

Notes of Meeting

CLIENT: Lydian International		PROJECT: Amulsar Gold Mine, Armenia	JOB NO.: ZT520088	PAGE1..... OF1.....
MEETING: Minutes from three ESIA disclosure events held on the 31st of May, 1st of June and 2nd of June 2016		NOTES BY: ST		DATE: 09/06/2016
ITEM:	NOTES: ACTION / STATUS:			
A	<p>Structure of events</p> <p>All events began with a presentation from Dr Dave Brignall from Wardell Armstrong International, the independent environmental assessors who have prepared and co-ordinated the Amulsar ESIA.</p> <p>Following the presentation there was an opportunity for questions to be asked, the minutes of each Q and A event are included within this document.</p> <p>Notes</p> <p>The presentation was interpreted live from English into Armenian via headsets given to all attendees. Questions raised in Armenian were translated back into English.</p> <p>Appendices</p> <ol style="list-style-type: none"> 1. Copy of the presentation slides shown 2. Attendee register from each event <p>Abbreviations</p> <p>AGMP - Amulsar Gold Mine Project BRSF – Barren Rock Storage Facility HLF – Heap Leach Facility PTS – Passive Treatment System</p>			
B	<p>Minutes of presentation</p> <p><i>Introduction</i></p> <p>AS welcomed attendees and outlined the structure of the presentation that DB was going to deliver. AS explained the difference between an ESIA and EIA, noting that the EIA process meets Armenian law and that the ESIA is designed to satisfy international requirements. AS noted that the EIA had been approved by the Armenian Government in April 2016.</p> <p>AS introduced DB and Wardell Armstrong, the company that have been involved with the project since 2006, and explained that his presentation would cover the changes that have been made to the AGMP design since the last public disclosure event undertaken in July 2015. AS explained that the changes had resulted from value engineering and optimisation exercise undertaken in late 2015.</p> <p>AS informed the audience that time would be set aside at the end of the presentation to answer any questions raised.</p>			
C	<p><i>Presentation - Changes to the AGMP and ESIA since July 2015</i></p> <p>DB commenced by introducing himself and explaining that the following presentation will describe the changes that have been made to the site design since the last round of public disclosure events in July 2015 as a result of the value engineering and optimisation exercise. DB outlined that after he had explained the changes he will also address how these alterations have affected the ESIA and if any potential environmental impacts have been altered.</p> <p>The initial slides provided a general introduction to the proposal describing the following key details:</p> <ul style="list-style-type: none"> - Site location and relationship to surrounding settlements and the Arpa and Vorotan Rivers - Gold and silver ore open pit mine located on the peaks of Erato, Artavazdes and Tigranes peaks 			

- The majority of rock that does not contain gold ore deposits will be left within the BRSF, which will remain as a permanent above ground feature post restoration.
- A conveyor will be used to transport crushed rock to the HLF
- Extracted rock will be crushed and then placed in a heap and will be treated with a dilute cyanide solution. Gold and silver ore will be collected at the end of this process.
- The location of biodiversity set aside area to the south west of the Tigranes and Artavazdes pit.
- Total of 1300 people employed during construction, approximately 650 during the operations phase
- Construction is due to start this month and will finish in spring 2018.
- The predicted volume of gold to be recovered is approximately 2.2 million ounces.
- the project is anticipated to generate a potential 485 million USD to the Armenia Government through taxes and levies
- Further 400,000 USD per annum are provided by the AMGP towards projects within the local communities that surround the site.
- IFC and EBRD involved as stakeholder and Lydian International are committed to meet their required environmental and social standards.

The slides also included site plans, aerial photographs and site photographs

DB provided an overview of the changes that have been made to the site design since the last public disclosure event undertaken in July 2015. These changes were as a result of a value engineering and optimisation exercise undertaken to improve the efficiency of the mine and the changes affected the following details:

- Haul road position
- Contact water management
- Reduction in the amount of material that would need to be sourced from borrow pits
- Re-design of the BRSF
- Re-design of the crushing process
- Re-alignment of the conveyor, which was now 1.5 km shorter
- Relocation of some of the associated the infrastructure of HLF

In relation to the haul road changes, DB explained that the road between the extraction pits and the BRSF facility has now been re-aligned to the western side of the mountain, improving the alignment of the route, which will improve the efficiency of the site operations. DB noted that this amendment also reduced the requirement for material to be collected from borrow pits outside of the planned extraction areas. DB also noted that more rock was being used in the construction of the haul roads, the rock being used would have otherwise been placed in the BRSF, and as a result the BRSF has now reduced in size.

DB explained that in respect of managing contact water, previous site design resulted in a limited amount of water flowing from the site into the catchment of the Vorotan River. DB added that with the re-design of the haul road, all contact water would fall within the Arpa catchment and would be treated before being discharged from the site. In relation to ground water, DB added that assessments have been undertaken and it has been confirmed that the ground water zone affected by the site is completely separate from the zone that supplies the Jermuk water bottling plant.

DB provided a brief explanation of what the BRSF was and the functions it provides. DB explained that the BRSF has now smaller as a result of the re-aligned haul road. DB highlighted the changing size and design of the BRSF in Year 1 of operations and in Year 6 of operations, alongside a photomontage of the restored BRSF taken from the top of the Jermuk Ski lift. DB added that the BRSF had been redesigned to now accommodate a stock pile of low grade ore that may be processed later in the sites development.

