cause actual results, performance and achievements to differ materially. The Annual Report 2013 sets out certain risk factors that may cause our results to be materially less favourable than those implied by these forward-looking statements including, for example, fluctuations in commodity prices and currency exchange rates, demand and supply changes in major markets and government regulations. Past performance cannot be relied on as a guide to future performance..."

- (d) otherwise admits the paragraph.
- 56B. As to paragraph 56B, it:
  - (a) admits that it published or caused to be published the BHP FY2013
     Sustainability Report (FY2013 Sustainability Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2013 Sustainability Report;
  - (c) <u>says that the FY2013 Sustainability Report covered assets wholly owned and</u> <u>operated by BHP or operated by BHP in a joint venture operation (i.e. controlled</u> <u>assets) during FY2013;</u>
  - (d) says further that the FY2013 Sustainability Report included a statement to the effect that BHP has the ability to set workplace HSEC standards and enforce their application at controlled assets only; and
  - (e) otherwise admits the paragraph.

# **Particulars**

# BHP FY2013 Sustainability Report, page 4.

- 57. As to paragraph 57, it:
  - (a) admits that it published or caused to be published the BHP Annual Report 2014
     (FY2014 Annual Report) to the ASX;

- (b) relies on the full terms and effect of the FY2014 Annual Report;
- (c) says further that the FY2014 Annual Report included statements that nonoperated assets may not comply with the Respondent's standards, concerning risk factors impacting the Respondent, and disclaiming the effect of forwardlooking statements contained within the FY2014 Annual Report; and

### Particulars

# FY2014 Annual Report pp 5, 20-25.

FY2014 Annual Report p 5: "...This Annual Report contains forward looking statements... These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this Annual Report. readers are cautioned not to put undue reliance on forward looking statements..."

# FY2014 Annual Report p 22: "...**Unexpected natural and operational** catastrophes may adversely impact our operations

We operate extractive, processing and logistical operations in many geographic locations, both onshore and offshore... Our operational processes may be subject to operational accidents, such as port and shipping incidents, underground mine and processing plant fire and explosion, open-cut pit wall failures, loss of power supply, railroad incidents, loss of well control, environmental pollution and mechanical critical equipment failures. Our operations may also be subject to unexpected natural catastrophes, such as earthquakes, flood, hurricanes and tsunamis... Existing business continuity plans may not provide protection for all of the costs that arise from such events. The impact of these events could lead to disruptions in production, increased costs and loss of facilities more than offsetting external premiums saved, which would adversely affect our financial results and prospects. Where external insurance is purchased, third party claims arising from these events may exceed the limit of liability of the insurance policies we have in place ... "

FY2014 Annual Report p 22: "...**Our non-operated assets may not** comply with our standards

Some of our assets are operated and managed by joint venture partners or by other companies. Management of our non-operated assets may not comply with our management and operating standards, controls and procedures, including our health, safety, environment and community (HSEC) standards. Failure to adopt equivalent standards, controls and procedures at these assets could lead to higher costs and reduced production and adversely impact our results and reputation..." (Emphases added)

- (d) otherwise admits the paragraph.
- 57A. As to paragraph 57A, it:
  - (a) admits that it published or caused to be published the BHP FY2014
     Sustainability Report (FY2014 Sustainability Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2014 Sustainability Report;
  - (c) <u>says that the FY2014 Sustainability Report covered assets wholly owned and</u> <u>operated by BHP or operated by BHP in a joint venture operation (i.e. operated</u> <u>assets) during FY2014;</u>
  - (d) says further that the FY2014 Sustainability Report included a statement to the effect that BHP has the ability to set workplace HSEC standards and enforce their application at operated assets only; and
  - (e) otherwise admits the paragraph.

