

Appendix E
Community Consultation Summary

E.1 Community Consultation (2003 – 2004)

E.2 Community Consultation (2005)

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Date	Stakeholder	Type of Consultation/Personnel	Issues Raised	Response for Original Expansion Project	Changes to Response for Open Cut Project
Early January 2003	Traditional owners	Traditional owners Bill Coolibah and Bruce Joy accompanied mine representatives on a helicopter flight to inspect the site of the proposed development from the air and to ascertain whether it would affect any sacred sites or other areas of significance.	The traditional owners said there was nothing of significance to them in the areas to be affected by the mine development.	-	-
January 13 -15, 2003	Traditional Owners and other residents	Traditional owners and other residents visited Brisbane. The trip included a site inspection of the Albion pilot plant and a briefing at MIM Holdings. Attendees: Billy Coolibah, Ronnie Raggett, Sammy Evans, Bruce Joy, Karlene Shadforth, Celia Mogarty.	Waste rock dump – visual impact and location.	The height of the waste rock dump will be 80 metres. MRM is also investigating the feasibility of putting some of the waste rock back into the pit. The dump will be on Emu Flat, not near the barramundi dreaming area.	The overburden emplacement facility will be 50 m high and located over 1.4 km to the east of the Carpentaria Highway. When rehabilitated, it will appear as a rocky embankment with vegetation growing along the berms.
			What will happen to rainwater that collects in the pit?	The water will be recycled and used in processing ore.	No change.
			How will the expansion affect the sacred sites in the area?	MRM has consulted with traditional owners on this matter and has conducted a site inspection via helicopter. From this work and the knowledge we already had about the scared sites we are 100% confident that no sites will be damaged. However, we will continue consulting with traditional owners on this matter should any concerns arise.	Another archaeological survey of the area to be disturbed is proposed prior to construction commencing.

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			Employment opportunities for local people.	Numbers will depend on training and the number of people who successfully complete that training and acquire the skills needed to enter the workforce. There will be more local people employed. This will be assisted by the fact that the expanded operations will have more jobs that require skills and experience which are easier to acquire. MRM is using the Memorandum of Understanding that it has signed with the NT Government and local groups to enable more school leavers to have the skills needed to enter the workforce.	The construction and operational workforce numbers will be less than originally proposed. Some of the positions required to be filled for the open cut project will be different from those required for the current underground mine. MRM is committed to hiring local people when appropriately skilled personnel are available, and will provide employment and training programs in order to train local people with the necessary skills.
			Transport of products	Discussed the physical differences between old and new product – zinc metal as opposed to zinc concentrate and the benefits of transporting metal in that there is no dust and any spills can be easily cleaned up.	There will be no change in the product. Concentrate will continue to be transported.
			Involvement of MAWA.	MRM is committed to the contract it has with MAWA and relationship the two parties share. MRM will continue to work closely with MAWA. MRM sees MAWA, other local organisations and local people as partners in the expansion project.	No change.
January 20 - 22, 2003	Traditional Owners and other residents	Traditional owners and other residents visited Brisbane. The trip included a site inspection of the Albion pilot plant and a briefing at MIM Holdings. Attendees: Northern Land Council Representative Anthony Chong, Harry Larsen, Tammy Madson, Corrine Coombes, Annie Isaac, Karina Hart, Damien Vincent, Warren Timothy. NT Government representatives Elliot McAdam and Senior Ministerial Advisor Richard Jackson also attended the Albion Plant site visit.			

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Feb 5 2003	NT Government	Meeting with NT Government Advisors at the Chief Minister's Office, Parliament House, Darwin. OTD: Jane Munday, David Malone CMO: Amanda Buckley, Sean Kennedy, Craig Rouston Office of Paul Henderson MLA: David Money Office of Chris Burns MLA: Marik Hough, Christine ?	MRM's planned approach to community consultation	MRM has planned a comprehensive, open community consultation process that has already begun in the local area. The company plans to create multiple channels and opportunities for stakeholders, give feedback to the company and discuss and work through issues that arise. The consultation process will focus on face to face methods of consultation such as site inspections, briefings, community meetings and workshops.	No change.
			Will MRM have someone available to address stakeholder concerns immediately and face to face or, for instance via talkback radio?	Yes, the company's site-based management fly in and out of Darwin and will be available to address concerns immediately, as will the Senior Corporate Affairs Advisor for the project who will visit Darwin regularly.	No change
			How will MRM inform the general public about the project and seek their feedback?	Via its website, e-mail, a freecall number, via the media and through the EIS process.	No change
Feb 10-13, 2003	MP's and media	<ul style="list-style-type: none"> - Amanda Buckley – Government Media Office - Richard Jackson - Senior Ministerial Adviser - Media Dinner – ABC and AAP journalists - Labor backbench members – Parliament House (12/2) – Delia Lawrie, Elliot McAdam, Marian Scrymgour 	Various topics including but not limited to announcement and media coverage, stakeholder communication and consultation going forward.		
Feb 11 2003	Darwin Media Briefing	Rydgges Plaza Hotel, Darwin. Representation by NT News, Channel 9, ABC TV, ABC Radio, AAP, Office of Territory Development. Presentation on McArthur River Zinc Metal Project followed by questions and interviews.	Discussion focussed on the viability of the mine without this project, job numbers, McArthur River realignment, the open pit and the power source (specifically in relation to sunrise gas, capital cost), global greenhouse impact. Positive response to briefing.	Handout material provided including copy of presentation, media release, community and environment report, annual report, indigenous affairs case study.	Scope of project has significantly reduced. Original project elements no longer proposed include; a weir on the Glyde River, a zinc refinery, a sulfur plant, an additional power station, and a limestone quarry. In addition the OEF and TSF footprints have reduced as has the construction and operational workforces.

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Feb 11 2003	Industry Bodies Briefing: NT Chamber of Commerce and Industry, Territory Construction Association, NT Mineral Council, ISO	Presentation on McArthur River Zinc Metal Project, incorporating a display of maps, diagrams and photos. Very positive feedback received	Overall contribution to NT economy.	Preliminary indications given. Overall contribution to NT GDP estimated at 1%.	The project will contribute \$175 million to the Gross State Product of the Northern Territory and \$271 million to Australia's Gross Domestic Product
			Details of other benefits to the Northern Territory.	Preliminary indications of jobs, training, business opportunities, capital investment and contributions to NT economy given.	MRM's contribution to the economic output of all industries in the Northern Territory will be \$329 million per year (including flow-on effects). Nationally, it will be \$523 million (including flow-on effects).
			Timings for project, especially construction.	Preliminary estimates given: feasibility study and EIS September 2002 to December 2003; construction early 2004 to late 2006; commercial production 2007 on.	Construction to be undertaken in 2006 and 2007. Stage 1 mining to commence in 2006.
Feb 11 2003	NT Environment Centre	Briefing, Rydges Hotel, Darwin.	Impact of river realignment on the environment. Existence of similar diversions in tropical Australia.	Realignment would be engineered to minimise environmental impact by creating minimal or no change to seasonal flows in the McArthur River. The realignment would be built in river gravels in the existing flood plain. MRM will closely examine aspects of similar realignment that have been built in Western Australia and in the NSW's Hunter Valley.	No change.
			Stability of realignment channels, open pit and tailings storage facility.	The realignment channels, pit and tailings storage facility will all be engineered to ensure stability, safety and to minimise environmental impact.	No change
			Power source	Discussed various power sources for the project, particularly PNG gas and a coal-fired power station.	Existing power station will continue. Fuel source will remain as natural gas.
			Global greenhouse impact	Although the Albion Process' need for power would increase greenhouse emissions from the site, the global impact of the project would be reduced greenhouse emissions. This is due to the fact that MRM materials would no longer be smelted, and there would be a reduced need for long-distance transport.	There will be no significant increase in greenhouse gas emissions.
			How decommissioning and rehabilitation be dealt with in the EIS.	Briefed consultants URS to deal with this comprehensively in the EIS.	See Section 20 of the EIS.

