

METALLURGICAL COAL

Anglo American Metallurgical Coal Pty Ltd

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Qld Flood Commission of Inquiry 400 George St GPO Box 1738 Brisbane 4001

1st November 2011

RE: Responses to Further Questions Raised by the Queensland Flood Commission of Inquiry

Dear Sir/Madam

Please find below responses to questions raised by the Queensland Flood Commission of Inquiry (QFCoI) following Anglo American Metallurgical Coal Pty Ltd's (AAMC) original two responses dated the 6th and 15th September 2011.

 The extent to which Anglo American Metallurgical Coal (Anglo American) was engaged with the Department of Environment and Resource Management (the Department) in flood preparedness activities in advance of the 2010/2011 wet season.

AAMC participated in meetings organised by the Queensland Resource Council (QRC) with the Department throughout 2009 and 2010 which aimed at providing more flexibility than the standard model conditions and associated limits. We also undertook extensive internal planning work and initiated a Rain Immunisation Project (RIP) which focused on the potential impacts of heavy rainfall on production and defined the infrastructure upgrades that were required. We developed a water strategy which collated the water-related risks faced by the operations and provided a Water Action Plan for each operation to control the risks. One conclusion from the water strategy development was that water release conditions had to be re-negotiated. Anglo American participated in the review of the release conditions that DERM undertook in 2011.

- 2. The processes associated with Anglo American's application for Emergency Direction dated 20 December 2010, with particular reference to:
 - a. whom the application is addressed to

Miss Principal Environmental Officer DERM, Project Manager for Moranbah North (at that time).



nitted
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Electronically (email), with paper copy to follow.

C.	whet	her any other	comr	nunic	ations	precede	ed th	he s	ubmission of the application
Teleph	none	conversations	with	both	Miss	а	and	Mr.	(DERM
Manac	ger).				_				

d. whether there were any negotiations of the conditions of the Emergency Direction with the Department

Only in the provision of site status and background to the current mine situation (e.g. rainfall, river flow and ability to discharge).

e. whether downstream landholders or any other persons were consulted

Not for the emergency direction, which only ran for 5 days during an emergency situation. It should be noted at the time the discharge pumping capacity was 0.1 m³/sec and the river was flowing at 320 m³/sec. The Direction was superseded by a TEP on the 24th December.

f. when Anglo American was able to commence discharging water in accordance with the Emergency Direction

From the 21st to the 23rd December (2010) the total discharge volume was 13.36 ML (0.041% of the flow in the Isaac River during that period of 32,981 ML).

g. when the dams were lowered to a safe level

Not during the period of the emergency direction.

- 3. Any Anglo American dams that were in danger of either spilling or failing during the 2010/2011 wet season, with particular reference to:
 - a. the storage levels of such dams prior to the 2010/2011 wet season
 - whether any measures were undertaken to prevent spillage or failure, and if so, what such measures involved

Across our operations, the storage that came closest to posing safety concerns is Pit F at Capcoal. At November 1 of each year, a design storage allowance (DSA) must be provided in regulated dams in order to prevent a discharge from that dam. DSA for Pit F is 3,000 ML (when Pit F holds 3,000 ML there is sufficient freeboard to minimise risks during the wet season). On 07/12/2009, Pit F was holding 3,190 ML. This was the last potential opportunity that sites had to release water prior to the new model water conditions being inserted into site environmental authorities. On 21/04/2011, it was holding 5,150 ML. With water volumes above 4,000 ML, there is a high risk of water infiltrating from Pit F into the underground mines, with associated safety risks to the



workforce. Emergency infrastructure was installed to pump water out of Pit F into other storages. AAMC have never measured such high inputs into Pit F and are attributing the greater flows to the over-saturation of the catchment (also see response to Question 13).

- 4. Anglo American's understanding of the information required by the Department for Temporary Environmental Program (TEP) decisions, with particular reference to and (where possible) using specific examples of:
 - a. the consistency and clarity of the information requested

For the Dawson North TEP, there were a number of examples of verbal discussions with DERM staff not being reflected in written responses provided back to AAMC. There were also many administrative requests that delayed the process and could easily have been addressed through verbal rather than written dialogue. For example, DERM placed an exaggerated focus on the provision of exact coordinates for release points when the salient information would be a map or a sketch showing where the releases will occur within the surrounding environment. This led to requests for additional information that do not help assess the potential impact of mine water releases.

b. the usefulness of the Department's template TEP application.

