

Alligator Rivers Region Advisory Committee

Summary record

Tuesday 4 April 2006 – Darwin

Meeting commenced: 9.42am

Item 1 – Welcome – Charles Webb

Charles Webb welcomed all committee member and attendees. He congratulated Alan Hughes on his new appointment as Supervising Scientist.

Items 2 – Apologies and observers

Chair	Charles Webb
Secretariat	Carolyn Lord
Members	
Peter Burns	Australian Radiation Protection and Nuclear Safety Agency
Ron Matthews	Cameco
Peter Robertson	Environment Centre Northern Territory
Shane Maraldo	Hanson
Alan Hughes	Supervising Scientist Division
Deputy Members	
Carolyn Barton	Department of Industry, Tourism and Resources
Alex Zapantis	ERA
Geoff Kyle	Gundjeihmi Aboriginal Corporation
Howard Smith	Northern Land Council
Michael Lawton	Department of Natural Resources, Environment and the Arts
Observers	
Leesa Carson	Department of Industry, Tourism and Resources
Emma King	Environment Centre Northern Territory
Linda Pew	Energy Resources of Australia Ltd
Phillipa Varris	Energy Resources of Australia Ltd
Julian Barry (for presentation of 13.4 only)	Parks Australia North
Claudia Sauerland	Supervising Scientist Division
David Jones	Supervising Scientist Division
Ian Loftus	Supervising Scientist Division
Michelle Iles	Supervising Scientist Division
Peter Bayliss	Supervising Scientist Division
Richard McAllister	Supervising Scientist Division
Suzanne Davis-Hall	Supervising Scientist Division

Apologies

Tania Constable	Department of Industry, Tourism and Resources
Chris Salisbury	Energy Resources of Australia Ltd
Xavier Schlobben	NT Department of Health and Community Services
John Carroll	NT Office of the Administrator

Request for reschedule of Item 13.4 raised by Charles Webb on behalf of Julian Barry

The committee was asked if Item 13.4 could be rescheduled to 11.00am.

No objections were recorded.

Housekeeping issues – raised by Alan Hughes

Attendees were informed of evacuation procedures and of the requirement to sign the visitors book.

Item 3 – Minutes of previous meeting – 24th meeting – December 2005

Amendment requested by Shane Maraldo – Item 13.3

Shane Maraldo requested that the last sentence of Item 13.3 be changed from ‘ARRAC was also informed that Hanson offered to remove all infrastructure on site at Nabarlek even though it belongs to NLC’ to ‘ARRAC was informed that Hanson offered to remove infrastructure on the mine site only, not at the Narbarlek campsite, even though it belongs to NLC.’

The amendment was accepted by members

Amendment requested by Carolyn Barton – Item 13.2

Carolyn Barton requested that the words UIF (Uranium Industry Framework) be replaced with the words House of Representatives Standing Committee inquiry into developing non-fossil fuel energy industry.

The amendment was accepted by members.

Secretariat note: Investigation after meeting revealed that no House of Representative Standing Committee inquiry into the developing non-fossil fuel energy industry was held in Darwin in December 2005.

Amendment requested by Howard Smith – Item 5 (Page 3) – Koongarra

Howard Smith requested that the sentence under dot point Koongarra be amended from ‘Approach by Koongarra Pty Ltd to NLC to initiate discussion for exploration licence’ to ‘Approach by AREVA to NLC to initiate discussion for exploration licence’.

The amendment was accepted by members

Secretariat note: Investigation after the meeting confirmed that Koongarra Pty Ltd is the correct registered company.

Query on possible missing content raised by Peter Robertson – Item 5 (page 4)

Peter Robertson asked what Gary Scott had said under the heading ‘Ranger reportable events-raised by Gary Scott’. Alan Hughes advised that this was likely to be with regards to the following heading ‘Radiation Clearance’.

Carolyn Lord agreed to refer to her notes taken at the previous meeting and advise Peter whether there had been and error made.

Secretariat note: Notes were checked and Peter Robertson was approached directly to confirm that minutes were correct, it was just a misunderstanding due to formatting of the text in the minutes.

Item 4 – Business arising from previous minutes

Outstanding actions

1. Meetings will be held in late March in Darwin and August in Jabiru.

Action: Meeting scheduled for August 2006 was confirmed

2. Chris Salisbury will confirm the figure and notify Keith Tayler of the outcome (DPIFM report – slide 23 – regarding figure against Pit#1 16288ML for date of 09/05)

Action: Keith Tayler confirmed this action was finalised.

