

**THARISA MINERALS (PTY) LTD**  
**EIA/EMP AMENDMENT I**

**FOR THE PROPOSED CONSTRUCTION AND OPERATION OF THE CHROME SAND DRYING PLANT,  
CHANGES TO THE DESIGN OF THE TAILINGS STORAGE FACILITY AND OTHER OPERATIONAL AND  
SURFACE INFRASTRUCTURE CHANGES**

**SCOPING REPORT FOR PUBLIC REVIEW**

Dear Interested and affected parties (IAPs),

## 1. INTRODUCTION

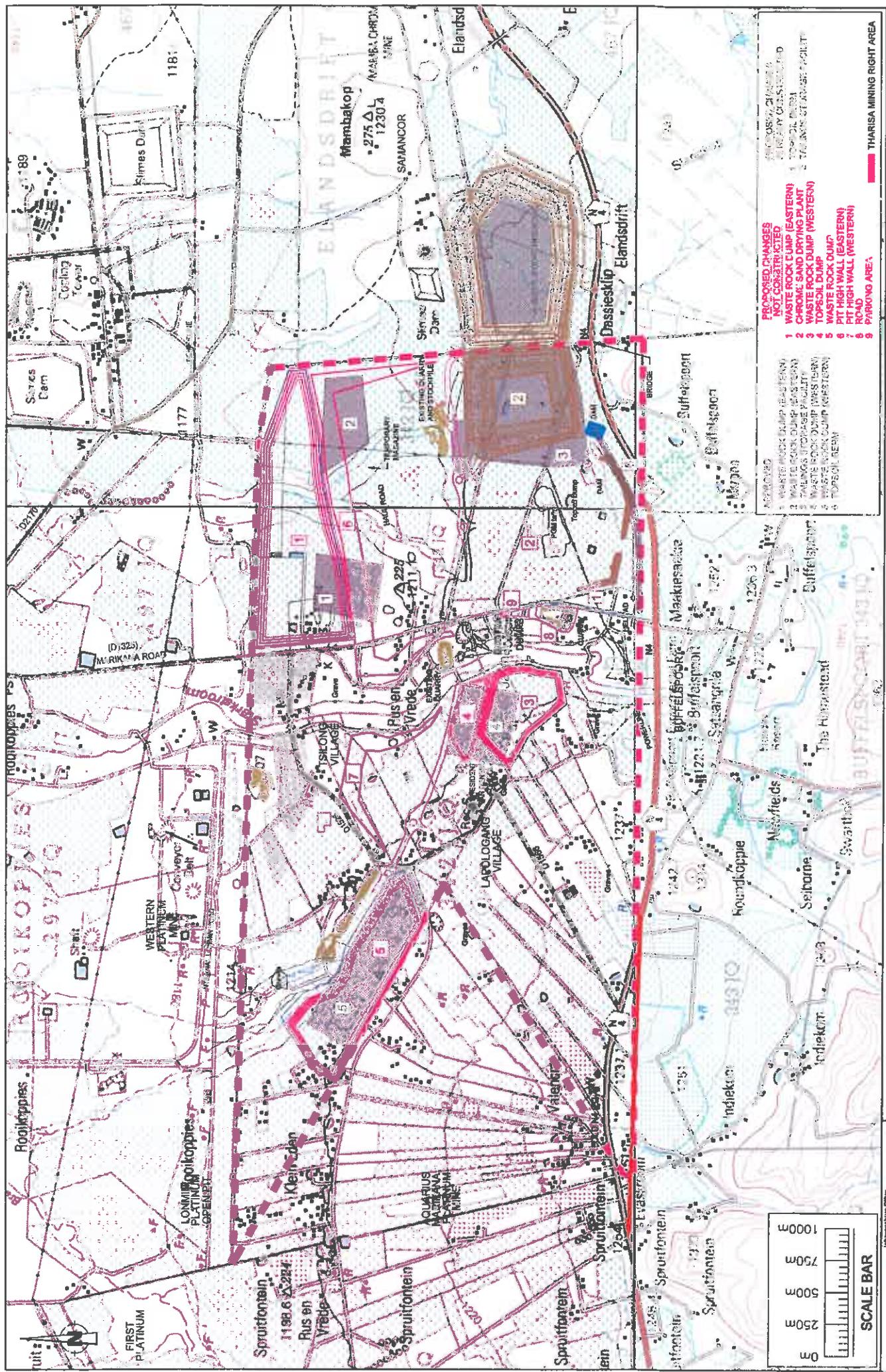
Tharisa Minerals (Pty) Ltd (Tharisa) is an existing chrome and platinum group metals (PGM) concentrate producing mine that is located on the farms Kafferskraal 342 JQ, Rooikoppies 297 JQ and Elandsdrift 467 JQ near Marikana town. Tharisa Mine is situated in both the Rustenburg and Madibeng Local Municipalities and in the Bojanala Platinum District Municipality in the North West Province.

Tharisa proposes the following developments at Tharisa Mine:

- construct and operate a chrome sand drying plant;
- changes to the tailings dam design; and
- changes to the general surface infrastructure layout and operations at Tharisa Mine.

It must be noted that the proposed project has changed since the scoping meetings that were held in February 2012. In this regard, Tharisa has removed the on-site smelter from the proposed project. Should this smelter be reconsidered in future, a separate EMP amendment process will be undertaken. Tharisa has also increased the size of the proposed chrome sand drying plant.

The proposed project components will be located on some of the portions of the farms Kafferskraal 342 JQ (Tharisa mining right area) and Elandsdrift 467 JQ (surface use area). The local setting of the proposed activities is illustrated in Figure 1.



Date :	05/2012	Scale : AS SHOWN
Project No :	TO14-12	FIGURE 1

The proposed project components require authorisations in terms of the Mineral and Petroleum Resources Development Act (MPRDA), 28 of 2002, the National Environmental Management Act (NEMA), 107 of 1998 and potentially the National Water Act (NWA), 36 of 1998. SLR Consulting (Africa) (Pty) Ltd (SLR) is an independent firm of consultants that has been appointed by the applicant to undertake the environmental assessment and related processes.

As part of the project's environmental impact assessment (EIA) and environmental management programme (EMP) amendment process, a scoping report has been produced. The main purpose of the scoping report is to set out the terms of reference for the EIA/EMP amendment that will enable the meaningful assessment of all relevant environmental and social issues. This document is a summary of the scoping report. Tswana translations are available on request.

## **2. RELEVANT NEMA LISTED ACTIVITIES**

The listed activities associated with the proposed project components include the activities listed below.

**Table 1: NEMA Listed Activities Relevant to the Project**

Activity Number	NEMA Listed Activity	Description of activity
<b>Notice 544, 18 June 2010</b>		
13	The construction of facilities or infrastructure for the storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 80 but not 500 cubic metres.	The construction of facilities or infrastructure for the storage and handling of 460 tons of a dangerous good (diesel or heavy fuel oil).
<b>Notice 545, 18 June 2010</b>		
5	The construction of facilities or infrastructure for any purpose or activity which requires a permit in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent and which is not identified in Notice No. 544 of 2010 or included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply.	Construction of a chrome sand drying plant.
<b>Notice 545, 18 July 2010</b>		
26	Commencing of an activity, which requires an atmospheric emission license in terms of section 21 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), except where Activity 28 in Notice No. R. 544 of 2010 applies.	Operation of a chrome sand drying plant.

## **3. REVIEW OF SCOPING REPORT**

Copies of the scoping report have been made available for public review at the following venues as agreed upon at the scoping meetings:

- Retief Primary School (Office);
- Marikana Community Hall;
- Hillside B&B;
- NG Kerk (Madithokwa);

- Rustenburg Library;
- Tharisa Mine; and
- SLR Office (Johannesburg).

Electronic copies of the scoping report will be made available on request.

IAPs will be given until **Monday 16 July 2012** to review the scoping report and submit comments in writing by means of either fax or email.

#### **4. PLAN OF STUDY FOR THE EIA**

The main objectives of the EIA/EMP amendment phase are to:

- Complete the specialist investigations (September 2012)
- Distribute EIA/EMP amendment report to IAPs, Department of Mineral Resources (DMR) and other regulatory authorities for review (October 2012)
- Public feedback meetings with IAPs (if required) (October/November 2012)
- Forward EIA/EMP amendment report including IAP comments to DEECT for review (December 2012).
- Circulate record of decisions (April 2013).

#### **5. ATTACHED DOCUMENTS**

The following documents have been extracted from the scoping report for your review:

- Appendix 1: Issues raised by interested and/or affected parties (IAPs) and regulatory authorities (Appendix C of the scoping report)
- Appendix 2: Terms of reference for further investigations (section 7.4 of the scoping report).

If you have any related questions please contact:

Stella Moeketse at: E-mail: [sмоeketse@slrconsulting.com](mailto:sмоeketse@slrconsulting.com), Fax: 01 1467 0978 and Tel: 011 467 0945.

