ANSWERS TO OUESTIONS ON NOTICE

Environment and Heritage

Environment Australia

Supplementary Budget Estimates 2000-2001, (23/11/00)

Outcome #1, Question: #1

Topic: (Ranger mine tailings water leak – update on implementation of

Supervising Scientist Recommendations)

Hansard Page: #5

Senator Bishop asked: Can you provide the committee - on notice – with an update of the progress against each of the recommendations of the report together with an expected time of implementation and completion of each measure?

Answer: The attached tables give an update of progress of implementation of the recommendations of the Supervising Scientist's Report entitled, "Investigation of tailings water leak at the Ranger uranium mine". Firm dates of completion have not been set. Many of the recommendations are contingent on other tasks being completed first. The Ranger Minesite Technical Committee (MTC) is progressing the recommendations as rapidly as possible while ensuring their thorough and systematic implementation.

Attachments: Tables 1 and 2.

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Table 1: Recommendations of the Supervising Scientist Report 153 "Investigation of tailings water leak at Ranger uranium mine"

No.	Recommendation	Progress
1	ERA should undertake a full review of the Tailings Dam Corridor with particular emphasis on the efficacy with which it performs the task of providing secondary containment. The Terms of Reference for the Review should be approved by the Supervising Scientist.	Final report on the review of process water system has now been received and accepted by the Ranger Mine Site Technical Committee (MTC). This is a major component of the review of the Tailings Dam Corridor. ERA has also undertaken permeability tests within the Tailings Dam Corridor. Progress on the implementation of the recommendations of the process water system review, and further components of the Tailings Dam Corridor review will be considered by the MTC at its next meeting on 23 January 2001.
2	All Recommendations on maintenance procedures in Tailings Dam Corridor made in the Sinclair Knight Merz Review of the Tailings Dam Corridor should be implemented.	Refer to Table 2 for details of progress in implementing the recommendations of the SKM report
3	ERA should strengthen the Ranger Management Team to ensure that there is an effective interface with external stakeholders and that decisions are made quickly to meet the expectations of the stakeholders.	ERA has re-established the position of Ranger General Manager. The position has been filled with the appointee commencing duties in early January. A stakeholder relations position has been added to the Ranger Management Team and the position has been filled.
4	ERA should take immediate steps to put in place an employee training program designed to ensure that all employees appreciate the need to keep the authorities informed of any event that could be perceived to be of concern to the local Aboriginal people or the broader community, not just incidents that are acknowledged infringements of the Ranger General Authorisation or the Environmental Requirements.	Discussions have been held through the Ranger Mine Site Technical Committee. ERA has commenced developing training programs. Implementation of this recommendation is, to some extent, contingent upon the finalisation of the Ranger Management Team structure.
5	The Supervising Scientist should offer to assist ERA in the above training program. In particular, the Supervising Scientist should provide a briefing to ERA employees on issues of significance in this report, and any other issues that are considered to be of concern to members of the public.	The Supervising Scientist has briefed senior ERA executives and members of the Ranger Management Team on issues of significance during ongoing liaison with ERA and in particular, at a meeting held on 3 August 2000 called to allow stakeholders to articulate their current perspectives and issues to ERA executives and Ranger staff. The Supervising Scientist has offered to assist ERA in implementing a training program for other staff. A proposal has not yet been received

