

Frieda River Limited - Sepik Development Project

EIS Expert Review – High Level Summary

- The Integrated Storage Facility (ISF; which is a large tailings dam – approximately 2.5 times the size of Sydney harbour) has a medium risk of dam breakage that needs to be managed forever – not just the 33 years of mine life + 50 years of water treatment that the EIS has planned for.
- Dam break analysis, which is not included in the EIS, has indicated that up to 30 villages would be affected by a catastrophic event resulting in the dam breaking; with substantial loss of life expected. This is one of the most critical reports necessary for understanding the EIS. The post closure phase of the project is a significant issue of concern. The EIS does not adequately detail who is responsible for the ongoing management and maintenance of the ISF, as well as where the funding necessary to carry out the necessary work will come from. It has been questioned whether the emergency response plan post closure can be realistically implemented and effective.
- The EIS does not detail the Resettlement Plan necessary for the 4 villages identified as requiring relocation. There is also no adequate discussion of consent for the project from these villagers having been achieved. An EIS should disclose whether consent has been granted from affected villages.
- The predicted contamination in ground water, surface waters and the surrounding environment is likely to be underestimated. The models used to predict contamination levels are based on simple assumptions that are unlikely to represent the real situation, and are not considered to be “conservative” i.e. the impacts are likely to be greater than those predicted.
- There are likely to be ongoing impacts on downstream communities, many of which have not been quantified. For example loss of floodplain areas for agricultural activities and the potential accumulation of contaminants in the environment.
- No sensitivity analyses has been conducted in the models used throughout the EIS to consider what impact changes to assumptions would have on likely project impacts, for example;
 - varying the mine life from 33 years to potential full life of mine following expected extensions,
 - varying models for ground water transmission of contaminants from the simple model used to one based on more complex models that more closely align with the complex geology of the site,
 - varying the oxidation rates experienced in the ISF to capture impact of higher mixing or extreme weather events, or
 - varying the rate of oxidation of waste rock prior to deposition in the ISF.Each of the above scenarios would impact the heavy metal content levels that will require treatment.
- The ISF will bring a large number of villages into contact with a large stagnant reservoir of water, which will likely increase their risk of contracting malaria by up to a factor of 20. This risk has not be adequately discussed or mitigated.
- The cost benefit analysis conducted for this proposal does not adequately account for the impacts and their associated costs and inappropriately attributes benefits of the project to the PNG people (i.e. profit and GDP increase) when they are only benefits to the mining company.
- The risks posed to biodiversity and endemic/species new to science are inappropriately assessed, not backed by scientific evidence and highly optimistic. The loss of biodiversity should be considered a certainty from this project.
- The EIS focuses on the ISF and its impacts, but fails to adequately detail or assess the risks and impacts from the various other construction and operating facets of the project i.e. 325km pipeline, airport, 5 major and 16 smaller bridges and roads. In addition, the EMMPs have only been developed for the construction phase of the project, and not the operational or post closure phase. It is stated that operational EMMPs will be produced 6 months prior to operations phases starting.