**APPENDIX 1: ISSUES RAISED TO DATE BY IAPS AND REGULATORY AUTHORITIES (APPENDIX C OF SCOPING REPORT)**

**APPENDIX C: COMMENTS AND RESPONSE REPORT– SUMMARY OF ISSUES RAISED TO DATE BY AUTHORITIES AND IAPS**

	<b>ISSUE RAISED</b>	<b>BY WHOM AND WHEN</b>	<b>RESPONSE GIVEN BY PROJECT TEAM AS AMENDED FOR THE SCOPING REPORT- RESPONDES ARE FROM SLR UNLESS OTHERWISE INDICATED</b>
<b>A Procedural Related Issues</b>			
1	Once the project is approved by the DMR, how will Tharisa communicate the Record of Decision?	Alex Salang General public scoping meeting, 16 February 2012	Tharisa will communicate this information in one and/ or a combination of the following ways: <ul style="list-style-type: none"> <li>• email,</li> <li>• letter,</li> <li>• Placing notification in the same areas where the BIDs were placed. (Tharisa)</li> </ul> Monitoring reports are available for public review on request. (Tharisa)
2	How will the monitoring results be shared?		SLR is still in the initial phase of the EIMP Amendment process and has just commenced with the public participation process (PPP).
3	Why has SLR not consulted us as part of Tharisa's EIMP Amendment process?	Hilton Bedwell Focussed scoping meeting, 2 February 2012	It was agreed that the meetings will not be postponed and that SLR will arrange a feedback meeting during the review of the EIA/EIMP Amendment Report phase to address all the raised issues and give feedback on the specialist studies.
4	Due to the new date of our feedback meeting (13 of February 2012) with Tharisa, we would like SLR to postpone the scoping meetings that are currently scheduled to take place on 16 of February 2012 so that we can consult our lawyers in time for these meetings.	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	The purpose of the scoping meetings is to share information with the IAPs, understand their concerns and to ensure that these issues are covered in the terms of reference for the specialist studies.
5	Why has Tharisa constructed the foundation of the smelter house? We are aware that the mine has already constructed it without authorisation from the government.		Tharisa is of the view that no construction of the smelter house has commenced.
6.	We hereby formally request to that we be furnished with all information that is currently available pertaining to the proposed Tharisa development as detailed above and that we be invited to and be timely advised of any and all meetings, hearings and other events pertaining to the proposed development.	Elsa Steyn Fax, 10 February 2012	The smelter has been removed from the project scope. The BID was sent to Elsa Steyn on 10 February 2012
7	Hi Stella, please forward me the meeting	Marita Potgieter,	This information was provided to Mrs Potgieter on 14

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schedules because we did not know about it. Can you maybe give me Thulani's landline number, because he doesn't answer his cell?	Email, 14 February 2012	February 2012.
8 I am involved in development and empowerment of the affected communities (on Kafferskraal 342 JQ). I would like to be part of the project both in working and input distribution.	Joseph Ncoshosho Fax, 16 February 2012	This comment has been noted. Mr Ncoshosho will be involved in the dissemination of the proposed project information to the communities that reside on the farm Kafferskraal 342 JQ. All the IAPs will be informed of the details of the feedback meeting in the summary of the EIA/EMP amended report.
9 When is the next meeting date?		
10 Has Tharisa already submitted the water use license for the proposed activities?	Johan Swanepoel Key stakeholder scoping meeting, 16 February 2012	Tharisa will make an application for the additional water related activities towards the end of the EIA phase.
11 Tharisa did not consider the use of Buffelspoort dam as an alternative for water supply in the original EIA/EMP process.	Ian Ashmole Key stakeholder scoping meeting, 16 February 2012	These issues have been recorded for Tharisa's attention.
12 Tharisa must bear in mind that they are operating without a water use license and as a result, they are operating illegally.		
13 Tharisa should also note that water allocation from the Buffelspoort dam will only be limited temporary use and not a permanent use.		
14 Kindly be notified that we have commissioned an independent Social Impact Assessment to determine the impact of Tharisa Mine on the neighbouring properties and owners, Buffelspoort, North West Province.	Elsa Steyn Email, 8 March 2012	These comments have been noted.
15 We furthermore trust that you will afford us a reasonable period of 3 months during which to conduct the aforesaid study, in view of the fact that we as a community have not been involved in the mine's studies conducted to date, allegedly due to the mine's inability to identify us as an interested and affected parties.		
16 Tharisa does not have an approved WULA therefore it cannot mention an amendment of the WULA in the BID for the proposed projects.	Shan Holmes Telephone communication: 18 May 2012	As required, WULA amendments will be submitted in consultation with DWA. In this context WULA is short for water use license application.
17 Tharisa is operating illegally because it does not		

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have an approved VVULA.		
18 We would like to the following information to be made available in the next round of meetings with SLR and Tharisa: current and future plans of Tharisa mine, location of the ore, rivers, wetlands, roads, neighbouring mines, the monitoring network and the normal wind direction.	Pieter Volvaardt Key stakeholder scoping meeting, 16 February 2012	This issue has been recorded and will be addressed in the EIA phase.
19 When will the scoping report be distributed for public review?	Nols de Wet Key stakeholder scoping meeting, 16 February 2012	Sometime in May/June 2012.
20 Is the public participation process already underway for the EIA process?	Kelebogile Mekgoe (Rustenburg Local Municipality) Regulatory authorities scoping meeting, 21 February 2012	Yes, advertisements were published in January and site notices were placed in and around the mine. The background information document (BID) was also distributed to the interested and affected parties (IAPs). Two public scoping meetings were held on the 16 <sup>th</sup> of February 2012 with the key stakeholders, the general public and IAPs. This will be done.
21 Please make sure that the minutes of all the scoping meetings are in the scoping report.		The mine will be applying for the license. The consultation information gathered from the EIA process will be used in this application. Tharisa will involve the municipalities in this process. (Tharisa)
22 Will the mine be applying for an atmospheric emissions license? Will the mine consult with the municipality with regards to this licence?		
23 I reserve the right to comment to the Scoping Report. My comments will be supplied in writing.	Marius Botha General public scoping meeting, 16 February 2012	This comment has been noted.
24 Please provide transport, or select a venue that is close to the local communities such as Madithlokwa for meetings.	Appearance Ndlovu (Ward Councillor) General public scoping meeting, 16 February 2012	This comment has been noted and will be used for future reference.
25 We require larger maps please.	W1 Engelbrecht General public scoping meeting, 16 February 2012	SLR will provide in the reports in A3 so that everything can be visible to the readers.
26 I am located on Portion 3 of the farm Kafferskraal near the Tailings Storage Facility (TSF), yet I have not been consulted with yet. Why have we not been consulted yet?	Jan Coetze General public scoping meeting, 16 February 2012	SLR is still in the initial phase of the EMP Amendment process and has just commenced with the PPP.

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27 I am a guardian and mother of Deon Dawn Moleba, who is the owner of Portion 233 of Portion 146 of Kafferskraal 342 JQ. My son who is a minor, has no objection to Tharisa and the developments on the properties Kafferskraal 342 JQ, Roilkoppies 297 JQ and Elandsdrift 467 JQ.	Keitumetse Monica Moleba Fax, 20 February 2012	This comment has been noted.
28 Kindly be notified that we have commissioned an independent Social Impact Assessment to determine the impact of Tharisa Mine on the neighbouring properties and owners, Buffelspoort, North West Province.	Elsa Steyn E-mail: 8 March 212	The comments have been noted.
29 We furthermore trust that you will afford us a reasonable period of 3 months during which to conduct the aforesaid study, in view of the fact that we as a community have not been involved in the mine's studies conducted to date, allegedly due to the mine's inability to identify us as an interested and affected parties.		
30 I would like to have electronic copies of Tharisa's WULA, BID for the proposed projects as well as other documentation for my records.	Shan Holmes Telephone communication: 18 May 2012	Electronic copies of the WULA and the BID were sent to Mrs. Holmes on Thursday 24 <sup>th</sup> of May 2012. The other EIA/EMP Amendment process related documents will be sent to Mrs. Holmes as per the project's programme.
31 It is our instructions that your company has started with activities next to our client's property.	Frikkie Pretorius Fax: 21 May 2012	These issues have been recorded for Tharisa's attention. They were sent to Tharisa on 21 May 2012.
32 Our instructions are that the environmental impact assessment and environmental management has not been finalised yet and therefore we and our client are of the opinion that your mining activities are illegal.		
33 We furthermore confirm that we have instructions to require proof of your rezoning and we would like to know exactly who the applicant for the rezoning application was.		
34 We would like to hear from you within the next seven days		
<b>B. Tharisa Stakeholder Engagement Related Issues</b>		
1 Tharisa does not comply with the commitment to	Hettie Le Roux	Many stakeholder meetings have been held, but not