The concept of the TEP template was a good one with a focus on expediting the process. However, the text format that has been adopted by DERM was ill-adapted to the provision of spatial information. We find the table format particularly cumbersome.

 The reasons why Anglo American considers that diluting contaminated water with imported raw water is environmentally and socially unacceptable (refer to page 12, paragraph 4.5 of the Moranbah North Coal Mine Transitional Environmental Program Amendment (MAN10140) dated 16 December 2010).

The mining industry as a whole has invested heavily towards improving its water management practices, by funding research projects through its Australian Coal Association Research Programme (ACARP) and implementing the outcomes of the research (ACARP projects C15001 and C16039). Leading practice mine water management is characterised by striving to minimise the import of high quality water from external sources. This is because high quality water is rare and precious, and only essential for a small component of total mine water demand. It is better to rely on lower quality water for which there is no competition. Anglo American, as a global mining group committed to the principles of sustainable development, has an overall objective of minimising imports of high quality water.



At our Moranbah North mine, high quality water is obtained from Eungella Dam, which also supplies other mining customers, the Collinsville power station, irrigation farms, and the towns of Collinsville, Scottsville, Glendon and Moranbah. Community survival depends on the water from Eungella Dam and it is critical not to waste this precious resource. Because discharge limits are set on concentrations, rather than loads, dilution can lead to water being acceptable for discharge. However, whether the discharge volumes are diluted or not, the mass of salt released to the environment will be the same. Diluting mine-affected water with high quality water provides no benefit towards minimising the impact on aquatic ecosystems but wastes a precious resource. It is therefore environmentally and socially unacceptable.

Any uncontrolled releases which occurred from the Hillview Dam during the 2010/2011 wet season.

An uncontrolled release occurred from Hillview Dam on the 6th September 2010 with DERM notified through an e-mail.

 Controlled releases from any Anglo American dam which occurred after receiving verbal permission from officers or employees of the Department or any other agency or any Minister, including details as to the regularity of such occurrences.

Dawson Mine

27/12/10 Verbal approval from the provided from DERM to release water from eastern storages using conditions of our licenced discharge points.

28/12/10 Text message confirming previous days discussion. No discharge was made due to access and infrastructure restrictions delaying release by which time flow had dropped below trigger level.

2/01/11 Verbal approval was received from DERM to continue controlled release from Hillview Dam until Kianga Ck flow dropped to 0.25 m³/sec.

4/01/11 Verbal approval was received from DERM to continue controlled release from Hillview Dam with flow dropping below 0.25 m³/sec.

8/1/11 Verbal approval was received from DERM to continue controlled release from Hillview Dam with flow dropping below 2 m³/sec.

14/01/11 Verbal approval was received from DERM to release from 9-12 Dam over the weekend.



8. Anglo American's understanding of the effect of a verbal permission to release given by a Department officer.

Verbal approval was taken as formal approval from DERM as this is how it was communicated to AAMC. DERM officers normally issued the verbal approvals with a short period of time for release or with a requirement for formalisation in a TEP at a later date.

- 9. The process of applying for a TEP for the Dawson North Mine, with particular reference to the table contained in paragraph 7 of the statement of Mr Mark Heaton provided to the Commission and dated 6 September 2011, including:
 - a. the reasons for any delays

AAMC has articulated the process reasons for delays in the Dawson North TEP in previous statements. However, it should be noted that any delay from AAMC related to site access, availability of water infrastructure such as pipes and pumps, and consultation with adjacent landholders.

b. the reasons for the rejection on 4 January 2011

The TEP was not rejected on the 4th January 2011. The comment in the conditions column indicates that the application was 'ultimately rejected' at a later date.

- c. the major points of contention between Anglo American and the Department
 The biggest issue that AAMC had with the negotiation process was that verbal agreements
 made in meetings between the company and DERM were not reflected in draft TEP's that
 were subsequently provided. This led to significant delays, frustration and lost opportunities
 to release.
- d. details of the discussions with the Department on 31 January 2011, and the unworkable conditions of the TEP that resulted contrary to these discussions.

AAMC were involved in a meeting with DERM in Gladstone where a number of in-principle agreements were reached. However, as outlined in point c above, the resultant TEP was not reflective of these discussions. In this case, the requirement for very high flows in the Dawson River (50 m³/sec when 10 m³/sec was proposed and had been discussed) meant that sustained discharge was not possible as the Dawson River does not remain at these flow rates for long periods of time. This meant that the TEP would not meet its primary objective of dewatering the Dawson North pit to allow mining to commence.