# <u>Particulars</u>

# BHP FY2014 Sustainability Report, page 4

- 57B. As to paragraph 57B, it:
  - (a) admits that it published or caused to be published as Environmental, Social and Governance Briefing to the ASX;
  - (b) relies on the full terms and effect of the Environmental, Social and Governance Briefing;
  - (c) says further that the Environmental, Social and Governance Briefing included a statement that disclaimed the effect of forward-looking statements contained within the Environmental, Social and Governance Briefing; and

# Particulars

Environmental, Social and Governance Briefing p 2: "This release contains forward-looking statements... These forward-looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this release. Readers are cautioned not to put undue reliance on forwardlooking statements."

- (d) otherwise admits the paragraph.
- 58. As to paragraph 58, it:
  - (a) admits that it published or caused to be published the BHP Annual Report 2015
     (FY2015 Annual Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2015 Annual Report;
  - (c) says further that the FY2015 Annual Report included statements that nonoperated assets may not comply with the Respondent's standards, concerning risk factors impacting the Respondent, and disclaiming the effect of forwardlooking statements contained within the FY2015 Annual Report; and

# Particulars

### FY2015 Annual Report pp 9, 20-25.

FY2015 Annual Report p 9: "...This Annual Report contains forward looking statements... These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this Annual Report. Readers are cautioned not to put undue reliance on forward looking statements ..."

# FY2015 Annual Report p 22: "...**Unexpected natural and operational** catastrophes may adversely impact our operations

We operate extractive, processing and logistical operations in many geographic locations, both onshore and offshore... Our operational processes may be subject to operational accidents, such as port and shipping incidents, underground mine and processing plant fire and explosion, open-cut pit wall failures, loss of power supply, railroad incidents, loss of well control, environmental pollution and mechanical critical equipment failures. Our operations may also be subject to unexpected natural catastrophes such as earthquakes, flood, hurricanes and tsunamis ... Existing business continuity plans may not provide protection for all of the costs that arise from such events. The impact of these events could lead to disruptions in production, increased costs and loss of facilities. Where external insurance is purchased, third party claims arising from these events may exceed the limit of liability of the insurance policies we have in place ..."

# FY2015 Annual Report p 22: "...**Our non-operated assets may not** comply with our standards

Some of our assets are operated and managed by joint venture partners or by other companies. Management of our non-operated assets may not comply with our management and operating standards, controls and procedures, including our health, safety, environment and community (HSEC) standards. Failure to adopt equivalent standards, controls and procedures at these assets could lead to higher costs and reduced production and adversely impact our results and reputation..."

Further particulars may be provided following evidence.

- (d) otherwise admits the paragraph.
- 58A. As to paragraph 58A, it:
  - (a) admits that it published or caused to be published the BHP FY2015
     Sustainability Report (FY2015 Sustainability Report) to the ASX;
  - (b) relies on the full terms and effect of the FY2015 Sustainability Report;
  - (c) <u>says that the FY2015 Sustainability Report covered assets wholly owned and</u> <u>operated by BHP or operated by BHP in a joint venture operation during</u> <u>FY2015;</u>
  - (d) says further that the FY2015 Sustainability Report included a statement to the effect that BHP has the ability to set workplace HSEC standards and enforce their application at operated assets only; and
  - (e) otherwise admits the paragraph.

# <u>Particulars</u>

# BHP FY2015 Sustainability Report, page 4 and 8.

59. As to paragraph 59, it:

- (a) refers to and repeats paragraphs 54 to 58<u>A</u> above;
- (b) says that, amongst other matters, the FY2011 to FY2015 Annual Reports included statements to the effect that:
  - the Respondent prioritised and was committed to the safety and sustainability of its people, operations and the broader communities in which it operated;
  - ii. notwithstanding that commitment, health, safety, environmental and community incidents or accidents could occur and impact the Respondent's people, business, operations and reputation; and

#### Particulars

#### FY2011 Annual Report p 45:

"... Our approach to sustainability is reflected in Our BHP Billiton Charter, which defines our values, purpose and how we measure success, and the BHP Billiton Sustainable Development Policy, which defines our public commitments to safety, health, environmental and social responsibility...."

