

## Lonmin Karee TSF's – Investor Requested Information

a) Fraser Alexander Tailings is responsible for the maintenance and operation of the dams. SLR Consultants (external engineering consultants) conducts overview on the monitoring data provided by the operators and carries out quarterly reviews on the active dams, reviews with the team comprising internal mine personnel and Fraser Alexander and reports to Lonmin. An annual report is compiled by the external consultants, SLR Consultants, and shared with the governmental authorities (Department of Mineral Resources - DMR) and Lonmin

b) All Lonmin tailings dams are constructed using the upstream method. Following the Brumadinho's incident, SLR Consultants were engaged to review the operations to ascertain the operating regime and stability. All dams were confirmed to be operated within the design parameters and the risk to be within acceptable limits

Question	KTD1	KTD2	KTD3		KTD4	
<b>1. "Tailings Facility" Name/identifier</b>	Lonmin Karee Tailings Dam 1	Lonmin Karee Tailings Dam 2	Lonmin Karee Tailings Dam 3 (2 X compartments)		Lonmin Karee Tailings Dam 4 (2 X Compartments)	
<b>2. Location (Longitude; Latitude)</b>	27°27'7.96"E 25°40'53.43"S	27°26'45.42"E 25°40'36.71"S	<b>3A</b> 27°26'13.25"E 25°40'36.97"S		<b>4A</b> 27°26'56.66"E 25°38'59.32"S	
			<b>3B</b> 27°26'1.47"E 25°40'55.62"S		<b>4B</b> 27°26'38.53" E25°39'8.33"S	
<b>3. Ownership</b>	Lonmin owned	Lonmin owned	Lonmin owned		Lonmin owned	
<b>4. Status</b>	Inactive	Active	Active		Active	
<b>5. Date of initial operation</b>	1989	2001	2002		2008	
<b>6. Is the Dam currently operated or closed as per currently approved design?</b>	Not depositing, under care & maintenance	Yes, in operation	Yes, in operation		Yes, in operation	
<b>7. Raising method</b>	Upstream	Upstream	Upstream		Upstream	
<b>8. Current Maximum Height</b>	37m	28m	<b>TD3A</b>	<b>TD3B</b>	<b>TD4A</b>	<b>TD4B</b>
			28 m	25 m	13 m	13 m
<b>9. Current Tailings Storage Impoundment Volume (m<sup>3</sup>)</b>	17.0 mil	13.2 mil	<b>TD3A</b>	<b>TD3B</b>	<b>TD4A</b>	<b>TD4B</b>
			7.4 mil	8.8 mil	4.2 mil	3.4 mil
<b>10. Planned Tailings Storage Impoundment Volume in 5 years' time.</b>	17.0 mil	17.1 mil	<b>TD3A</b>	<b>TD3B</b>	<b>TD4A</b>	<b>TD4B</b>
			9.7 mil	9.7 mil	7.1 mil	6.0 mil
<b>11. Most recent Independent Expert Review</b>	Feb 2019	Feb 2019	Feb 2019		Feb 2019	
<b>12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?</b>	Yes Relevant documents available to make informed decision on safety of the dam	Yes Relevant documents available to make informed decision on safety of the dam	Yes Relevant documents available to make informed decision on safety of the dam		Yes Relevant documents available to make informed decision on safety of the dam	

<b>13. What is your hazard categorisation of this facility, based on the consequence of failure?</b>	High hazard	High hazard	High hazard	Medium hazard
<b>14. What guideline do you follow for the classification system?</b>	(South African National Standards) SANS 10286 – Mine residue	(South African National Standards) SANS 10286 – Mine residue	(South African National Standards) SANS 10286 – Mine residue	(South African National Standards) SANS 10286 – Mine residue
<b>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).</b>	No	No	No	No
<b>16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?</b>	Yes – In-house engineering oversight by Lonmin personnel; Fraser Alexander (Dam Operators) & SLR Consultants (External engineering support)	Yes – In-house engineering oversight by Lonmin personnel; Fraser Alexander (Dam Operators) & SLR Consultants (External engineering support)	Yes – In-house engineering oversight by Lonmin personnel; Fraser Alexander (Dam Operators) & SLR Consultants (External engineering support)	Yes – In-house engineering oversight by Lonmin personnel; Fraser Alexander (Dam Operators) & SLR Consultants (External engineering support)
<b>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?</b>	Zone of Influence assessment (conducted in August 2012) in accordance to the safety classification specifications of SANS 10286. Environmental Classification as per EIA/EMPr	Zone of Influence assessment (conducted in August 2012) in accordance to the safety classification specifications of SANS 10286. Environmental Classification as per EIA/EMPr	Zone of Influence assessment (conducted in August 2012) in accordance to the safety classification specifications of SANS 10286. Environmental Classification as per EIA/EMPr	Zone of Influence assessment (conducted in August 2012) in accordance to the safety classification specifications of SANS 10286. Environmental Classification as per EIA/EMPr
<b>18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?</b>	a) No b) Yes	a) No b) Yes	a) No b) Yes	a) No b) Yes
<b>19. Have you, or do you plan to assess your tailings</b>	Yes. Assessed on actual weather condition and dam is maintained and	Yes. Assessed on actual weather condition and dam is maintained and	Yes. Assessed on actual weather condition and dam is maintained and	Yes. Assessed on actual weather condition and dam

<b>facilities against the impact of more regular extreme weather events as a result of climate change, e.g. over the next two years?</b>	operated to withstand a 1:100 year flood event	operated to withstand a 1:100 year flood event	operated to withstand a 1:100 year flood event	is maintained and operated to withstand a 1:100 year flood event
<b>20. Any other relevant information and supporting documentation.</b>  <b>Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.</b>	Annual report  No joint ventures	Annual reports  No joint ventures	Annual reports  No joint ventures	Annual reports  No joint ventures