10. The problems caused by delays in the TEP approval process, with reference to specific examples.



The most significant impact to AAMC of the delay in TEP approvals has been on the Dawson North pit which was scheduled to be mined in May but still contains a significant volume of water today with mining not predicted to commence until December 2011 (optimistically). More detail of this impact has been outlined in the previous two submissions. Furthermore, delays in approval for release from Elliott's Dam has led to vegetation impacts and a landholder suspending exploration drilling operations until the water can be removed.

11. The requested amendment to the Dawson Mine TEP dated 20 June 2011, including:

a. an elaboration of Anglo American's concerns regarding the build up of fresh water in blind lakes and flood mitigation dams

AAMC were concerned that 'flood mitigation' dams still contained water leading into the next wet season. In 2010, the wet season started in August. Hence, the focus was on creating freeboard for an early start to the 2011/12 wet season or for fresh water to be released at the start of the wet season so that freeboard could be maintained.

b. Anglo American's understanding of why the application was refused.

AAMC has a copy of the refusal letter from DERM dated the 29th June from Mr Our issue is that the reasons provided in that letter were not reflective of the discussions held in Rockhampton on the 17th June and incorporated into the 20th June TEP application.

12. What progress, if any, has been made on the TEP application for the Dawson North Mine.

AAMC re-submitted the Dawson North TEP on the 23^{rd} September 2011 and is still waiting on a formal response. The most recent correspondence was on the 4^{th} October 2011 when Dawson submitted some additional water quality information from the pit. Importantly, the quality of water in the Dawson North pit has deteriorated significantly over the last 9 months of negotiations (e.g. surface water EC has gone from 1500 μ S/cm to 4500 μ S/cm).

13. Anglo American's safety concerns at the Grasstree Coal mine, including details as to:

- a. the risks to the workforce of water entering an underground mine;
- b. any steps that could be taken to protect the mine from water inundation during heavy rainfall; and
- c. Anglo American's understanding of the source of the water which entered the Grasstree mine.

During the wet season, the Grasstree mine experienced an in-rush of water. These events can be fatal as flows enter the mines so rapidly that workers may not have sufficiently time



to evacuate and may drown. Due to the extensive safety training that our workers undertake, there were no fatalities. To better understand what caused such an in-rush, AAMC are conducting isotope studies to help determine the sources of water into the mine. The studies have yet to provide conclusive results because the isotope signatures are too dominated by rainfall isotopes. AAMC are planning to undertake more studies next year when we can better discriminate between the various sources. We are also undertaking hydrogeology reviews, as it is likely that the surrounding aquifers have contributed large volumes. We have never measured such high groundwater inputs into the mine. It is likely that the over-saturation of the catchment led to more groundwater in aquifers and more water being transported to the underground mine. This is confirmed by the monitoring DERM is currently undertaking in the catchment streams. All streams are displaying elevated salinity, related to greater baseflow contributions. At this stage, the only management strategy that can be implemented is to increase pumping capacity which has been completed.

- 14. Elaboration of the statement 'Availability of pumps and pipes and long lead times required for desalination plants and equipment to enhance evaporation' contained in paragraph 14(b) of the statement of Mr Heaton provided to the Commission and dated 6 September 2011, including:
 - a. whether this statement refers to a lack of resources available, and if so, why a shortage exists
 - b. whether this issue is being addressed by Anglo American
 - c. any suggestions Anglo American has as to how to fix this issue for future wet seasons

This refers to a lack of available resources in the Bowen Basin (BB). The BB was in a period of extended drought over most of the last decade and the flooding in nearly all mines led to an unprecedented demand, particularly for pipes and pumps. There is one supplier of high wall pumps (Legra) and most mines ordered this type of pumps. AAMC organised meetings with suppliers to shorten lead times and were successful to a certain extent.

Installing a desalination plant cannot be done without significant lead times as it requires careful analysis:

- Optimisation of treatment capacity to ensure the plant keeps the total surface water inventory in balance for a range of climatic conditions;
- Design of a brine management strategy;
- Selection of an acceptable water recovery rate;
- Early engagement with suppliers to reduce lead times;



- Selection of the most appropriate quality target for the plant permeate;
- Comprehensive analysis of the quality of the feed water;
- Discussion of supplier requirements with respect to battery limits;
- · Preliminary design of all required infrastructure; and
- Impact on electricity supply system and electrical work.

