

Rio Tinto Alcan – Bauxite and Alumina
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Private and confidential

Ms Anthea Tinney,
Gladstone Review Secretariat
PO Box 787
Canberra, ACT 2601

21 March 2013

Dear Ms Tinney,

Independent Review of the Port of Gladstone

Thank you for the opportunity to provide a submission to the Independent Review of Gladstone Harbour. As a long-time member of the Gladstone community, Rio Tinto Alcan (RTA) supports sustainable environmental practices and protection.

Through our wholly owned Yarwun refinery and 80% interest in Queensland Alumina Limited (QAL), RTA has operated in the Gladstone region for nearly 50 years. Over that time, RTA has worked closely with the community to ensure our operations make a positive contribution. For example since construction of QAL in 1964, Rio Tinto Alcan has invested more than \$500 million in community infrastructure and programmes, including housing, bridges and roads.

RTA also endeavours to implement sustainable environmental practices at our operations. For example, with the commissioning of a gas-fired cogeneration facility as part of the Yarwun expansion project, the refinery is using low emission electricity to power the existing operation, delivering a 26 per cent reduction in the operation's greenhouse gas intensity.

The safe transport of bauxite from our Weipa mine in western Cape York Peninsula, around the tip of Cape York and inside the Great Barrier Reef to Gladstone, is essential to the ongoing contribution of our operations to the regional and national communities. Bauxite shipping has been taking place safely for more than 46 years and our commitment to safeguarding the reef is evidenced through our long-standing relationship with the Great Barrier Reef Foundation.

In 2012, Rio Tinto Alcan, CSIRO and the Great Barrier Reef Foundation announced a landmark three-year, \$1 million research project called Future Reef MAP.

The project involves the deployment of an ocean sensor system on a Rio Tinto vessel that travels between Weipa and Gladstone. The vessel, the RTM Wakmatha, will continuously collect samples and record data that will help in understanding the impacts of climate change on the Reef.

Therefore RTA is grateful for the opportunity to make this submission because not only is the Gladstone Harbour critical to our business, but to the Gladstone community as well.

The Port of Gladstone provides critical infrastructure for RTA's business, allowing our products to be shipped throughout the world, and to bring in the raw materials that are needed in producing alumina.

Extensive monitoring regime already in place

According to the Terms of Reference for this review, an important aspect will be the review of current monitoring arrangements within the Port of Gladstone. Both Yarwun and QAL refineries have extensive point source and near field monitoring programs in place. In addition to this monitoring, both operations also have recently developed validated hydrodynamic and water quality models that have been endorsed by EHP, helping them assess the impacts of discharges into Gladstone Harbour. The operations have also conducted Direct Toxicity Assessments on discharges and have ongoing toxicity testing programs. Yarwun is currently implementing an EHP approved Receiving Environment Monitoring Program.

In order to obtain a better understanding of far field water quality in Gladstone Harbour, QAL and RTA Yarwun (RTAY) were foundation members of the Port Curtis Integrated Monitoring Program (PCIMP) and have a continuing commitment to PCIMP. The monitoring program was established in 2005 to monitor the ecological health of Port Curtis. The annual water quality monitoring historically included measures of metals and nutrients assessed through physicochemistry monitoring, water grab sample analysis, diffusive gradients in thin-films (DGT) samplers, oyster accumulation and ecoindicators (settlement nets).

In 2011, PCIMP was restructured and became an incorporated association (PCIMP Inc) to improve governance, including formalising procedural and management controls. As part of this restructure the program was independently reviewed (Hart et al. 2012¹), and based on the recommendations of the review PCIMP Inc established a Technical Sub-Committee, of which RTA is a member, which designed a new water quality monitoring program. The new program, which commenced in 2012, was also independently reviewed by both Government specialists and some members of the original review panel.

PCIMP Inc facilitates collaboration of 15 local industries and organisations, and focuses on ambient mid- to far-field water quality monitoring, based on discharges and compliance requirements. Individual industries are responsible for monitoring near-field receiving environments and discharges as specified in development approvals and associated licence conditions.

The water quality monitoring program is conducted quarterly, and includes bioaccumulation of metals in oysters. A full review of all PCIMP monitoring programs, including previously conducted intertidal and coastal monitoring, commenced in February 2013, and includes, but is not limited to, mangroves, saltmarshes, seagrass, invertebrates, sediments, eco-indicators and the adequacy of the new water quality program. Following this review, a new extensive monitoring program will be implemented in 2013-14.

