

Alligator Rivers Region Advisory Committee

Summary record – 6 December 2005 – Darwin

Meeting commenced: 9.37am

Item 1 – Welcome - Charles Webb

Item 2 – Attendance

Attendance – appointed members

Representative	Member Status	Organisation
Charles Webb	Chairperson	
Carolyn Lord	Secretariat	
Peter Burns	Member	ARPANSA
Ron Matthews	Member	CAMECO
Carolyn Barton	Deputy	DITR
Gary Scott	Deputy Member	ECNT
Chris Salisbury	Member	ERA
Alex Zapantis	Deputy	ERA
Shane Maraldo	Member	HANSON
Howard Smith	Deputy	NLC
Russell Robinson	Deputy	NT DHCS
Michael Lawton	Deputy	NT DNRETA
Keith Tayler	Deputy	NT DPIFM
Alan Hughes	Ex-officio	SSD

Attendance – non-members

Representative	Member Status	Organisation
Dave Sweeney	Observer	ACF
Leesa Carson	Observer	DITR
Gillian Jan	Observer (pending appointment as Deputy)	NT Office of the Administrator
Amanda Buckley	Observer	ERA
Ben Bravery	Observer	SSD
David Jones	Observer	SSD
Henne Hagemann	Observer	SSD
Ian Loftus	Observer	SSD
Peter Bayliss	Observer	SSD
Richard McAllister	Observer	SSD
Sally-Ann Atkins	Observer	SSD
Shelley Iles	Observer	SSD
Suzanne Davis-Hall	Observer	SSD

Apologies

Representative	Member Status	Organisation
Damien Ewington	Member	AFMECO
Richard O'Brien	Deputy	ARPANSA

Paul Melville	Deputy	CAMECO
Tania Constable	Member	DITR
Peter Robertson	Member	ECNT
Andy Ralph	Member	GAC
Geoff Kyle	Deputy	GAC
Leslie Cadzow	Deputy	HANSON
Sam Napia	Observer	JTC
Mark Foy	Member	NLC
John Carroll	Member	NT Office of the Administrator
Xavier Schobben	Member	NT DHCS
Lyn Allen	Member	NT DNRETA
Richard Jackson	Member	NT DPIFM
Peter Cochrane	Member	Parks Australia
Glenn Meade	Deputy	Parks Australia

Amendment to agenda

Charles Webb moved to reschedule ‘Agenda Item 10.3 – Nabarlek environmental audit’ to follow ‘Agenda Item 9.1 – Nabarlek’. No objections raised by committee members.

Item 3 – Minutes of previous meeting – Meeting 23 – August 2005

The following amendments were requested, discussed and accepted by members in attendance.

Amendment 1 – requested by Gary Scott.

Page 16 – regarding discussion on the Cultural Health Index.

Gary advised that following sentence was incorrectly recorded and requested deletion. ‘He advised this covered how this affected beliefs regarding land and water use. It deals with potential cultural impacts and how descendants interact with it.’

It was agreed to amend the minutes to:

Gary Scott highlighted the existence of the Cultural Health Index and referred to one developed in New Zealand.

Amendment 2 – requested by Gary Scott on behalf of Andy Ralph

It was agreed that on page 15 the following paragraph be amended from ‘Andy Ralph advised that he was not consulted about the framework and he emailed a media release the previous Friday advising that GAC would be offering assistance for the TOs to be involved.

Tania Constable welcomed the involvement of the Traditional Owners on the working groups input.

Action: Andy Ralph asked Tania Constable to email him the information.’

And should be changed to

‘Tania Constable stated she would welcome the involvement of the Traditional Owners on the working groups input.

Action: Tania Constable was to forward information on the process for Mirrar’s consideration

Amendment 3 – requested by Carolyn Barton

Page 7 – last paragraph is revised to include the word ‘no’ prior to ‘changes to the current agreement.’ The amended item now to read:

John Carroll advised there were no new arrangements. He also advised that there have been discussions on how things may operate in the future but there are no changes to the current agreement.