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conduct quarterly stakeholder meetings as per the original EIA/EMP report. They meet with the stakeholders only when they need authorisation for specific activities at the mine.	Key stakeholder scoping meeting, 16 February 2012	always at the required quarterly frequency and not with all stakeholders. Tharisa is committed to rectify this problem in the future. (Tharisa)
2 Proposed regular meetings to be held with stakeholders as per the approved EIA/EMP report never materialized.	T Le Roux (Hettie) Email, 8 February 2012	
3 The stakeholders need regular interaction with Tharisa.	Alex Salang General public scoping meeting, 16 February 2012 Hettie Le Roux and Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	Tharisa has an "open door" policy where nearby landowners/ I&APs can contact the mine. Tharisa is maintaining a community complaint register which will be reviewed with feedback at every stakeholder meeting. Complaints can be lodged directly at the General Managers office. (Tharisa)
4 We (the surrounding landowners) are frustrated with Tharisa because we raise our concerns with them and they never do a thing about them. We do not trust Tharisa.	Danie van Rensburg (146 and 101 Kafferskraal) Key stakeholder scoping meeting, 16 February 2012	
5 I would like to communicate with Tharisa's management.	Theunis van Rensburg Key stakeholder scoping meeting, 16 February 2012	Yes. (Tharisa)
6 Does Tharisa have a blasting certificate and a certificate to operate on Sunday from the DMR?	T Le Roux (Hettie) Email, 8 February 2012	
7 Tharisa minerals have failed to address the problems created by the mine since its operations in the year 2008. How does Tharisa intend to address the new problem that will arise with the increase of activities such as noise, air pollution and ground water contamination and drainage?		Tharisa has a detailed environmental monitoring programme to identify problems caused by Tharisa's activities. Where this monitoring proves that community members have been materially adversely affected (such as drying of boreholes), Tharisa will rectify this. Where this monitoring proves that unacceptable environmental impacts are being caused by Tharisa's activities, these will be rectified by Tharisa. (Tharisa)
8 Previously raised concerns which have not yet been addressed include:	<ul style="list-style-type: none"> <li>• Pumping water at mine completely drain our boreholes.</li> <li>• Dust, noise and damage to our properties created by the blasting activities.</li> <li>• Overpopulation on mine residential property results in extensive use of farm road and this</li> </ul>	Tharisa has an "open door policy where nearby landowners/ I&APs can contact the mine. Tharisa is maintaining a community complaint register which will be reviewed with feedback at every stakeholder meeting. Complaints can be lodged directly at the General Managers office.
		These seven issues have been lodged in the complaints

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road cannot handle it.		register. (Tharisa)
<ul style="list-style-type: none"> <li>The traffic and promise from mine management to close the said site never happened but occupiers and vehicles just increased creating a dust and safety risk.</li> <li>Technology (internet connection) in the area affected by mine surrounding wall (soil berms south of the mine along the N4).</li> <li>The mine is seriously affecting our income and lack of interest by mine officials is not helping the situation (has been going on for months).</li> <li>Overall effect of above-mentioned problems on the quality of our lives.</li> </ul>		
C. Project/Technical Related Issues		
1 According to Figure 1, Drawing T014-12, 01/2012 entitled local setting the item indicated as "proposed changes not completed" Item #1 "waste rock dump" covers, or at least partly covers the property "Portion 135 (portion of portion 8), Kafferskraal 342, Registration Division JQ. Could you please urgently confirm that my interpretation of the information sent to me is correct, or otherwise? This information would have a bearing on my interest in the two respective meetings scheduled for 16 February 2012, for which I received an invitation to attend, on behalf of my mother Mrs AC Retief.	Prof JV Retief Email, 30 January 2012	Tharisa communicated with Prof. Retief and agreed that it will not be necessary for him to attend this meeting. Tharisa also have agreed with Prof. Retief on the price for the purchase of the said property. (Tharisa)
2 Could you also please provide a clearer indication of the interrelationship between Item #1 and the said Portion 135?		
3 The buffer area surrounding Tharisa Mine is already too narrow and should be increased so that the surrounding community is not exposed to the mining activities. Instead, Tharisa is seeking to expand its operations, thus further narrowing this buffer area. This is not acceptable.	Elsa Steyn Email, 24 February 2012	The buffer zone between Tharisa's operations and surrounding communities will be evaluated during the EIA/EMP process. (Tharisa)

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4 Will there be minor element impurities in the waste acid – this includes Se, Te, Bi, Hg, Pb, Zn, etc?	Buks Kruger Email, 8 February 2012	The smelter and the leaching process have been removed from the project scope.
5 Will the leach circuits produce any jarosite products? What are the leaching characteristics of the iron sulphate and calcium sulphate residues from the leach circuit?		
6 Why does Tharisa want to construct a smelter house when they had previously informed us that they will not do so?	Hilton Bedwell Focussed scoping meeting, 2 February 2012	The smelter has been removed from the project scope.
7 Does Tharisa have any plans of undertaking underground mining activities in our area (south of the N4)?	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	No, Tharisa has no plans of undertaking mining activities south of the N4. (Tharisa)
8 What will Tharisa do with the by products (e.g. nickel) from the smelting process?		The smelter has been removed from the project scope.
9 Will the tailings dams be lined?		This is part of the tailings code of practice. Liner details will be provided in the EIA/EMP report.
10 Are there emergency plans in place in case there is the tailings dam's failure?		
11 The smelter house description mentions both alloy granulation and crushing – which one of the two processes will be utilised?	Buks Kruger Email, 8 February 2012	The smelter has been removed from the project scope.
12 There are a lot of smelters in the area such as IFM Ferrochrome and Xstrata's in the area. Which smelter is Tharisa considering as an alternative?	Nols de Wet Key Stakeholder scoping meeting, 16 February 2012	Tharisa will sell the PGM concentrate to Impala for further processing. (Tharisa)
13 Why are the PGM and chrome concentrates not sold to IFM or other chrome smelters?	Johan Swanepoel Key Stakeholder scoping meeting, 16 February 2012	PGM concentrate is being sold to other smelters. Chrome concentrate is sold mainly to Chinese smelters. Some chrome is sold to South African smelters. Tharisa continually evaluates the best possible markets for the chrome concentrate, including the possibility of IFM. (Tharisa)
14 Where will the chrome from Tharisa be sent to?		Most of Tharisa's chrome is destined for China via Richards Bay and Durban ports. Some is also sold to various south African smelters. (Tharisa)
15 Is Tharisa also intending to buy PGM concentrate from other mining houses for smelting purposes?	Theunis van Rensburg Key Stakeholder scoping meeting, 16 February 2012	No. The smelter has been removed from the project scope.
16 If Tharisa decides to use an off-site smelter, does	Pieter Wolvaardt	Tharisa cannot comment on this, as it depends on the

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it mean that another mining company will build an additional smelter to accommodate the PGM concentrate from Tharisa?	Key Stakeholder scoping meeting, 16 February 2012	capacity of- and supply to the other existing PGM smelters. Tharisa does not have detailed knowledge of this. (Tharisa)
17 Will chrome 6 be a by-product of the smelting process?		The smelter has been removed from the project scope.
18 Will there be any harmful material in the slag? We do not want the slag to contaminate the waste rocks and the tailings dam.		
19 Will the storage of the LPG and acids be considered as hazardous areas?		
20 What are the dimensions of the smelter house?	Hilton Bedwell Key Stakeholder scoping meeting, 16 February 2012	
21 At the informal community meeting the size of the proposed smelter house was downplayed; yet the EIA/EMP Programme Document proposes a smelter house with a footprint of 200m x 200m. This means that the community is being misinformed.	Elisa Steyn Email, 24 February 2012	
22 At the general public meeting of 16 February 2012 the footprint comparison stated that the Tharisa Smelter would be 200m x 250m – why is this different from the footprint as designated in the EIA/EMP Programme Document?		
23 The fact that the Smelter Plant will be operated 24 hours per day is of concern. There already is great unhappiness in the community due to the fact that there is a lot of noise at night due to mine trucks being operated (reverse hooters), stones being crushed, other mechanical noise emanating from the mine, as well as the bright lights that are shining through bedroom windows. All of these are preventing the community from sleeping properly and they go to work tired the next day. This will be exacerbated by the proposed smelter plant being operated 24 hours per day. The current blasting at the mine contributes to the		

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noise factor, but even more serious is the fact that it creates a safety risk to community members due to rocks that are thrown 700m from the mine.		
24 We require larger maps please.	W I Engelbrecht General public scoping meeting, 16 February 2012	SLR will provide them in the reports in A3 so that everything can be visible to the readers.
25 Does Tharisa have an authorisation to carry out the proposed projects particularly the smelter house given that Tharisa previously informed us that Eskom couldn't supply them with the necessary electricity?	Jaco Schoeman (Kafferskraal 352) Key stakeholder scoping meeting, 16 February 2012	The smelter has been removed from the project scope.
26 Tharisa previously stated in the past that not all the properties could be purchased due to lack of funds, who is funding the smelter project?		
27 What are the impacts that are associated with the proposed smelter house?	Nols de Wet Key stakeholder scoping meeting, 16 February 2012	
28 What will be the content of the tailings?	Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	The tailings is a slurry. The chemistry and other details will be provided in the EIA phase of the process.
29 What is the chemistry of the tailings? There is a concern from the government departments that there are heavy metals in the water.		
30 The General Manager (GM) and the Managing Director (MD) of the mine informed us in our meeting with Tharisa that the smelter has already been built and it is currently stored in Johannesburg.	Martinus Barnard Key stakeholder scoping meeting, 16 February 2012	The smelter that is located in Johannesburg is Mintek's permanent testing facility not Tharisa's smelter.
31 How far are the soil berms from the N4?	Hettie Le Roux Key stakeholder scoping meeting, 16 February 2012	The smelter has been removed from the project scope.
32 Where is the position of the tailings return water dam?		Approximately 400m.
33 We would like to have the details of the smelter house so that we can have a proper understanding of how it will be operating e.g. gas cleaning technologies to be used, are they approved and what types of scrubbers will be	Pieter Wolvaardt, Ian Ashmole, Lappies Labuschagne Key stakeholder scoping meeting, 16 February 2012	The smelter has been removed from the project scope.