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		from ERA.
6	ERA should upgrade the environment protection staff structure at Jabiru to ensure that the company has the on site ability to effectively identify, interpret and rectify environmental incidents.	ERA has appointed a new Senior Environmental Scientist, is considering additional environmental positions, and is reviewing its relationship with its consultants EWLS to optimise it.
7	ERA should complete a comprehensive investigation of the additional sources of manganese, including previous tailings spills in the Tailings Dam Corridor, and provide a report to the Minesite Technical Committee.	ERA has undertaken a comprehensive review of its records and identified locations of previous spills of tailings and process water in the Tailings Dam Corridor. EWLS (ERA's environmental consultants) will commence a scientific investigation into the waste rock pile as a possible source of manganese during the week of 4 December 2000. This investigation will collect data during the 2000/01 Wet season and is due for completion in July/August 2001. The outcomes of the EWLS study will be considered in parallel with an examination of the record of spills in the corridor undertaken by ERA. This may or may not lead to further studies.
8	 The Minister for Industry Science and Resources should consider what action should be taken in response to the established breach of the Environmental Requirements 3.4 and 16.1 taking into account: The radiological and ecological impact arising from the leak of tailings water to the environment has been negligible The leak resulted from poor maintenance practices in the Tailings Dam Corridor The view of the traditional owners of the Ranger Project Area is that Aboriginal people will only believe that the Government takes their concerns seriously if substantive action is taken. 	Minister Minchin considered that ERA should not be prosecuted by the Commonwealth, and required that the recommendations of the Supervising Scientist leak report be implemented.
9	The statutory environmental monitoring program should be extended to enhance its capacity to provide early warning of unplanned releases of contaminants. This extension should include the establishment of additional monitoring locations within secondary containment systems that would indicate the failure of primary containment systems.	A paper on the Philosophy of Monitoring is being prepared by the MTC which will contribute to the consideration of extensions to the statutory monitoring program. This recommendation is also contingent upon the completion of the review of the process water system and the tailings dam corridor.
10	The Minesite Technical Committee should review the inspection and monitoring system at Ranger to establish and implement measures that will detect failures in the secondary containment systems and structures.	This recommendation will be completed in parallel with the extension of the statutory monitoring program.

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11	ERA should provide the Supervising Scientist and the Supervising Authorities with all research data as they become available rather than at the end of research projects. Protocols should be developed for the appropriate use of research data.	A protocol has been drafted which is subject to ongoing discussions with ERA.
12	The Northern Territory Department of Mines and Energy should undertake a comprehensive review of its site inspection regime in light of deficiencies identified in this report, and design and implement a new proactive inspection regime within a risk management framework.	NTDME is preparing revised inspection checklists.
13	The Supervising Scientist should ensure that there is an adequate and independent on-site audit program related to potential off-site environmental consequences arising from operation of the Ranger mine and mill.	The model for the independent on-site audit program involves monthly site inspections, using checklists, by the OSS and an annual environmental audit led by an independent consultant, in which OSS participates. These arrangements need to be discussed with stakeholders and further developed. Implementation of this recommendation has moderate resource implications.
14	The Supervising Scientist should develop and implement a routine environmental monitoring program whose focus should be the provision of advice on the extent of protection of the people and ecosystems of Kakadu National Park. A component of the program could also provide support to the onsite audit program referred to in Recommendation 13.	For the current year, the Supervising Scientist has diverted resources to enable this program to commence. A full biological monitoring program will be carried out during the 2000-2001 wet season as well as a chemical monitoring program of limited scope. Additional funding will be required to extend this program to 2001-2002 and beyond.
15	The Working Arrangements between the Commonwealth and the Northern Territory regarding the regulation of uranium mining activities in the Alligator Rivers Region should be reviewed and amended to take into account changes in the activities of the Supervising Scientist arising from this report.	The NT Government has now signed the revised Agreement on the regulation of uranium mining which contains an agreement to revise the Working Arrangements. Renegotiation of the Working Arrangements is due to commence in February of 2001.
16	The Mine Site Technical Committee should develop guidelines clarifying requirements for the reporting of incidents which retain the transparency of the current system, are consistent with Environmental Requirement 16.1, reduce the need for the exercise of judgement by staff of ERA and will assist in minimising undue concern for Aboriginal people and the broader community.	ERA has developed an unplanned event register which is reported to stakeholders periodically. Events which are not trivial are reported to stakeholders immediately by phone, and if required by stakeholders, formally in writing. All infringements must be reported in writing. The reporting system is being trialled for a period of three months.
17	The Working Arrangements between the Commonwealth and the Northern Territory regarding the regulation of uranium mining activities in the Alligator Rivers Region should be reviewed and amended to require the Department of Mines and Energy and the Supervising Scientist to immediately inform each other of any information they may acquire	The NT Government has now signed the revised Agreement on the regulation of uranium mining which contains an agreement to revise the Working Arrangements.