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Feb 11 2003	Amateur Fishermen's Association of NT	Briefing, Rydges Hotel, Darwin.	Temperature of water to be released from the Glyde weir and effect on native fish populations.	MRM has not investigated this to date but we will instruct our consultants URS to investigate the matter and address it in the EIS.	The Glyde River weir is no longer proposed.
			Appropriateness of incorporating fish ladders in any weir design.	MRM has not investigated this to date but we will instruct our consultants URS to investigate the matter and address it in the EIS.	The Glyde River weir is no longer proposed.
			The EIS process and opportunities for AFANT involvement.	Discussed this issue, especially how stakeholders can input into the EIS process. Invited AFANT representatives to visit the site for an inspection.	No change.
Feb 12 2003	NT Seafood Council	Briefing, NT Seafood Council Office, Darwin.	Would like to be informed if there is a possibility that the port facilities at Bing Bong could be expanded as this would allow a number of bigger fishing boats to be based in this part of the Gulf.	MRM explained that such an expansion of the port facilities was not part of the feasibility study for the project. The project was based on using the current facilities.	No change to existing port operations except for a small reduction in export volumes and barge movements.
Mar 3 2003	King Ash Bay Fishing Club and community	Community briefing on the MRM expansion proposal, King Ash Bay Fishing Club clubhouse, King Ash Bay, March 3, 2003. Club President Bernie Redfern and 42 club members and guests were in attendance.	Is there barramundi in the Glyde River pools and will the weir affect them?	Yes, there is barramundi in the pools. MRM is proposing to put a fish ladder in at the weir to allow the migration of fish. MRM is also investigating the weir should be stocked with native fish.	The Glyde River weir is no longer proposed.
			Who are the principal shareholders in M.I.M. Holdings? Are they Americans?	MIM is listed on the Australian Stock Exchange, could not provide information on the exact holdings of different nationalities but offered to get back to the questioner with that information. Gave a brief overview of the company's history's history especially the role of American company ASARCO. Later came back to the club with a detailed answer to this question.	Mount Isa Mines Ltd (MIM) is a wholly owned subsidiary of Xstrata Queensland Limited. Xstrata plc (Xstrata), the ultimate holding company of Mount Isa Mines Ltd, is a major global diversified mining group listed on the London and Swiss stock exchanges. It is headquartered in Zug, Switzerland.

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			Why does MRM want to dam the Glyde River? Will it overtop in the wet?	<p>The water will be required for cooling in the proposed power station. There is not enough water in the existing bore-fields and other mine water sources to provide enough water for this purpose.</p> <p>The proposed Glyde River weir would overtop in the wet season. The weir would be 18 metres high. Gave the 2003 wet season as an example, during the wet the Glyde River levels reached 30 m. Explained that water would be released from the top of the weir, not the bottom, to maintain a temperature suitable for native fish species. Explained that further work would be done on modelling the volumes of water needed to maintain base flow rates.</p>	The Glyde River weir is no longer proposed.
			When there are 600 employees, will the mine still be a primarily fly-in/fly-out operation.	Yes, the mine will still fly employees in and out of Darwin, but will try to source as many employees from the local area as possible. During the construction phase there will probably be a flight service to Mount Isa, as well as Darwin, due to the fact that there may not be enough skilled workers in Darwin and the NT and they may need to be sourced from Mount Isa and the east coast.	The operational workforce will now be 270. The mine will continue to be a fly-in/fly-out operation.
			How many of the trainees employed by MRM have gone on to do apprenticeships? Does MRM employ any apprentices?	MRM has a comprehensive training program for local people. Training is moving from the traditional four-year indentured apprenticeship to competency based training. Competency based training offered by MRM is nationally recognised.	No change.
			How many trainees are now tradesmen?	A discussion on the training program followed including the fact that a number of trainees have gone on to hold full-time positions as skilled operators, in administration and in technical areas.	No change.
			What power is MRM using at Bing Bong? Will a gas line or power line ever be put through to Bing Bong?	Bing Bong uses diesel generators. There are no plans to put a gas pipeline or a power line through to Bing Bong.	No change.

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			How will the expansion impact Borrooloola and King Ash Bay?	Employment opportunities in the local area will increase. These opportunities will not be solely open to Borrooloola people. There will be opportunities for people from the whole area such as Robinson River and King Ash Bay.	The construction and operational workforce numbers will be less than originally proposed. Some of the positions required to be filled for the open cut project will be different from those required for the current underground mine. MRM is committed to hiring local people when appropriately skilled personnel are available, and will provide employment and training programs in order to train local people with the necessary skills.
			Will there be any changes to the Bing Bong operations?	Transport and logistics for the project have yet to be finalised. Some options have been identified such as barging the product to a deep water port such as Gove or Groote Eylandt. The zinc metal would still have to be transported through Bing Bong. The MAWA agreement will still stand in one form or another and trucking arrangements would not change significantly.	There will be no changes to the current Bing Bong operations except for a slight reduction in export volume and hence barge movements.
			How will the project affect local businesses?	If there is a competitive business in the local area that the company can use then it will be used preferentially over other businesses from outside the local area.	No change.
			Has the study investigated using a railway?	Constructing a railway would be too expensive.	There is no need for a railway.
			Can you guarantee that the Glyde River won't suffer the same fate as the Fly River that was polluted by tailings from the Ok Tedi Mine?	No tailings will be dumped in any local waterways, they will be placed in the tailings storage facilities.	The Glyde River weir is no longer proposed.

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Mar 19 2003	Borrooloola residents	Community briefing and consultation session. Borrooloola Inn. Local people in attendance including representatives of the following groups, agencies and businesses: Gulf Health Services, Borrooloola Police, NT Health, Borrooloola Bulk Discount, Community Education Centre, JobPlace, Community Council, Refrigeration Services, PAWA, FM 102.9, Mabunji Resource Centre, Wunala Creche, KAB Fishing Club, Borrooloola Inn, DIPE Conservation and Natural Resource Division.	Can the mine cope with the expected water in the open pit?	Any water that collects in the bottom of the pit will be recycled and used in processing ore. Because of the way the river diversion will be engineered we do not expect the volumes of water that will collect in the pit to be a problem.	No change.
			What are the dangers with the higher lead in the by-product, especially considering the 2001 release? Could this happen again with more disastrous effects?	The tailings generated by the current operations have a significant component of lead whereas the tailings of the expanded operation would be more inert as by-product additives would be used. Furthermore, our experience at our current operations has taught us a lot about achieving dam stability and minimising the risk of release during high rainfall events. We will apply this knowledge and world's best practise design to achieve safe storage of tailings.	The product from the open cut project will be a bulk concentrate (including lead, zinc and silver) which is the same as the product from the current underground operations. There will be no increase in lead concentrations in the tailings.
			Where would the proposed gas pipeline go?	It is unclear at this stage and will not be determined until the power source for the project is finalised. All stakeholders would be consulted.	No new gas pipeline is proposed. The existing gas pipeline will be used.
			Is there a possibility that the new processing plant could process ore from other satellite deposits?	We are concentrating on just treating the ore from the deposit at the current mine site which would give the project a 35-year mine life.	There is no new processing plant proposed. The existing processing plant will continue to be used.
			What will happen at Bing Bong?	The port facilities at Bing Bong will be an important part of the expanded operations. The agreement with MAWA will also continue in some form.	There will be no change to the existing Bing Bong operations.
Mar 20 2003	Secondary Education Unit	Briefing and consultation session for the Secondary Education Unit, Borrooloola Community Education Centre. March 20, 2003. Attended by Headmaster Ian Cooper, two teachers and 34 students.	Project overview and explanation given. No questions asked.		

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Mar 20 2003	Traditional Owners and local elders	Briefing and consultation session with local traditional owners and elders including members of the Gurdanji, Yanyula, Mara and Garawa language groups outside the Council Office, Borrooloola. March 20, 2003. Attendees: Damien Vincent, Harry Lansen, Billy Miller, Tom Friday, Steve Johnston, Larry Simon, Tom Simon, Allen Jupiter, Steve Anderson, Rikki Dank, Mr Pyro, Brian Raggett, Waylo McKinnon, Sammy Evans, Phillip Timothy.	What is the difference between smelters and refineries?	Explained differences. The project involves building a refinery, not a smelter. Highlighted the different forms waste from refineries and smelters take. Discussed MIM's Albion technology.	There will be no smelter or refinery at McArthur River.
			Will the new plant include smoke stacks?	No, unless there is a coal-fired power station. Such a power station would have smoke stacks.	There will be no new smoke stacks.
			Is what MRM is planning similar to the Pasmaenco operations?	The only similarity with Pasmaenco's Century operations is that both will be open cut mines. Century produces concentrate whereas the proposed MRM project will produce zinc metal. MRM's processing plants will be very different from the Pasmaenco smelters that operate in the southern states. These use old technology that is less efficient and produces gaseous, "smoke", emissions.	McArthur River will be an open cut mine and concentrator plant which is similar to what is at Century. However, the scale of operation at McArthur River will be significantly smaller than that at Century.
			What will happen to tailings generated by the new operation and how big is the proposed tailings storage facility?	All the tailings will be piped to the tailings storage facilities (dams) in slurry, all the tailings will be mixed together. These tailings storage facilities will be approximately twice the size of the present ones and would be located in the same place.	The existing tailings storage facility will continue to be used. There will be no expansion beyond the existing footprint of the tailings storage area and runoff ponds.
			Will there be more or less chemicals used in the expanded operation?	The expanded operations would use fewer chemicals and reagents.	No change.
			What will the smoke emissions be?	There will be no smoke emissions (emissions to air) from the refinery. There will be an increase in greenhouse gas emissions from the power station. On a global scale, the project will mean a reduction in greenhouse gases and other emissions to air as the inefficient smelting of concentrate will stop and as less material will need to be transported long distances.	There will be no significant change in air emissions compared to the existing operations. There will be no smoke emissions.