Item 4 – Business arising from previous minutes

Nil raised

Item 5 – Supervising Scientist six monthly report

Alan Hughes informed attendees that Supervising Scientist recruitment was still underway and should be finalised soon.

Richard McAllister presented the SSD report to ARRAC

Points to be noted:

- Period reported August to December in comparison to DPIFM reporting period of March to September.
- Wet season data was reported in last report so not reported on in this report.

Topics covered

- Ranger Mine
 - Developments
 - Water Treatment Plant
 - Ranger Minesite Technical Committee
 - Applications
 - Water quality monitoring
 - Radiological monitoring
 - Reportable Events
 - ADU incident
 - Tailings line failure
 - Update on 2004 potable water incident
- Jabiluka
 - Decommissioning of Djarr Djarr Camp
 - Jabiluka Minesite Technical Committee
 - Monitoring data
 - Applications
- Nabarlek
 - Mining Management Plan
 - Nabarlek mine fire
- Koongarra
 - Approach by Koongarra Pty Ltd to NLC to initiate discussion for exploration licence
- Exploration – Myra Camp & King River
- South Alligator valley

Discussion

Ranger

Water Treatment Plant indicator levels – raised by Gary Scott

Discussion was held on why EC levels were set at different levels for treated process water permeate (200) and treated or partially treated pond water permeate (400). ARRAC was advised that for treatment of process water, EC was a guide to plant performance due to the level of ammonium sulfate present in process water. For Pond water treatment ammonium sulfate is not an issue and therefore the level has been set at that of what the receiving water bodies are known to be able to receive and still meet water quality criteria in Magela Creek.

Mining Management Plan (MMP) – raised by Gary Scott

Discussion was held on the current draft MMP and further development of an MMP for Ranger mine. ARRAC was advised that ERA has a very prescriptive authorisation and there is no requirement for ERA to have a MMP, although an undertaking had been given that a MMP would be developed. The current authorisation format has been effective in the past and still operating effectively. The reference to the MMP in the authorisation was raised and ARRAC was advised that as operating conditions change, the authorisation needs to be periodically updated and the Ranger MTC were hoping to address this next year.

A copy of the Ranger authorisation is located on the ARRAC members website as an appendix to a previous Supervising Scientist's ARRAC report and was included in the meeting papers at that time.

Ranger water quality monitoring data – raised by Charles Webb

The lack of chemistry and biological monitoring results in the SSD report for December was raised. ARRAC was informed that all the relevant data had been presented at the previous meeting and there were no additional data available since the previous meeting in August.

Ranger reportable events – raised by Gary Scott

Radiation Clearance

An update was requested on the following – refers to page 35 – SSD Annual Report. *'Following completion of AS4801 certification audit and the new ARPANSA audit, the Supervising Scientist will provide further advice to the Minister for Industry, Tourism and Resources on the status of ERA's implementation of all the Ministers conditions and recommendations of the Supervising Scientist related to the potable water contamination incident and the radiation clearance incident'*

ARRAC was informed that the Minister had been advised in September after the AS4801 certification had been received by ERA.

Clarification was sought on the alteration of conditions at the front gate of Ranger and whether the reason for alteration was that there was a shortage of radiation personnel in Australia. ARRAC was advised that the change was made because a radiation detector set at the gate would not detect alpha or beta radiation, only gamma rays. This would not detect all forms of potential contamination and was therefore not an appropriate clearance procedure and the Minister's condition had been changed to reflect this.

Further information on the recommendation for radiation clearance audits was requested. ARRAC was informed that ARPANSA completed a detailed audit in July. Regular audits will be included periodically, with the most recent conducted in September. Outcomes of all audits undertaken have shown the revised radiation clearance system to be satisfactory.

The requirement to have a second permanent radiation Safety Officer by 31 Dec had also been met and ERA currently has employed four radiation health physicists, one of whom has a PhD.

Tailings line failure – 11 November – raised by Gary Scott

Information on the cause of the tailings line failure was requested. ARRAC was advised the matter was still being investigated and a report would be provided to SSD and the NT Govt when the investigation is finalised.

