

**RÖSSING URANIUM MINE EXPANSION PROJECT – PUBLIC PARTICIPATION MEETINGS: SWAKOPMUND, WALVIS BAY AND ARANDIS  
22-24 JANUARY 2008**

**RECORD OF STAKEHOLDER RESPONSES TO THE RELEASE OF THE DRAFT SOCIAL AND ENVIRONMENTAL IMPACT ASSESSMENT REPORT FOR PHASE 1<sup>1</sup>**

Issues/ questions/comments	Comment by:	Event/Communication	Response
<b>ACID PLANT</b>			
What tonnages of sulphur are you moving out of Walvis Bay?	M Brueckner, NEC	Public participation meeting Swakopmund 22 January 2008	<p>We are importing 30,000 metric tonnes of sulphur per load. We will transport about 400-500 tonnes per day, so one load will be moved within a period of about 75 days, working every 2nd day. Currently we transport about a thousand tonnes of acid to the mine daily. Ore sulphur will be moved from the closed-up stock-pile at Walvis Bay to the mine in specially designed rail cars.</p> <p>The sulphuric acid plant is designed to produce 1200 metric tonnes of sulphuric acid, and requires 400 tonnes of sulphur Significantly less</p>

<sup>1</sup> A number of the issues raised during this series of meetings relate to Phase 2 of the Rossing Mine Expansion Project and are accordingly reflected in the documentation of Phase 2.

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			volumes of sulphur are required compared to current acid volume imports, so transport volumes and frequency will decrease, by approximately two thirds. We will not be transporting sulphuric acid but solid sulphur, which is much safer.
<b>SOCIO-ECONOMIC</b>			
The mine is going to be extended so the pit is also going to be extended. When the mine closes the pit will still be there. What is going to be the effect of the visual impact on tourism?	Participant	Public participation meeting Arandis 24 January 2008	From the Arandis side you will not be able to see the pit, but on the other side the rock dumps and, the tailings will become higher. This could have a visual impact. The report indicates what we should do to minimize these impacts. In the continuation of these studies we will try to ensure that these impacts will not affect the tourist industry.
The plans to increase production might not be essential for the continued viability of the company. It would be much more sustainable (and sustainable development is high on Rio Tinto's agenda) to mine the remaining resources at a slower pace in order to maintain RUL's contribution to the Namibian economy and Arandis's livelihood for a longer time.	S Muller, I&AP	Written submission, 6 February 2008	Noted. This issue will be addressed in the assessment of Phase 2 issues.
<b>BIODIVERSITY</b>			
I am concerned that we are going to affect habitats about which we don't know enough and think more alternatives should be included and evaluated in Phase 2.	S Muller, I&AP	Written submission, 6 February 2008	Noted. This issue will be addressed in the assessment of Phase 2 issues.
Avoiding the extension of the mine's footprint	S Muller, I&AP	Written submission, 6 February 2008	Noted. This issue will be addressed

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<p>would also fit in better with the Rio Tinto environmental standards, for instance:</p> <ul style="list-style-type: none"> <li>• Best practice for mineral waste disposal is either reuse of waste or backfilling of existing pits</li> <li>• The biodiversity guidelines call for avoidance of impacts as the first choice, then minimisation, then mitigation</li> </ul>			<p>in the assessment of Phase 2 issues.</p>
<b>MINING</b>			
	<p>Martin Amedick, Municipality of Walvis Bay</p>	<p>Public participation meeting Walvis Bay 23 January 2008</p>	<p>The alternative mining methods in the RU open pit – The orebody is quite a long drawn-out body, interspersed with waste rock, and it would be difficult to undertake underground mining, given the potential for dilution of the ore, which would make it financially not viable to treat in a plant . We look at these issues on an ongoing basis.</p> <p>If you look at the expansion of the SJ pit, it is in all directions, to the north, south and east and at certain stages it is not possible to dump back into the pit – if one looks at the expansion to the eastern side you could make the western side available. Ideally you could do this at alater stage, , but at the initial stages it is not possible because you are still deepending the pit. For SK4, if we only mine this area within SK, and finish the three years of mining, then there will be a</p>