AAMC started this work in January 2011. The preliminary study was completed in August 2011. The installation project is underway and is scheduled for completion in March 2012.

- 15. Elaboration of the statement 'our estimates indicate that significantly more water could have been released during high flow conditions with no potential to cause environment harm' contained in paragraph 3(c) of the statement of Mark Heaton provided to the Commission and dated 15 September 2011, with particular reference to:
 - a. how the estimates were determined, and whether such estimates take into account the cumulative effect of releases from other mines
 - b. the extent of the downstream environment taken into account (that is, immediately downstream, or to the Great Barrier Reef).

AAMC have estimated potential acceptable volumes of mine water releases for our most affected operations: Dawson and Capcoal / Foxleigh.

For Dawson, we used the measurements of the Dawson River flows at the Bindaree gauging station, which is immediately downstream of our Dawson operations. The new framework for the Fitzroy model conditions yields an acceptable increase in electrical conductivity of 26 $\mu S/cm$ (Zone 3 calculation). An acceptable mine discharge is a volume of water that will not increase the conductivity in the river by more than 26 $\mu S/cm$. We calculated these acceptable volumes for every day between 01/12/2010 and 30/04/2011. The sum of all acceptable release volumes for this period is 143,400 ML. Ideally our Dawson operations would have released 10,000 ML of mine affected water. Our estimates take into account cumulative impacts as we are clearly showing that our water releases would only account for less than 7% of the total acceptable release volumes.

For Capcoal and Foxleigh, we used the measurements of the MacKenzie River flows at the Coolmaringa gauging station, which is about 70 km downstream of our operations. The new framework for the Fitzroy model conditions yields an acceptable increase in electrical conductivity of 490 $\mu S/cm$ (Zone 2 calculation). An acceptable mine water discharge is thus a volume that will not increase the conductivity in the river by more than 490 $\mu S/cm$. We calculated these acceptable volumes for every day between 01/12/2010 and 30/04/2011. The sum of all acceptable release volumes for this period is 4,160,000 ML. Ideally our Capcoal and Foxleigh operations would have released 15,000 ML of mine affected water. This represents less than 0.4% of the total acceptable release volumes. A



more detailed study would have conducted a risk assessment for potential impacts between our release points and the gauging station. However, given the magnitude of river flows, it is clear that the impact of mine water releases would have been minimal.

Regarding the Great Barrier Reef, we are not aware of any potential detrimental impact of salt on marine species.

- 16. The 2011 changes to the Fitzroy Model conditions, in terms of the effect on Anglo American mines, including:
 - a. an overview of the main changes
 - b. whether there have been any changes to the flow requirements or the electrical conductivity maximum value for discharges
 - c. specific examples of issues that were not resolved to Anglo American's satisfaction, and any steps taken to negotiate such issues with the Department (refer to paragraph 7 of the statement of Mark Heaton provided to the Commission and dated 15 September 2011).

Through an extensive engagement process with the mining industry, DERM has developed a new framework for regulating the releases of mine-affected water in the environment. The basis for the regulation remains the protection of environmental values, captured in the form of water quality objectives for flow events and for base flows. We raised many concerns about the methodology with which water quality objectives were obtained. These concerns were provided to DERM in writing and discussed in a meeting with DERM personnel (on Tuesday 21/06/2011.

Mines can now propose maximum release rates for medium and high flow conditions, calculated so that the receiving environment provides sufficient dilution to meet the water quality objectives. There are still complex monitoring requirements attached to the release conditions but the new framework at least provides flexibility and can be adapted to local circumstances. We have undertaken extensive work to determine the most beneficial release rates and have lodged amendments (or are in the process of lodging amendments) to the environmental authorities of Moranbah North, Capcoal, Foxleigh and Dawson to take advantage of the new release framework.

AAMC's major issue with the new framework is that it does not provide options for extreme events. Maximum release rates are proportional to trigger flows, which are dictated by the relationship between electrical conductivity and flows. They are not related to hydrological analysis. As shown in our response to Question 15, with large to extreme events, mines can potentially release large volumes of water without impacting on the environment. This



has not been taken into account in the Fitzroy Model conditions. In contrast, in the Hunter Valley, no restrictions are imposed on mine water discharges once flows in the Hunter River are beyond a pre-agreed threshold¹. Regulation is more strongly focused on hydrological principles.