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independently which could be of environmental significance.	Renegotiation of the Working Arrangements is due to
	commence in February of 2001.

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Table 2: Progress on implementation of recommendations on maintenance procedures in Tailings Dam Corridor made in the Sinclair Knight Merz Review

Item	Task	Progress
1	Investigate the widening of the western end section of the corridor where the 500mm polyethylene pipes run in the drainage trench in order to reduce the risk of a pipe leak resulting in contaminated water falling outside the corridor embankment. Incorporate an examination of the other potential impacts of the polyethylene pipe routing noted in the SKM report as part of the review.	In progress.
2	Obtain and review the particle grade and impermeability etc. specifications for all main and branch corridor coverings to confirm their acceptability with respect to the prevention of seepage / leakage from the corridor.	In progress. Some tests completed.
3	Specifically review all areas where the original corridor base material has been significantly disturbed / altered to ensure that the cover now provided is adequate.	In progress.
4	Review the design of the recently completed corridor concrete cover modifications carried out at the retrofit culvert location for the south west run off.	In progress.
5	Obtain and review the corridor sump overflow details to ensure that the overflow capacity is adequate.	Awaiting clarification from ERA on progress.
6	Prepare a maintenance program covering all aspects of corridor maintenance.	Preventative monitoring inspections established. Now under review.
7	Review Roles and responsibilities of the various departments within ERA with respect to operation and maintenance of the corridor to ensure that all aspects are properly covered and confirm a regime most suited to the foreseeable remaining life of the facility.	ERA is currently investigating the introduction of a coherent approach to asset management throughout the Ranger site. This includes consideration of roles and responsibilities of ERA departments in respect of maintenance.
8	Undertake a review of corridor related drawings to ensure that a fully representative set of updated drawing is available.	Technical plant drawings 65% complete. Civil drawings to be updated as part of the SKM review of corridor drainage capacity.
9	Review and confirm the procedure for advice to Engineering Technical Services Section regarding modifications affecting the currency of corridor drawing information.	Implementation of a formal equipment and process change procedure is an important component of asset management as discussed in item 2.
10	Assemble and review all available evidence with respect to tailings lines lining condition. Based on this and specific capability and cost information on internal inspection techniques, review the justification for undertaking an investigation of the tailings line polyethylene lining condition.	Completed - A representative sample of polyethylene liners have been inspected and all have been found to be in good condition.
11	Progressively strip and paint the pipe ends on the process water return line to prevent deterioration of the pipe ends and reduce the	5% Completed.

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	risk of joint failures.	
12	Carry out a survey of flange and bolting to ensure that all bolts are adequately sized.	Completed.
13	Carry out a visual inspection for deterioration of bolts etc of all joints which were buried up until recently.	Completed.
14	Check and properly fit guards on all flange joints.	High priority flanges have had guards fitted and an audit of remaing flanges has been completed.
15	Emphasise in procedures and to maintenance staff, the importance of careful handling of pipes / pipe ends during the assembly of Victualic coupling joints especially on the non lined process water return line. Provide documentation and training via the maintenance systems.	Procedures are being updated to meet this recommendation.
16	Ensure that the manufacturers instructions for installation and maintenance of the couplings are included in the standard maintenance procedure for these activities.	To be incorporated in standard procedures
17	Ensure that manufacture/supply quality continues to be ensured in any future purchases of Victualic couplings.	ERA only stock genuine Victualic brand couplings and the store will include a note to this effect in the stock description.
18	Identify all pipework not currently being used and establish whether or not it is, or should be, made permanently redundant.	Complete in the corridor, ongoing for the rest of the site.
19	Establish a program to remove all redundant pipe work as soon as practical.	Elected to retain the redundant C-D tailings line to provide a protection barrier for the other pipes. Most redundant pipe work in the corridor has been removed.
20	Inspect the embankments which form the corridor enclosure to confirm that they are still as per the original design intent.	SKM commissioned to review corridor drainage capacity.
21	Ensure that the corridor clean up operation recently undertaken has returned all corridor levels, drainage and other features as appropriate, to original specifications.	Underway. Civil Drawings to be updated and specifications checked in the SKM review of corridor drainage capacity.
22	Document the procedure for future grading operations for the main corridor road and general maintenance of the corridor.	Completed. Standard procedures developed for grading the corridor road and a scheduled Preventative Maintenance inspection is in operation.
23	Safely remove all grass and other growth which has developed along the corridor.	Completed. Vegetation has been removed from the corridor and Preventative Maintenance (PM) inspection system is in operation.
24	Initiate and continue a regular and supervised poisoning program to prevent future regrowth of grass etc along the corridor.	Completed. Standard procedure developed for poisoning grass in the corridor and a scheduled PM inspection is in operation.