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			<p>void, and it should be possible to fill it.</p> <p>We can't answer the heap leach question at the moment, but we are doing a pilot heap leach on the tailings facility to optimise the design in terms of economics and conserving water. One method already used is transparent plastic on top of the heap to prevent evaporation. There are a number of alternatives, but we don't know yet what the preferred option will be. Evaporative areas are certainly a consideration that need to go into the equation.</p>
<p>The tailings dam at Rössing is quite elevated already, and can be seen from the main road. Phase 2 will introduce more tailings. Has Rössing ever determined the extent of migration of sand and dust into surrounding areas.</p>	<p>Tim Eiman Nampont</p>	<p>Public participation meeting Walvis Bay 23 January 2008</p>	<p>There are two issue - dust on the ground and in the air.</p> <p>In the early 90s a number of surveys traversed the area around the tailings dam and three different zones were identified. 1) physical dust on the ground, which will be removed on decommissioning. This is easily done; 2) dust behind little rocks and bushes 3) dust only identified by taking radiometric samples and comparing it to other sand. This dust can only be measured in a multi-channel analyser, you can't actually see it. The Closure Plan has details of these.</p> <p>In the air quality study we have</p>

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			modelled how much dust will be dispersed into the air and made comparisons with air quality standards. The specialist report has details of this.
<b>GENERAL</b>			
<p>There is the option that the mine continues producing at the current rate (say 14 Mt milled per year), instead of ramping up to 22 Mt/a. In this case a lot of problems could be solved:</p> <ul style="list-style-type: none"> <li>• No need to employ more people but rather keep on the existing staff until retirement age and plan to have suitably trained replacements available in time</li> <li>• No need for more housing, schooling, other infrastructure</li> <li>• If the SJ pit was mined out first, it could be backfilled with tailings and waste rock, e g from the SK area</li> <li>• No additional processing plant, heap leach area or tailings dam required</li> </ul> <p>No need to disturb/destroy critical biotope areas.</p>	S Muller, I&AP	Written submission, 6 February 2008	Noted. This issue will be addressed in the assessment of Phase 2 issues.

## **RÖSSING URANIUM MINE EXPANSION PROJECT**

### **FOCUS GROUP MEETING: WALVIS BAY 7 FEBRUARY 2008**

#### **RECORD OF STAKEHOLDER ISSUES AND COMMENTS AS PART OF THE SOCIAL AND ENVIRONMENTAL IMPACT ASSESSMENT FOR PHASE 2 – BULK STORAGE AND HANDLING OF SULPHUR AT WALVIS BAY HARBOUR.**

Issues/ questions/comments	Comment by:	Affiliation	Response
<b>WATER</b>			
What measures will be taken about cleaning out the rail cars and dealing with leakage? Will Rössing use TransNamib rail cars?	André Burger	Private, Walvis Bay Municipality	Rössing will purchase customised railcars and TransNamib will manage the operation of transporting sulphur to site. Rössing intends purchasing side tipping rail cars as they are less likely to leak compared to bottom tipping. There will be washbays to wash out the railcars if required. These will be managed by TransNamib.
What happens to the wash down water and where does Rössing intend placing the treatment plant?	Michelle Yates	ASEC	The footprint for the water treatment plant is not yet defined and it is agreed that it will have to be considered in the detailed design.
<b>NOISE AND DUST</b>			
The local residents are very affected by the noise and dust from the port activities, especially with respect to manganese and coal ore dust. Will operations at the sulphur handling occur during	André Burger	Private, Walvis Bay Municipality	Rössing will maintain a 5,000 to 10,000 tonne stockpile at the mine. This will allow a certain amount of flexibility with respect to the number of rail movements.

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daylight hours only or extend to a 24 hour operation?			It is anticipated that rail cars will not travel every day, possibly every second day and these will only be done during normal daylight operation. It can be arranged to suit the needs of local residents. However, the offloading of sulphur from the ships will need to be undertaken over a 24 hour operation given demurrage costs. Offloading should take around 4 days and should occur approximately 20 days a year. If the Swivertell facility is made available to other users, then the number of days could increase. Rössing as yet does not know what noise the Swivertell produces, it has requested this information from the suppliers. With respect to dust, it is aiming for zero dust emissions.
Has Rössing considered the cumulative effects in the port given the number of different operation? Either Namport or individual companies need to consider these effects on the community.	David Uushona	Walvis Bay Municipality	Namport representative – Raymond Visagie provided answer: A baseline noise and dust study was completed two years ago. It found that dust levels were exceeded; however noise was within acceptable limits. Namport would consider revisiting this study and undertaking more monitoring.
Option D lies adjacent to the salt works. Are there any contamination issues associated with this arrangement?	Keith Wearne	CETN	Rössing has been in discussions with the operators of the salt works and given our commitment to work towards zero spillage. They are happy with this arrangement. They have even offered to move some of their workshops.