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34 How far is the proposed smelter house from the environment.		
34 How far is the proposed smelter house from the Marikana Road?	Hilton Bedwell General public meeting, 16 February 2012	The smelter has been removed from the project scope.
35 How far is the large waste rock that is located on the eastern side of the mine from the settlement?	Calvin Thutlwane General public meeting, 16 February 2012	Approximately 100m. This will be confirmed in the EIA/EMP phase of the process.
36 Why is the large waste rock dump so close to the existing community?	Mavis Vilame General public meeting, 16 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the sections 7.4.4, and 7.4.12 of the scoping report.
37 What is the distance by law that is allowed from the house and the Western Waste Rock Dump?	Mr R and/or P C van der Westhuizen General public meeting, 16 February 2012	
38 Will the Tailings Dump and Slag Dump be lined?	Hilton Bedwell General public meeting, 16 February 2012	
	Kelebogile Mekgoe (Rustenburg Local Municipality) Regulatory authority's meeting, 21 February 2012	
39 At present Tharisa fails to adhere to its undertaking not to use the school road for the trucks to commute; it still does this and this endangers the lives of innocent school children. The smelter plant and higher number of trucks will increase the safety risks.	Elisa Steyn Email, 24 February 2012	The smelter has been removed from the project scope.
40 The fact that the chrome sand drying plant will be operated 24 hours per day is of concern. There already is great unhappiness in the community due to the fact that there is a lot of noise at night due to mine trucks being operated, stones being crushed, other mechanical noise emanating from		The smelter has been removed from the project scope.

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	the mine, as well as the bright lights that are shining through bedroom windows. All of these are preventing the community from sleeping properly and they go to work tired the next day. This will be exacerbated by the proposed smelter plant being operated 24 hours per day.	
41	With regards to the change of the general infrastructure layout, it is interesting that one of the alternatives being considered includes the "no project" option when one bears in mind that Tharisa has by its own admission already commenced effecting the 'proposed' changes, eg the designs and sizes of the tailings facility storages and the location of the topsoil berm wall.	This comment has been noted.
42	Nowhere in the EIA/EMP Amendment background information document (BID) is mentioned that the intention is to increase the life of the mine from 12-18 years – this was disclosed for the first time at the meeting of 16 February 2012. This is a further significant impact on the community that will increase the devaluation of their properties.	This information was confirmed after the distribution of the BID. This EIA process is still in the early phase and there might be some changes in the proposed project component prior to submission of the EIA/EMP amended report for authorisation all the changes in the scope of work will always be communicated with the IAPs via the newsletters or meetings.
43	They promised us a focussed stakeholder meeting but it still has not taken place and there is no indication about when and/or that it will take place. Thus SLR is closing the scoping process for comments without taking into account the comments of the true stakeholders in the proposed expansion. This makes a mockery of the scoping phase.	A key stakeholder scoping meeting was held with the land owners in and around the mine at 11h00, 16 February 2012 at the Retief Primary School. A general public scoping meeting held on the same day at 16h30.
44	Where is the slag going to be deposited?	Kelebogile Mekgoe
45	Will the footprint of the TSF change with the new layout? In the BID document it states that it will be reduced, is this a type-error?	(Rustenburg Local Municipality) Regulatory authority's meeting, 21 February 2012
D. Blasting Related Issues	1 Current operations at Tharisa Mine particularly	Each blast is carefully designed and monitored by a

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blasting related activities have caused damage to our structures e.g. cracking of houses/structures.	Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	specialist blasting consultant. Ground and air vibrations are monitored for each and every blast.
2 We are concerned about fly rock from the blasting activities which is a safety related matter (south of the N4).		All Tharisa's blasts have not exceeded the required legal limits thus far. On a number of occasions, blast monitors have also been placed in properties on the south of the N4; these have also indicated that Tharisa's blasts will not cause any damage to any infrastructure on the south of the N4 (near their properties). (Tharisa)
3 Does Tharisa monitor its blasting impacts?	Tina du Toit and Christa Hattingh (238 Kafferskraal) Key stakeholder scoping meetings, 16 February 2012	
4 How often does it monitor?	Monica Moleba General public scoping meeting, 16 February 2-12 WAJ Vorster Email, 17 February 2012.	
5 Who monitors the impacts?	Mr R and/or Mr P C van der Westhuizen Email, 24 February 2012.	
6 Tharisa's blasting activities have damaged some of my structures (houses).	Elsa Steyn, comment Email, 24 February 2012.	
7 There is blasting that takes place between 3 and 4pm that causes the houses to shake. Will Tharisa take responsibility and fix the damage that is created by the blasting?	Hilton Bedwell General public scoping meeting, 16 February 2012	The IAPs are welcome to appoint their preferred consultant. The mine already uses a specialist who is independent. Relevant reports are available on request. (Tharisa)
8 In some instances the level of water in boreholes has even risen and caused pumps to cease. Blasting has furthermore caused boreholes to collapse.		Tharisa has an "open door" policy where nearby landowners/ I&Ps can contact the mine. Tharisa is maintaining a community complaint register which will be reviewed with feedback at every stakeholder meeting. Complaints can be lodged directly at the General Managers office. (Tharisa)
9 Can we please have an independent person to monitor blasting related activities at Tharisa?	Peter van Rensburg General public scoping meeting, 16 February 2012	
10 We have raised issue with Tharisa on numerous occasions, how can we believe that Tharisa is going to address the matter?	Calvin Thutwane General public scoping meeting, 16 February 2012	
11 There is no trust with regards to the blasting issues. People move to the road during blasting. There is no regard for people's discomfort. Before		

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Tharisa continues, they need to fix what has been damaged.		
12 Mine detonations are causing glasses to fall from the shelves and the houses of the surrounding community to crack. Intensifying the mining conducted at Tharisa will increase the problem.	Elsa Steyn Email, 24 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.5 of the scoping report.
<b>E. Biodiversity Related Issues</b>		
1 Our trees are already taking on strain from the current mining operations and we feel that the proposed projects will exacerbate the situation.	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012 and key stakeholder scoping meeting, 16 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.11 of the scoping report.
2 We are also concerned that the bees that are needed for farming activities particularly for the pollination process will be in more danger of being depleted by the proposed activities- smelter house.		
3 The people from Madithokwa cut down our trees for domestic purposes because they have no trees, bushes or grass in their resettlement village	A Botha General public scoping meeting, 16 February 2012	This comment has been noted.
4 There is a wetland that has been identified on several portions of the farm Rooikoppies. Which portions of the Rooikoppies farm will be affected by the proposed project components?	Kelebogile Mekgoe (Rustenburg Local Municipality)	No activities will take place on the farm Rooikoppies. (Tharisa)
<b>F. Groundwater Related Issues</b>		
1 Will Tharisa compensate the landowners if the boreholes water is contaminated?	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	Tharisa has a detailed environmental monitoring programme to identify problems caused by Tharisa's activities. Where this monitoring proves that community members have been materially adversely affected (such as polluting of boreholes), Tharisa will rectify or compensate for this. Where this monitoring proves that unacceptable environmental impacts are being caused by Tharisa's activities, these will be rectified by Tharisa. (Tharisa)
2 Tharisa drilled a borehole of 300m deep on my property in the early phase of the mine and they have never revisited it. I would like Tharisa to test it and also include it in the groundwater monitoring system.	Jaco van Wyk Key stakeholder scoping meeting, 16 February 2012	Your borehole issue has been included in Tharisa's complaints register and Tharisa will take this forward. (Tharisa)

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3 My borehole's yield has decreased due to Tharisa's operations.	Hettie Le Roux Key stakeholder scoping meeting, 16 February 2012	Field work and tests have been conducted at the Le Roux property, the outcome of the test conducted in Mr Le Roux's presence indicated that the borehole was not properly maintained. (Tharisa)
4 Due to the blasting activities, the borehole pumps do not last and they are now pumping sand. What will the mine do about this?	Peter van Rensburg General public scoping meeting, 16 February 2012	All Tharisa's blasts are monitored by a specialist and independent blast consultant and the reports reveal that all Tharisa's blasts are within permitted legal limit (thus will not cause damage to any infrastructure which is 500m or more away from the blast). (Tharisa)
5 How does Tharisa monitor groundwater to ensure that there is no contamination or it is determined as early as possible?	Hilton Bedwell, Johan van Heerden and Barend Clark Focused scoping meeting, 2 February 2012	Tharisa monitors the quality and quantity of water in and around its operations as per the approved EIA/EMP report. This includes the monitoring of the landowners upstream and to the west of Tharisa. These results have been documented in reports to the Department of Water Affairs. These reports are available on request. (Tharisa)
6 There is a general concern from the local residents that the surrounding mines are causing decrease in water quality and quantity.	Kelebogile Mekgoe (Rustenburg Local Municipality) Regulatory authority's meeting, 21 February 2012	Yes, they are publicly available. (Tharisa)
7 Tharisa should monitor its impacts on water resources in the area. We currently cannot pinpoint who is responsible for the decrease in water quantity and quality.		There is a program of regular surface and groundwater monitoring. No pollution from the mining activity has been observed. (Tharisa)
8 Are these reports available for public review?	Elsa Steyn, comment Email, 24 February 2012.	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.13 of the scoping report.
9 The groundwater is currently being polluted by the mine, as is evident from the fact that the borehole water of the surrounding community is turning milky. Further expansion of the mine will only exacerbate this problem.		
10 There is loss of water (dewatering) due to the mine?	Farouk Saloogee Fax: 1 February 2012	
11 I object to the Tharisa Mines' proposed development as the underground water table will be polluted.	Andre Maritz, letter Email, 24 January 2012	
12 How will the deepening of the pits impact groundwater- dewatering process? I have a borehole that is located approximately 50m from the open pit	Marthinus Barnard Key stakeholder scoping meeting, 16 February 2012	
13 Will there be possible contamination of the		

