

## STATEMENT OF ENVIRONMENTAL AUDIT

I, <u>Adrian Michael Dickinson Hall</u> of <u>Tonkin Consulting</u>, a person appointed by the Environment Protection Authority of Victoria under the Environment Protection Act 1970 ("the Act") as an environmental auditor for the purposes of the Act, having:-

- been requested by <u>Energy Resources of Australia Limited</u> to issue a Statement of Environmental Audit in relation to the site located at <u>Section 2498 Hundred of Strangways</u>, <u>Humpty Doo</u> ("the site") owned occupied by <u>Ranger Uranium Mines Pty Ltd;</u>
- 2. had regard to, amongst other things,-
  - (i) guidelines issued by the Victorian EPA and endorsed by the Department of Lands, Planning and Environment, Northern Territory;
  - (ii) the beneficial uses that may be made of the above site; and
  - (iii) relevant environment protection policies and related waste management policies;

in making a total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment which may be caused to, any beneficial use made of the site by any industrial processes or activity, waste or substance (including any chemical substance);

and

3. completed an Environmental Audit Report in general accordance with Section 57 of the above Act, a copy of which has been sent to the Department of Lands, Planning and Environment, Northern Territory.

HEREBY STATE that I am of the opinion that:

- 1. Portion A of the site (being the whole site excluding the Former Sulfur Stockpile Area, Portion B, and Borrow Pit No 1, Portion C, as indicated on Figure 1.3 of the attached Environmental Audit Report) is suitable for the following beneficial uses subject to the conditions attached thereto:-
  - rural residential living
  - all uses permitted under the Litchfield Area Plan, 1992, for Zone RL1 (Rural Living 1);

## Subject to:

- (i) there should be no use of phreatic groundwater from Aquifer A of the site, as defined in section 3.6 of the EWL Sciences (2001) report, other than for the purposes of environmental monitoring;
- (ii) there should be a programme of annual groundwater monitoring of the phreatic groundwater, as outlined in Section 6, and in particular Table 25, of the EWL Sciences (2001) report; a review of the programme should be undertaken by the auditor annually, and the programme should be continued until the auditor is satisfied that all nominated Groundwater Investigation Levels (GILs) are met, and that the contaminated groundwater plume no longer poses unacceptable human health or environmental risks.
- 2. Portion B of the site (being the Former Sulfur Stockpile Area, as indicated on Figure 1.3 of the attached Environmental Audit Report) and Portion C of the site (being the Borrow Pit No 1, as indicated on



Figure 1.3) are suitable for the following beneficial uses subject to the additional conditions attached thereto:-

- flora and fauna sanctuary
- retail agricultural stall

as permitted under the Litchfield Area Plan, 1992, for Zone RL1 (Rural Living 1);

## Subject to:

- (i) there should be a programme of annual monitoring of soil pH, and application of agricultural lime as necessary, as outlined in Section 6, and in particular Table 25, of the EWL Sciences (2001) report; a review of the programme should be undertaken by the auditor annually, and the programme should be continued until the auditor is satisfied that all pH values meet the nominated target, and that the contaminated soils no longer pose unacceptable human health or environmental risks;
- (ii) the ADAS (1974) soil sulfur suitability ratings (or other approved rating method) for concrete pipes and footings should be used to assess any construction involving in-ground placement of concrete; the use of high alumina or super-sulfated concrete and cement should be specified for all below ground concrete structures such as pipes and footings.

It is also a condition of this statement that Portions B and C should be clearly delineated using survey markers set out by a licensed surveyor, and that within 3 months of the date of this statement a survey plan prepared by a licensed surveyor, and clearly showing the locations and extent of Portions B and C, should be submitted to the auditor for approval.

- 3. I have not issued the equivalent of an unconditional Certificate of Environmental Audit for the site, reasons for which are presented in the Environmental Audit Report and are summarised as follows:
  - (i) the phreatic groundwater (Aquifer A) is polluted in the vicinity of well 22440, with unacceptably low pH, and unacceptably high concentrations of some heavy metals;
  - (ii) the near surface soils in the Former Sulfur Stockpile Area and Borrow Pit No 1 are contaminated, with unacceptably low pH, and unacceptably high concentrations of sulfur.

This Statement of Environmental Audit should be read in conjunction with, and forms part of, the Environmental Audit Report entitled

Tonkin Consulting (2001), Section 2498 Strangways, Humpty Doo NT, Environmental Audit Report, for ERA Ranger Mine, Reference No 990869RA1, May 2001.

Further details regarding the condition of the site may be found in the Environmental Audit Report.

DATED: 31 May 2001

Signed:

Adrian Michael Dickinson Hall ENVIRONMENTAL AUDITOR (CONTAMINATED LAND)