The aims of the interim water quality monitoring program are to:

- monitor the health of water assets in Port Curtis
- collect data on key water quality parameters
- maintain a longitudinal study
- include adequate sampling frequency to understand temporal changes
- ensure coverage of water bodies in the Port Curtis region
- allow identification of cumulative impacts
- compare monitoring data to reference sites.

The Independent Review of the Port of Gladstone Issues Paper states that PCIMP was "established to implement a cooperative monitoring program for assessing the ecosystem health of Port Curtis and to ensure the environmental sustainability of Gladstone Harbour". This was an aspiration of the original programme, however, the new PCIMP Inc program is focused on water quality monitoring and is not in itself an "ecosystem health" program. Ecosystem health monitoring and the development of a Healthy Harbour Report Card are proposed objectives of the proposed Gladstone Healthy Harbour Partnership (GHHP).

¹ Hart, B., Abal, E., Babcock, R., and Schaffelke, B. (2012) Independent Review of Port Curtis Integrated Monitoring Program (PCIMP). Report to Independent Chair, PCIMP Inc. Board, February 2012.

The relationship between PCIMP Inc and GHHP is being determined at this point in time, and while RTAY and QAL remain committed to PCIMP, they are also actively involved in the development of the GHHP through membership of the Working Groups for Communications, Funding and Science.

World heritage boundaries

The Terms of Reference define the geographic boundary as “Port of Gladstone and offshore areas that may be used for the disposal of dredge material or may be otherwise affected directly or indirectly by port development within the Port of Gladstone.”

While this geographic scope of the Review is clear there appears to be an anomaly/conflict with the World Heritage Area boundary within the Port of Gladstone area.

QAL understood that the boundary of the Great Barrier Reef World Heritage Area (GBRWHA) followed the low water mark on the seaward side of Boyne Island and across the mouth of the Boyne River and a boundary line midway up South Trees Inlet. This was reflected in the Department of Sustainability, Environment, Population and Communities (DSEWPaC) protected matters search tool in a search undertaken in March 2011 (Figure 1).

A protected matters search in 2012 shows a different boundary for the GBRWHA, with the majority of Boyne Island within the world heritage area (Figure 2). This boundary results in the QAL red mud dams on Boyne Island being incorporated into the world heritage area.

QAL wrote to DSEWPaC on 31 August 2012 seeking clarification of the boundary of the GBR world heritage property and if in fact there has been a change, an explanation as to the basis for that change. If Boyne Island is included within the WHA it has significant implications in relation to the ongoing operation and management of QAL’s red mud dams and we propose the boundary be re-aligned with the previous location as per Figure 1.

In addition, this has potential to impact the outcomes of any strategic environmental assessment which is required to “identify, plan for and manage existing and emerging risks to ensure ongoing protection and management of the natural values of the Great Barrier Reef World Heritage Area”.