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			What are the coal emissions?	If a coal-fired power station were to be built on the site, emissions to air would be kept to a minimum by using past-practise techniques and technology. MIM is currently investigating the viability of a range of power sources and have signed a Memorandum of Understanding with PNG gas.	Coal will not be used as a fuel source.
			Will there be extra air services as a result of the expansion?	Yes, there will be either larger planes or extra services to transport the extra people who will need to come to MRM to work during the construction phase, and after that on the expanded operations. During the construction phase the additional flights will come from both Darwin and possibly Queensland to access skilled workers. During the normal operations the extra services will be from Darwin.	Due to the reduced workforce there may be a slight reduction in aircraft movements.
			How many local people will be employed?	Numbers will depend on training and the number of people who successfully complete that training and acquire the skills needed to enter the workforce. MRM is using the Memorandum of Understanding that it has signed with the NT Government and local groups to enable more school leavers to have the skills needed to enter the workforce.	No change.
			Why would you build a weir on the Glyde River?	The water is required for cooling in the power station and in the refining process. The weir would provide good quality water that could be used without treatment, as opposed to water from a bore field. Furthermore, there is not enough water in the local ground water to supply the operation.	The Glyde River weir is no longer proposed.
			Are there any other alternative water supplies for the project?	There is water in the McArthur River but we are not considering this.	No change.

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			Are the consultants that MRM has chosen, URS, independent in their assessment of the environmental aspects of the project?	MRM will pay URS for their work. By using URS we will have some of the leading experts in various fields from around Australia and oversee looking at various aspects of the project.	No change.
			What will happen to the bund wall after the mine ceases operations?	The EIS studies include a full assessment of the options for closure of the mine once mining is complete. We are considering three options that will be evaluated according to how they minimise damage to the environment. These are: retaining the river realignment and letting the pit flood with water naturally; filling the pit with water ourselves and retaining the river realignment; removing the bund wall and realignment and letting the river flow into the pit and on from there.	The preferred closure scenario is to remove part of the flood protection bund but maintain the McArthur River in the realigned river channel. River flows that overtop the McArthur River channel will be allowed to enter the pit and overflow downstream. This option has the least water quality impacts of all the options considered.
			What will happen if the expansion doesn't go ahead?	The future for the operation in its current state would depend on its profitability. The zinc price and the value of the Australian dollar affect this.	Should the open cut project not proceed, mining at McArthur River will cease. This will result in a loss of economic production for the Northern Territory, the loss of employment for the existing workforce, and detrimental socio-economic impacts in the region.
			Could the same thing that happened at the Merlin Mine (i.e. premature closure) happen at the McArthur River Mine?	Yes, it is possible that the mine could be closed if it could not make any money. However, unlike Merlin, at MRM we have been able to define our ore reserves and know we can continue mining for many years if we can develop those deposits cheaply. Merlin was unable to define its ore reserves because of the depth of the diamond deposits.	No change.

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Mar 25 2003	Local indigenous women	Local Indigenous women including members of the Garawa and Yanyula language groups. Briefing and consultation session Borroloola Council Offices. Attendees: Rody Harvey, Jemima Miller, Thelma Dixon, Mani Mel, Rosi Nobel, Thelma Douglas, Dainna Norra, Kaidy Baker, Anni Issacc, Ruth Friday, Mavis Timothy, Peggy Morsen, Margery Kieren.	How far will the Glyde River pumping station be from the diversion?	A fairly long way away. The Glyde River is well beyond the sandstone ranges about 8 km from the McArthur River.	The Glyde River weir is no longer proposed.
			A request was made to visit Bing Bong to inspect the loading and unloading of the Aburri, especially environmental and safety aspects of loading.	A commitment was made to organise such a tour. We have nothing to hide and welcome your interest. The tour on the Aburri is a 12 hour round trip and there is not a lot of room for passengers so only a small group may be able to go but we could arrange video footage for others who are interested.	No change.
			How high will the weir on the Glyde River be?	The proposed weir will be 18 metres high. This is well below the river's flood level of 30 metres in January 2003.	The Glyde River weir is no longer proposed.
			Will any sacred sites be affected by the expansion?	No. The site of several nearby sacred sites was discussed with those present and the fact that they will not be affected. It was explained that some traditional owners had inspected the site and the location of the various parts of the proposed development. They did not identify any issues. Consultation with traditional owners is continuing.	No change.
			What about the impact of the current mine on the environment? We have seen dead fish downstream of the mine at the mouth of the McArthur River.	Dead fish are a common occurrence in rivers around Australia. The local Sea Rangers are supposed to sample any dead marine life to check that the mine has not caused the creatures to die. We had no releases from the tailings dams during the 2003 wet season, sampling showed the fish kills had been caused by changes in the water caused by flooding. Those in attendance were asked whether such fish kills had occurred before mining began and some recalled that they had.	No change.

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			If the expansion goes ahead will MRM provide more training opportunities and opportunities for students?	Employment at the site will nearly double and this will translate into a proportionate increase in local employment. The number of trainees will be doubled. Scholarships and vocational work is currently offered and will continue. The MoU between MRM, the local community and the NT Government on training and education has been an initiative to try to improve the skills of local people so they can make the most of employment opportunities at the mine.	The construction and operational workforce numbers will be less than originally proposed. Some of the positions required to be filled for the open cut project will be different from those required for the current underground mine. MRM is committed to hiring local people when appropriately skilled personnel are available, and will provide employment and training programs in order to train local people with the necessary skills.
April 1 2003	Traditional Owners	Consultation meeting with Billy Coolibah, Ronnie Raggett, Bruce Joy, McArthur River Mine, to inspect Site 6165-65 on the AAPA map	Discussion of these traditional owners' views of claims made by Harry Lansen in the media that the proposed expansion impinges on a dreaming site that involved a second snake going down the river past this site. The Djungkai, Bruce Joy, explained that "the story goes past there but there is nothing there". The others agreed to that and added that there were no sites in the proposed area of disturbance downstream of the McArthur River crossing.	Part of normal heritage site clearance activity under AAPA.	No change.
April 1 2003	Mabunji Board	Consultation meeting with the Mabunji Board at the Mabunji Aboriginal Resource Association.	Do the current and expanded employment numbers include Hampton's, port and other contractors?	Yes	No change.
			The timeline is aggressive, how will the consultation process be able to be conducted in that period of time? (John Mason) Note that this is a long question, much extrapolation was involved including that the community would take a long time for this information to sink into the community and for them to digest the content.	The guideline period has been doubled to allow for comment. This is a consultation period set by the Government. We will consult during that time. McArthur River minesite has been studied for a long period of time and therefore we have much current information. We are filling the gaps during this EIS and feel that such a timeline is appropriate to undertake all the required investigations for the EIS. The guidelines and full EIS process was explained.	No change.