Expansion of milling & closure – raised by Gary Scott

A query was made as to the involvement of SSD in studies on rehabilitation and closure of the mine. ARRAC was advised that NT Govt, NLC and SSD were all currently involved in discussions on this and a major consideration will involve the future deposition of tailings in Pit 3. ARRAC was advised that the amount of tailings yet to be produced from Pit 3 ore would be significantly less than the volume of existing tailings, although approval for deposition of tailings in Pit 3 will be necessary for milling operations to continue beyond 2008.

Polonium 210 in mussels - raised by Peter Burns

A query on whether polonium- 210 was measured in mussels was raised. ARRAC was advised that it is measured at the same time as lead-210 and the lead-210 and Ra-226 levels are of greater significance in modelling dietary dose rates.

Jabiluka

Nil questions

Nabarlek

Fire at Nabarlek - raised by Howard Smith

Howard Smith advised ARRAC that he had visited the Nabarlek site after the fire and the area showed extensive damage. A further 10 days after, a minimum of 50% of trees were showing new foliage. He commented that this recovery indicates that the area appears to be developing some resilience to fire.

Radiological Anomalous Area (RAA) – raised by Gary Scott

Further information was requested on the RAA. ARRAC was informed that plans for burial of contaminated material from the RAA will be discussed at next Nabarlek MTC. Alan Hughes advised that some discussions had taken place on the best methodology for treating the RAA site and a suitable methodology should be detailed in the MMP. There are a number of excavation and burial options that could fit with other rehab work being undertaken.

Hanson and NLC have put forward a closure criteria objectives paper to be reviewed by SSD and the NT regulator. It is anticipated that the MMP will address comments made on the paper.

Koongarra

Importation of high level waste into Australia – raised by Gary Scott

Gary Scott commented that Areva had been reported in the media as supporting the possible import of high level waste into Australia. No further discussions ensued.

General

Discussion was held on the timing of data being available for reporting to ARRAC. ARRAC was reminded that SSD water chemistry monitoring data is uploaded onto the SSD website within a week (usually) of being available. The availability of data initiated discussion on the timing of meetings. Peter Burns suggested March would be a more suitable time to have the meeting.

The following comments were noted.

- Incomplete reports in March available, will only provide an interim report with little opportunity for interpretation as water will still be flowing.(AH)
- If report in March then any interim report will cover only half of wet season.(DJ)
- Preference to having a full report in August and nothing in December. (PB)

- Favour six monthly meeting. (GS)
- From Environmental Groups perspective, the water quality data is important but not the whole forum, some stakeholders see ARRAC as an opportunity to discuss broader issues.(GS)
- The reporting period for NT Govt is from end of March – Sept- only the tail end of wet season data is included in the report. May be worth changing the reporting periods of the NT data to better conform with the seasons. (KT)
- Suggested to get the two reporting frameworks together to pool data and interpretation.(ML)
- Purpose of NT report is to check with ERA data – will ERA have data available? (KT)
- ERA has data available in March however some of it won't be verified and interpretation of the data will not be complete. (AZ)
- Understand caveats on data at first meeting, the purpose is just to provide a sense of what is happening in wet season (CW)
- Would support earlier in year than December.(CB)
- Happy with 6 months starting March. (SM)

Chair asked all members if there was any objection to changing the timing of the meetings. No objections were recorded.

Action: Meetings will be held in late March in Darwin and August in Jabiru, 2006

Item 6 – Department of Primary Industry, Fisheries and Mines report

Keith Tayler presented the DPIFM 6 monthly report, noting that the current DPIFM reporting period is 1 April to 30 September.