In relation to the redesigned crusher, DB explained that the design had moved away from a three stage to a two stage system. DB noted that all crushing will take place indoor within the facility, which will provide a high degree of noise abatement and dust suppression. DB added that the crushing facility had been moved further down the mountain, which will reduce the visibility of the

	<p>plant, however it will still be visible from the Ski Lift view point in Jermuk and provided a photomontage to illustrate that point.</p> <p>DB noted that in addition to the changes to the BRSF design, a number of buildings associated with the BRSF and the crusher (welfare, maintenance and office facilities) have now been moved further down the mountain side. DB explained that this design change would reduce the potential visual impact of these structures.</p> <p>The conveyor, which transported crushed ore to the HLF, in the previous project design was elevated, DB explained that the conveyor will be now placed at ground level. DB elaborated that the previous version of the conveyor allowed relatively free access beneath most of its length. DB added that the conveyor would create a barrier, and that four passing places would be incorporated into the design which will allow access across the conveyor for traffic, local public vehicles and herders. DB described the previous alignment of the conveyor, which included a change in direction mid-way and DB added that the new route of the conveyor was now straight and had a more direct route to loadout area.</p> <p>In relation to the HLF, DB provided an overview of the specific processes involved at the facility, explaining how dilute cyanide is used to extract the gold and silver deposits. DB outlined that a number of the HLF facilities (metal processing plants, detention ponds, and storm ponds) have now been moved further south, whilst the HLF itself remains in the same position. DB added that the new arrangement now results in the need for only one main site access.</p> <p>DB provided an explanation of the passive water treatment system in place at the restored BRSF. DB explained that the water collected at the BRSF from year 5 onwards, once it has been capped and grass seeded, will be fed through a series of filtration and treatment ponds prior to being discharged within the catchment of the Arpa River. DB added that up to year 5 all water collected at the BRSF will be recycled and recirculated and there will not be a need to discharge water in that time. DB added that the water would be tested throughout the treatment process to ensure that the system was working correctly and that required water standards could be met. DB confirmed that feedback loops will be included in all stages in the treatment process to ensure that no failing water is discharged. DB added that further testing will also be undertaken to establish the appropriate size of the treatment facilities.</p> <p>DB provided details of the areas affected by the footprint of the updated AMGP noting that area directly affected by the project infrastructure is 595ha. DB added that in relation to areas to be disturbed, or will be restricted as a result of the project (for example by blasting or noise emissions) will be a total area of 1765ha. That these areas may change to reflect footprint for construction.</p>	
D	<p><i>Presentation – Stakeholder Engagement and Disclosure schedule</i></p>	
	<p>DB concluded this section of the presentation by informing the attendees that these changes have been incorporated into the revised ESIA which is available to view in the Gndevaz Amulsar Information Centre as well as on Geoteam website and at the Geoteam Yerevan office. DB added that the whole ESIA will be available to view on the EBRD website. DB directed people to read the Non-Technical Summary in particular as it is a good way to familiarise yourself with the project relatively quickly.</p> <p>DB confirmed that the ESIA complies with International standards including Equator Principles, and EBRD and IFC requirements. DB added that there have been many public meetings since 2009 and that a public liaison committee will continue as the site progresses. Regular updates will continue to be provided on the Geoteam website as well as in the Gndevaz Amulsar Information Centre.</p> <p>DB reiterated that the purpose of this stage of disclosure was to make sure everyone was made aware of the changes made to the design following the value engineering and optimisation exercise.</p> <p>DB explained that a community liaison committee had been set up which includes a spread of local residents. DB added that 1000 newsletters are sent to local residents on a monthly basis.</p>	
E	<p><i>Presentation - Potential impacts that have been re-assessed for ESIA v10</i></p>	
	<p>DB outlined the remaining section of the presentation which will briefly highlight any changes to the findings of the ESIA, covering the key topics of:</p> <ul style="list-style-type: none"> - Water - Landscape 	

- Land take and restricted access
- Socio-economic (including the worker's accommodation)
- Noise and dust
- Health
- Biodiversity

In relation to water resources, DB confirmed that there was no change to the ground water effects, and noting, in particular that the ground water affected by the AGMP is not linked to the Jermuk mineral water supply and that no mine processing areas lie within the Lake Sevan restricted Zone.

DB explained that the effects of the changes to the project upon surface water will be minor and generally beneficial compared to the previous July 2015 version of the ESIA. DB reiterated that no surface water will flow from the site into the Vorotan catchment and that water from the BRSF will be subject to passive water treatment (PTS) before being discharged into the Arpa catchment, a process that will only occur after year 5 of operations. DB highlighted that the improved engineering design has moved operations below a number of seeps and springs on the mountainside, which means that surface water originating from these sources can be effectively diverted away from the site and will not become contact water.

In respect of landscape effects, DB noted that the revised design is a minor change from the July 2015 ESIA and will result in both negative and beneficial effects depending upon view point. DB explained that the removal of the three peaks (Erato, Artavazdes, Tigranes) by open pit mining and that the HLF and BRSF will become permanent post mining landforms, all will have potential negative effects. DB added that plant and machinery will be visible during the construction and operational phases from nearby settlements and that during night time operations site lighting will be visible, which may also have a negative effect.

DB noted that in relation to land take and restricted access effects, there had been a minor change since the July 2015 ESIA, which results in a further mixture of both minor beneficial and negative effects. DB explained that 252 privately owned plots will be required, these are mainly located within the HLF. DB added that an additional 22 plots were now required to accommodate the re-aligned conveyor and that affected landholders will be subject to cash compensation or to a "land for land" arrangement. DB further stated that herders will be supported to gain access to new grazing areas and will continue to be monitored to better understand the potential effects upon their livelihoods.