3. Russell Robinson was to forward a copy of the new Radiation Act to Keith Tayler.

Action: Russell Robinson confirmed this action was finalised

Item 5 – Supervising Scientist report – Richard McAllister

Richard McAllister presented the Report of the Supervising scientist to Alligator Rivers Region Advisory Committee – April 2006 to ARRAC, (Powerpoint presentation available).

Points noted: Reporting period is from December 2005 to March 2006.

Topics covered:

Ranger

- Supervisory activities
 - Routine Period Inspections held in December 2005, January, February and March 2006.
 - Minesite Technical Committee meetings held on 20 January and 27 March 2006
 - Audits – next audit due in May 2006.
- Water Treatment Plant – overview on the Ecotox testing undertaken by SSD.
- Incidents
 - Accidental irrigation of MLAA – January 2006
 - Potential ingestion of product dust

Discussion

Explanation on graphs presented in PP presentation on Magela Land Application Area (MLAA) – raised by Charles Webb

ARRAC was advised

The red dotted line represents the time the incident occurred. The green line is the hydrograph at the discharge stations centre of the Land Application Area (LAA). The blue line of the graph is electrical conductivity (EC). The red line indicates a discharge at 009 and a 4 hour time lag. At 12am on the 22nd was the peak of the EC spike. The cause of the spike was yet to be determined and could possibly be from Coonjimba Billabong, but the datasets were not

available on that area. David Jones advised that the delay was from wash off and the peak was already well formed before the release from the incident would get there. ARRAC was advised that additional sampling was undertaken on the 23 January and no uranium shown in the results. Further discussions were held on the flow rates, run temperatures and transit times that could affect the peaks. Alan Hughes advised that SSD were undertaking trials to assist with determining whether there is a relationship with peaks and the retention pond for Coonjimba Billabong.

Jabiluka

Supervisory Activities

- Routine Periodic Inspections – one only during wet season
- Minesite Technical Committee meetings held on 20 January and 27 March 2006.
- Audits – next audit due 6 May 2006.

Nabarlek

Minesite Technical Committees meetings held 5 December 2005 and 3 April 2006

Koongarra

Nil activity reported

South Alligator valley

Nil activity reported

Exploration

No activity due to wet season.

Item 5 continued – SSD monitoring activities – Michelle Iles

Michelle Iles presented the monitoring results from SSD routine monitoring activities (Powerpoint presentation available) including;

- Water chemistry sampling
- Creekside monitoring
- Radon monitoring
- Fish community studies (nil activities included in this report)
- Bio-accumulation (nil activities over this reporting period)

Areas covered included

Ranger water surface water quality

- Magela Creek water quality

Graphs of SSD and ERA U data for 2005–06 wet season to date and SSD uranium data since 2000 explained. Reference made to MLAA incident and lack of impact on downstream water quality. ARRAC was advised that the water quality in Magela Creek downstream of the mine has improved in recent years, particularly with respect to sulfate, magnesium, EC and uranium.

- Gulungul Creek uranium

Graphs of SSD and ERA U data for 2005–06 wet season to date and SSD uranium data since 2001 explained. ARRAC was advised that ERA were on site sampling within a few hours on the first day of flow and recorded higher than usual (compared to the rest of the season) uranium concentrations at both the upstream and downstream sites. Michelle Iles advised that some of the results had been queried, particularly the higher point in January, although the spike was not as high as it had been in past years. The ecotox focus trigger applied in Magela is 0.3 µg/L for focus and 0.9 µg/L for action and the January spike measured by SSD was 0.4 µg/L. ERA measured uranium less than 0.3 µg/L that week. Michelle reported that there is a current study being done by a student on uranium and sulfate in Gulungul Creek that will provide data to help understand the source and mechanisms of uranium transport in Gulungul Creek

- Creekside monitoring

Graph on snail eggs and fish survival and was explained in detail. Black dots on graph indicate mean number of eggs downstream and the white dots show the upstream numbers. The last entry was invalid due to pump failure. Results indicated that the western channel replica had a lower survival rate than the eastern channel. Extra chemistry is being undertaken and a full report will be provided at the next ARRAC meeting.

Jabiluka surface water

- Ngarradj uranium

The Ngarradj uranium graph was explained. Results shown in brown indicate downstream, and those in blue indicate upstream. ARRAC was advised that focus levels had not been exceeded this year and the action levels had never been exceeded.