The new Fitzroy water model conditions still maintain requirements for a Water Management Plan and a Receiving Environment Monitoring Programme. We have issues with these requirements. Our mine water systems are very complex and very few people have the technical skills to fully comprehend how they operate. In the context of the skills shortage, we do not believe that DERM will be in a position to appropriately assess the content of these documents. Water quality monitoring in the Fitzroy Basin should be based on an integrated approach, with one agency organising and maintaining monitoring points. Having each mine operating and maintaining monitoring points through their Receiving Environment Monitoring Programme leads to duplication, inefficiencies and difficulties in consolidating data sets. It is not the most appropriate process for collating water quality information at catchment scale.

- 17. Elaboration of the suggestion that flood specific conditions be included in the environmental authority of each site, contained at paragraph 15(a) of the statement of Mark Heaton, provided to the Commission and dated 6 September 2011, including:
 - a. what conditions Anglo American envisages
 - b. how Anglo American would define a flood event for the purposes of such conditions, and whether this would involve any reliance on forecast rainfall.

AAMC would like the regulation of mine water to be more closely aligned with well-accepted hydrological and engineering standards. As demonstrated in the answer to Question 15, releases of mine water pose no environmental risk in flood events. Aquatic eco-toxicology is not the appropriate framework with which to regulate the mining industry in times of floods. The appropriate scientific framework is hydrology. Floods are characterised by an annual exceedence probability. For a pre-agreed exceedence probability, we would envisage that constraints on water releases would be lifted or that at the very least, mine water releases would be calculated as a proportion of flood flows. Dams on mine sites would be designed according to this pre-agreed annual exceedence probability and would naturally overflow and release water to the environment when the exceedence probability is reached. This would present the huge advantage of minimising pumping requirements.

¹ Hunter River Salinity Trading Scheme – Analysis of Operational Constraints. NSW Environment Protection Authority, January 2000. Pp. 5: "flood flows permit unlimited discharge with no accounting for salt loads".



By restricting releases to the environment, the Fitzroy model conditions have forced mines to pump water in and out of pits and storages almost continuously since January 2010. At our Capcoal operations, pumping has consumed 11,250 MWh, representing 5% of total electricity requirements. At Dawson, it has consumed 20,294 MWh, representing 13% of total electricity requirements.

To minimise environmental impacts it is critical to adopt an integrated view of mine water systems that take into account a range of factors, including energy requirements. The exaggerated focus on aquatic eco-toxicology has led to design principles that are not aligned with well-accepted engineering standards and to significant increases in energy consumption. In the context of climate change, which in Queensland is predicted to lead to an increase in the magnitude of the oscillations between floods and droughts, enforcing legislation that promotes increases in energy consumption is irresponsible.

- 18. With reference to Table 4 on page 4 to 7 of the new Fitzroy model conditions negotiated throughout 2011:
 - a. whether a table of that sort would be usefully inserted into Anglo American's environmental authority
 - b. whether there are reasons militating against the introduction of such a table in water management, and if so, what
 - c. whether there are particular circumstances in which the table proposed would not assist in, or would impede, water management, and if so, what
 - d. whether Anglo American would be able to provide the Department with scientific studies to support the figures to be inserted into that table.

Table 4 provides flexibility in selecting end-of-pipe limit concentration and associated release rates and AAMC will insert it into its environmental authorities. The issue with Table 4 is that it does not take into account flood flows, as outlined in the answer to Question 16. In times of floods, Table 4 would not assist with water management because the maximum release rates calculated with trigger flow values are likely to be too small compared to the volumes of water mines will receive.

AAMC, through the Australian Coal Association Research Program (ACARP), are supporting a range of research projects, including the development of locally relevant toxicity datasets which will clearly demonstrate under which circumstances mine-affected water can threaten the health of aquatic ecosystems and the gathering of scientific evidence for ecologically sustainable discharge criteria in seasonally flowing streams.