FY2011 Annual Report p 9:

"...Health, safety, environmental and community incidents or accidents and related regulations may adversely affect our operations and reputation or licence to operate

We are a major producer of carbon-related products such as energy and metallurgical coal, oil, gas, and liquefied natural gas. Our oil and gas operations are both onshore and offshore.

The nature of the industries in which we operate means that many of our activities are highly regulated by health, safety and environmental laws. As regulatory standards and expectations are constantly developing, we may be exposed to increased litigation, compliance costs and unforeseen environmental rehabilitation expenses.

Potential health, safety, environmental and community events that may have a material adverse impact on our operations include rockfall incidents in underground mining operations, aircraft incidents, light vehicle incidents, well blowouts, explosions or gas leaks, incidents involving mobile equipment, uncontrolled tailings breaches, escape of polluting substances, uncontrolled releases of hydrocarbons, human rights breaches and community protests or civil unrest..."

FY2012 Annual Report p 46:

"... Our BHP Billiton Charter value of Sustainability reflects our priority of putting health and safety first, being environmentally responsible and supporting our communities...."

FY2012 Annual Report p 10:

# *"... HSEC impacts, incidents or accidents and related regulations may adversely affect our people, operations and reputation or licence to operate*

We are a major producer of carbon-related products such as energy and metallurgical coal, oil, gas, and liquefied natural gas. Our oil and gas operations are both onshore and offshore.

The nature of the industries in which we operate means that many of our activities are highly regulated by health, safety and environmental laws. As regulatory standards and expectations are constantly developing, we may be exposed to increased litigation, compliance costs and unforeseen environmental rehabilitation expenses.

Potential safety events that may have a material adverse impact on our operations include fire, explosion or rock fall incidents in underground mining operations, personnel conveyance equipment failures in underground operations, aircraft incidents, incidents involving light vehicles and mining mobile equipment, ground control failures, well blowouts, explosions or gas leaks, isolation, working from heights or lifting operations.

Environmental incidents that have the potential to create a material impact include uncontrolled tailings breaches, subsidence from mining activities, escape of polluting substances and uncontrolled releases of hydrocarbons.

Our operations by their nature have the potential to impact biodiversity, water resources and related ecosystem services...

Due to the nature of our operations HSEC incidents or accidents and related regulations may adversely affect our reputation or licence to operate..."

FY2013 Annual Report p 8:

"...Our overriding commitment is ensuring the safety of our people, and respecting our environment and the communities in which we work. This commitment informs everything we do and influences every aspect of our work..."

FY2013 Annual Report p 16:

*"...HSEC impacts, incidents or accidents and related regulations may adversely affect our people, operations and reputation or licence to operate* 

Safety

Potential safety events that may have a material adverse impact on our operations include fire, explosion or rock fall incidents in underground mining operations, personnel conveyance equipment failures in underground operations, aircraft incidents, incidents involving light vehicles and mining mobile equipment, ground control failures, well blowouts, explosions or gas leaks, isolation and working from heights or lifting operations.

#### Environment

Environmental incidents that have the potential to create a material impact include uncontrolled tailings containment breaches, subsidence from mining activities, escape of polluting substances and uncontrolled releases of hydrocarbons.

Our operations by their nature have the potential to impact biodiversity, water resources and related ecosystem services..."

FY2014 Annual Report p 18:

"...Our Charter values and commitment to putting health and safety first, being environmentally responsible and supporting the communities in which we operate will remain unchanged..."

### FY2014 Annual Report p 23:

"... Safety, health, environmental and community impacts, incidents or accidents and related regulations may adversely affect our people, operations and reputation or licence to operate

#### Safety

Potential safety events that may have a material adverse impact on our operations include fire, explosion or rock fall incidents in underground mining operations, personnel conveyance equipment failures in underground operations, aircraft incidents, incidents involving light vehicles and mining mobile equipment, ground control failures, well blowouts, explosions or gas leaks, and accidents involving inadequate isolation and working from heights or lifting operations...