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groundwater due to the deepening of the pits?		
14 Has the possibility of chemical seepage from the TSF been considered?	Kelebogile Mekgoe (Rustenburg Local Municipality) Regulatory authority's meeting, 21 February 2012	
15 How will the groundwater be affected by the proposed projects particularly the contamination of the Buffelspoort dam?	Hilton Bedwell and Pieter Wolvaardt Key stakeholder scoping meeting, 16 February 2012	It is unlikely that the water from the Buffelspoort dam will be contaminated by the operations at the mine. (Tharisa)
<b>G. Surface water Related Issues</b>		
1 The farmers that rely on irrigation water from the Buffelspoort dam say that their quotas will be restricted.	Andre Maritz Email, 24 January 2012	Tharisa acquired the rights to the Buffelspoort water entitlements by virtue of purchasing properties which were allocated agricultural water rights from the Buffelspoort Scheme. Therefore Tharisa has applied to use water that is already allocated to its properties. It important to note that Tharisa has continued to pay for this water even though it is not using it. The Buffelspoort water will be used as a last resort if Tharisa's water sources are insufficient. (Tharisa)
2 We are concerned that should Tharisa be authorised to use the water from the Buffelspoort dam for mining activities there will be a shortage of water for other users particularly during the dry season.	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	Tharisa has been monitoring the river, so there is a large amount of baseline information that is available. If necessary, Tharisa will extend the monitoring regime. Currently, there is no negative effect on surface water quality as a result of Tharisa's operations.
3 What are the impacts of the mine on the Sterkstroom river?	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	Take off point for the water from the Buffelspoort dam will be an existing canal which runs through Tharisa's property. (Tharisa)
4 We are concerned that Tharisa has relocated Madithokwa community closer to the banks of the Sterkstroom and this may increase the potential negative impacts on it by this community.	Alex Salang (Department of Water Affairs) Regulatory Authority's Meeting: 21 February 2012	No.
5 What is Tharisa going to do to ensure that the water is not contaminated?		There is no need for such authorisation since Tharisa does not get its water from this river.
6 How will the mine ensure that the flow of Sterkstroom river will not be negatively affected?	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	
7 Does Tharisa get its water from the Sterkstroom?	Danie van Rensburg Key stakeholder scoping	Tharisa will make use of the existing water supply and potentially the water from the Buffelspoort dam. (Tharisa)
8 Has it been authorised to get water from the Sterkstroom?		
9 What is the planned source of water supply for the proposed projects?		

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10 Does 400ktp relate to the size of the plant? What is its water consumption?	Ian Ashmole Key stakeholder scoping meeting, 16 February 2012	Yes, it is the size of the plant. There are two concentrator plants at the mine which consume different quantities of water. There is a 100ktp which consumes 150m <sup>3</sup> /hr of water and a 400ktp which consumes 600m <sup>3</sup> /hr and we recover 75% of the water consumed (450m <sup>3</sup> /hr) by it.
11 Where is the return water dam for the tailings storage facility (TSF)?	Marthinus Barnard Key stakeholder scoping meeting, 16 February 2012	This was described as per the locality map that has been attached in the BID.
12 What will be the impacts of the proposed projects on surface water particularly contamination by heavy metals?		These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.12 of the scoping report.
13 How will Tharisa control and monitor the pollution of the Sterkstroom river with the developments of their proposed projects?	A Botha Fax, 20 February 2012	
14 Is the mine going to consider how the surface and groundwater will be affected by the dust and pollution from the mine?	Alex Salang (Department of Water Affairs) Regulatory Authority's Meeting, 21 February 2012	
15 Will the slag deposits contribute to water pollution?	Kelebogile Mekgoe (Rustenburg Local Municipality) Regulatory authority's meeting, 21 February 2012	The smelter and the slag dump have been removed from the project scope.
<b>H. Air Quality Related Issues</b>		
1 My property was not included in the monitoring network and I would like it to be included.	Tina du Toit Key stakeholder scoping meeting, 16 February 2012	Tharisa is revising its monitoring network for air quality monitoring and this will be taken into account. (Tharisa)
2 The location of the proposed smelter plant will be right on our doorstep. I am concerned about the sulphuric acid and sulphur dioxide that will negatively impact our health.	A van Rensburg General public scoping meeting, 16 February 2012	The smelter has been removed from the project scope.
3 The people who reside south of the N4 are concerned about the potential impacts of the smelter house on the air quality since the area is affected by the north westerly winds that prevail in the area.	Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	
4 I object to the Tharisa Mines' proposed	Andre Maritz, letter	

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development as smoke from the smelter will impact our health as well our fruits, planted crops and properties.	Email, 24 January 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.14 of the scoping report.
5 The development will also encourage/accelerate global warming and is not environmentally friendly.		
6 What SO <sub>2</sub> and dust/particulate air pollution abatement equipment will be installed on the concentrate and chrome sand dryer plants as well as on the electric furnace off gas?	Buks Kruger Email, 8 February 2012	
7 What will be the impacts of the mine's dust fall out on the surrounding land uses such as farming activities- strawberries, citrus fruits and guavas.	Nols de Wet General public scoping meeting, 16 February 2012	
8 What will be the impacts of the proposed projects on the ambient air quality? Some of the people have allergies and others are asthmatic.	Marthinus Barnard Key stakeholder scoping meeting, 16 February 2012	
9 There are a lot of speeding trucks that use our dirt road causing a lot of dust in our area. We do not know whose trucks they are but could they please suppress dust and put speed humps on the road for our health, plants and safety purposes?	Jaco van Wyk Key stakeholder scoping meeting, 16 February 2012	
10 What will be the impact of the TSF on the air quality?	Joseph Nkoshosho General public scoping meeting, 16 February 2012	
11 How will the impact be reduced?	Monica Moleba General public scoping meeting, 16 February 2012	
12 The air is polluted by the mining activities, how will the proposed project components add to the current situation?	Calvin Thutlwane General public scoping meeting, 16 February 2012	
13 We are concerned about the dust that will be generated from the dumping of the waste rock.	Joseph Nkoshosho Fax, 16 February 2012	
14 Has Tharisa improved their design of the tailings dams with regards to air pollution limitation?	Elsa Steyn Email, 24 February 2012.	
15 Levels of dust generated by mining activities are already at unacceptable levels and are a great inconvenience to the surrounding community and		

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a potential health risk. Further expansion of the mine in general and the proposed chrome sand drying plant in particular, will only exacerbate the problem. As with noise, unrealistic associations are made between the mine and other sources of dust. An increase in vehicle and smelting plant emissions (CrVI) is carcinogenic, which is highly problematic especially for the community settlements neighbouring the plant.		
16 Will the two proposed ROM pads with ore stockpiles have dust and air pollution mitigation measures in place so as to have no negative impacts on the surrounding residents?	Kelebogile Mekgoe (Rustenburg Local Municipality) Regulatory authority's meeting, 21 February 2012	
17 Will the above mentioned mitigation measures be outlined in the report?		Yes.
<b>I. Roads and Transport Related Issues</b>		
1 Tharisa uses our dirt road (located South of the N4), are there plans of up-grading it? We would like Tharisa to upgrade it.	Hettie Le Roux Key stakeholder scoping meeting, 16 February 2012	Tharisa will assist the community where it can; this issue has been raised by the landowners before and Tharisa has evicted all the contractors who were residing in properties serviced by the dirt road. (Tharisa)
2 There are a lot of speeding trucks that use our dirt road causing a lot of dust in our area. We do not know whose trucks they are but could they please suppress dust and put speed humps on the road for our health and safety?	Jaco van Wyk Key stakeholder scoping meeting, 16 February 2012	For some period in the past, the public road which leads to the school was used by chrome dispatch trucks using Tharisa's weigh bridge at the West portion of the mine while the weigh bridge located at the plant (eastern portion of the mine) was not functioning. This should not be necessary in future; actually, Tharisa has already changed the route of its trucks from the West and this has resulted in Tharisa using only 200 meters of public road instead of the 3.4 km it was using before. (Tharisa)
3 I am concerned about the fact that the access road from Marikana to Retief is utilised by trucks daily and the dust suppression is not effective.	Jeanetta Seleka and Alex Salang General public scoping meeting, 16 February 2012	
4 Children and villagers walk along this road and they are faced with the dust and safety and security issues.		
5 Road safety issues have been previously raised, the specific details of the truck owners/users were submitted to Tharisa and nothing has happened to date. I do not trust Tharisa.	Mr R and/or Mr P C van der Westhuizen Key stakeholder scoping meeting, 16 February 2012	
6 We do not trust Tharisa. What will happen in the	Jeanetta Seleka and Alex	