Radiation monitoring

ARRAC was advised of the radiation monitoring, including airborne pathways and public exposure rates for the Jabiru , Jabiru East and 4 Gates Road Station near Mudginberri sites. More detailed explanation of the exposure rates and findings are outlined in the Report of the Supervising Scientist to Alligator Rivers Region Advisory Committee, April 2006.

Research and Development of new monitoring techniques

Surface water quality research and development has been undertaken through various methods including.

- Continuous data sondes
- Biological early warning methods
- Bioaccumulation studies

Discussion

Radiation doses to public – raised by Peter Burns

Peter Burns asked whether the radiation doses to public had been calculated assuming outdoor exposure was for the total year. Michelle Iles indicated she was unsure and would have to check with Andreas Bollhoefer.

Creekside monitoring fish survival rates – raised by Michael Lawton

Michael Lawton queried the fish survival rates shown from the creekside monitoring testing.

David Jones informed ARRAC that the insitu deployment had tested using snails, and that the next season with Ranger Uranium mine the wet season tests will be for both the snails and the fish.

Pre-mining data – raised by Peter Robertson

Peter Robertson queried whether there was any available data pre-mining. Michelle Iles advised that NT Govt had some data but the levels of detection for uranium were a magnitude higher than now and most of the historic uranium data is either below detection limit or represents contaminated samples.

Jabiluka baseline data – raised by Peter Robertson

Peter Robertson asked how good the baseline data was for Jabiluka. Michelle Iles advised that the detection level for uranium for much of the baseline data was 0.005µg/L which is about four times higher than the current detection level and that the dataset is affected by uranium contamination of many samples.

Data monitoring & insitu toxicity testing – raised by Howard Smith

Howard Smith queried how long it would be before the data would be accepted. Michelle Iles advised that she was unable to comment on the ecotox testing. She advised that it would take about two years to validate the data and commented that SSD was hoping to have the teething problems worked out by the next wet season. David Jones commented that SSD needed to work through the use of data sondes to see how it affected results.

Cultural concerns – raised by Peter Robertson

Peter Robertson raised the issue of concern to TOs with levels of spikes that appear, even though they may not be of concern to SSD. Michelle Iles advise that the narrative water quality objectives of maintaining the improved water quality of the past few years was aimed at addressing TOs concerns about changes in the water quality while the numeric trigger values allowed changes to be scientifically interpreted. Geoff Kyle raised that TOs had identified that they wanted no change, but commented this was not possible. Alex Zapantis agreed that no change was unrealistic and commented that if no change had been detected, ERA would need to correct their monitoring program and that they had put a lot of effort into keeping levels of chemical changes low.

Peter Robertson asked whether it was possible to include a trigger that indicated a level that was of concern to TOs. Howard Smith commented that it is difficult to convert to a number that people will visually feel happy about and that NLC was working with GAC on adopting a system for monitoring stream health similar to the Maori Cultural Health Index system. Geoff Kyle raised that the TOs had seen visual differences in the turbidity this year and even though SSD followed up these concerns when asked about the turbidity there was no official feedback system to identify if these changes were due to natural turbidity. He concluded that further work was needed to make this clear.

Michelle Iles advised that there was a presentation being held tomorrow on the subject of setting water quality objectives and invited Peter Robertson to attend.

Permeate testing – slide 1 – raised by Charles Webb

ARRAC was advised that the permeate produced for pond water treatment had been tested for toxicity and there was no observable affect on green algae but there was an effect on the fleas. Charles asked what the affect was. Michelle Iles advised that it was a chronic test and she was unsure what the end point of the test was. David Jones commented that it would

depend on the number of broods tested. The affect of the test was small and got higher as the solution was more concentrated. The affect was considered only mildly toxic as some animals were affected by pure.

Incidents – raised by Peter Robertson

Peter Robertson raised concern that there appeared to be three more incidents that had occurred on site at ERA that had not been reported through SSD and briefly outlined the circumstances of each. He stressed the importance of obtaining a complete overview of all incidents, not just those that exceed the requirements. This was supported by Geoff Kyle and Howard Smith.

Alex Zapantis advised that these occurrences had not been considered an incident within the requirements but he was happy to discuss them with Peter if there was concern and also offered to report the incidents to ECNT via phone if they require. The chair, Charles Webb indicated he did not feel that ARRAC was the correct forum to discuss all levels of incidents and felt that it was appropriate for OSS to present only those incidents it deemed to be of concern.