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			<p>In the Environmental and shareholder report (2000) there is a claim that there were 31 community organisations funded. Can we have more detail as to the community support program funding arrangements and beneficiaries?</p>	<p>Whilst we are unable to name all of the funding recipients, some of the larger contributions are; MAWA, health centre, school, fishing competition, rodeo, provision of the ambulance, supply of a boat, and the list goes on. We will not be providing dollar amounts as that is confidential.</p> <p>McArthur River Mining looks at each individual proposal and considers them on a case by case basis. We will continue to strongly support the local community.</p> <p>We will get a breakup of the names of those organisations (Ross Browning) and supply them to Mabunji.</p>	<p>No change.</p>
			<p>As a stakeholder what do we get out of this proposed expansion? This question discussed the process and responsibilities that John Mason felt was his duty to the Mabunji Board in terms of collation of advantages and disadvantages of the expansion item by item. This will be undertaken when there is more information after the EIS release.</p>	<p>No explicit comment – some general discussion on the stage of the project development and the total information will be available in the EIS</p>	<p>No change.</p>
			<p>Can we get some more detail on the timeline for the project, specifically on the release of information and comment period?</p>	<p>This will be followed up and sent through to Roddy.</p>	<p>The EIS will be available for public comment for a period of 10 weeks during August - October 2005.</p>

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Date	Stakeholder	Type of Consultation/Personnel	Issues Raised	Response for Original Expansion Project	Changes to Response for Open Cut Project
April 7 2003	NT Government	<p>Site inspection. Chief Minister The Hon Clare Martin MLA, Minister for Business, Industry & Resource Development The Hon Paul Henderson MLA, Minister of Environment and Heritage The Hon Chris Burns MLA, Department of the Chief Minister CEO Paul Tyrrell, Department of Business, Industry and Resource Development CEO Peter Blake, Community Cabinet Officer Nuala Murphy, Ministerial Advisors Sean Kennedy, Michael Gunner, Mark Hough, Patrick Bindon and Richard Cheswick.</p> <p>Taskforce Members: Department of Business, Industry and Resource Development: John Carroll and Ray Swann. Department of Employment, Education and Training: Brenda Elfrink. Department of Justice: Alastair Shields and Sarah Lunn. Department of the Chief Minister: Matthew Wallach and Ray Smith. Attending with taskforce, Borroloola School principal Ian Cooper.</p>	Discussed project proposal. No particular issues raised		
Aug 5 2003	Traditional Owners, NLC	<p>Briefing and site visit.</p> <p>Traditional Owners: Max, Roy Hammer, Tom, N Raggett, C Raggett, Valerie, W Maher, Gordon, Noreen, Billy Coolibah, Bruce Joy.</p> <p>Northern Land Council: Edna Bartolis, Mark Foy, John Hughes, Garry Richardson, David Mearns.</p>	Future of current operations	Future without expansion discussed and the effects of the expansion on the extension of the operation explained.	Should the open cut project not proceed, mining at McArthur River will cease. This will result in a loss of economic production for the Northern Territory, the loss of employment for the existing workforce, and detrimental socio-economic impacts in the region.
			Ongoing role of the Aburri	The role of the Aburri will continue as at present	No change.
			Training programs and mine employment	Information provided	No change.
			Environmental assessment process	Process explained	No change.

Appendix E.1

Community Consultation Summary (2003 – 2004)

Date	Stakeholder	Type of Consultation/Personnel	Issues Raised	Response for Original Expansion Project	Changes to Response for Open Cut Project
			Fate of lead and cadmium	Explanation provided – concentrate and tailings	The product from the open cut project will be a bulk concentrate (including lead, zinc and silver) which is the same as the product from the current underground operations. There will be no increase in lead concentrations in the tailings.
			Current monitoring program	Program details provided	No change.
			Social impact assessment	To be included in EIS	No change.
			Waste characterisation testing	Information provided	Additional waste characterisation has been undertaken. Results are provided in the EIS.
Oct 7 2003	AAPA, DBIRD, OEH	Update on project discussions with John Avery (AAPA), Tony McGill, Steve Tatzenko, John Carrol (DBIRD), Steven Sutton (OEH)	Need to complete heritage and archaeological site surveys ASAP.	Clearance surveys held late 2003. Design of bund wall changed to avoid sites.	Another archaeological survey of the area to be disturbed is proposed prior to construction commencing.
11-12 May 2004	IMETF	Indigenous Mining and Enterprise Task Force, Mabunji Conference Room,, Mabunji Resource Centre, Borrooloola. Representation by DBIRD, NLC, MRM, PITAC, DEET. Curtin University, Waralngka Arts, Mabunji Assoc., MAWA Corp, Xstrata, Regional Dev. CDSCA, Papula Apparr-Kari Ab Assoc., Traditional Owners, Freshwater, Our Place Magazine, Li-Kurlurluwa Ab Corp, Out Place Radio, FM 102.9, Borrooloola CEC, IM Training, Borrooloola Region Youth Development Unit.	<p>Presentation by Bill Baird (Xstrata) on MRM community relations, and objectives to</p> <ul style="list-style-type: none"> - provide entry level employment at MRM for local and indigenous people with no mining or employment experience - to provide a workplace environment conducive to the preparation and trading of local recruits. <p>Recent MOU with DEET to provide specific post education outcomes.</p> <p>MRM very sensitive to sacred sites.</p>		
ND	Northern Land Council	Briefing on project at NLC offices, Casuarina, Darwin. Acting CEO Mark Foy, Senior Policy Advisor Katy Hare.			

Appendix E.1

Community Consultation Summary (2003 – 2004)

Date	Stakeholder	Type of Consultation/Personnel	Issues Raised	Response for Original Expansion Project	Changes to Response for Open Cut Project
ND –	Residents of the NT	Information on the project was made available to the general public in the media, on the MIM website, an e-mail inquiry service and via telephone. In this way members of the public were able to access information and forward questions and requests to MIM.	The availability and timing of business opportunities for NT businesses.	Opportunities will be created during the construction phase from early 2004 to late 2006, and during the normal operation of the expanded mine from 2007.	Opportunities will be created during the construction phase during 2006-2007, and during the normal operation of the open cut project which will commence in 2006.
			Timing of the EIS.	The Draft EIS is expected to be placed on display for public comment from July 2003.	The EIS will be available for public comment for a period of 10 weeks during August - October 2005.
			Job opportunities for residents of the NT.	Gave preliminary estimates of job numbers: 600 permanent jobs, employment peaking at 1000 jobs during construction.	The construction workforce will peak at 150 and there will be 270 operational workers.

Appendix E.2

Community Consultation Summary (2005)

Northern Territory Government	
Date:	17 June 2005
Venue:	Darwin
Type Of Consultation:	Presentation Of The Open Pit Project and Consultation Program
Stakeholder:	
Present for NT Government:	<p>DBIRD – Mike Burgess, Richard Jackson, John Carroll, Ros Volcano, Ross Trevena, DIPE – Sarah Butterworth OEH – Lyn Allen, Juanita Croft OTD – David Malone AAPA – Jeff Stead</p>
Xstrata Consultation Team:	<p>Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) – Open Pit Technical Manager</p>
Issues Raised	MRM Response
Timing of the public review period for the EIS was discussed. OEH is seeking an extended review period.	The EIS will be available for public comment for a period of 10 weeks during August - October 2005.
It was suggested that the DEH in Canberra should be briefed.	DEH will be incorporated into the consultation program following release of the EIS.
Has there been any consideration of greenhouse gas offsets.	As McArthur River mine is an existing operation and the change from underground to open cut mining will have no significant change to its greenhouse emissions, it is considered that an offsets program is not warranted.
Have predictions of increased future rainfall been taken into account	The water management system will be modelled (OPSIM) using a long period of historical rainfall record. An adaptive management approach will be used to enable the system to be updated and reassessed as necessary consistent with a philosophy of continuous improvement. The water management system will be optimised with improving knowledge which will include planning for greenhouse climate change effects on rainfall when reliable predictions become available.
Clarification was sought if all activities are to be undertaken on existing leases.	All activities will be confined to existing mining leases
Has a heritage assessment been undertaken in the project area	Another archaeological survey of the area to be disturbed is proposed prior to construction commencing.

