FIRESTONE DIAMONDS: Liqhobong Mine Tailings Disclosure Table

Overview question:
Please
a) Provide an overview of your tailngs management system, and how you manage risk
b) Confirm whether your approach to tailings management has changed or will change in light of the recent tailings disasters at Brumadinho, Mariana, Mt Polley and others. Have you, for example, reviewed all tailings storage facilities with upstream dam construction, and taken steps necessary to protect local communities and the environment e.g. buttressing, evacuation?

The remaining questions should be answered by listing all of the tailings facilities you are responsible for or associated with, per the disclosure letter of the 5th April 2019.

(a) Overview of tailings management system:
An internal competent person (the manager of the process plant) has been appointed as the responsible manager (the Manager), to oversee the operation of the TSF. Legislative requirements are assessed and incorporated into the TSF management system. The mine has implemented a site-specific Code of Practice (COP). The operating procedures are aligned with the COP. A professional civil/geotechnical engineer (the Engineer) is appointed to conduct annual structural audits and quarterly sureveillance monitoring of the TSF. An operating company (the Operator) has been appointed to operate the TSF under guidance of the Engineer, and in close cooperation with the Manager. Routine daily, weekly and monthly inspections are performed both by the operating company and the mine. The Engineer, the Operator and mine personnel conduct quarterly inspections, and submit quarterly risk reports to the Manager. The mine is responsible for document control.

(b) Recent actions taken to strengthen tailings management: Recently, the mine has reviewed its status on legal compliance; risk assessment; zone of influence (in the event of failure at final capacity); and emergency preparedness planning.

	Instructions to support completion	
1. "Tailings Dam" Name/identifier	Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.	RSF3 Residue Storage Facility.
2. Location	Please provide Long/Lat coordinates	Latitude: 28°59'14.44"S, Longitude: 28°36'41.19"E
3. Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019.	Owned: Liqhobong Mining Development Company (PTY) LTD Reg. No I96/97- A subsidiary of Firestone Diamonds PLC. Operated: Turnkey Civils Lesotho (TCL) contracted to Design and operate as a turnkey solution reporting to the mine.
4. Status	Please specify: Active, Inactive/Care and Maintenance, Closed etc. We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&M is not considered closed until such time a closure plan has been implemented.	Active
5. Date of initial operation	(date)	Oct-16
6. Is the Dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to Q20.	Yes
7. Raising method	Note: Upstream, Centerline, Modified Centreline, Downstream, Landform, Other.	Downstream - impoundment.
8. Current Maximum Height	Note: Please disclose in metres.	111 m
9. Current Tailings Storage Impoundment Volume	Note: (m3 as of March 2019).	3.4 million m3
10. Planned Tailings Storage Impoundment Volume in 5 years time.	(m3 as planned for January 2024).	10 million m3
11.Most recent Independent Expert Review	(date) For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.	Snowden 2019 review (Structural stability audit conducted by the external specialist professional engineer annualy. The most recent audit was conducted during 2018).
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	(Yes or No) We take the word "relevant" here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provided in your answer to Q20.	Yes
13. What is your hazard categorisation of this facility, based on consequence of failure?		High
14. What guideline do you follow for the classification system?		SANS 10286
15. Has this facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an independent engineer (even if later certified as stable by the same or a different firm).	(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a "Yes" answer may not indicate heightened risk. Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping etc. If yes, have appropriately designed and reviewed mitigation actions been implemented? We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be supplied in your answer to Q20.	No
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	Note: Answers may be "Both".	External (A specialist company has been appointed to operate the dam on behalf of the mine due to their in-house specialist civil/geotechnical engineering capacity and experience. In addition, an external professional engineer from the same company has been appointed to provide external civil/geotech surveillance and auditing service).
17. Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of catastrophic failure been undertaken and to reflect final conditions? If so, when did this assessment take place?	Note: Please answer 'yes' or 'no', and if 'yes', provide a date.	Partial analysis has been done with the Zone of Influence having been determined. The latest update to the zone of influence assessment in accordance with SANS 10286 was undertaken during the first quarter of 2019. The affected area has been demarcated and awereness established through the Local Community Committee. Affected households and structures have been relocated.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Please answer both parts of this question (e.g. Yes and Yes)	a) No b) No (The mine has an approved Environmental Management Plan (EMP) which stipulates management commitments during construction, operation and closure stages of the mine, which includes the residue storage facility. Rehabilitation and closure assessments are performed annually and financial provision is made accordingly. Long-term monitoring remains an integral part of the process and the existing water licence requires post-closure monitoring.)
19. Have you, or do you plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g. over the next two years?	(Yes or No)	Yes (Is part of the annual external audit by the professional engineering service, freeboard analysis includes consideration of 1:100 year storm/flood events).
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.	Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports etc.	