

## QUESTIONS

### Re: QMM's project changes (SEMP 2014-2018) and Buffer Zone violation

Since May 2018, referencing both Emerman (1) and Ozius (2) reports, The Andrew Lees Trust (ALT UK) has repeatedly questioned Rio Tinto (RT) about QMM's encroachment into Lake Besaroy and their violation of the 50-m permitted buffer (3). It has asked Rio Tinto/QMM to evidence their claim of compliance to the SEMP 2014-2018, as approved by the Malagasy Government, and requested their official statement regarding the findings of Dr Emerman.

Meanwhile other questions have arisen and been submitted to Rio Tinto, including:

1. Why did RT/QMM submit a new SEMP for changes to the project using an OHWL of 0.6 masl when it knew the OHWL was higher, at least 1 masl, due to the weir (ref: de Kock Memo, 3 Oct 2017) (4)
2. Why is the PGES (SEMP) extract dated Oct 2015 when the permissions were sought for 2014 start - is this 'the second version' referenced by de Kock (4)? Where is the version used to advance works that began already in 2013 and were in place by 2014?
3. Has the Office Nationale de 'Environnement (ONR) inspected the works at Mandena (Zone 2 in the Ozius report) and the 'berm' as would be expected? Where is the inspection report?
4. 14.4 Hectares of additional land have been acquired from changing the buffer by a 30-m margin (Emerman, 2018, addendum 3) (2)? This is the equivalent, approximately, of another mining basin. Was this agreed with the government with an additional lease - where is the agreement for the additional hectares and what remittances will be reflected in the additional extraction? What permissions were sought from the local community regarding this additional land acquisition?
5. A Dina is mentioned to allow community access in the mine area. In particular "*the berm was built on top of the existing surface ....as a way of providing community access*" and '*reduce impact of the mine on local communities*' (PH email 10 July 2018) (5); what access, if any, is allowed on the 30- m and in the 50-m buffer according to this Dina, for example? Where precisely are the roads /paths located for community access along the lake that have been promised in the SEMP? (6)
6. Substantial monitoring of the water levels and 'berm' (i.e. dam) is promised in the SEMP - *constant monitoring is suggested*. Where are the water management reports? Where is water pumped into from out of the mining ponds? Where are the discharge points? Is water pumped into the lakes and waterways? What monitoring of radionuclide levels is happening for water at these discharge points?
7. Rio Tinto said that the dam has a factor of safety of 1.3 for a 50-year event. a) How did Rio Tinto decide that these were the appropriate safety criteria? b) How were these safety criteria taken into account in designing and constructing the dam? What are the "*relevant standards and permits*" that Rio Tinto claims the 'berm' was designed to meet? (PH email 10 July 2018)(5). Please supply the Rio Tinto D3 standard as referenced in the SEMP (6).
8. What is the TARP -Trigger Action Response Plan, that has been put in place and what actions does it take on what specific triggers?
9. Did QMM do a separate EIA for this change to the project/operations - especially given the sensitive nature of this area and the waterways involved? Are there additional studies or reports, e.g. to address groundwater management issues? Where are the detailed *risk*

*assessments* promised in the SEMP for when the pinch points in the buffer were approached? (SEMP extract Oct 2015)(6)?

10. Did QMM do a public consultation with the local communities around Mandena for the changes to the project as per the SEMP? Where is the evidence of community consultation – in particular communication with the local authorities, the Comite de Gestion de Mandena and the Plan d'Aménagement de la Gestion (PAG) as promised in the SEMP? Where is evidence of implementation of the additional communications plan with regard to the project changes, as laid out in the SEMP? (SEMP extract Oct 2015)(6)
11. What happens after QMM has finished dredging in this zone and groundwater levels revert to normal? How will Rio Tinto prevent the seepage of radionuclides toward the lakes after closure of the mining basins? Does the mine have a closure plan? How has the mine closure plan made provision for the new project changes, both technically and financially?
12. What is the progress on rehabilitation of the mine site? How have the plans for rehabilitation been altered since the RT 2013 write down and reduced environmental commitments?
13. How far were project design changes and the nature of the mining operations themselves necessitated by the adverse market conditions affecting ilmenite, the lower than forecast prices for the raw material, and net losses reported for every fiscal year of QMM's operation, as reported by the World Bank 2015 (7)?
14. Does RT have a performance bond in place with MG govt to address negative impacts arising from its operation/ e.g. buffer breach and resultant issues?
15. What are RT internal policies that provide for sharing of data and evidence that substantiates their claims, for instance on compliance? Are any mechanisms or protocols for sharing data available in order to assess and verify the company's commitment to transparency?

***The above questions were sent to Rio Tinto on 30<sup>th</sup> July 2018 and are largely concerned with the 2014-2018 project changes; answers to these questions should therefore be readily available. However, at the end of August 2018, five weeks after the request for information was sent, the few additional reports that have been shared by Rio Tinto/QMM have raised more questions than they have answered. No official statement on the buffer zone issues has been issued by RT/QMM.***

## References

- (1) Evaluation of a Buffer Zone at an Ilmenite Mine operated by Rio Tinto on the Shores of Lakes Besaroy and Ambavarano, Madagascar, Steven H. Emerman, Malach Consulting, May 27 2018 + Revisions June and July 2018
- (2) OS1718133 QMM Waterbody Buffer Zone Analysis/USER GUIDE, Ozius, 29<sup>th</sup> March 2018
- (3) ALT UK first letter to RT – Re: Buffer Zone, QMM Mine Madagascar, 21<sup>st</sup> June 2018
- (4) P de Kock Memorandum, Rio Tinto, 3<sup>rd</sup> October 2017
- (5) Email Re: buffer zone report, Peter Harvey email to ALT UK, 10<sup>th</sup> July 2017, with QMM 'commentary'.
- (6) Extract : Section 4. PGES-Mine Phase Operation 2014-2018. « *Description des activites et des infrastructures associees a l'extraction et a la separation des sables minerales du secteur minier de Mandena* ». Version Finale October 2015. (QMM Social and Environmental Management Plan, 2014-2018).
- (7) Implementation Completion and Results Report (IDA 4101-MAG, 4399-MAG) On A Credit in The Amount of SDR 107.6 Millions (US\$165 Million Equivalent) to the Republic of Madagascar for the Integrated Growth Poles Project (PIC), June 15, 2015