# Environment

Environmental incidents have the potential to lead to material adverse impacts on our operations. These include uncontrolled tailings containment breaches, subsidence from mining activities, escape of polluting substances and uncontrolled releases of hydrocarbons.

Our operations by their nature have the potential to adversely impact biodiversity, water resources and related ecosystem services...

Due to the nature of our operations, HSEC incidents or accidents and related regulations may adversely affect our reputation or licence to operate..."

### FY2015 Annual Report p 12:

"...Our overriding commitment is to ensuring the safety of our people, and respecting our environment and the communities in which we work. This commitment informs everything we do and influences every aspect of our work..."

### FY2015 Annual Report p 23:

"...Safety, health, environmental and community impacts, incidents or accidents and related regulations may adversely affect our people, operations and reputation or licence to operate

#### Safety

Potential safety events that may have a material adverse impact on our operations include fire, explosion or rock fall incidents in underground mining operations, personnel conveyance equipment failures in underground operations, aircraft incidents, incidents involving light vehicles and mining mobile equipment, ground control failures, well blowouts, explosions or gas leaks, and accidents involving inadequate isolation and working from heights or lifting operations...

# Environment

Environmental incidents have the potential to lead to material adverse impacts on our operations. These include uncontrolled tailings containment breaches, subsidence from mining activities, escape of polluting substances and uncontrolled releases of hydrocarbons.

Our operations by their nature have the potential to adversely impact biodiversity, water resources and related ecosystem services...

Due to the nature of our operations, HSEC incidents or accidents and related regulations may adversely affect our reputation or licence to operate..."

- (c) otherwise denies the paragraph.
- 60. As to paragraph 60, it:
  - (a) refers to and repeats paragraphs 53A to 59 above;
  - (b) says that it did not make the "Representations" (as defined), and that as such the Representations were not withdrawn or qualified, and were not continuing representations; and
  - (c) otherwise denies the paragraph.

# I.2 Misleading or Deceptive Conduct Contraventions

- 61. As to paragraph 61, it:
  - (a) admits that statements made in the Respondent's Charter, annual reports, sustainability reports, summary reviews, interim results investor and analyst briefing and Environmental, Social and Governance Briefing was conduct engaged:
    - in trade or commerce, in relation to financial services within the meaning of s 12DA(1) of the ASIC Act;
    - ii. in relation to financial products, or financial services within the meaning of s 1041H of the Corporations Act; and
  - (b) otherwise denies the paragraph.
- 62. As to paragraph 62, it:
  - (a) denies the paragraph;
  - (b) refers to and repeats paragraphs <u>30H to 43A and 53A to 61 above; and</u>
  - (c) says that if the Representations were made (which is denied);
    - to the extent that the alleged Representations were representations as to present and existing fact, they were true in substance; and
    - alternatively, to the extent the alleged Representations comprised matters of opinion, the Respondent held the represented opinions and had a basis, alternatively a reasonable basis, for holding those opinions.

# Particulars

BHP's Charter acknowledged its commitment to safety and sustainability, which was one of six key values. BHP's sustainability value included: "putting health and safety first, being environmentally responsible and supporting BHP's communities".

BHP Iron Ore's 5 Year Business Plans from July 2012 – July 2014, recorded that Iron Ore's message was "Safe and Sustainable Operations before all else" (Iron Ore 5Y Business Plan FY13-17; Iron Ore 5Y Business Plan FY14-18; Iron Ore 5Y Business Plan FY15-19). The Respondent put in place various systems to ensure its values of safety and sustainability was-were reflected in the conduct of its business during the Relevant Period including introducing minimum mandatory performance requirements of: (a) identifying and reporting all material risks that have the potential to impact the delivery of business plans; (b) conducting a risk assessment on all material risks to understand their potential causes and impacts and to determine the tolerance of the material risks in the context of business plans; (c) ensuring that critical controls were implemented and managed so that material risks were "well-controlled" (BHP's Group Level Document (**GLD**) on Risk Management (GLD.017)).