Appendix E.2

Community Consultation Summary (2005)

Local Traditional Owners and Aboriginal Community Members			
Date:	2 August 2005		
Venue:	Mabunji Aboriginal Resource Association Borroloola		
Type Of Consultation:	Presentation Of The Open Pit Project and Consultation Program		
Stakeholder:			
Present for Local Community:	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <p>Gordon Lansen Harry Lansen Jack Green Wylo McKinnon David Harvey Thomas Simon Warren Timothy Graham Friday Damien Pracey Bill Miller Frazer Baker Benjamin McKinley Norman Kingsley Keith Rory</p> </td> <td style="width: 50%; border: none; vertical-align: top;"> <p>Bruce Joy Ady Miller Elizabeth Lansen Valerie Raggett Daphne Ahwoh Felicity Kendall Muki Muir Kathy Willets Billy Coolibah Toby Johnston Michael Miller Bronwyn Mulholland Vicky Mulholland</p> </td> </tr> </table>	<p>Gordon Lansen Harry Lansen Jack Green Wylo McKinnon David Harvey Thomas Simon Warren Timothy Graham Friday Damien Pracey Bill Miller Frazer Baker Benjamin McKinley Norman Kingsley Keith Rory</p>	<p>Bruce Joy Ady Miller Elizabeth Lansen Valerie Raggett Daphne Ahwoh Felicity Kendall Muki Muir Kathy Willets Billy Coolibah Toby Johnston Michael Miller Bronwyn Mulholland Vicky Mulholland</p>
<p>Gordon Lansen Harry Lansen Jack Green Wylo McKinnon David Harvey Thomas Simon Warren Timothy Graham Friday Damien Pracey Bill Miller Frazer Baker Benjamin McKinley Norman Kingsley Keith Rory</p>	<p>Bruce Joy Ady Miller Elizabeth Lansen Valerie Raggett Daphne Ahwoh Felicity Kendall Muki Muir Kathy Willets Billy Coolibah Toby Johnston Michael Miller Bronwyn Mulholland Vicky Mulholland</p>		
Xstrata Consultation Team:	<p>Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) – Open Pit Technical Manager Bill Bair – Community Relations Herman Radmueller – Community Relations Charles Johnston – Environmental Scientist Jane Munday – Communications Specialist</p>		
Issues Raised	MRM Response		
What will be the path of the rechannelled section of the McArthur River? What will be the length of re-channelled section is and how long will it take to construct?	5.5 km or river section will be rechannelled and it will take 2 years to complete.		
Will minerals leach from the rock formations into the river during the construction of the rechannelled section?	Minerals will not leach from the rock during construction works. Also rock from the construction of the channel will be used to armour the channel against erosion.		
Is the bund planned to surround the open pit an engineered structure and will it leak water into the open pit?	The bund will be a fully engineered structure similar to a dam except it is designed to keep water out of the pit. The bund is designed not to leak water into the pit.		

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Community Consultation Summary (2005)

Is it possible the tailings dam will overflow/ release tailings water during open pit operations and what has been done to prevent further release of Tailings water similar to the event that occurred in 2001?	The tailings dam is being extended away from surprise creek to make it larger to control overflow/release. Works are also currently ongoing to seal the dam against seepages and strengthen the current structure to further prevent overflow/release.
What is the environmental impact from an overflow/release from the Tailings Dam?	The tailings dam has experienced some minor sulphate seepages, similar to salt, into surprise creek. There was also a release from the water storage area of the dam during high rainfall experienced in 2001. Xstrata and independent environmental monitoring programs have shown that no heavy metals have entered the local creeks as a result of these releases. Also, monitoring of local flora and fauna in the area surrounding the tailings dam has recorded no impact.
The aboriginal community noted their support for the current Northern Territory Government sponsored Dugong and Turtle survey currently being carried out in the local marine area?	The survey is part of an ongoing research project by the Territory Government and is unrelated to Xstrata's operations. Xstrata carefully monitors its impact in the marine environment. Xstrata does however contribute sponsorship to the project and will continue to look for ways it can provide further assistance.
What is the approval process following submission of the EIS?	The EIS once lodged will be open for public comment for 10 week period. Xstrata will then prepare a supplement to the EIS in response to the many and varied questions which may come from the public, government and other stakeholders. A period of decision making by the Department of Infrastructure, Planning and Environment will then take place, followed by a decision and release of the environmental assessment report detailing the decision and any conditions imposed on the project.
What are Xstrata's legal obligations to traditional owners with respect to the open pit project?	The change of mining method is occurring on an existing mineral lease and as such there are no legal obligations to traditional owners related to the proposed project. Xstrata is however committed to working with the local community to maximize the impact of the project on local health, business, education and employment
Can a model of the open pit project be produced showing the proposed changes to the mine site so that the local aboriginal people can see for themselves?	A model of the open pit operations has been made and it can be made available for viewing in Borroloola. There are also extensive pictures and diagrams of the proposed project in the EIS which will also be available for public viewing.
Who do Xstrata currently define as the traditional owners?	Traditionally Xstrata has worked and will continue to work with representatives put forward by the local aboriginal community. There is no definitive list of traditional owners.
What are the employment and economic benefits to the local community from the proposed open pit project?	10%of the current workforce comes from the local community and this likely to increase with the shift to open pit mining. Open pit mining is a less specialised mining method and as such jobs will be more accessible to local people, with the skills required more in line with the skills and training of the local workforce, such as truck drivers and maintenance crews. Xstrata will increase its sponsorship through its local community support program with initiatives such as the construction of a swimming pool in Borroloola. There will be other commercial opportunities to the community to provide services such as equipment hire and nurseries for plants required for rehabilitation for example. Xstrata and its contractors are obligated to employ locally where possible.
Will the open pit mining be carried out by Xstrata or a contractor on their behalf?	The mine will be operated by a contractor on behalf of Xstrata. A Townville contractor JJ McDonald has been engaged to develop the test pit, a decision on the final open pit contractor has still to be made.
There was a concern raised that the Aburri transport barge which transports the concentrate from Bing	There will be no changes to the operation with regard to the port facilities or marine operations. There is a marine environmental monitoring program in place to monitor impacts on water and sediment quality.

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Community Consultation Summary (2005)

<p>Bong port to the ocean going vessels may contaminate the local marine environment. What assurances are there that Xstrata will look after the marine environment in the area?</p>	<p>Current monitoring shows no impacts on the marine environment from operations. It is expected that the open pit project will have no impact on the marine environment.</p>
<p>Is the proposed open pit on top of the current mine underground workings?</p>	<p>Yes, the open pit will gradually overtime get deeper and develop into the old area of underground workings.</p>
<p>It was noted that aboriginal field-hands currently working on the Northern Territory Government Dugong and Turtle Surveys may be a resource for environmental studies in support of the open pit project. What opportunity would available for the field hands to work with Xstrata?</p>	<p>Xstrata are happy to review the opportunities for aboriginal field-hands to assist with the mines environmental monitoring program.</p>
<p>With the commitment by Xstrata to look at biodiversity offsets will ceremonial sites along the river, particularly Bull Creek and Rainbow Serpent Dreaming in the River be considered for protection?</p>	<p>The Aboriginal Areas Protection Authority (AAPA) has identified 146 sites in the general McArthur River area. This includes 5 registered sites in the south of the mining lease. The AAPA has issued authority certificates for all of the open-pit project components in accordance with Section 22 of the Northern Territory Aboriginal Sacred Sites Act 1989. These certificates include special conditions to protect all sacred sites near the project. Xstrata remains committed to ongoing consultation with traditional owners during construction and operation of the open-pit.</p>

Appendix E.2

Community Consultation Summary (2005)

King Ash Bay Local Residents and Fishing Community		
Date:	2 August 2005	
Venue:	King Ash Bay Fishing Club House	
Type Of Consultation:	Presentation Of The Open Pit Project and Consultation Program	
Present for Local Community:	<p>Des Winter Pam Winter Allen McNabb Terry Shannon Bernard Redfern Peter Woodbine Tony Reynolds Wendy Hume Enid Leonard Pam Woodbine Bill Hayley Garry Witham Roger Marturia Trevor Dorn Lyn Rea Mary Frost Rosslyn Delaney Alan Westerman</p>	<p>L. Westerman Berniece Manley Graham Thurrcat S. Wang D.A. Waugh Bruce Manley John Valos JH Morton Val Rogers Ken Melville Jean Hillman Christina Buckley Dave Buckley Chris Melville Stewart Melville Keith Adlett Geoff Page</p>
Xstrata Consultation Team:	<p>Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) – Open Pit Technical Manager Bill Bair – Community Relations Herman Radmueller – Community Relations Charles Johnston – Environmental Scientist Jane Munday – Communications Specialist</p>	
Issues Raised	MRM Response	
How do you stop cave in of the open pit if current underground workings are not filled and sealed?	The underground workings are drilled from the surface and the voids packed with fill material.	