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future regarding traffic related issues relating to the proposed projects?	Salang General public scoping meeting, 16 February 2012	
7 Will Tharisa use the road with the bridge over the N4 to access the tailings dam?	Jan Coetzee General public scoping meeting, 16 February 2012	No. After numerous discussions with the relevant landowners, Tharisa has requested SANRAL not to reconstruct the bridge. (Tharisa)
8 How is Tharisa planning to transport its products?	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	All products will be transported from the plant to various destinations by road truck. (Tharisa) These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.6 of the scoping report.
9 Will the proposed projects cause an increase in traffic? How will it be dealt with?		
10 Will the volume of the trucks increase on the dirt roads due to the proposed activities?	Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	
11 The reckless driving of mine trucks on the dirt roads is already problematic. An expansion would mean more trucks, and thus a greater problem.	Elisa Steyn, comment Email, 24 February 2012.	
12 How will the waste rock dumps affect the community in terms of traffic?	Alex Salang (Department of Water Affairs) Regulatory authority's meeting, 21 February 2012	
13 What public road re-routing will be required?	Buks Kruger Email, 8 February 2012	
<b>J. Noise Related Issues</b>		
1 The noise of the hooters has been addressed by Tharisa on the eastern side of the property.	Hilton Bedwell General public scoping meeting, 16 February 2012	This comment has been noted.
2 Why does Tharisa operate the plant for 24hrs/day when it has been indicated in the original EIA/EMP process that all activities that cause significant noise levels to the surrounding land users especially at night will only operate between 06h00 and 20h00?	Theunis van Rensburg Key stakeholder scoping meeting, 16 February 2012	Tharisa has purchased a lot of properties in order to ensure that neighbours are not negatively affected by its operations. The EMP specifies not working at night during the mentioned timeframes particularly on the west portion of the mine. This is being dealt with; the West Plant was decommissioned in 2011. (Tharisa)
3 We are completely against the current and proposed 24hr operations at the mine as the activities impact on us negatively. We need to sleep in a quite environment without noise coming	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	Tharisa is implementing noise abatement measures such as restricting and/or rescheduling work near to noise-sensitive areas during late night and early morning hours; construction of the berm wall and possibly increasing its

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from the mine.		height.  Tharisa also has an "open door" policy where nearby landowners/ &APs can contact the mine. Tharisa is maintaining a community complaint register which will be reviewed with feedback at every stakeholder meeting. Complaints can be lodged directly at the General Managers office. (Tharisa)
4 The noise from the trucks dumping rock and specifically the reverse hooters is a disturbance at night.	Peter van Rensburg General public scoping meeting, 16 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.15 of the scoping report.
5 The night time noise of the crushers and the use of the Marikana/Rietief road are disturbing.	Mr R and/or Mr P C van der Westhuizen General public scoping meeting, 16 February 2012	
6 We are unhappy with the negative impacts that we are experiencing due to the current operations particularly noise impacts at night. The reverse noise indicators, movement of the trucks and the many other activities that are taking place at night.	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 2 February 2012	
8 There is a major noise disturbance from Tharisa's operations particularly the reverse alarm from the trucks at night. How will the proposed project components add to the current situation?	Tina de Toit and Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	
9 We are concerned about the noise that will be generated from the dumping of the waste rock.	Calvin Thutwane General public scoping meeting, 16 February 2012	
10 I would like the noise impacts of the proposed project components to be assessed in this EIA process	Hilton Bedwell General public scoping meeting, 16 February 2012	
11 Plant emergency sirens noise must please be included in the noise study.		
12 Noise is currently already at an unacceptable level, with mining operations keeping the surrounding community awake at night, as previously mentioned. Further expansion of the mine will only exacerbate this problem.	Elsa Steyn Email, 24 February 2012	

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Unrealistic associations are made between sources of noise in the EIA/EMP Programme Document: there is no comparison made between the noise created by mining activities and that of tractors or even traffic.		
13 How will the waste rock dumps affect the community in terms of noise?	Alex Salang (Department of Water Affairs) Regulatory Authority's meeting, 21 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.16 of the scoping report.
<b>K. Visual Related Issues</b>		
1 We are unhappy with the negative impacts that we are experiencing due to the current operations and we are concerned that these impacts are going to get worse should the government authorise the proposed projects.	Hilton Bedwell, Johan van Heerden and Barend Clark Focused scoping meeting, 16 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.16 of the scoping report.
2 This is one of the biggest sources of concern to Living Waters Properties, as our property development's view is significantly encumbered by the mine. A further expansion of the mine only serves to exacerbate the problem. Given that the property development predates the mine, it is a legitimate and serious concern.	Elsa Steyn, comment received via email, 24 February 2012.	
<b>L. Heritage Related Issues</b>		
1 The heritage of the churches that are located on the eastern side of the mine has been neglected.	Calvin Thutlwane General public scoping meeting, 16 February 2012	These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.1 of the scoping report.
2 How will the proposed project activities impact on these resources?		
<b>M. Socio-economic- Tourism Related Issues</b>		
1 Buffelspoort area used to be the gate way for tourism but that is no longer the case due to all these mining activities including Tharisa Mine.	Hilton Bedwell	This issue has been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.8 of the scoping report.
2 I object to the Tharisa Mines' proposed development as my business "Buffelspoort Liquor	Andre Maritz, letter Email, 24 January 2012	

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"Store" is in the Buffelspoort Shopping Centre opposite the ATKV. Our business is mainly dependent on holiday makers. My fears are that because of the development fewer tourists will come to our area and therefore we will be disadvantaged.		
<b>N. Socio-economic- Employment and Social Labour Related Issues</b>		
1 Tharisa needs to focus more on job creation programmes and the social impact of the proposed projects and not only focus on the impacts on the biophysical environment.	Mavis Vilame General public scoping meeting, 16 February 2012	Both social and biophysical impacts of the projects will be considered.(Tharisa)
2 An employment strategy is required.	Sebenzile General public scoping meeting, 16 February 2012	Tharisa has adopted a recruitment policy. Tharisa is committed to maximising employment from local communities. (Tharisa)
3 Why is the employment of local people only for temporary jobs and not permanent?	David General public scoping meeting, 16 February 2012	
4 What is Tharisa's recruitment strategy?	Appearance Ndlovu, Ward Councillor General public scoping meeting, 16 February 2012	Yes. This is nothing unusual, but all contractors are required to maximise recruitment from local communities whenever feasible. (Tharisa)
5 Will MDM be bringing in Clivcon employees?		It does through the implementation of its SLP as well as preferential appointment of existing and relevant local businesses for some of its projects. (Tharisa)
6 With regards to small business development, vendor procurement is required to benefit the locals.		The smelter has been removed from the project scope.
7 With the start of the smelter plant, Tharisa should start with partnerships to guarantee employment in the future.		A learnership program has been instituted, irrespective of its smelter. (Tharisa)
8 Small businesses are not flourishing due to the existence of Tharisa Mine.	Calvin Thutlwane General public scoping meeting, 16 February 2012	It develops small businesses through the implementation of its SLP as well as preferential appointment of existing and relevant local businesses for some of its projects. (Tharisa)
9 There is an influx of contractors, how will Tharisa address the migration?	Alex Salang General public scoping	After August 2012 the numbers of contractors will dramatically decrease and this issue will improve. (Tharisa)

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O.	<b>Socio-economic: Land Purchase and Compensation Related Issues</b>	meeting, 16 February 2012
1	Tharisa mine has spoilt our property as there is lack of occupation. The two houses that we rent out to private company have been empty for over a year.	Farouk Saloogee Fax: 1 February 2012
2	We are very disappointed since Tharisa moved in our area. Tharisa is of no benefits to us at all.	
3	We are suffering financial losses to the mine.	
4	We are unhappy that some landowners were compensated for enduring the negative impacts of the mining operations and some were not compensated. On what basis did Tharisa Mine compensate them?	Hilton Bedwell, Johan van Heerden and Barend Clark Focusussed scoping meeting, 16 February 2012 Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012
5	Tharisa should provide the surrounding landowners with notification of intent to buy them out in advance because the farmers have lease contracts that they would like to honour.	
6	What future plans does Tharisa have for Lapologang village and Retief Primary School?	Pieter Wolvaaert Key stakeholder scoping meeting, 16 February 2012
7	My farm is in the close proximity to the mine.	J Hislop Fax: 31 January 2012
8	Is the land purchase programme by Tharisa going on?	Jaco Schoeman Key stakeholder scoping meeting, 16 February 2012
9	I stay at a property that is located between the mine and the N4. I am concerned that the proposed smelter house and the soil berms will be on my property. Is the Tharisa planning to buy us out?	Marieta Potgieter (127 Kafferskraal) Key stakeholder scoping meeting, 16 February 2012
10	What is the future of our properties if the mine does not buy us out? The mine is encroaching	Johan Breedt Key stakeholder scoping