BHP refers to and repeats the particulars subjoined to paragraphs 53A to 58 above and the statements:

- a. within each relevant Annual Report, that BHP's nonoperated assets may not comply with its standards and that unexpected natural and operational catastrophes may adversely impact BHP's operations;
- b. within the 2011 Sustainability Report and the 2012 Sustainability Report, that non-controlled assets were not obliged to operate according to BHP Billiton standards;
- c. within each relevant Summary Review, that disclaimed the effect of forward-looking statements contained within that Summary Review; and
- d. within the Environmental, Social and Governance Briefing, that disclaimed the effect of forward-looking statements contained within that Briefing.

### Further particulars may be provided following evidence.

- 63. As to paragraph 63, it:
  - (a) refers to and repeats paragraphs 61 and 62 above; and
  - (b) denies the paragraph.

# J. THE DAM FAILURE

- 64. As to paragraph 64, it:
  - (a) admits that at around 3.45pm on 5 November 2015 in Brazil, the Fundão Dam failed;
  - (b) as to subparagraph 64(a), admits that the global failure of the Fundão Dam Failure resulted in 43.7 million cubic metres of tailings mud being released;
  - (c) as to subparagraph 64(b):
    - as to subparagraph 64(b)(i), says that operations at the Germano Complex ceased following the global failure of the Fundão Dam and that the Germano Complex resumed operations in 2020, and otherwise denies the subparagraph; and
    - ii. admits subparagraphs 64(b)(ii)-(iii);
  - (d) admits that the matters at subparagraphs 64(a)-(b) exposed the Respondent to remediation costs and reputational damage; and
  - (e) otherwise denies the paragraph.

# K. INFORMATION DISCLOSURE AND SHARE PRICE IMPACTS

- 65. It admits paragraph 65.
- 66. It admits paragraph 66.
- 67. As to paragraph 67, it:
  - (a) says that the paragraph is vague and embarrassing; and
  - (b) under cover of that objection:
    - i. admits that:
      - A. the price of BHP ASX shares was:
        - a. \$23.28 at the close of trade on 5 November 2015; and
        - b. \$18.09 at the close of trade on 30 November 2015;
      - B. the price of BHP LSE shares was:
        - a. GBP 10.34 at the close of trade on 5 November 2015; and
        - b. GBP 7.97 on 30 November 2015;
      - C. the price of BHP JSE Shares was:

- a. ZAR 221.59 at the close of trade on 5 November 2015; and
- b. ZAR 170.30 on 30 November 2015;
- ii. otherwise denies the paragraph.

# L. CONTRAVENTIONS CAUSED LOSS

# L1. BHP ASX Shares

- 68. As to paragraph 68, it:
  - (a) admits subparagraph 68(a); and
  - (b) otherwise denies the paragraph.

# Particulars

BHP refers to and repeats subparagraph 50(b) above and the particulars to subparagraph 50(b).

- 69. As to paragraph 69, it says:
  - (a) if (which is denied) the Respondent committed the Continuous Disclosure Contraventions and/or the Misrepresentations Contraventions alleged by the Joint Applicants, the matters pleaded in paragraphs 68 to 69 of the 2<u>3</u>FACSOC would not, even if established, constitute any causal nexus sufficient to support a claim for compensation pursuant to any of ss 10411, 1317HA or 1325 of the Corporations Act or ss 12GF or 12GM of the ASIC Act; and
  - (b) it otherwise denies the paragraph.
- 69A. As to paragraph 69A, it:
  - (a) refers to and repeats paragraph 69 above; and
  - (b) denies the paragraph.
- 70. It denies paragraph 70.

# L.2 BHP LSE Shares

- 71. As to paragraph 71, it:
  - (a) says that ss 674, 1041H, 1041I, 1317HA and/or 1325 of the Corporations Act and/or ss 12DA, 12GF and/or 12GM of the ASIC Act do not operate to provide shareholders in BHP Plc with causes of action in respect of alleged contraventions by the Respondent; and
  - (b) otherwise denies the paragraph.