Appendix E.2

Community Consultation Summary (2005)

Is there a proposed change in ownership of the mine with the proposed change to open pit mining?	No. Xstrata took ownership of the mine from MIM in 2003. There are no other changes in ownership proposed.
Will dust suppression techniques be used in the tailings dam to ensure dust does not get airborne during, and will there be an increase in dust levels with the project?	Yes. The surface of the tailings is kept wet with areas being waters on a rotational basis.
What has been done to prevent further release of Tailings water similar to the event that occurred in 2001?	The tailings dam is being extended away from surprise creek to make it larger to control overflow/release. Works are also currently ongoing to seal the dam against seepages and strengthen the current structure to further prevent overflow/release. Environmental monitoring shows no adverse effects to the environment from the 2001 release.
Will the current mining workforce be retained as part of the open pit project?	Underground mining is a specialised activity. The underground miners have been offered a job within Xstrata's other underground mines due to industry wide skills shortages. Some of the mine personnel will be retrained and will be retained within the open-pit operation. Opportunities exist for all current mining personnel within Xstrata.
Will powerlines be coming to McArthur River from Mount Isa as part of the open pit project?	At present, the mine requires about 18 MW of power, the majority of which is used in the mill. There will be no change in the operation's power demand. Power will continue to be generated by the existing on-site gas-fired power station. No extra power is needed for the new operation and therefore no new power sources, such as power lines will be required from interstate.
What chemicals are used in the production of concentrate and will they enter the river?	A series of chemicals are used ion the processing plant including, Copper Sulphate, Methyl-Isyl-Propyl-Carbonate and Xanthate. These chemicals are used during reactions in the plant and any residual in the tailings water will be stored and treated in the tailings dam. There will be no release to the river except for fully treated water from the licensed discharge from the clean water holding dam.
Will the open pit be used as a wetland at closure or will it become a poisoned pit such as at Mount Morgan?	Key elements of the mine closure strategy associated with the open pit will include: <ul style="list-style-type: none"> • The river will continue to flow along the realigned river channel • The flood bund will be breached and the open cut allowed to fill with flood water This will allow flood waters from a 1 in 2 year storm to enter the closed pit, allow mixing of any contaminants in the pit with the stormwater, effectively refreshing the quality of water in the pit. Current studies show this option will not result in contaminated water building up in the open pit.
Have there been any investigations of further downstream processing options, such as a refinery, as part of the open pit project?	Xstrata Zinc will continue to investigate developing MRM as a source of zinc feed for a future zinc refinery using the Group's Albion process technology, as this would significantly improve the profitability of MRM mining operations. Given the power requirements associated with zinc refineries, the MRM site has been ruled out as a possible location for an Albion plant and we continue to assess other potential sites. If a cheap and reliable energy source becomes available to support downstream processing at the mine, we would reconsider our options regarding on-site downstream processing.
What metals do Xstrata recover from the ore mined at the site?	There are 7 different ore bodies at MRM each with slightly different metal properties but all containing varying percentages of Zinc, Lead and Silver.
Has there been a review of social and economic	Yes. There has been a full assessment and management plan developed and reported in the EIS for

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Community Consultation Summary (2005)

impacts of the open pit project as part of the EIS process?	environmental, social, and economic and heritage impacts identified. .
Can water from the river rechannelling be available for other uses such as market garden style enterprises?	The rechannelling works will mimic the current river section and as such no further water or permanent pools will be created that would prove suitable for abstraction for other uses such as the ones suggested.
Why was open pit mining not used from the start of the McArthur River project?	At the time of the original development of the mine, the processing technology was not suitably developed to allow all the ore bodies to be processed. Development work carried out since 1995 has allowed this to become possible for the proposed open pit project.
What is being done to reduce the impacts of the river rechannelling?	<p>The mining industry has been rechannelling rivers for decades but the environmental science associated with it is a relatively new development. Xstrata has learned from the industry's past mistakes. The rechannelling will be undertaken as a detailed environmental project over a two year period to encourage revegetation, minimise the loss of biodiversity, and avoid any impact on downstream fishing activities. While all technical and environmental considerations for the rechannelling will be detailed within the EIS, the broad approach is to follow best practice techniques established in the diversion of river systems around the world. While no two rivers are alike, there are technical and environmental protocols which have proven successful and which we will follow.</p> <p>Criteria for the design of the rechannel have been based on the principles and recommendations taken from the Australian recognised ACARP (2002) paper "Monitoring and Evaluation Program for Bowen Basin Diversions".</p>
It was noted that Xstrata have a significant influence within the local community and that sponsorships and that local support would be missed if the mine was to be closed?	Noted with thanks.
Does the current local community apprenticeships program include adult apprentices?	At this stage the program does not focus on adult apprenticeships, however Xstrata would consider each application.
What will the mine do when the underground mining ceases and approvals are still being sought?	The mine will continue to process stockpiled ore and carry out test pit operations while awaiting approvals.
Is there an opportunity for Xstrata to sponsor a local project to assess the need and practical implications of restocking Barramundi in the McArthur River?	Yes. If proven that a restocking program would prove beneficial Xstrata would consider some form of sponsorship.
How deep will the open pit be and how will it be closed at the end of mine life?	<p>The open pit will be 210m deep at its largest. Key elements of the mine closure strategy will include:</p> <ul style="list-style-type: none"> • The river will continue to flow along the realigned river channel • The flood bund will be breached and the open cut allowed to fill with flood water • The processing plant and infrastructure facilities will be removed and the areas remediated and revegetated • The overburden emplacement facility and the tailings storage facility will be topsoiled and revegetated

Appendix E.2

Community Consultation Summary (2005)

	<ul style="list-style-type: none"> Rehabilitation will ensure that the final result is a stable, vegetated landscape which has minimal impact on the surrounding environment
What is the metal percentage in the ore mined?	47% Zinc and 9.5% Lead
Will there be more trucks on the road as a result of the move to open pit mining?	There will be no change to truck movements from the mine as the volumes of concentrate transported will be similar to the current operation. Xstrata have and will continue to lobby the Northern Territory Government to improve road links between the Mine site and Borroloola.

Appendix E.2

Community Consultation Summary (2005)

Borrooloola Community Leaders and Local Residents			
Date:	<i>2 August 2005</i>		
Venue:	<i>Borrooloola Hotel</i>		
Type Of Consultation:	<i>Presentation Of The Open Pit Project and Consultation Program</i>		
Present for Local Community:	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <i>Judy Cotton – Principal Borrooloola CEC Colinette Cotton – Hobart Tasmania Beverly Blackston – Health Centre Ian Douglas – Sport and Recreation Officer, Borrooloola Janet McSkimming - GMM Glen Hogg - GMM Lesley Garner - BCGC Jeff Colver - BCGC</i> </td> <td style="width: 50%; border: none; vertical-align: top;"> <i>Don Garner – NT Police Borrooloola Brooke Barnett – Teacher, Borrooloola CEC Rob Collins – Carpentaria Enterprises, Borrooloola Karina Hart – Borrooloola Resident Val Seib – Borrooloola Library Helen Collins - Carpentaria Enterprises, Borrooloola John Mason – Borrooloola Resident Stan Allen – Borrooloola Council</i> </td> </tr> </table>	<i>Judy Cotton – Principal Borrooloola CEC Colinette Cotton – Hobart Tasmania Beverly Blackston – Health Centre Ian Douglas – Sport and Recreation Officer, Borrooloola Janet McSkimming - GMM Glen Hogg - GMM Lesley Garner - BCGC Jeff Colver - BCGC</i>	<i>Don Garner – NT Police Borrooloola Brooke Barnett – Teacher, Borrooloola CEC Rob Collins – Carpentaria Enterprises, Borrooloola Karina Hart – Borrooloola Resident Val Seib – Borrooloola Library Helen Collins - Carpentaria Enterprises, Borrooloola John Mason – Borrooloola Resident Stan Allen – Borrooloola Council</i>
<i>Judy Cotton – Principal Borrooloola CEC Colinette Cotton – Hobart Tasmania Beverly Blackston – Health Centre Ian Douglas – Sport and Recreation Officer, Borrooloola Janet McSkimming - GMM Glen Hogg - GMM Lesley Garner - BCGC Jeff Colver - BCGC</i>	<i>Don Garner – NT Police Borrooloola Brooke Barnett – Teacher, Borrooloola CEC Rob Collins – Carpentaria Enterprises, Borrooloola Karina Hart – Borrooloola Resident Val Seib – Borrooloola Library Helen Collins - Carpentaria Enterprises, Borrooloola John Mason – Borrooloola Resident Stan Allen – Borrooloola Council</i>		
Xstrata Consultation Team:	<i>Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) –Open Pit Technical Manager Bill Bair – Community Relations Herman Radmueller – Community Relations Charles Johnston – Environmental Scientist Jane Munday – Communications Specialist</i>		
Issues Raised	MRM Response		
It was noted that the Aburri barge at Bing Bong port has been hitting the bottom of the dredged channel and may require dredging. Further it was noted that the local marine environment is important. What plans to Xstrata have for further dredging and environmental monitoring?	There will be no changes to the operation with regard to the port facilities or marine operations. There is a marine environmental monitoring program in place to monitor impacts on water and sediment quality. Current monitoring shows no impacts on the marine environment from operations. It is expected that the open pit project twill have no impact on the marine environment. With regard to dredging, the results of ongoing annual dredge maintenance program have not been as hoped, and plans are currently underway to secure a larger barge-based dredge to further clear the dredge channel.		
With the scholarships available at the mine, will the mine look at ways of strengthening the relationship and integration of local secondary education with mine operations?	Xstrata currently has a program to expose secondary school students to mine operations by arranging visits and short-term work placements within non-mining activities such as IT, environment and administration. Students and teachers also get an opportunity to discuss job opportunities with mine management. Finally there is a partnership program with the NT Department of Education to develop relationships between schools and the mine.		
It was noted that as part of the Xstrata community support programme for the Borrooloola region that a	Noted with thanks. Xstrata is dedicated to supporting the community through the community assistance		