Topics covered:

- Ranger
 - Incidents and accidents
 - Alterations to Authorisations
 - Prosecutions
 - Approvals and Major Projects
 - Monitoring results
- Jabiluka
 - Monitoring results
- Nabarlek
 - Monitoring results
 - Revegetation

Discussion

Reference to slide 23 – Ranger Pond and Process Water Inventory

Alex Zapantis advised he had not seen the figure reported against Pit 1 of 16288 ML for the date of 09/05. Keith Tayler advised that it had been recorded there was a change of methodology used in the calculation of the volume of water. David Jones commented that such a large number must have included the inferred volume of pore water contained within the tailings. The rationale for this method of calculation would be to provide an upper conservative estimate of the total volume of water that may need to be treated by the water treatment plant, allowing for the water to be expressed via consolidation of the tailings following capping.

Action: Chris Salisbury will confirm the figure and notify Keith Tayler of the outcome..

Water quality – RP2 – raised by Gary Scott

A discussion was held on why RP2 water quality had been degrading. ARRAC was informed this was due to:

- Need for interim storage in Pit 3 each year resulting in increased exposure to higher grade ore and increased solute concentrations and loads.
- An increase in use of Pit3/RP2 as a storage facility over the past year as Djakmarra BB has been consumed by Pit 3.
- Improved seepage capture from stockpiles.
- Water treatment had been more difficult, hence development of WTP.
- Pit 3 will not be available for water storage during wet season when mining operations are proceeding at the base of the pit.

Effluent ecotox testing – raised by Gary Scott

Gary queried whether the whole of effluent ecotox testing had been undertaken on water from the water treatment plant. ARRAC was advised that testing would commence once effluent from treated pond water is produced and provided to the Supervising Scientist.

Jabiluka interim water management pond – raised by Michael Lawton

A query was raised as to the existence of gauge boards in the Jabiluka holding pond. ARRAC was informed that there are gauge boards, the pond is double lined, with seepage detectors and there had not been any seepage. Evaporation usually exceeds rainfall and there was therefore more of an effort to retain water in the pond. Further discussion was held on why the pond had remained. ARRAC was informed that it was a piece of infrastructure that the operator presently wishes to retain. The DPIFM had no concerns with the pond remaining on the site as it was a mining lease area.

Nabarlek – Figure 2.3 DPIFM report- Bore OB47D – raised by Gary Scott

A query was made regarding the increase in nitrate concentration in the bore and what could be causing it. ARRAC was informed that OB47D is a deep aquifer bore (RN23906 bore on Map- Figure 2.1) at the downstream edge of the forest irrigation area that had been irrigated with Nabarlek process water. This water had high levels of ammonium that oxidised to form nitrate, causing depressed pH levels and elevated nitrates. The trend is a decrease in nitrate concentration.

It was acknowledged by Gary Scott that the level was not dangerous, but had queried the issue as it had not been clear in the DFIFM report.

DPIFM report format – raised by Gary Scott

It was noted that the DPIFM report contained long contextual information and history of the mining areas and that the detail may not be necessary. It was also noted that there appeared to be gaps in information regarding Jabiluka history and an inclusion of a reference to GAC's opposition and the reasons for the mining not proceeding could be included. It was acknowledged by Keith Tayler that it may not be necessary to include the history of the mines into the report as the basis of the report was to provide a 6 month activity report.

Senate Inquiry – raised by Gary Scott

A query was raised on the implementation of the recommendations of the David Lea review and Senate Inquiry report on regulation of uranium mining, noting it was now 26 months since the inquiry was finalised. Keith Tayler informed ARRAC that the NT Govt had been working toward implementation of the Lea report recommendations. The working arrangements have been revised and signed off and the enforcement policy was currently being worked on.

ARRAC was informed that the Senate Inquiry report was currently with the Commonwealth DEH. Although Alan Hughes was unable to comment on the status of the Commonwealth response to the report he noted that some recommendations such as the continuous monitoring at Magela were being implemented.

Rationalisation of water monitoring program – raised by Gary Scott

Reference was made to section 3.5 of the DPIFM report and a request for further information regarding ERA's monitoring program being supplemented by DPIFM's check monitoring program, which was rationalised and presented to ARRTC. ARRAC was informed that the NT Govt had approached SSD to co-ordinate monitoring activities and to arrange alternation of sampling between DPIFM and SSD at Jabiluka. SSD is currently maintaining monitoring stations in Narradj and recording data from the gauges.