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onto my properties and they are losing value (Kafferskraal portion 140) not the other way round.	meeting, 16 February 2012	
11 Is Tharisa planning on buy our properties?		
12 Tharisa must consider purchasing our properties.	Peter Wolvaardt (110 Kafferskraal) Key stakeholder scoping meeting, 16 February 2012	
13	Theunis van Rensburg (144 Kaferskraal) Key stakeholder scoping meeting, 16 February 2012	
14 Tharisa had promised to develop my land and they have not done anything about it to this day.	Jaco van Wyk Key stakeholder scoping meeting, 16 February 2012	
15 As a landowner of a farm near Lepologang, on which portions will the waste rock dump be located?	Hennie Potgieter General public scoping meeting, 16 February 2012	If approved, the waste rock dumps will be located on the following portions of the farm Kafferkaal: 90, 91, 149, 330, 329, 243, 335, 336, 368, 22, 23, 166, 182, 217, 108, 3, 2, 53, 83, 297, 331 and 356 (Western side of the mine) and 285, 282, 145, 256 and 306 (Eastern side of the mine). (Tharisa)
16 Will this land be purchased by Tharisa?		Land acquisition is proceeding for developments that Tharisa requires to operate the mine and plant. (Tharisa)
17 There is no certainty on the future of these matters, and as a result one cannot develop this land.		
18 Can Tharisa take corporate responsibility and confirm that I cannot continue with my development?	A Botha General public scoping meeting, 16 February 2012	
19 Why did Tharisa not purchase my property? It is situated within the mining right area.	A van Rensburg General public scoping meeting, 16 February 2012	
20 Why has Tharisa not bought me out?	Mr R and/or P C van der Westhuizen General public scoping meeting, 16 February 2012	
21 Portion 135 of Kafferskraal farm was donated by the landowner to the community to build a school.	Calvin Thutlwane General public scoping	The registered owner of a property has the legal right to sell it. This issue will be investigated.(Tharisa)

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Tharisa then bought this land without consulting with all the people. Who did Tharisa consult because no one knows anything about this transaction?	meeting, 16 February 2012	
22 I own land on both sides of the N4.	Jan Coetzee Email 9 February 2012	This comment has been noted.
P. Socio-economic-Land and Land-use Related Issues		
3 Does the SLP address issues relating to how best can/will Tharisa ensure that local businesses do not suffer from the loss of their staff to the mine?	Johan Swanepoel Key stakeholder scoping meeting, 16 February 2012	No, but Tharisa is open to suggestions on this matter, without compromising the rights of workers to free choice and a competitive and fair wage. (Tharisa)
4 Tharisa needs to revise its monitoring network. Tharisa's monitoring network does not cover our area (south of the N4) and I would like our area to be included in the network.	Theunis van Rensburg and Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	There are sufficient ground water monitoring points on the south of the N4. Tharisa is revising its monitoring network for air quality monitoring and this will be taken into account. The blast monitors have been placed on numerous occasions at the Du Toit's property. It is important to note that Tharisa will not be able to monitor each and every household. (Tharisa)
5 Where will the workers that will be needed for the proposed be from?	Pieter Wolvaaert Key stakeholder scoping meeting, 16 February 2012	Workers will be employed from local communities as far as possible. (Tharisa)
6 Where will the workers that will be needed for the proposed project stay?	Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	Workers will be employed from local communities as far as possible. There are no plans to provide housing to employees.
7 Some of the workers cross our properties for access to the mine without our permission.	Tina du Toit Key stakeholder scoping meeting, 16 February 2012	If this situation persists after landowners have posted signage and confronted the trespassers, then Tharisa's security personnel and, if necessary, the local police can be asked to intercept the trespassers. (Tharisa)
8 Theft is now high and there is no positive sign that Tharisa to purchase our land.	Farouk Saloongie Fax: 1 February 2012	Noted. Criminal matters must be reported to the Marikana police. Land acquisition is proceeding for developments that Tharisa requires to operate the mine and plant. (Tharisa)
9 We are also concerned about our safety and security in the area.	Tina du Toit and Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	This comment has been noted. Tharisa wants to have a positive impact on safety and security in the area. (Tharisa)
10 Our internet connections are repeatedly interrupted due to the operations of the	Hettie Le Roux Key stakeholder scoping	This matter has been addressed with Mrs Le Roux. It was discovered that Mrs Le Roux's service provider mislead

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surrounding mines.	meeting, 16 February 2012	Tharisa does not have sufficient information to comment her. (Tharisa)
11 Tharisa's activities are very close to Aquarius Mine. Are these activities not going to be in conflict with Aquarius's mining activities?	Lappies Labuschagne Key stakeholder scoping meeting, 16 February 2012	Tharisa does not have sufficient information to comment on surrounding mines' activities. However, cumulative impacts will be considered where possible. (Tharisa)
12 Tharisa should provide housing for its workers because they are now becoming nuisance to us (the surrounding landowners) by sleeping over in the accommodation that is provided for our workers.	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 16 February 2012	Tharisa does not have a policy to provide employee housing. Note that after August 2012, the number of contract construction workers will reduce dramatically. (Tharisa)
12 Mr Daniel Potgieter and the other landowners are concerned that they might have restricted access to their properties via the bridge that transverse the N4 on the farm Elandsdrift due to Tharisa's activities.	Hilton Bedwell Focussed scoping meeting, 16 February 2012 Key stakeholder scoping meeting, 16 February 2012	Tharisa is engaging with the relevant property owners on this this matter. (Tharisa)
13 My farm is located 200m away from the proposed smelter house, the rain falls in north-westerly direction and I am concerned that the potential acid rain might affect my current land use.		The smelter has been removed from the project scope.
14 Are there any no zone areas/ buffer zone from the mine within which no activities are allowed to take place?		These issues have been recorded and will be addressed in accordance with the EIA terms of reference as set out in the section 7.4.4 of the scoping report.
15 Peace and tranquility, fruit trees, landowners' children playing in the garden in the residency on our property is gone. Our natural environment is gone to the dogs.	Farouk Saloogee Fax: 1 February 2012	
16 We are concerned that mining activities are taking over our agricultural land use in this area.	Hilton Bedwell, Johan van Heerden and Barend Clark Focussed scoping meeting, 16 February 2012	
17 We are also concerned that we will no longer be able to undertake farming- grow crops (lucern, vegetables and pigs and horses) and rear animals due to Tharisa Mine and the proposed projects (plot A1-A47 of the farm Buffelspoort).		
18 What will be the impacts of the proposed projects on Mooiinooi town and Pure Plaas game park that is located south of the N4?		
19 I have employed about 40 people on my farm. I have a problem with the mine because all of the	Jaco van Wyk Key stakeholder scoping	

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best employees leave my farm and other surrounding farms for better opportunities at the mine. We cannot compete with the mine financially in terms of wages. What will be done to ensure that current and proposed activities do not affect my operation?	meeting, 16 February 2012	
20 Some of us have been involved in the EIA processes for a long time and we are concerned that our area is now being described as a mining and industrial area instead of a fairly rural area. Does this mean our air, visual and land use and related activities do not matter anymore and that mines can do as they please?	Pieter Wolvaardt Key stakeholder scoping meeting, 16 February 2012	
21 We are concerned that the proposed projects might deplete the bees in the area that we need for pollution process that is necessary for farming vegetables and fruits.	Hilton Bedwell Key stakeholder scoping meeting, 16 February 2012	
22 How are piggery farming activities going to be affected by the proposed projects?	Johan van Heerden Key stakeholder scoping meeting, 16 February 2012	
23 Tharisa will be 50m away from my place, what will the impacts be?	Jan Coetzee General public scoping meeting, 16 February 2012	
24 I am based on Plot 23, which is close to Lapologang, will I be affected by the proposed project?	Malo Lazarus General public scoping meeting, 16 February 2012	
25 The trespassing of individuals onto our property is a concern. Tharisa is not taking responsibility for security and safety.	Mr R and/or Mr P C van der Westhuizen General public scoping meeting, 16 February 2012	
26 How will the mining influence us? What is the short term and long effect on us?	HG Pieterse Letter dated 7 February 2012	
27 I am based on Plot 23, which is close to Lapologang, will I be affected by the proposed project?	Malo Lazarus General public meeting, 16 February 2012	
<b>Q Socio-economic: Resettlement Related Issues</b>		

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1 There are no clinics and amenities in Madithlokwa.	Samuel Modise General public scoping meeting, 16 February 2012	This issue should be taken up with the relevant government structures. Tharisa will assist where it can. (Tharisa)
2 The toilets at Madithlokwa are built on slabs on top of the soil. Water enters the toilet and over flows into the community, creating a health and sanitation issue	Jeanette Sekane General public scoping meeting, 16 February 2012	Tharisa will engage with the developers of the amaloolo sanitation system and seek an amicable solution to this issue. (Tharisa)
3 The sewerage system was installed too shallow, resulting in faeces rising to surface when it rains (Madithlokwa).		Water purification plants have been installed where water quality results deemed it necessary. Drinking water quality monitoring has been initiated and the water is within drinkable standards. (Tharisa)
4 It is important to note that the current borehole used by the community is located in the middle of the toilets.	Thomas Makaringe Phineas	The housing provided is of similar or better standard to the previous existing housing. Tharisa needs Madithlowa's participation in order to resolve this issue. (Tharisa)
5 In the Madithlokwa community, the boreholes and toilets are too close to each other.	General public scoping meeting, 16 February 2012	Noted. Criminal matters must be reported to the Marikana police. (Tharisa)
6 The Madithlokwa shacks leak when it rains.	Calvin Thuthwane	If there are issues of this nature, one should approach Tharisa in order for the issue to be investigated. (Tharisa)
7 There is increased crime in Madithlokwa since Tharisa started operating.	General public scoping meeting, 16 February 2012	Nobody is charged rent by Tharisa for housing in Madithlokwa resettlement. (Tharisa)
8 I was relocated and the material for my shack was lost.	Sylvester M Matsego	There will be a waste rock dump on the other side of the D1325 road. The dump will be approximately 100m from the road. (Tharisa)
9 I pay rent to Tharisa for my house in Silver City, but there are no facilities.	General public scoping meeting, 16 February 2012	See answers to issues number T1 & T2 above. Tharisa also has a water monitoring programme which will indicate if there are negative impacts on the River. (Tharisa)
10 How will Madithlokwa community be affected by the proposed projects?	A Botha General public scoping meeting, 16 February 2012	It is Tharisa's intention to get Rustenburg Municipality to take over the infrastructure and management of Madithlokwa. Until then Tharisa will maintain infrastructure including boreholes, waste removal and road grading. (Tharisa)
11 I am concerned that service delivery in Madithlokwa specifically the sewage system and its impact on the river.		If the tank runs dry, the water is still safe to drink
12 Will the Rustenburg Local Municipality maintain the current living conditions? What will happen if they don't?	Samuel Modise	
13 The water tanks that are provided in Madithlokwa		