Discussion continued on the incidents that had occurred, the reporting and availability of information relating to incidents. ARRAC members present were asked to vote on whether they wanted a full detailed report of all ERA site incidents that occur for the reporting period, including those that do not exceed requirements, presented at each ARRAC meeting.

Outcome

Vote: Yes – Peter Robertson, Geoff Kyle, Howard Smith. All other members indicated they did not want the full report tabled

Alex Zapantis offered to provide the information directly to Peter Robertson.

Peter Robertson advised he would think about it.

Item 6 – Department of Primary Industry, Fisheries and Mines – Keith Tayler

Keith Tayler presented the DPIFM Interim Wet Season Report for the period October 2005 to March 2006 (Report 51) to ARRAC. (Powerpoint presentation available) ARRAC was advised that this report contained an incomplete dataset and that not all data had been validated. The next report will contain validated data and completed analyses.

Topics reported included:

- Minesite Technical Committee meetings
- Variation of Ranger Authorisation 0108-02
- Variation of Jabiluka Authorisation 140-03
- Environmental and safety incidents
- Ranger surface water – monitoring and results
- Radiation monitoring for December quarter 2005
- Jabiluka monitoring and available results

Discussion

Recommendations from Coffee report (200 5– raised by Geoff Kyle

Geoff Kyle asked whether Keith Tayler had considered the report and whether the NT Govt had agreed with the recommendations made. He also asked whether the Department was satisfied that seepage no longer exists and that the monitoring could cease considering seepage would go into Gulungul Creek. Keith Tayler advised that he considered this to be more of a company issue as it is their responsibility to ensure there is no impact on 009. He confirmed that if levels were increasing above level, then action would be taken by the Department.

Geoff also commented that the report indicated there were a number of aspects of the tailings dam that did not meet the standards for large dams and asked whether Keith knew what the missing compliances were. Keith advised that the reporting engineer was happy with the dam, he indicated that the internal walls that slipped had been replaced by ERA and that any erosion of material was replaced to maintain the wall.

Water Treatment Plant (WTP) – raised by Michael Lawton

Michael Lawton mentioned that the Department had a non-prescriptive approach to the implementation of the Water Treatment Plant.

Keith Tayler advised that under the Act the Department does not have a prescriptive approach to activity. Ranger has a prescriptive authorisation. He advised that the Department was keen to increase the regulation, but at this stage there is only certain statutory points they are required to monitor. Michael asked whether there had been any monitoring reports on the WTP and was advised that these had been presented to ARRAC in the last report and confirmed that ERA were responsible for monitoring the WTP and that limits had been set on the effluent, and prescriptive limits had been set.

Figures 3.6 and 3.7 – DPIFM report – raised by Howard Smith

Howard Smith highlighted the drop in the level of sulfate and the drop of in electrical conductivity shown in the graphs and queried whether there had been anything specific that had happened in RP1. Keith Tayler advised if the sample had spiked again that it would then be investigated. David Jones commented that the spike could occur due to an increase after a big storm.

Nabarlek bond – raised by Peter Robertson

Peter Robertson asked for an update on the Nabaralek bond. Alan Hughes advised that SSD had not been happy with the bond set, but needed to assess what was going to happen with Nabarlek. The bond would not be altered until the plan for rehabilitation had been completed and accepted by relevant stakeholders. The Nabarlek Minesite Technical Committee had a draft closure criteria tabled for consideration. Once this has been agreed on by the members it will be written into the Mine Management Plan.

Item 8 – ERA developments – Alex Zapantis

Alex Zapantis presented on the developments at Ranger and Jabiluka to ARRAC (Powerpoint presentation available).

Topics covered:

- Staff changes
- Health and safety, including the figures for lost time injury rates for ERA for the reporting period
- Production figures for 2005 and uranium prices

- Consideration of the Acid Plant refurbishment, including the requirement to transport 15000t of acid through Kakadu National Park by the end of 2007 and requiring a permit.
- Exploration activities on 2 areas in orebody 3, including consultation on drilling for Anomaly 18.
- Update on Water Treatment Plant activities
- Update on Pit #1 Barrier activities and advice of URS completing a report on the barrier
- Overview of 2005-06 wet season – Ranger and Jabiluka monitoring data
- Overview of the accidental irrigation of the Magela Land Application Area incident in January 2006
- Update on the rehabilitation activities at Ranger, including the infill planting at Jabiru East and the MBL Bund, plus at Jabiluka & Djarr Djarr.