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25	As far as possible avoid cold burn offs of grass etc as these place pipe jointing components and pipe linings at risk.	Completed.
26	Investigate options to reshape / cut back the waste rock stockpile in the vicinity of the corridor at the tailings dam end in order to reduce the risks of falling rocks damaging the adjacent corridor pipe work.	No need. The waste dump is no longer in use and is stable. The Mine has no plans to re-open this dump.
27	Other than the routine 3 times and preferably 4 times per shift inspection of the corridor pipe work, there is no automatic means of detecting leaks. Consideration should be given to installing magnetic flow meters to detect major leaks which could have a significant impact if they occurred some time before the next inspection.	ERA will investigate the installation of flow and/or leak detection equipment

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Outcome #1, Question: #2

Topic: (Briefings by World Heritage Group)

Hansard Page: #6

Senator Bishop asked: You said the representatives had received a copy of the report and the government's response. Have they also been offered and received briefings on the progress of implementation?

Answer: The Australian World Heritage Division has advised that there were no briefings given to the World Heritage Committee on progress on implementation of recommendations of the Supervising Scientist's report following advising of the incident on the 9 May 2000.

Outcome #1, Question: #3

Topic: (Amendments to the Customs Prohibited Export Regulations)

Hansard Page: #7

Senator Bishop asked: If under the new regime licences are granted for a specific period of time rather than for each consignment, are the licences then granted for a company or for a particular mining operation?

Answer: This question has been referred to the Department of Industry, Science and Resources by the Secretary of the Senate Estimates committee and will be responded to in due course.

AGENCY/DEPARTMENT: DEPARTMENT OF INDUSTRY, SCIENCE AND

RESOURCES

OUTCOME/OUTPUT: OUTCOME 1, OUTPUT 1.2

TOPIC: REGULATIONS GOVERNING THE EXPORT OF

URANIUM

REFERENCE: HANSARD 23/11/00, PAGE 7 (Refer to the Hansard

transcript of the Senate Environment, Communications,

Information Technology and the Arts Legislation

Committee hearing)

QUESTION:#3a

Senator Bishop asked:

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"If under the new regime licenses are granted for a specific period of time rather than for each consignment, are the licences then granted for a company or for a particular mining operation?" (p.7)

Mr Zapantis replied:

"I believe in the past the practice has been that licenses have been issued for particular consignments, and obviously that would be to a particular company." (p.7)

Senator Bishop asked:

"Is that still the case under the new regulations?... Could you take that question on notice?" (p.7)

ANSWER:

Under the new regime, the Government has not granted export permits other than on a shipment-by-shipment basis. As with the previous regulation, export permits under the current regulation are issued to the company exporting uranium subject to compliance with safeguards requirements and the environmental requirements which apply to the project from which the uranium is sourced.

Outcome #1, Question: #4

Topic: (Exploration Licences under Northern Territory Legislation)

Hansard Page: #8

Senator Bishop asked: How many such exploration licences have been granted?

Answer: The Northern Territory Department of Mines and Energy has advised the Office of the Supervising Scientist that during the last two years there have been 15 exploration licences granted in the Alligator Rivers Region. It should be noted that for the purposes of this request the boundaries of the Alligators Rivers Region were approximated and the number may not be precise. The map position of these titles can be accessed via the Department of Mines and Energy web based Titles Information System at www.dme.nt.gov.au/tis/olq.asp