- 72. As to paragraph 72, it:
  - (a) refers to and repeats subparagraph 71(a) above; and
  - (b) otherwise denies the paragraph.
- 73. As to paragraph 73, it:
  - (a) refers to and repeats subparagraph 71(a) above; and
  - (b) otherwise denies the paragraph.
- 74. As to paragraph 74, it says:
  - (a) it refers to and repeats subparagraph 71(a) above;
  - (b) if (which is denied) the Respondent committed the Continuous Disclosure Contraventions and the Misrepresentations Contraventions alleged by the Joint Applicants, the matters pleaded in paragraphs 68 to 69A and 71 to 73 of the 2<u>3</u>FACSOC would not, even if established, constitute any causal nexus sufficient to support a claim for compensation pursuant to any of ss 1041I, 1317HA or 1325 of the Corporations Act or ss 12GF or 12GM of the ASIC Act; and
  - (c) it otherwise denies the paragraph.
- 74A. As to paragraph 74A, it:
  - (a) refers to and repeats paragraphs 71 to 74 above; and
  - (b) denies the paragraph.
- 75. It denies paragraph 75.
- 76. Paragraph 76 is not used and therefore BHP does not respond to it.
- 77. Paragraph 77 is not used and therefore BHP does not respond to it.
- 78. Paragraph 78 is not used and therefore BHP does not respond to it.
- 79. Paragraph 79 is not used and therefore BHP does not respond to it.
- 80. Paragraph 80 is not used and therefore BHP does not respond to it.

# M. LOSS OR DAMAGE SUFFERED BY THE JOINT APPLICANTS AND GROUP MEMBERS

- 81. It denies paragraph 81.
- 82. It denies paragraph 82.

# 82A. It denies paragraph 82A.

- 83. It does not plead to paragraph 83 as it makes no allegation against the Respondent.
- 84. Further, or in the alternative, as to the whole of the 23FACSOC, the Respondent says that if it is liable to the Joint Applicants or any Group Members by reason of the facts and matters alleged in the 23FACSOC (which is denied), then the Respondent acted honestly and having regard to all of the circumstances of the case, ought fairly be excused from any such liability (in whole, or in the alternative, in part) pursuant to s 1317S (by reason of s 1041I(4)) and/or s 1318 of the Corporations Act.
- 85. Further, or in the alternative, as to the whole of the <u>23</u>FACSOC, the Respondent says that
  - (a) the Joint Applicants and Group Members make claims pursuant to:
    - section 1041I(1) of the Corporations Act in relation to economic loss allegedly caused by the conduct of the Respondent that was allegedly done in contravention of s 1041H of the Corporations Act; and/or
    - section 12GF(1) of the ASIC Act in relation to economic loss allegedly caused by conduct of the Respondent that was allegedly done in contravention of s 12DA of the ASIC Act;
  - (b) if and to the extent that the Joint Applicants or any Group Member failed to have adequate regard to any of the FY2011 Annual Report, FY2011 Sustainability Report, FY2012 Annual Report, FY2012 Summary Review, FY2012 Sustainability Report, FY2013 Annual Report, FY2013 Summary Review, FY2014 Annual Report, Environmental, Social and Governance Briefing and/or FY2015 Annual Report (as the case may be) in full, including to the disclaimers referred to in subparagraphs 54(c), 54A(c), 55(c), 55A(c), 55B(c), 56(c), 56A(c), 57(c), 57B(c), and 58(c) and 59(b), then, if the Joint Applicants or Group Member suffered the loss claimed or any loss at all (which is denied), the Joint Applicants or Group Member did so as a result wholly or partly of the Joint Applicants' or Group Member's failure to take reasonable care;
  - (c) the Respondent did not intend to cause the loss claimed by the Joint Applicants or any Group Member or any loss at all and, if the Respondent caused that loss (which is denied), it did not do so fraudulently; and
  - (d) in the premises, if the Joint Applicants or any Group Member suffered the loss claimed or any loss at all (which is denied), the damages which the Joint Applicant or Group Member may recover in relation to the loss are to be reduced

pursuant to s 1041I(1B) of the Corporations Act and/or s 12GF(1B) of the ASIC Act to the extent to which the Court thinks is just and equitable having regard to the Joint Applicants' or Group Member's share in the responsibility for the loss.