Proclamation of the Koongarra Project Area Act, 1981 – raised by Gary Scott

Refers to page 62 DPIFM report – A query on the legal implications of proclamation of the act given that KNP is listed as a world heritage area was raised. Alan Hughes determined that no comments could be made on the legalities as he was not qualified to comment.

Refers to page 63 DPIFM report. A discussion was held on the wording of the paragraph on the moratorium and NLC's role as representatives for the TOs signing. It was determined that the wording was technically correct as is.

Approval of ERA's scientific and technical work – raised by Gary Scott

Refers to KKNs and SSD report – 3rd paragraph Page 18 SSD report. Gary Scott asked if the process could be elaborated on. David Jones advised that SSD and ERA work on different budget and planning cycles. With proposals for funding, SSD works on financial year and ERA works on a calendar year. The two organisations' planning processes are therefore out of phase. ARRTC has acknowledged this issue.

Item 7 – Issues raised by environmental NGO's

Gary Scott tabled the *Nuclear Power- no solution to Climate Change* report released by Environment Groups and Public Health Association. The report examines nuclear power and aspects of it, and is available on the ACF and Friends of Earth website.

Item 8 – ERA developments

Chris Salisbury provided an overview of ERA's operations for the past 4 months.

Topics covered:

- Organisations and changes to staffing
- Health & Safety statistics
- AS4801
- ISO 14001
- Water Treatment Plant
- Pit 1 seepage barrier construction
- Closure model
- Recovery from 2004 incidents
- Production
- Life of mine update

Discussion

Staffing query – raised by Howard Smith

A query was made as to where Jeffrey Davidson works within ERA was made. Chris Salisbury advised he worked for Dave Patterson.

Magela Land Application Area (MLAA) – raised by Howard Smith

A query was made regarding the possibility of an extension of the mine life beyond 2008 based on exploration activities on the MLAA. Chris Salisbury informed ARRAC that it is possible but unknown until the results are available, analysed and released to ASX. The implications would need to be assessed before any decision could be made.

Howard also queried whether there was scope to ramp up production and get processing completed prior to 2008 if only a small deposit was located. Chris advised that the fleet was running flat out at the moment and this would have to be considered.

Availability of ERA PP presentation to members – raised by Gary Scott

Chris Salisbury advised that the PP presentation is available although he was concerned that the slide on exploration could be taken out of context if released in its current form without explanation. Chris offered to discuss the content of his presentation further.

Presentation by Alex Zapantis

Topics covered:

- Water treatment plant construction and future operation program.
- Pit 1 Barrier (grouting process)
- RP1 Wetland Filter – consultants reports and recommendations
- Weed Management Workshop – October
- Tailings line failure – 11 November
- Revegetation of the Jabiluka site
- Dust in fine crushing
- Rehabilitation activities – Ranger, Jabiluka, Djarr Djarr

Discussion

Monitoring bores – raised by Gary Scott

Referred to SSD report (section 1.1.3 – Seepage barrier in Pit # 1). Gary queried whether the Primary Monitoring Bores were in place yet. Alex Zapantis informed ARRAC that the bottom section of some of the primary bores had been plugged up by grout that had been pressure injected into the fractured rock beneath the barrier. The presence of the grout means that the lower section of the affected primary bores is no longer able to provide a reliable measure of water quality. Gary queried whether this would affect monitoring seepage from the system. Alex further informed ARRAC that the Primary and Secondary Bores had different roles. The Primary Bores are located immediately behind the barrier and their role is to determine if any solutes have leaked laterally through the barrier material itself. The role of the secondary bores is to monitor the overall performance of the containment – integrating seepage through and under the barrier. Hence adequate monitoring is in place.

Item 9 – Hanson developments

Shane Maraldo reported to ARRAC that the ongoing maintenance program had continued and that an audit had been conducted in November. It was noted that the reported fire had been addressed previously in the meeting.

Shane informed ARRAC that activities for 2006 would depend on the final Mining Management Plan.