In relation to the impacts of the worker accommodation, DB presented a slide showing the variations in the number of workers required to undertake the construction and operations phases (1300 peak construction, 400 locally based staff, approximately 30%). DB presented the findings of the recently completed worker accommodation assessment which suggested that a hybrid solution of using both hotels in Jermuk and an onsite camp would be required. DB concluded by stating that this was no change from the July 2015 ESIA, however there had been an increased understanding of the baseline conditions.

DB addressed the potential nuisance effects (noise, dust, blasting vibration) stating that there had been no change from the July 2015 ESIA. DB added that a new primary monitoring location has now been included which will provide further information to the public regarding the noise, blasting and dust levels generated by the site.

In respect of community development and health effects, DB explained that moving the metal refining plant at the HLF further south away from Gndevaz was a beneficial change from the July 2015 ESIA. DB highlighted the improvements to Gndevaz channel which will improve water supply and irrigation north of Gndevaz. DB added that medical response planning was being undertaken prior to the operations and this would be completed alongside community health surveys. DB concluded that the changes from the July 2015 ESIA were minor and were generally beneficial in respect of community development and health.

DB noted that in relation to biodiversity major new baseline studies have been undertaken, which mainly involved surveying for Asian Brown Bear, a species whose movements within the area will be restricted by the AGMP. DB explained that an offset area was being arranged north of Jermuk for offsetting some of the biodiversity effects. DB added that the re-alignment of the haul roads will have an effect upon *Potentilla Porphyrantha* and that translocation would be required. DB also noted that *Potentilla Porphyrantha* have been translocated and cultivated herbarium to the north of Lake Sevan. DB concluded that there is a minor change between the latest ESIA and the July 2015 version mainly relating to the improved baseline studies of Brown bears and the translocation of *Potentilla Porphyrantha*.

In relation to cultural heritage DB explained that there has been a minor change since the July 2015 ESIA, and that this relates primarily to the changes in the footprint associated with the HLF associated buildings, realigned conveyor, truck and office buildings.

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	DB confirmed that early works will look at unassessed sites and that there had been no change in the chance finds procedure.
	<i>Presentation – Next steps</i>
	DB concluded the presentation section of the event by informing the attendees that the ESIA will be updated following the event. DB added that following that the update the ESIA will be further disclosed. DB noted that construction works are due to commence between June and August 2016, which includes the water pipe work which can be seen from the H42 road.
	Questions and answers from the first event held in Jermuk for local residents
	<p>Time and Date: 12:10 local time Tuesday 31st May 2016</p> <p>Venue and location: Hyatt Place Hotel, Jermuk, Vayots Dzor Province, Armenia</p> <p>Geoteam Presenters/contributors: DB – Dr Dave Brignall, Regional Director at Wardell Armstrong International – Main presentation AS – Dr Armen Stepanyan, Sustainability Senior Manager at Geoteam – Introduction and answering questions HA – Dr Hayk Aloyan, Managing Director of Geoteam – Answering questions</p>
	<p>Notes: Approximately over 120 attendees, representing residents from Jermuk, Gndevaz, Saravan and Gorayk.</p> <p>AS asked those present if they wanted to ask any questions of DB in relation to the EIA and ESIA process?</p>
1	<p><i>Vanik Zohrabyan, a member of the Jermuk community group</i></p> <p>What is going to happen with the proposed creation of the Jermuk National Park and will disturbed species be translocated from the site into these areas? Is it real?</p> <p>AS response:</p> <p>The plan for the Jermuk National Park is still valid and is at a very early stage, a new round of discussions are being held with the government in order to establish a road map to the creation of the park. It will be implemented during few years.</p>
2	<p><i>Syuzanna Avetisyan, head of Jermuk Youth Centre</i></p> <p>As you have mentioned water is going to pour into Arpa River. So how will it impact on water quality of Kechut Reservoir and Jermuk. You mentioned that the estimations have been changed, so please clarify we are speaking about decrease or increase of impact</p> <p>DB response:</p> <p>The discharge into the Arpa River is downstream of the Kechut reservoir and as such does not have an effect upon it.</p> <p>In relation to the discharge, DB then referred to slide 17 of the presentation which showed the various stages of the water treatment process, explaining the purpose of the each stage. DB also clarified that after treatment, water will not be discharged directly into the river but rather into a soakaway. DB reiterated that water quality will be monitored throughout all stages of the treatment process. DB noted that the discharge will only take place after five years of operations before then further testing of the extracted rock will be undertaken during this period will help to refine the treatment process and ensure it works correctly. DB noted that the majority of the water used is recirculated, for example within the HLF and that the first priority for water use is always re-use. DB asked if that response had answered the question that was raised and, it was confirmed by the originator that it had.</p>
3	<i>Martun Tadevosyan, Principal of Goryak School (All questions asked at the same time)</i>