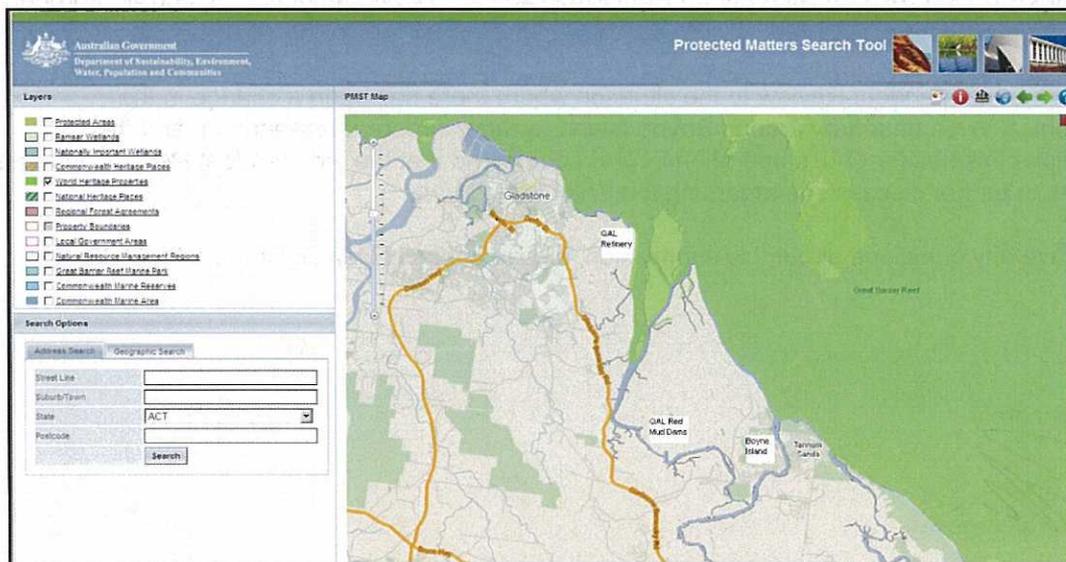


Figure 1: Protected Matters Search Tool – World Heritage Properties. Location: Gladstone, Queensland. Search conducted 8 March 2011 (Green area is World Heritage Property).

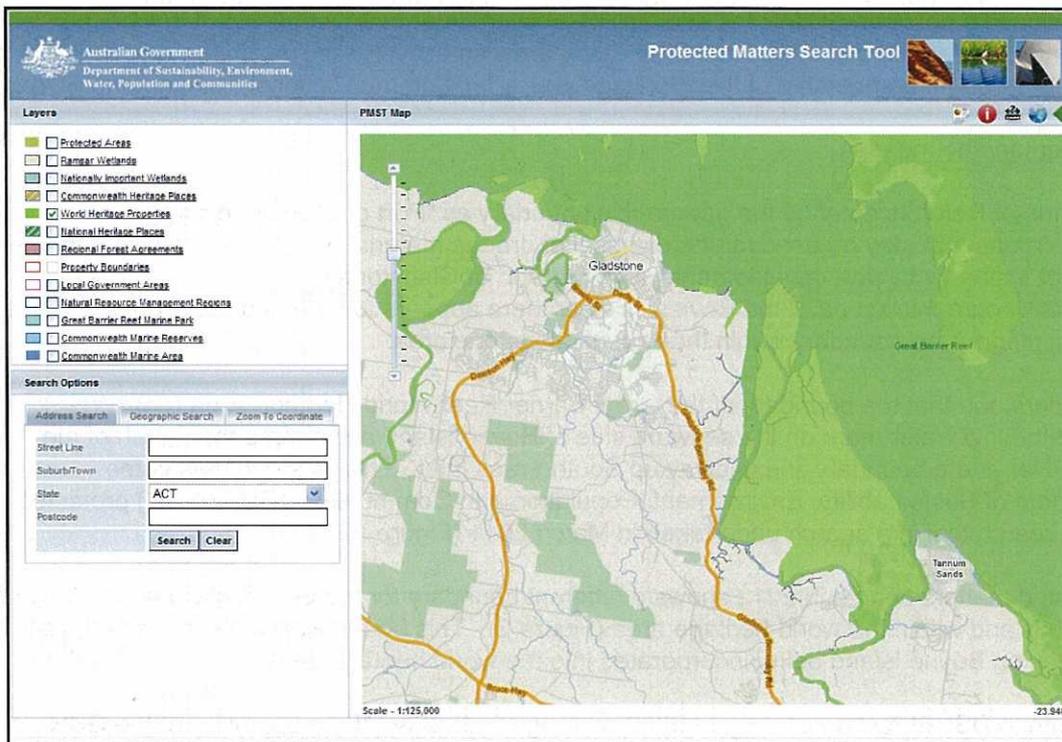


Figure 2: Protected Matters Search Tool – World Heritage Properties. Location: Gladstone, Queensland. 2012. (Green area is World Heritage Property).

Conclusion

In summary, RTA is a long term and active member of the Gladstone community, and as such the health of Gladstone Harbour is important to us. We currently support best practices at our operations, support research like Future Reef MAP, and are key members of the current harbour monitoring programme, PCIMP.

We alert the Independent Review to the situation where there has been a change in the geographical WHA boundary around Boyne Island, without apparent explanation, and the implications this has for QAL's operations. We recommend that the Independent Review engages with QAL in further discussions regarding the WHA boundary.

If you have any questions about this submission, please contact Ryan Duysen on 07 3625 3699.

Yours sincerely

Pat Fiore
President & CEO, Bauxite and Alumina