Discussion

Pit barrier permeability tests – raised by Howard Smith

Howard Smith asked whether the barrier materials tested for permeability were tested under load dry or saturated. His interest was based on the ionic load and expressed concern that over the long term that seepage could occur through the barrier at a slow rate. David Jones advised of tests conducted at the University of NSW to support the opinion that seepage would not occur.

Uranium spike at Gulungul Creek – 2005–06 wet season – Ranger monitoring data slide – raised by Geoff Kyle.

Geoff Kyle asked for an explanation on the spike shown in the graph indicating high levels of uranium at Gulungul Creek for the first sample taken for the season. Discussions were held on possible reasons for the spike. Alex Zapantis informed ARRAC that this will be watched, although at this stage no specific study had been assigned to determine the reason.

Geoff Kyle raised concern to the TOs on the gap in data available, as the TOs had a specific interest with the upper billabong of Gulungul Creek. ARRAC was informed that a student would be undertaking a study looking at data and small tributaries coming into the creek. David Jones confirmed that SSD did have probes in place for continuous monitoring. Geoff Kyle raised concerns that this had not been the case for the past 10 years.

Contract for sale of uranium from ERA to Taiwan – raised by Peter Robertson

Peter Robertson raised his concern over the announcement today that ERA had completed a deal to sell uranium to Taiwan, and asked whether the Minister for Industry, Tourism and Resources had approved this deal or whether it had required an export licence for approval. Carolyn Barton informed ARRAC that in the case of Taiwan there is a full scope of safeguard agreements with the IAEA, and they have signed a non-proliferation treaty (NPT). However as Taiwan is not officially recognised as a country, the Australian Government allows uranium exports to Taiwan under the US Australian Bi-lateral Agreement. This agreement was approved by the Australian Parliament in 2002. ARRAC was also informed that export permits are issued to uranium producers, not to the country, so in this case all contracts between the uranium producers and the buyer TaiPower have been approved by the Australian Government.

Peter Robertson advised that the Australian newspaper stated that Taiwan was not a member of the non-proliferation treaty. Carolyn Barton stated that they were.

Item 9 – Hanson developments – Shane Maraldo

Shane Maraldo advised ARRAC that Hanson had been conducting the regular wet-season program which entailed feral animal and weed eradication.

Item 10 – OSS audits and inspections

Covered in Item 5

Item 11 – South Alligator Valley mine rehabilitation – Julian Barry

Julian Barry presented the Gunlom Land Trust Rehabilitation Project: Report to ARRAC April 2006 to ARRAC and provided an overview on

- Part A & B of the Gunlom Land Trust (GLT) Rehabilitation Plan
- Management of the Gunlom residues site, and the interim containment facility
- Reporting to ARPANSA

Nil questions were raised

Item 12.1 – Exploration – Cameco – Ron Matthews

Ron Matthews advised there had been nil activity due to the wet season.

Item 13.1– ARPANSA – Peter Burns

Nil reported

Item 13.2 – DITR – Carolyn Barton

Carolyn Barton presented to ARRAC on the Uranium Industry Framework (Powerpoint presentation available).

Discussion

Jabiluka – raised by Peter Robertson

Peter Robertson advised ARRAC that Emma King (Uranium Campaigner – ECNT) had recently attended a forum where the Commonwealth had made statements on keenness to re-open Jabiluka. Peter queried what consultation had taken place with the TOs. Carolyn Barton commented that the statement made was a wide statement and in the case of Jabiluka TOs would be consulted.

Royalties steering group – raised by Geoff Kyle

Geoff Kyle queried whether the Royalties Steering Group which had only met once and involved representatives from NLC, NT Govt and the Office of Indigenous Policy, specifically related to Ranger royalties or whether this was broader. ARRAC were informed that the working groups role was broader than Ranger.

ARRAC were also advised by Carolyn Barton that land access issues were discussed, although nothing new specific to uranium had been identified. Any proposals for land access would feed back into the Minerals Exploration Act.

Item 13.3 – Northern Land Council – Howard Smith

Howard Smith advised that Cameco and NLC were waiting for weather to clear to finalise consults on uranium issues.

Item 13.4 – Parks Australia North

Report covered in Item 11

Item 13.5 – Department of Health and Community Services – Russell Robinson

Russell Robinson tabled fact sheet on Radiation Protection Act.

Item 13.6 – Department of Natural Resources, Environment and the Arts – Michael Lawton

Nil reported

Item 13.7 – Other members reports

Nil reported

Item 14 – Other business

Production of SSD Internal Report for ARRAC meeting papers – raised by Alan Hughes

Outcome: Supported by all members