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	<p>Why were the changes made to the site design?</p> <p>DB response:</p> <p>The engineering team became more familiar with the project and highlighted a number of efficiency saving measures which is common on most mining projects. DB further stated that looking at these changes we felt that the ESIA would need to be updated and that it should be re-published publically to ensure that the whole process remains transparent.</p>
4	<p><i>Martun Tadevosyan, Principal of Goryak School</i></p> <p>You mentioned that the HLF has been moved further south how far has it moved and how much closer is it to the surrounding settlements?</p> <p>DB response:</p> <p>DB clarified that the HLF has not moved further south, rather the metal processing facility adjacent to it has moved further south, the main reason for doing so was that it was a much more efficient way of dealing with the water.</p>
5	<p><i>Martun Tadevosyan, Principal of Goryak School</i></p> <p>You mentioned that the use of cyanide has decreased, Is there a possibility that the cyanide use will decrease further over the life of the site?</p> <p>DB response:</p> <p>DB explained that use of cyanide may vary throughout the years although it will always be very diluted, and that in that sense the process has not changed since the earlier versions of the ESIA. DB also stated that a detailed Cyanide Management Plan has been prepared to control cyanide and its use on site.</p> <p>AS response:</p> <p>The concentrations of cyanide could go down over the life of the site. AS reiterated that the levels of cyanide used are considered to be very low.</p>
6	<p><i>Martun Tadevosyan, Principal of Gorayk School</i></p> <p>The plants that were transferred to Lake Sevan, couldn't they have been transferred somewhere more local?</p> <p>DB response:</p> <p>DB explained that the purpose of the translocation of the <i>Potentilla Porphyrantha</i> was to move the samples to a secure location. Other <i>Potentilla Porphyrantha</i> translocation will take place on the mountain side and seeds will also be harvested from the plants for use on site.</p> <p>AS response:</p> <p>AS noted that only 20% of the plants translocated were taken to Lake Sevan which is one of only 3 places that RA legislation allows Red Book listed plants to be transferred to and this was done mainly to aid research work into this red listed plant. AS explained that the research work was undertaken to provide a benefit for the whole population of plants and to aid their reproduction on Amulsar at restoration.</p>

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7	<p><i>Martun Tadevosyan, Principal of Gorayk School</i></p> <p>In the event of an earthquake, how safe will the peaks be after the changes that have been created by the mine?</p> <p>DB response:</p> <p>DB explained that a Seismic Hazard Study had been undertaken the results of which were used to inform the site design to ensure that the excavation areas remain stable. DB confirmed that the BRSF and HLF have been designed to be earthquake resistant however it is not practical to design the buildings and the conveyor to be as resistant, however the impact on environment as result of earthquake damage to the conveyor or associated buildings would not be environmentally significant. DB noted that it is not unusual to have mines located within earthquake zones.</p>	
8	<p><i>Martun Tadevosyan, Principal of Gorayk School</i></p> <p>Local young people are very keen to get involved in the project, some of them also has an experience on working in mine. Are you going to continue scholarship program? What sort of level of education for employment need will going forward?</p> <p>HA response:</p> <p>HA explained that the company was into its 5th year of funding a course in Yerevan and that 12 people have had a scholarship onto this program, and opportunities will be given to those young people and some of them are beginning to work as geologists on site. HA explained that going forward the need won't be for mining specialists as they have enough people available for that, funding will be directed to other professions.</p>	
	<p><i>Comments and summing up</i></p> <p>AS asked if there were any further questions or comments</p> <p>The Youth centre representative Syuzanna Avetisyan said that information needed to be disseminated to more people as there didn't appear to be many people here from Jermuk.</p> <p>AS responded explaining that the event was announced on the website and in the local community newspaper and for past events over 7000 letters have been sent out but the company past experience has been that not many people show up. AS agreed that they would like to see more residents involved from Jermuk and that they have had a number of events in Gndevaz and Gorayk and would like more in Jermuk.</p> <p>DB concluded by remarking that changes of this scale take place in all projects and value engineering is a common practice and is not unusual. DB added that given the scale of the changes we felt it was important to explain these and he hoped that what had been explained was clear.</p> <p>AS concluded the event and thank all of those attending for their time.</p> <p>Event concluded at 1:15pm</p>	
	<p>Questions and answers from the 2nd disclosure event held in Yerevan for government and financial institution representatives.</p>	
	<p>Time and Date: Presentation commenced at 15:10 local time Wednesday 1st June 2016</p> <p>Venue and location: Hyatt Place Hotel, Republic Square, Yerevan, Armenia</p> <p>Geoteam Presenters/contributors:</p>	

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	<p>DB – Dr Dave Brignall, Regional Director at Wardell Armstrong International – Main presentation</p> <p>AS – Dr Armen Stepanyan, Sustainability Senior Manager at Geoteam – Introduction and answering questions</p> <p>HA – Dr Hayk Aloyan, Managing Director of Geoteam – Answering questions</p> <p>US – Ulrich Sibilski, Health Environment and Safety and Security Manager at Geoteam – Answering questions</p> <p>NG – Nara Ghazaryan, Social/Development program manager at Geoteam – Answering questions</p> <p>AnS – Anna Saghabalyan, Communications Manager at Geoteam – Answering questions</p>
	<p><i>Question and Answers</i></p> <p>AS asked those present if they wanted to ask any questions of DB in relation to the EIA and ESIA process?</p>
1	<p><i>Raphael Sambou, Representative of US embassy in Yerevan</i></p> <p>Can you please walk through the feedback gained and how that has been incorporated?</p> <p>DB response:</p> <p>As with previous ESIA disclosure events, such as the July 2015 events the consultation takes place, and then as a result of any comments amendments are made.</p> <p>AS response:</p> <p>In addition to consultation events such as this, we review articles for feedback and try to incorporate everything into the process.</p>
2	<p><i>Marina Vardanyan, Representative of USAID</i></p> <p>It appears that there is a risk of ground water contamination, what measures are being incorporated to reduce this risk?</p> <p>DB Response:</p> <p>In relation to ground water impacts, the assessment looked at two aspects, 1) contaminants that may flow from the site e.g. residues from explosives, these are often the impacts that you cannot mitigate so you have to understand the effect of these substances and 2) potential contaminants within the process that need to be controlled so that they do not enter the ground water system.</p> <p>DB clarified contact water is separate from ground water and that ground water will be monitored during and after operations and any change will be recorded and fully understood. The purpose of the impact assessment is to assess the effectiveness of those control measures outlined to manage the potential contaminants.</p>
3	<p><i>Naren Chanmugan, Representative from USAID</i></p> <p>How is cyanide used on site?</p> <p>DB response:</p> <p>Cyanide is diluted with water and poured over the crushed rock at the HLF, the results of which lead to a “pregnant solution” which contains the gold and silver. DB added that no treatment for cyanide is done externally, all done indoors.</p>
4	<p><i>Naren Chanmugan, Representative from USAID</i></p> <p>How will the HLF be monitored?</p> <p>DB response:</p> <p>The HLF will be sealed and checked 2 years before cyanide is used on site and there are a number of safety mechanisms in place on site.</p>
5	<p><i>Naren Chanmugan, Representative from USAID</i></p>