- 86. In further answer to the whole of the <u>23</u>FACSOC, the Respondent says:
  - (a) certain Group Members first became Group Members within the meaning of paragraph 3 of the <u>23</u>FACSOC by reason of the orders of the Court dated 6 June 2024 (the Additional Group Members);

# Particulars

Additional Group Members are persons who or which during the Relevant Period entered into a contract (whether themselves or by an agent or trustee) to acquire an interest in fully paid up ordinary shares in BHP Ltd and/or BHP Plc, but who did so **other than** on the Australian Securities Exchange, on the London Stock Exchange and/or on the Johannesburg Stock Exchange.

 (b) certain claims by Group Members as alleged in the <u>23FACSOC</u> first came to be made in this proceeding by reason of the orders of the Court dated 6 June 2024 (the Additional Claims);

### Particulars

Additional Claims are claims in respect of an interest in ordinary shares in BHP Ltd and/or BHP Plc, acquired by Group Members (other than Additional Group Members) during the Relevant Period, **other than** any interest in fully paid up ordinary shares in BHP Ltd and/or BHP Plc, acquired on the Australian Securities Exchange, on the London Stock Exchange and/or on the Johannesburg Stock Exchange.

- (c) the 2<u>3</u>FACSOC alleges at paragraph 53 that the Respondent contravened section 674(2) of the Corporations Act, and at paragraph 63 that the Respondent contravened section 12DA(1) of the ASIC Act and section 1041H(1) of the Corporations Act;
- (d) such alleged contraventions are subject to 6-year limitation periods by operation of:
  - i. sections 1317K and/or 1325(4) of the Corporations Act; and
  - ii. sections 12GF(2) and/or 12GM(5) of the ASIC Act;
- (e) 6 June 2018 is a period 6 years prior to the Court's orders of 6 June 2024;

- (f) the Relevant Period alleged in the <u>23</u>FACSOC is 8 August 2012 to the close of trade on 9 November 2015;
- (g) any claim(s) by any Additional Group Members and any Additional Claim(s) as alleged in the 2<u>3</u>FACSOC concern alleged contraventions occurring prior to 6 June 2018, and alleged causes of action arising or accruing prior to 6 June 2018;
- (h) accordingly, as the claim(s) by an Additional Group Member and any Additional Claim(s) as alleged in the 23FACSOC have been started later than 6 years after the occurrence of alleged contraventions, and outside the period of 6 years after the day on which the alleged cause of action arose or accrued such claim(s) are brought outside of the 6-year limitation periods pleaded at subparagraph (d), and cannot be maintained.

Date: 2 December 2024 15 April 2025 27 June 2025

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Signed by Jason Betts Lawyer for the Respondent

This pleading was prepared by Wendy Harris KC, Kane Loxley and Benjamin Cameron; and amended by Wendy Harris KC, Kane Loxley, Benjamin Cameron and Jessica Moir.

# **Certificate of lawyer**

I, Jason Betts, certify to the Court that, in relation to the defence filed on behalf of the Respondent, the factual and legal material available to me at present provides a proper basis for:

- (a) each allegation in the pleading; and
- (b) each denial in the pleading; and
- (c) each non admission in the pleading.

Date: 2 December 2024<u>15 April 2025</u>27 June 2025

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Signed by Jason Betts Lawyer for the Respondent

# **ANNEXURE A**

# RELEVANT CORPORATE STRUCTURE FOR THE HOLDING OF BHP BRASIL'S INTEREST IN SAMARCO DURING THE RELEVANT PERIOD