Item 10 – OSS audits and reviews.

Suzanne Davis-Hall provided a summary of the outcomes of audits and inspections conducted during the reporting period at

- Ranger

- Jabiluka
- Nabarlek
- South Alligator valley
- King River & Myra Camp

Discussion

King River Camp category 2 non-conformance – raised by Gary Scott

A query was raised regarding the changing of the drilling program by Cameco at King River Camp. Keith Tayler advised that a category 2 non-conformance was recorded because Cameco had submitted a report for exploration and advised they were drilling a specific numbers of holes. They did not notify DPIFM that additional drilling would take place.

Item 12 – Cameco

Ron Matthews advised he had nothing additional to report to ARRAC and he was not clear on the events associated with the drilling program. Richard McAllister informed ARRAC that Cameco had increased the RAB program from 80 to 160 holes.

Discussion

Exploration activities at Myra Falls Camp and King River Camp – raised by Gary Scott

A query was raised regarding Cameco exploration activities on all the exploration licences in Arnhemland. Ron advised ARRAC that Cameco had been conducting a small program late in the season for two weeks out of Katherine. All sites had been accessed by helicopter and no camp had been erected. All other work conducted was in north-west Arnhemland from the two camp sites at King River and Myra Falls.

Item 13 1 – ARPANSA

Peter Burns – nil reported

Item 13.2 – DITR

Carolyn Barton presented on the Uranium Industry Framework (UIF).

Topics presented:

- Objectives
- 3 year plan
- Processes for development
- Steering group
- Reference Group
- Update on progress to date
- Meeting schedules
- Working Groups
- Possible outcomes
- House of representatives inquiry
- Opportunities
- National principles for all to work under to improve transparency
- Radiation health working – establishment of courses

Discussion

Indigenous representation – raised by Dave Sweeney

The recent death of the indigenous representative that had occurred in the UIF Steering Group was raised. Carolyn Barton informed ARRAC that the replacement of the indigenous representative on the steering group had been discussed at the meeting in Adelaide and a new representative was to be approached.

Nuclear power and the UIF raised by Dave Sweeney

A query was made as to why the UIF inquiry held in Darwin on the Friday 2nd December discussed fusion issues if Nuclear Power was not part of the scope of the UIF review. Carolyn Barton advised that the issue was raised during the inquiry, and committee members wanted to find out more about it.

Dave Sweeney commented that there was no active NGO in the UIF, which reflected a unified position from NGOs that nuclear power is not considered to be a sustainable way forward. Gary Scott stated he had checked out the UIF website and it appeared that a blatant goal of the uranium unit within DITR was to expand uranium mining in Australia.

Item 13.3 – Northern Land Council

Howard Smith provided an overview of his consultation with Traditional Owners on the final landform for Ranger Uranium mine. He advised that TO s had requested that ERA staff not be present at the consultation session, although representatives from various stakeholder groups including EWLS, DPIFM and SSD were present.

Keith Tayler commented that calculation of the Ranger radiation dose prior to mining doses would need to be taken into consideration as part of the process.

ARRAC was informed that Hanson offered to remove infrastructure on the mine site only, not at the Nabarlek campsite, even though it belongs to NLC

Item 13.4 – Parks Australia North

No representation from PAN – nil reported.

Item 13.5 – Department of Health and Community Services

Russell Robinson informed ARRAC that the new Radiation Act was to come into force in January 2006. The first draft of the regulations were due this month. The commencement of the regulations has been pushed back to later in 2006 and there is currently a consultation period where members can comment, although they need to register.

Discussion

Radiation Act – raised by Keith Tayler

A query was raised as to whether the new Act would affect uranium mining. ARRAC was advised that that the Act excludes uranium mining.

Action: Russell Robinson to forward a copy of the Act to Keith Tayler

Item 13.6 Department of Natural Resources, Environment and the Arts

Michael Lawton – nil reported

Item 14 – Other business

Nil raised

Item 15 – Next meeting:

March 2006

Meeting finished: 2.20pm