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	<p>Who does the monitoring?</p> <p>DB response: All monitoring is all done by the Geoteam but the monitoring department will be independent from the operation team. Lydian have also committed to joining the International Cyanide Code and will be subject to external auditing reviews.</p> <p>US response: The whole plant and the HLF will be monitored 24 hours a day from the control room, close attention will be paid to the volume of cyanide used on site and will be able to immediately detect if there is a problem. There will also be a community system in place for monitoring ground water.</p>
6	<p><i>Naren Chanmugan, Representative from USAID</i></p> <p>30% of the jobs on site will be sourced locally, how will this be controlled and how will the influx of the remaining 70% be managed and at the end of the site will the incomers stay or go back?</p> <p>HA response: Initially the priority will be to provide jobs to people who come from areas immediately affected by the site, and then further afield within Armenia if they cannot be sourced locally. It is anticipated that only 50 expats will be employed on site.</p>
7	<p><i>Naren Chanmugan, Representative from USAID</i></p> <p>Will incomers stay or go back?</p> <p>DB response: DB explained that there is a hybrid model for accommodation within the construction phase, however after that phase, the 657 people required for the operations will most likely be accommodated within the existing accommodation Jermuk. Two years prior to the completion of the mine a plan for retrenchment of staff will be implemented.</p> <p>AnS contribution: AnS suggested that in relation to an earlier comment that it should be clarified that water from the HLF is not going to enter the PTS.</p> <p>DB response: The PTS will treat water collected on the mountainside. The HLF will not discharge directly into a water course, the dilute cyanide mix will be rinsed for 2 years after operations have completed to remove the cyanide. After this period a separate PTS will be in place for the HLF water until it meets the required quality standards, at which point it will be discharged. DB added that this process is not unusual in relation to projects that handle cyanide in gold production.</p>
8	<p><i>Gevorg Torosyan, Representative of the Ministry of Energy and Natural Resources, RA</i></p> <p>Will there be an effect upon the Jermuk mineral water supply?</p> <p>AS response: Isotope analysis has been undertaken from water collected on site and the waters that supply the Jermuk water plant. The analysis shows that the two water systems are completely separate and the site should have no effect on the Jermuk supply.</p>
9	<p><i>Gevorg Torosyan, Representative of the Ministry of Energy and Natural Resources, RA</i></p> <p>When will the mine going to produce its first gold?</p>

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	<p>HA response: This is anticipated as being June 2018.</p>
10	<p><i>Armine Yedigaryan, Representative of the Asian Development Bank</i></p> <p>Have the negotiations with landowners involved paying for land at market value?</p> <p>NG response: All land purchase discussions have been in accordance with the land acquisition guidance produced by the EBRD and IFC. Negotiations have taken place directly with the landowners and 98% of the land required has been secured. Three remaining land plots are going through an ongoing legal process.</p>
11	<p><i>Armine Yedigaryan, Representative of the Asian Development Bank</i></p> <p>Has "land for land" been offered?</p> <p>NG response: First round of negotiations offered land for land arrangements</p>
12	<p><i>Armine Yedigaryan, Representative of the Asian Development Bank</i></p> <p>Was there any interest?</p> <p>NG response: There was a low amount of interest to begin with, possibly 6 land holdings, however once they saw that people were being paid for their land most people preferred being paid with money.</p> <p>HA response: An independent assessment of the land acquisition process has been undertaken and it has given the process a positive .</p>
13	<p><i>Armine Yedigaryan, Representative of the Asian Development Bank</i></p> <p>Have there been any archaeological assessments undertaken and are you also going to undertake it during the mine operation?</p> <p>AS response: Archaeological assessments have been undertaken to date and further work will be done as the site progresses. There is at least one archaeologist on site at any one time and there is a chance find procedure in place.</p> <p>HA response: Construction has started on site and an archaeological expert has been in place checking the work undertaken.</p>
14	<p><i>Marina Vardanyan, Representative of USAID</i></p> <p>What are the main landscape mitigation measures?</p> <p>DB response:</p>