AAMC's extensive infrastructure investments, combined with the new water release conditions, have resulted in mine water systems that are increasingly more complex. We



have engaged with researchers to design projects that will help deal with this complexity, in the context of climate change and more acute rainfall variations. In 2012, two ACARP projects will deal with managing mine water under extreme climate variability and designing mines for both drought and flood. The main objectives of these studies are to develop practical methods to perform climate-related vulnerability assessments, evaluate the mine ability to adapt; identify 'bottle-necks', faults or weak points during or after an extreme event and assist in allocating resources for adaptation. These research projects, which all have an industry monitor from the AAMC environmental team, will provide additional knowledge to help better control water-related risks.

- 19. The 'regulated dams' review discussed in paragraph 6 of the statement of Mr Heaton, provided to the Commission and dated 6 September 2011, including:
 - a. what this review entails
 - b. any information received from the Department about the review.

AAMC assume that this question relates to paragraph 6 of the statement of the 15th September and not the 6th September as outlined above.

In July 2011, DERM finally agreed to review the draft version of the manual for regulated dams. A workshop was held with the mining industry on the 26/09/2011. The proposed new version is much improved. It is based on the analysis of mine water balance over a long climate sequence and is at least related to the reality of mine water management. AAMC still has an issue with the assumption of 0% evaporation and 100% run-off over an entire wet season as required under the deciles analysis method of calculating Design Storage Allowance. AAMC still hold the view that mine water system design should be better aligned with hydrological principles, as explored in the answer to Question 17. AAMC have been informed that the manual should be finalised by the end of October.

20. Any plans put in place by Anglo American since the 2010/2011 wet season to manage water differently at mine sites, including any discussions with the Department about this topic.:

Whilst each operation had systems in place to transfer, redirect or convey surface and groundwater for normal operating conditions, the extreme rainfall received in 2010 and early 2011 resulted in critical parts of the mining operations being impacted upon: access roads were closed, open cut pits and underground areas collected excessive volumes of water and the capacity of the pumping and pipe systems were exceeded. AAMC initiated a Rain Immunisation Project (RIP) in 2010, which was extended in 2011. A review of water-related risks was also conducted. Workshops were undertaken at each operation where a bow-tie risk control analysis was used to identify water hazards and develop a control



effectiveness chart. The information gathered as part of the risk review was integrated into the RIP. A first phase of the RIP is now complete and has delivered:

- Extensive pump and piping works at Capcoal and Dawson, with significant upgrades to backbone pipelines;
- Flood proofing of critical infrastructure and maintenance of flood protection infrastructure such as raising conveyors at Dawson, dredging dams to obtain more storage capacity (Dawson and Capcoal) and upgrading levees for diversion of non mine-affected water;
- Road sheeting works on the semi-permanent roads (ramps and haul roads) at Capcoal and Foxleigh;
- The application of Dust-A-Side (DAS), a dust suppressant product, to selected roads at Capcoal to maintain their trafficability in wet weather; and
- Upgrades to underground mines drainage network and dewatering capacity.

Throughout the year, an effective and engaged "traffic light" reporting system was being used to track progress and delays. Project outcomes have provided the basis for the development of a Wet Weather Plan at each operation. These are now being finalised in advance of the next wet season.

In terms of surface water inventory, the most critical situation is at our Capcoal operations. To re-establish equilibrium in the water system, we are implementing a desalination plant at German Creek that will treat up to 10 ML/day of mine-affected water. This project presents a number of benefits:

- It will produce high quality water that will replace the water currently imported from an
 external source, thereby reducing the volume of external high-quality water brought into
 the water system (as discussed in the answer to Question 5, AAMC has a commitment
 to minimise its imports of high quality water);
- Excess treated water can be disposed of in a local dam, reducing further the mine water inventory; and
- The disposal of treated water into this dam will increase the number of occurrences of overflows, which will re-establish the environmental flows that the dam has suppressed.

A major feature of the work we have conducted this year is that the infrastructure investment has been thought through to cater for both drought and flood conditions, thereby meeting our commitment to adapting to climate variations. The investment in water management infrastructure will provide the operations with world-class tools to address water-related risks.

DERM undertook pre-wet season inspections of our operations, during which they could observe the outcomes of our extensive investments.



AAMC hope that these detailed responses to the QFCoI third round of questions and associated statements will be satisfactory and prevent the requirement for another appearance before the commission by a AAMC representative. A large amount of time and resources has been spent on putting these responses together to meet the QFCol requirements and Mr Heaton appearing before the commission. We do not believe that further information can be provided by a personal appearance.

Yours sincerely

Carl Grant

Regional Environment Manager