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Community Consultation Summary (2005)

<p>grant for \$6000,000 has been forthcoming from Xstrata to construct a swimming pool in the township. This has considerable benefits for health and recreation and a vote of thanks was expressed to the Mine Manager Mr Brian Hearne.</p>	<p>program offered by the mine, of which this financial support for the swimming pool is part.</p>
<p>Are there any parts of the EIS that are considered weak?</p>	<p>Xstrata have assessed all the environmental impacts likely from the development and have designed the project to minimise those impacts. Where some impact is unavoidable management measures and environmental monitoring will be carried out to reduce those impacts to a minimum. Xstrata believe the mine will continue to have no impact on the local environment.</p>
<p>How many of the local community are employed at the mine site?</p>	<p>Approximately 10% of the current workforce of 350 is employed from the local community.</p>
<p>Will the current underground mining personnel be retained with the move to open pit?</p>	<p>Underground mining is a specialised activity. The underground miners have been offered a job within Xstrata's other underground mines due to industry wide skills shortages. Some of the mine personnel will be retrained and will be retained within the open-pit operation. Opportunities exist for all current mining personnel within Xstrata.</p>
<p>Will rain water enter the open pit?</p>	<p>An engineered flood protection bund will be constructed to keep flood waters out of the open pit. It will be approximately 12m high; this is high enough to prevent a 1 in 500 year flood event from entering the pit. Any small amounts of rain or groundwater entering the pit will be removed by a series of dumps.</p>
<p>At the end of mine life will the waste rock be put back into the void of the open pit and how deep is the pit?</p>	<p>No. Key elements of the mine closure strategy will include:</p> <ul style="list-style-type: none"> • The river will continue to flow along the realigned river channel • The flood bund will be breached and the open cut allowed to fill with flood water • The processing plant and infrastructure facilities will be removed and the areas remediated and revegetated • The overburden emplacement facility and the tailings storage facility will be topsoiled and revegetated. • Rehabilitation will ensure that the final result is a stable, vegetated landscape which has minimal impact on the surrounding environment.
<p>What is currently happening at the mine?</p>	<p>The mine is currently finishing off the underground operations and starting construction of the test pit. During the approval process the mine will continue to operate the test pit and process surface stockpiled ore reserves.</p>
<p>Will the project result in more trucks on the road and what is proposed in the way of new road infrastructure or upgrades if the condition of the roads deteriorates?</p>	<p>There will be no change to truck movements from the mine as the volumes of concentrate transported will be similar to the current operation. Xstrata have and will continue to lobby the Northern Territory Government to improve road links between the Mine site and Borroloola.</p>
<p>What impacts will the open pit have on the local water table?</p>	<p>A system of groundwater extraction bores will be built around the open pit to prevent groundwater flowing into the pit, which would interfere with mining activities. The extracted groundwater will be used as process water in the process plant. Extracting the groundwater will cause groundwater levels surrounding the pit to</p>

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	<p>drop. At the end of the mine's life, groundwater levels could have dropped by up to one metre in permeable aquifers up to 2.3 kilometres from the pit. Further assessment of ecological dependency of variations in groundwater levels is currently being conducted. Ecological monitoring will be conducted prior to, during and post construction. Even without mining, groundwater levels in the area fluctuate naturally by up to six metres between the wet and dry season. Once mining has stopped, groundwater will return to its pre-mining levels.</p>
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Appendix E.2

Community Consultation Summary (2005)

Northern Land Council	
Date:	<i>3 August 2005</i>
Venue:	<i>Holiday Inn Esplanade</i>
Type Of Consultation:	<i>Presentation Of The Open Pit Project and Consultation Program</i>
Present for Northern Land Council:	<i>Norman Fry – CEO Ron Levy – Legal Council Justine Yanner – Mining Manager Tracker Tilmouth – Central Land Council Barry Clark – Media Officer John Sheldon – Senior Policy Advisor</i>
Xstrata Consultation Team:	<i>Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) – Open Pit Technical Manager Bill Bair – Community Relations Herman Radmueller – Community Relations Jane Munday – Communications Specialist</i>
Issues Raised	MRM Response
What is proposed for the rechannelling of the river?	<p>McArthur River runs through the centre of the mining lease. About 5.5 kilometres of the river will be diverted around the proposed open pit, part of which is along an old watercourse. The realigned channel will be designed to mimic features of the existing river, such as water velocity, bank slopes, downstream sediment impact and fish passage.</p> <p>The rechannelling will be staged over two years to give vegetation time to re-establish and reduce the risk of erosion. The lower channel bank will be stabilised against erosion and the banks and berms will be revegetated. This will minimise the risk of erosion and will allow the riverine fauna corridor to re-establish.</p> <p>An extensive tree planting program involving locally grown saplings of endemic species will be undertaken along the river banks. This is designed to ensure the vegetation around the new water course will replicate the vegetation around the section of river to be diverted.</p> <p>While all technical and environmental considerations for the rechannelling will be detailed within the EIS, the broad approach is to follow best practice techniques established in the diversion of river systems around the world. While no two rivers are alike, there are technical and environmental protocols which have proven</p>

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	<p>successful and which we will follow.</p> <p>Criteria for the design of the rechannel have been based on the principles and recommendations taken from the Australian recognised ACARP (2002) paper "Monitoring and Evaluation Program for Bowen Basin Diversions".</p>
<p>NLC raised the importance of on-going consultation and asked to be involved in any further consultation with Traditional Owners.</p>	<p><i>Noted.</i></p>

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NT Environment Centre	
Date:	4 August 2005
Venue:	Holiday Inn Esplanade
Type Of Consultation:	<i>Presentation Of The Open Pit Project and Consultation Program</i>
Present for NT Environment Centre:	Gary Scott Peter Robinson
Xstrata Consultation Team:	Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) – Open Pit Technical Manager Bill Bair – Community Relations Herman Radmueller – Community Relations Charles Johnston – Environmental Scientist Jane Munday – Communications Specialist
Issues Raised	MRM Response
How does the current proposal differ from previous proposals?	The open cut development marks a considerable change from previous plans by MIM to expand the mine significantly, which entailed the construction of a zinc refinery and coal-fired power station on site and the damming of the Glyde River. The development of open pit mining within the existing mine lease will necessitate the rechanneling of the McArthur River but entails no additional infrastructure construction. The rechanneling will be undertaken as a detailed environmental project over a two year period to encourage revegetation and minimise the loss of biodiversity, and to avoid any impact on downstream fishing activities. Xstrata requested that the Environment Centre update their website to reflect the current open pit project proposal.
What fish surveys have been carried out in the area of the proposed re-channelling?	Extensive studies conducted in the area since 1992 for the previous and current Environmental Impact Studies have found no endangered flora on the mine site. Only one endangered fauna species occurs in habitats potentially affected by the project - the freshwater sawfish. This species has been recorded at five locations in the McArthur River in 1975 and in the river estuary in 2004. No significant impacts on this species are expected from the open cut project. The realigned river channel will be designed so there is no physical or hydraulic obstruction to fish passage. A variety of substrates and micro habitats will be provided along the channel to minimise impacts on fish.
How deep will the open pit be?	Upon completion, the pit will have a surface area of 83 ha and a depth of 210m.
Will the tailings dam be extended?	The tailings dam is being extended away from surprise creek to make it larger to control overflow/release. Works are also currently ongoing to seal the dam against seepages and strengthen the current structure to prevent overflow/release.
How has the proposed re- channelling been	McArthur River runs through the centre of the mining lease. About 5.5 kilometres of the river will be diverted