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	<p>There have been no changes to the mine reclamation plan and all restoration plans have been costed and incorporated so that they can be financed after the site has completed production. There will be some progressive restoration with grassland rehabilitation outside the areas directly affected by the site. Tree nurseries have been established now and some trees are being used to provide screening, the nursery will continue to be used. DB added that in relation to the high mountain habitats, they present difficult conditions to establish new growth and the work that is being undertaken at the Lake Sevan herbarium will help with improving this task.</p> <p>US response: The BRSF will be a man-made rock pile, to ensure that grass cover takes there have been some trial on existing bare earth patches at varying angles on the mountain. US emphasised that the company cannot wait until the restoration phase before ensuring that the restoration techniques will work.</p>	
15	<p><i>Naren Chanmugan, Representative of USAID</i></p> <p>How have the changes in the site design come about?</p> <p>DB response: The changes are a result of the value engineering and optimisation exercise undertaken after the last disclosure event in July 2015. DB added that this is a very common process in the development industry and was brought about by a need to look at the capital costs and efficiencies as the project develops and that further value engineering will also be undertaken.</p>	
16	<p><i>Arman Barkhudaryan, Representative of the IFC</i></p> <p>What will be the number of indirect jobs?</p> <p>HA response: The multiplier effect for mining operations is approximately 4 or 5 indirect jobs to 1 job on site.</p> <p>IFC representative Arman Barkhudaryan : Is this more than 50% of the local population</p> <p>HA response: It would be probably more.</p> <p>DB response: These roles will include people working in the catering, supply, fuel, hotels, mechanics and a wide range of other services.</p>	
17	<p><i>Arman Barkhudaryan, Representative of the IFC</i></p> <p>How many people were paid for land acquisition?</p> <p>HA response: For phase 1 and 2, it was 140 landowners, for phase 3 and 4 it was 35 landowners AS concluded the event and thanked all of those attending for their time. Event concluded at 17:00</p>	
	<p>Questions and answers from the 3rd disclosure event held in Yerevan for non-government organisations, Expert Groups and Peer Mining Companies</p>	
	<p>Time and Date: Presentation commenced at 15:10 local time Thursday 2nd June 2016</p> <p>Venue and location: Hyatt Place Hotel, Republic Square, Yerevan, Armenia</p>	

	<p>Geoteam Presenters/contributors:</p> <p>DB – Dr Dave Brignall, Regional Director at Wardell Armstrong International – Main presentation</p> <p>AS – Dr Armen Stepanyan, Sustainability Senior Manager at Geoteam – Introduction and answering questions</p> <p>HA – Dr Hayk Aloyan, Managing Director of Geoteam – Answering questions</p> <p>US – Ulrich Sibilski, Health Environment and Safety and Security Manager at Geoteam – Answering questions</p> <p>NG – Nara Ghazaryan, Social/Development program manager at Geoteam – Answering questions</p> <p>AnS – Anna Saghabalyan, Communications Manager at Geoteam – Answering questions</p> <p>Questions and answers</p>	
1	<p><i>Representative of Civil Voice Babken Harutyunyan</i></p> <p>Can we have some more information regarding the new primary monitoring station, it is one thing to have the commitment to monitor written on paper it is another thing to make sure that monitoring takes place?</p> <p>DB response:</p> <p>Industry best practice is to provide an environmental management that is closely linked to the ESIA. as well as the primary monitoring station there will be monitoring undertaken within the nearby communities. DB added that the primary monitoring location is deliberately away from the existing community and is located very close to the site, this is so that any environmental issues can be picked up early before they are able to affect nearby settlements. DB noted that the primary monitoring station will assess noise, dust and vibration emissions from the site and that the environmental management systems will tie in with the levels set out in the ESIA.</p>	
2	<p><i>Hasmik Mkrtyumyan, representative of “Zangezur Cooper Molybdenum Combine” CJSC</i></p> <p>Will the Red book plant species taken to the Lake Sevan herbarium be left there or will they be returned back to the site?</p> <p>AS response:</p> <p>It is Lydian’s objective to achieve no net loss for the population of plant species on site, indeed there is an aspiration to achieve net gains for a number of important populations. AS added that to achieve this will require a large amount research to be undertaken at the herbarium, the results of which will be applied to the AGMP to ensure that the restored areas on site are a success.</p>	
3	<p><i>Representative of the Young Environmental Lawyers Association Erik Grigoryan</i></p> <p>Ground water impacts have the highest potential to create adverse impacts that can last decades after the site has been completed. Do you think that further studies need to be undertaken to ensure the effect upon groundwater is fully understood. The main concern is the impact on the Vorotan basin and the potential impact upon the Lake Sevan catchment. Have you undertaken any cross checking of the ground water data?</p> <p>DB response:</p> <p>A second study of the groundwater effects has not been undertaken however two other independent consultancies that have been involved in the mine design have reviewed the report that has been produced and agree with its findings, this review process will be ongoing.</p> <p>AS response:</p> <p>We will try to continually improve our understanding of how the ground water works.</p>	