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sometimes run dry and dust settles in them. Is the water from such tanks safe to drink?	General public scoping meeting, 16 February 2012	Afterwards. The system is such that the water will not run dry unless there is a power failure. (Tharisa)
14 The new Madithlokwa township is located on barren land, with no trees or vegetation. We need Tharisa to provide trees and grass for this community.	Alex Salang General public scoping meeting, 16 February 2012	In the long run, Tharisa will assist with the planting of trees within the settlement. (Tharisa)
15 A separate meeting with Tharisa needs to be arranged to discuss amenities, and the DMR and other government departments are required to be at that meeting.	Appearance Ndlovu (Ward Councillor) General public scoping meeting, 16 February 2012	Such a meeting would be welcomed. (Tharisa)
16 The construction of new houses and the relocation project and of the Madiklokwe community involved only certain individuals as opposed to the whole community.	Mavis Vilame General public scoping meeting, 16 February 2012	This relocation was undertaken with the relevant community leadership – ward committee. (Tharisa)
17 I would like to engage with Tharisa as to their reasons of not including the community?	Jackson Phiri Fax, 16 February	There were numerous community meetings which took place regarding the relocation. (Tharisa)
18 The project will bring success to the people of Madithlokwa, unfortunately not all of us.		Tharisa would like the project to be a success for all.
19 Where is the land and good houses you promised the people?		Tharisa is open to suggestions in this regard. (Tharisa)
20 Where is my stolen transformer?		Housing standards and infrastructure has been improved from the previous situation. (Tharisa)
21 I am staying near the river – the bridge was damaged by water, and yet Tharisa neglects the problem. The small foot path/road to the school was closed by Tharisa and now my children struggle to get to school.		Tharisa doesn't know. Theft needs to be reported to the Police. (Tharisa)
22 There is no democracy near Tharisa. They employed black people to assist us but they neglect our crisis. Now I don't know where to go because they use their powers against us and their lawyers are hazardous to the lives of us, but nothing ever ends.		The bridge is part of a public road and not Tharisa's responsibility. Tharisa no longer uses this bridge for transport of ore. (Tharisa)
23 As far as I understand, there is no agreement between the municipality and the mine that outlines the plans to move Madithlokwa	Kelebogile Mekgoe (Rustenburg Local Municipality)	Tharisa seeks to balance all stakeholder interests in the development of the mine. (Tharisa)
		It was decided that once the resettlement had taken place, the community would be handed over to the municipality as a formal township. There is currently an agreement

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community.	Regulatory authorities scoping meeting, 21 February 2012	between the community representatives and the mine. The 848 households that have been identified for relocation would all have been completed by the end of June 2012. (Tharisa)
24 I am concerned that service delivery in Madithokwa specifically the sewage system and its impact on the river. Will RLM maintain the current living conditions? What will happen if they don't?	A Botha Fax, 20 February 2012	It is Tharisa's intention to get Rustenburg Municipality to take over the infrastructure and management of Madithokwa. Until then Tharisa will maintain infrastructure including boreholes, waste removal and road grading. (Tharisa)

## **APPENDIX 2: TERMS OF REFERENCE FOR FURTHER INVESTIGATIONS (SECTION 7.4 OF SCOPING REPORT)**

The proposed terms of reference for further investigations are discussed below. The terms of reference of these tasks have been designed to address all the issues that have been identified in the scoping process. These investigations will cover construction, operation, decommissioning and closure phases where relevant and conceptual closure planning principles (including post-closure management) will be incorporated into the EIA/EMP amendment report. The main component of the tasks is assessment work by specialists, SLR and the Tharisa project team. The outcome of this set of tasks includes specialist reports and the EIA/EMP amendment report.

### **7.4.1 Cultural and Heritage Resources**

On finalisation of the location, footprint and associated activities for each of the proposed project components, the existing cultural and heritage specialist information will be used to identify and assess the potential impacts. The assessment and detailed management measures will be provided in the EIA/EMP amendment report by SLR.

### **7.4.2 Paleontological Resources**

For paleontological impacts, it is proposed that a specialist opinion will be obtained to formalise the view on this issue. The assessment and detailed management measures will be provided in the EIA/EMP amendment report by SLR.

### **7.4.3 Geology: Sterilisation of the Mineral Resources**

On finalisation of the location, footprint and associated activities for each of the proposed project components, the existing geology information will be used to identify and assess the potential impacts. The assessment and detailed management measures will be provided in the EIA/EMP amendment report by SLR.

### **7.4.4 Land Use**

On finalisation of the location, footprint and associated activities for each of the proposed project components, the existing land use information and the assessment of the impacts (environmental, cultural, social and economic) below will be used to identify and assess the potential land use impacts. The assessment and detailed management measures will be provided in the EIA/EMP amendment report by SLR.

### **7.4.5 Blasting**

Cambrian CC will conduct a specialist investigation prior to the commencement of the proposed project components. The investigation will include the following tasks:

- Assess the impacts of blast vibration, air blast and fly rock on surrounding people and property; and
- provide input, together with SLR and the technical project team into project alternatives and management measures going forward.

#### **7.4.6 Transport Systems**

It is proposed that SLR will make use of the existing specialist information to provide the relevant assessment and detailed management measures in the EIA/EMP amendment report.

#### **7.4.7 Economic Issues**

It is proposed that a specialist opinion will be obtained to formalise the view on this issue. The assessment and detailed management measures will be provided in the EIA/EMP amendment report by SLR.

#### **7.4.8 Social Issues**

It is proposed that SLR will make use of the existing specialist information to provide the relevant assessment and detailed management measures in the amended EIA/EMP report.

#### **7.4.9 Topography**

It is proposed that SLR will make use of the information available and provide the relevant assessment and detailed management measures in the EIA/EMP amendment report.

#### **7.4.10 Soils**

It is proposed that SLR will make use of the available specialist information to provide the relevant assessment and detailed management measures in the EIA/EMP amendment report.

#### **7.4.11 Natural Vegetation and Animal Life (Flora and Fauna)**

It is proposed that SLR will make use of the available specialist information to provide the relevant assessment and detailed management measures in the EIA/EMP amendment report.

#### **7.4.12 Hydrology (Surface Water)**

SLR will conduct a specialist investigation that will include the following tasks:

- make use of the existing detailed baseline hydrological description of the mine area and immediate surroundings;
- identification and assessment of potential sources of pollution and related impacts of the proposed project components on surface water resources (quantity, quality and flow characteristics);
- development of management and mitigation measures including a detailed storm water management plan; and
- provide input, together with the technical project team into project alternatives and surface water management measures going forward.

#### **7.4.13 Groundwater**

SLR will conduct a specialist investigation that will address dewatering and pollution aspects from the proposed project components. The investigation will include the following tasks:

- make use of the existing detailed baseline geology, geohydrology and groundwater information;

- remodel dewatering impacts of the proposed increase of the high wall and associated activities;
- remodel the potential seepage from the most relevant pollution sources;
- assess the potential impacts; and
- provide input, together with the technical project team into project alternatives and groundwater management measures going forward.

#### **7.4.14 Air Quality**

Airshed will conduct a specialist investigation that will include the following tasks:

- quantify the existing baseline air quality information;
- model the potential impacts dust emissions from the current mine plus the of the proposed surface infrastructure;
- provide the relevant mitigation measures; and
- provide input, together with SLR and the technical project team into project alternatives and air quality management measures going forward.

#### **7.4.15 Noise**

Acusolv Acoustic Engineers will conduct a specialist investigation that will include the following tasks:

- survey will be conducted to evaluate the proposed location of the proposed infrastructure, as well as landscape and environmental factors which would influence the propagation of noise;
- develop a model to simulate the emission and atmospheric propagation of noise from the existing and proposed operations;
- evaluate the noise impact in terms of the criteria and guidelines of SANS10103 and the applicable noise regulation and provide mitigation measures; and
- provide input, together with SLR and the technical project team into project alternatives and noise management measures going forward.

#### **7.4.16 Visual Aspects**

It is proposed that SLR will make use of the available specialist information and provide the relevant assessment and detailed management measures in the EIA/EMP amendment report.

#### **7.4.17 Closure Cost Estimate**

Tharisa's closure cost estimate will be updated in accordance with the DMR requirements.