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designed?	<p>around the proposed open pit, part of which is along an old watercourse. The realigned channel will be designed to mimic features of the existing river, such as water velocity, bank slopes, downstream sediment impact and fish passage.</p> <p>The rechannelling will be staged over two years to give vegetation time to re-establish and reduce the risk of erosion. The lower channel bank will be stabilised against erosion and the banks and berms will be revegetated. This will minimise the risk of erosion and will allow the riverine fauna corridor to re-establish.</p> <p>An extensive tree planting program involving locally grown saplings of endemic species will be undertaken along the river banks. This is designed to ensure the vegetation around the new water course will replicate the vegetation around the section of river to be diverted.</p> <p>While all technical and environmental considerations for the rechannelling will be detailed within the EIS, the broad approach is to follow best practice techniques established in the diversion of river systems around the world. While no two rivers are alike, there are technical and environmental protocols which have proven successful and which we will follow.</p> <p>Criteria for the design of the rechannel have been based on the principles and recommendations taken from the Australian recognised ACARP (2002) paper "Monitoring and Evaluation Program for Bowen Basin Diversions".</p>
How high is the bund wall and is an engineered structure?	The flood protection bund has been designed to keep flood waters out of the open cut. It will be high enough to retain the 1 in 500 year flood and will have a central clay core to provide an impervious barrier to water. The outside wall will be lined with rock to provide protection against erosion and scouring of flood waters.
Have all ore bodies been fully tested as part of open pit feasibility study	Trials have been undertaken on all ores to prove feasibility of the project. The final stage testing will take place with a bulk sample from the test pit in 2005. This will allow Xstrata to finalise process plant design.
Why would Xstrata do an EIS if the test pit is not proven?	To be able to start construction in the Dry season 2006, EIS approvals will be required to run in parallel with the test pit activities.
What will happen at the mine during the approvals process?	The mine is currently finishing off the underground operations and starting construction of the test pit. During the approval process the mine will continue to operate the test pit and process surface stockpiled ore reserves.
How long will it take to develop the test pit and carry our processing?	The test pit and process test program will be complete by the end of 2005.
Where will the refinery using the Albion process be located?	Xstrata Zinc will continue to investigate developing MRM as a source of zinc feed for a future zinc refinery using the Group's Albion process technology, as this would significantly improve the profitability of MRM's mining operations. Given the power requirements associated with zinc refineries, the MRM site has been ruled out as a possible location for an Albion plant and we continue to assess other potential sites.
Will MAWA continue to operate the Aburri barge operations?	Yes. This relationship will continue with the change to open pit processing.
Will the open pit cause impacts to groundwater?	A system of groundwater extraction bores will be built around the open pit to prevent groundwater flowing into the pit, which would interfere with mining activities. The extracted groundwater will be used as process water in the process plant. Extracting the groundwater will cause groundwater levels surrounding the pit to drop. At the end of the mine's life, groundwater levels could have dropped by up to one metre in permeable

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	aquifers up to 2.3 kilometres from the pit. Further assessment of ecological dependency of variations in groundwater levels is currently being conducted. Ecological monitoring will be conducted prior to, during and post construction. Even without mining, groundwater levels in the area fluctuate naturally by up to six metres between the wet and dry season. Once mining has stopped, groundwater will return to its pre-mining levels.
Will there be acid drainage from the overburden facility?	Overburden produced will be stored in a 255 ha overburden emplacement facility (OEF). Characterisation of the overburden indicates that 11% of the total overburden is potentially acid forming (PAF). The OEF design encapsulates the PAF within layers of non-acid forming material. Any seepage from areas where PAF material is stored will be contained within the sites water management system and transferred to the tailings storage facility for recycling to the process plant.
Will further ore bodies be explored on the lease?	Xstrata's focus is in developing and processing the current ore body.
What is the \$ value of the current rehabilitation bond and will this increase with the open pit and the increase in rehabilitation activity?	The current rehabilitation bond is 12 million AUD and this is reassessed annually based on operations at the site.

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Amateur Fishermen Association Northern Territory	
Date:	4 August 2005
Venue:	
Type Of Consultation:	<i>Presentation Of The Open Pit Project and Consultation Program</i>
Present for NT Environment Centre:	<i>Geoff Bird – Vice President Colin Cordingley – Cordingley Trading Pty Ltd John Cooper – Treasurer Tony Hare – Secretary Mel Knolling – Office Manager Chris Makepeace – Executive Officer</i>
Xstrata Consultation Team:	<i>Brian Hearne (Xstrata) – Mine General Manager Peter Thompson (Xstrata) – Open Pit Project Manager Warren Crabb (Xstrata) – Open Pit Technical Manager Bill Bair – Community Relations Herman Radmueller – Community Relations Charles Johnston – Environmental Scientist Jane Munday – Communications Specialist</i>
Issues Raised	MRM Response
How will the McArthur River be rechannelled?	<p>McArthur River runs through the centre of the mining lease. About 5.5 kilometres of the river will be diverted around the proposed open pit, part of which is along an old watercourse. The realigned channel will be designed to mimic features of the existing river, such as water velocity, bank slopes, downstream sediment impact and fish passage.</p> <p>The rechanneling will be staged over two years to give vegetation time to re-establish and reduce the risk of erosion. The lower channel bank will be stabilised against erosion and the banks and berms will be revegetated. This will minimise the risk of erosion and will allow the riverine fauna corridor to re-establish.</p> <p>An extensive tree planting program involving locally grown saplings of endemic species will be undertaken along the river banks. This is designed to ensure the vegetation around the new water course will replicate the vegetation around the section of river to be diverted.</p> <p>While all technical and environmental considerations for the rechanneling will be detailed within the EIS, the broad approach is to follow best practice techniques established in the diversion of river systems around the world. While no two rivers are alike, there are technical and environmental protocols which have proven successful and which we will follow.</p>

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	Criteria for the design of the rechannel have been based on the principles and recommendations taken from the Australian recognised ACARP (2002) paper "Monitoring and Evaluation Program for Bowen Basin Diversions".
Where will the acid forming waste rock be stored	Overburden produced will be stored in a 255 ha overburden emplacement facility (OEF). Characterisation of the overburden indicates that 11% of the total overburden is potentially acid forming (PAF). The OEF design encapsulates the PAF within layers of non-acid forming material. Any seepage from areas where PAF material is stored will be contained within the sites water management system and transferred to the tailings storage facility for recycling to the process plant.
What if the current nature of flow of the McArthur River at the site and how far is it from the coast?	The river is actually an intermittently running or dry creek much of the year, with several permanent waterholes near the mine. During the Wet season, the river sometimes floods (three times in the past 10 years) and can be as wide as 15 kilometres. The mine site is located 120 km upstream of the river mouth.
How will the tailings dam be rehabilitated?	The tailings dam is being extended away from surprise creek to make it larger to control overflow/release. Works are also currently ongoing to seal the dam against seepages and strengthen the current structure to prevent overflow/release.
What is the current size of the environmental bond?	The current rehabilitation bond is 12 million AUD and this is reassessed annually based on operations at the site.
What is proposed for open pit closure?	Key elements of the mine closure strategy will include: <ul style="list-style-type: none"> • The river will continue to flow along the realigned river channel • The flood bund will be breached and the open cut allowed to fill with flood water • The processing plant and infrastructure facilities will be removed and the areas remediated and revegetated • The overburden emplacement facility and the tailings storage facility will be topsoiled and revegetated. Rehabilitation will ensure that the final result is a stable, vegetated landscape which has minimal impact on the surrounding environment.
Are there other examples of successful river re-channeling works?	The science associated with it is a relatively new development. We have learned from the industry's past mistakes. The rechanneling will be undertaken as a detailed environmental project over a two year period to encourage revegetation, minimise the loss of biodiversity, and avoid any impact on downstream fishing activities. While all technical and environmental considerations for the rechanneling will be detailed within the EIS, the broad approach is to follow best practice techniques established in the diversion of river systems around the world. While no two rivers are alike, there are technical and environmental protocols which have proven successful and which we will follow. Criteria for the design of the rechannel have been based on the principles and recommendations taken from the Australian recognised ACARP (2002) paper "Monitoring and Evaluation Program for Bowen Basin Diversions".

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What will be done with the current underground system of tunnels?	The underground workings are drilled from the surface and the voids packed with fill material.
Will there be a requirement to upgrade the port as part of the move to open pit?	There will be no changes to the operation with regard to the port facilities or marine operations.
AFANT requested that they would like to review the design of the proposed channel and take a role in ensuring construction was carried out to the proposed design.	Noted.