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4	<p><i>Vahe Vardanyan , representative of "Dundee Precious Metals" CJSC</i></p> <p>How exactly did you assess the potential impact of the site upon the ground water used to supply the Jermuk water bottling plant?</p> <p>AS response: Two studies were undertaken, a geological and isotope assessments. The geological assessment demonstrated that there was no link between the Amulsar site and Jermuk. The isotope analysis confirmed that the two ground water areas are not interconnected. AS added that the company will commit to undertake a further study when the site has commenced operations.</p>	
5	<p><i>Suren Yeritsyan, representative of "Teghut" CJSC</i></p> <p>How will you determine the location of the conveyor crossing points?</p> <p>DB response: DB referred to the conveyor plan, 4 preferred locations, these include a crossing point for a public road, the mine main access point also looking at non-motorised access and access for wildlife, these last two are not fixed at this moment.</p> <p>AS response: The company has worked closely with the local community and worked with them to identify at least 3 potential public crossing locations.</p>	
6	<p><i>Suren Yeritsyan, representative of "Teghut" CJSC</i></p> <p>What will be done with the contact water?</p> <p>DB response: Contact water is any water that flows across any land that has been disturbed by the site operations. DB explained that it was important to make sure that the site was split off with cut off ditches to divert any incoming water away from eth mine. DB added that the majority of the water collected within the site will be recirculated within the mine, however from year 5 onwards water collected in the toe pond at the BRSF via a gravity feed to the HLF, with any excess water diverted through to the PTS. DB continued, stating that there are no other discharges to surface water during the life of the site. DB added that the HLF facility will continue to leach gold and silver post mining, and that a new PTS will be installed and monitored until the water shows the same characteristics as the surrounding natural water.</p>	
7	<p><i>Representative of GeoPro Mining Anush Gevorgyan</i></p> <p>What technologies will you use to clean the water of cyanide?</p> <p>US response: The cyanide used is in a very diluted form, and as it progresses through the system it gets more depleted, added to this the HLF is completely lined and totally contained and will be subject to constant monitoring</p>	
8	<p><i>Independent environmental expert Galust Nanyan</i></p> <p>How much land will remain as affected by the site once it has been completed?</p>	

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	<p>DB response:</p> <p>A detailed restoration plan will be submitted 2 years before the end of the operational period and that will outline how the site will look once operations have been completed, by not producing this plan until that later stage it will help to ensure that the restoration design reflects up to date best practice and the site working conditions. DB added in relation to the BRSF and the HLF the remaining mounds will be rounded and soiled and returned to grassland and will eventually be used for agriculture. DB further explained that the extraction voids will be backfilled to a level to ensure that they remain dry and do not fill with water, the Erato void will be backfilled to above natural ground level. DB further explained that a budget will remain in place to ensure that all buildings and tracks</p>
9	<p><i>Independent environmental expert Galust Nanyan</i></p> <p>Do you have any preliminary number for the volume of the area that will remain as disturbed at restoration?</p> <p>AS response:</p> <p>Only the area of the open pits will be left which is approximately 110 hectares, the remainder of the site will be brought back into a useable condition.</p>
10	<p><i>Representative o "Teghout" CJSC Davit Shindyan</i></p> <p>What will you do with the sanitary waste collected in site? will you use landfills?</p> <p>DB response:</p> <p>Only non-hazardous waste will be placed into the landfill on site, the details of how this is managed are contained within the integrated waste management plan. DB clarified that only non-hazardous and non-recyclable waste will be placed into the landfills, as a result the waste should be relatively dry and not generate any leachate. DB added that the hazardous waste generated on site will be within the HLF, here it will either be recycled or removed from site.</p> <p>US response:</p> <p>There will be hazardous waste cells on site but they won't be landfill and they will be designed to meet the required EBRD standards. US added that there is a potential that an incinerator may be installed on site to treat waste.</p>
11	<p><i>Tigran Sadoyan, representative of "GeoPro Mining Gold" LTD</i></p> <p>Have you considered the impact of emergencies and are there any measures in place?</p> <p>US response:</p> <p>Full emergency management plan developed from a wide variety of experience gained from a wide variety of sites globally. US added that there will also be a medical emergency plan in place.</p>
12	<p><i>Tigran Sadoyan, representative of "GeoPro Mining Gold" LTD</i></p> <p>How will you protect against the breaching of the HLF liner?</p> <p>US response:</p> <p>There is a full cyanide management plan in place and the company is committed to joining the international cyanide code, US added that the company was confident that they were very well covered in respect of cyanide control.</p>
	<p>AS thanked those attending for their time and their questions.</p>

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	The meeting concluded at 4:40pm
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Appendix 1

LIST of PARTICIPANTS		
ESIA DISCLOSURE MEETING, MAY 31, 2016, Jermuk		
N	NAME, SURNAME	ORGANIZATION/COMMUNITY
1	Shushan Hovsepyan	Jermuk
2	Robert Ghazaryan	Saravan
3	Lilit Mkrtchyan	Gndevaz
4	Sevak Harutyunyan	Jermuk
5	Anyuta Harutyunyan	Administration of Saravan Community
6	Lusaber Davtyan	Gndevaz
7	Gor Davtyan	Jermuk
8	Samvel Margaryan	Jermuk
9	Narek Grigoryan	Jermuk
10	Priest Ter Galust Sahakyan	Jermuk
11	Robert Stepanyan	Jermuk
12	Qristine Harutyunyan	Administration of Gorayq Community
13	Nelly Grigoryan	Gorayq
14	Marieta Grigoryan	Administration of Gorayq Community
15	Arayik Mkrtchyan	Jermuk
16	Martun Tadevosyan	Principle of Gorayq Shcool
17	Armen Grigoryan	Jermuk, Head of Water Centre
18	Garik Yeghyan	Gndevaz
19	Gayane Karapetyan	Kechut, Jermuk N 3 Secondary School
20	Artavazd Tadevosyan	Kechut
21	Mkhitar Ayvazyan	Jermuk