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Option D and C are close to the salt works. Where are the cement works and are there any issues with general contamination?	Susan Roux	CETN	The same answer was given as above. Rössing needs to ensure that not only do they not contaminate other materials but it is also important that the sulphur is not contaminated by other material, hence the need for a covered storage facility.
International health standards highlight that noise issues are not specific only to nighttime, that noise nuisance can occur during the day. What is Rössing doing with respect to the noise associated with the rail movements?	Deville Dreyer	Walvis Bay Municipality, Health Department	Rössing's noise and vibration consultants have this week undertaken a baseline noise monitoring of the port and surrounding residential area. A noise assessment will be part of the social and environmental impact assessment.
<b>BIODIVERSITY</b>			
Is Rössing aware that there is a Ramsar site just 300 m from the proposed storage site? What measures are being considered to prevent dust movement during northerly and southerly winds?	Keith Wearne	CETN	At the moment, the engineering is in the concept design phase and the HAZOP will look at the movement of dust and mitigation. We may use wind curtains on site given that the sulphur will be stored in open stockpiles. This stops the wind and sulphur from moving. We could investigate using wind curtains at the port in the unlikely event of a spillage.
<b>SULPHUR HANDLING</b>			
Whose responsibility is the sulphur after it leaves the port?	Rod Brady	NACOMA	The sulphur will always remain the responsibility of Rössing even if it is being transported by TransNamib, as is the case currently with our acid transport. If there is a sulphur spill it will be Rössing's responsibility to take the emergency action and clean it up. However, the emergency response would need to be triggered by TransNamib.

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Have you looked at alternative loading arrangements if there is a breakdown with the offloading equipment?	?	?	We are not looking at alternatives. We have discussed the issue of critical repairs and parts for the Swivertell with the supplier. They intend providing a local representative in Southern Africa and this hopefully should ensure that emergency repairs and parts are available within a day or so.
How does Rössing intend to remove the left over sulphur in the screw conveyor?	Thomas Wolff	WBS	It is a good point. Rössing will need to discuss with the suppliers of the swivertell the issue of how the hold of the ship is cleaned out. It is known that for grab systems, a front end loader is lowered into the hold to remove the remaining sulphur. This issue needs some further consideration and discussion.
How will the tires of the front end loaders be cleaned and will these loaders move from the storage shed to the outside? There may be issues of contamination.	Michelle Yates	ASEC	The vehicles are likely to be dedicated to the storage shed to prevent any issues of contamination. In the even of cleaning, it will be undertaken in washbays and the water appropriately treated.
<b>HEALTH AND SAFETY</b>			
What firefighting systems will be provided for within the sulphur handling shed?	Raymond Visagie	NAMPORT	Rössing will install similar systems to that used are Richards Bay, namely the provision of infra red cameras linked to an alarm system and automatic sprinklers.
What material will the storage shed be made out of? Aluminum?	Deville Dreyer	Walvis Bay Municipality, Heath Department	The shed will be constructed of a material that is both spark free and corrosion resistant. This will be considered in the engineering design.
Have you considered the issue of train accidents	Deville Dreyer	Walvis Bay Municipality, Heath	Given that there will be a change from

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at rail crossings in Walvis Bay? There were quite a few accidents in the last few years.		Department	the more dangerous sulphuric acid to sulphur and the number of rail transports will decrease by a third, Rössing believe there is a net benefit in this development.
Have you considered that the required evacuation distances for sulphur fire is 800 m?	Deville Dreyer	Walvis Bay Municipality, Heath Department	Sulphur explosions occur due to confinement. At the mine site the sulphur will not be contained and therefore there is no risk of sulphur explosion. At the port all best practice measures will be applied to prevent explosions.
What is the potential for explosion if sulphur dust mixes with other dust in the area, eg caustic soda, manganese etc.	Jakobus Olivier	PMC, Protea Chemicals	There is no danger of mixing, given that Rössing is aiming towards zero spillage design. The facility will be undercover so movement and mixing of sulphur with other surrounding dust material is unlikely. However, it should be noted that for options C and D, transfer points along the conveyor will be required, given their location. This is one of the disadvantages of these locations and Rössing is still considering these limitations.
Will Rössing use special front end loaders to prevent the occurrence of sparks and the risk of explosions?	Deville Dreyer	Walvis Bay Municipality, Heath Department	An asphalt floor will be used which should prevent the metal scoops from sparking.
Have Rössing considered the inclusion of metal in the sulphur feed stock? If so, what will they do to screen out these metal pieces to prevent them from becoming a spark hazard?	Deville Dreyer	Walvis Bay Municipality, Heath Department	A screen or magnetic extractor could be used. This will have to be discussed with the suppliers.

## PARTICIPANTS

Andre Burger	Walvis Bay Municipality
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Johnny Ferreira	Walvis Bay bulk terminal
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