Notes of Meeting



22	Minas Arshakyan	Gndevaz
23	Hakob Hakobyan	Gndevaz
24	Varujan Antonyan	Gorayq
25	Vahan Antonyan	Gorayq
26	Tigran Arustamyan	Gorayq
27	Vardan Barseghyan	Gndevaz
28	Karen Aghabekyan	Gndevaz
29	Paruyr Badasyan	Jermuk
30	Tigran Vardanyan	Jermuk
31	Garegin Karapetyan	Saravan
32	Vahan Mkrtchyan	Gndevaz
33	Mkhitar Arshakyan	Gndevaz
34	Artak Hambardzumyan	Gndevaz
35	Ashot Pandunts	Saravan
36	Gerasim Andreasyan	Gndevaz
37	Emma Hakobyan	Saravan, school
38	Anri Grigoryan	Ecoline
39	Sevan Ghazaryan	Yerevan
40	Nunufar Frangulyan	Gndevaz
41	Marine Suqiasyan	Gndevaz
42	Syuzanna Avetisyan	Jermuk, "Youth Centre of Jermuk"
43	Vahe Manukyan	Jermuk, Restaurant "Fortte"
44	Armen Harutyunyan	Jermuk
45	Vardan Sargsyan	Jermuk

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46	Zara Gevorgyan	Saravan
47	Anna Aghajanyan	Gorayq
48	Marine Khurshudyan	Gndevaz
49	Alvard Sargsyan	Gndevaz
50	Laura Yeghoyan	Gndevaz
51	Vardan Hovsepyan	Jermuk
52	Arsen Garnikyan	Jermuk
53	Grigor Harutyunyan	Jermuk
54	Pavlik Harutyunyan	Jermuk
55	Tigran Gaspayan	Saravan
56	Gevorg Hayrapetyan	Jermuk
57	Ruzanna Grigoryan	Jermuk
58	Armen Danielyan	Jermuk
59	Norayr Aleqsanyan	Jermuk
60	Arevhat Qolayan	Jermuk
61	Lusik Sargsyan	Jermuk
62	Artak Movsisyan	Jermuk
63	Arman Tadevosyan	Jermuk
64	Vahe Papoyan	Jermuk
65	Mamikon Tadevosyan	Gndevaz
66	Andranik Yeghoyan	Gndevaz
67	Vanik Zohrabyan	Jermuk
68	Benik Araqelyan	Gndevaz
69	Never Mkrtchyan	Gndevaz

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70	Narine Harutyunyan	Jermuk
71	Liana Papoyan	Jermuk
72	Lilit Petrosyan	Jermuk
73	Harut Harutyunyan	Saravan
74	Taron Ghazaryan	Saravan
75	Azat Hovakimyan	Jermuk
76	Ruzanna Stepanyan	Jermuk
77	Artak Bagratyan	Kechut
78	Vardan Yeghyan	Gndevaz
79	Aram Mkrtchyan	Gndevaz
80	Haykaz Harutyunyan	Gndevaz
81	Anna Tadevosyan	Kechut
82	Khachik Yeghoyan	Saravan
83	Ruzan Asatryan	Administration of Saravan Community
84	Artak Nikoghosyan	Jermuk, Gas Service
85	Mkhitar Arustamyan	Gorayq
86	Martik Poghosyan	Gorayq
87	Tigran Harutyunyan	Gorayq
88	Gor Hakobjanyan	Gndevaz
89	Narek Arshakyan	Gndevaz
90	Arsen Stepanyan	Gndevaz
91	Mkhitar Tchatunts	Gorayq
92	Arustam Arustamyan	Gorayq
93	Artur Mkrtchyan	Jermuk

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94	Ara Saqaryan	Jermuk
95	Narek Khachatryan	Khoreni
96	Nina Avanesyan	Jermuk

ESIA DISCLOSURE MEETING, JUNE 1, 2016, YEREVAN

N	NAME, SURNAME	ORGANIZATION
1	Anri Grigoryan	Ecoline
2	Vardan Gevorgyan	Ministry of Energy and Natural Resources, RA
3	Artur Minasyan	Centre of Expertise for Environmental Impact Assessment
4	Armine Yedigaryan	ADB, environmental specialist
5	Naren Chanmugan	USAID
6	Marina Vardanyan	USAID
7	Raphael Sambou	US Embassy
8	Karen Azaryan	EU delegation
9	Narine Tadevosyan	World Bank
10	Alex Hovakimyan	US Embassy
11	Arman Barkhudaryan	IFC
12	Artashes Davtyan	UK Embassy
13	Gevorg Torosyan	Ministry of Energy and Natural Resources, RA

ESIA DISCLOSURE MEETING, JUNE 2, 2016, YEREVAN

N	NAME, SURNAME	ORGANIZATION
1	Erik Grigoryan	"Young Environmental Lawyers Association" NGO
2	Anri Grigoryan	Ecoline
3	Galust Nanyan	Independent expert

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4	Lyuba Balyan	ASPB
5	Armine Davtyan	"Zangezur Copper Molybdenum Combine" CJSC
6	Ani Qeshishyan	168 zham
7	Siranush Yeghiazaryan	MediaMax
8	Anush Gevorgyan	"GeoPro Mining Gold" LTD
9	Tigran Sadoyan	"GeoPro Mining Gold" LTD
10	Vahe Vardanyan	"Dundee Precious Metals" CJSC
11	Ani Sargsyan	"Teghut" CJSC
12	Suren Yeritsyan	"Teghut" CJSC
13	Babken Harutyunyan	"Civil Voice" NGO
14	Eduard Mkhitarian	GALA TV
15	Tigran Ghasabyan	GALA TV
16	Georgy Fayvush	Institute of Botany, RA NAS
17	Hasmik Mkrtumyan	"Zangezur Copper Molybdenum Combine" CJSC
18	Arpine Tamrazyan	H2
19	Davit Shindyan	"Teghut" CJSC
20	Naira Badalyan	ArmInfo
21	Lusine Gharibyan	Yerkir Media