

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Mr Vowles to the Minister for Mines and Energy:

Resource Industry Management – Mines Directorate

The Department of Mines and Energy is currently preparing data for verification and inclusion in end of year financial statements. Once approved by Accountable Officers and audits have been completed, end of year financial data will be available in agency Annual Reports in accordance with the Public Sector Employment and Management Act and the Financial Management Act.

Financial information included in this WQON is to 31 March 2014.

- 1. Please provide details of all Northern Territory mine sites considered by the Department of Mines and Energy to be legacy mine sites, detailing:**
 - a) the name of the site,**
 - b) the location, area of land affected, key environmental and management issues for each site,**
 - c) the key remediation measures required at each site,**
 - d) the nature of any current or proposed plans for remediation works (including indicative cost), and**
 - e) the timing of any existing or proposed remediation works.**

See Table 1: Assessment of known Legacy Sites

Legacy issues are more complex than identifying a site as a legacy site. Almost all of the NT's mining related legacy issues are located on sites that currently have an authorised operator. Many of these are on active mining operations. One definition in this context is a site that has mining related disturbances on it that were not created by the current Authorised operator and for which the NT does not hold a 100% security.

The Department of Mines and Energy's Legacy Mine Unit is planning a field program to compile an inventory of legacy sites to enable assessment of their risk to the environment and provide valuable information in determining remediation options. This includes the sites listed in the table below which will be assessed.

Table 1: Legacy Sites for assessment

Site	Operator	Currently Active	Commodity	Legacy Components
Appel Holdings (Barkly Region)	None	No	Au	AMD from tailings leaching ponds. Surface water contaminated and running off site. Public safety.
Brocks Creek (Darwin Region)	Crocodile Gold	No	Au	Tailings Dam potential AMD from WRDs. Open Pit water quality.
Chariot/ Malbec (Barkly Region)	Emmerson	No	Au	Potential AMD from WRDs. Stability of WRDs. Public safety of open pits.
Cosmo-Howley (Darwin Region)	Crocodile Gold	Yes	Au	AMD from WRDs and old Tailings Dam. Ongoing requirement for water management. Open Pit water quality.
Fountain Head (Darwin Region)	Crocodile Gold	No	Au	Potential AMD from WRDs. Erosion of alluvial residues. Ongoing requirement for water management. Open Pit water quality.
Gecko (Barkly Region)	Emmerson	No	Cu	AMD from WRD and stockpile areas. Subsidence instability.
Golden Dyke (Darwin Region)	Crocodile Gold	No	Au	AMD from WRD. Erosion. Open Pit water quality.
Goodall (Darwin Region)	None	No	Au	AMD from WRDs and old Tailings Dam. Ongoing requirement for water management. Open Pit water quality.
Hatches Creek (Barkly Region)	Arunta Resources	No	W	Potential AMD from WRDs. Public safety of open workings.
Iron Blow (Darwin Region)	Crocodile Gold	Yes	Au	AMD from WRD. Open Pit water quality.
Maud Creek (Katherine Region)	Crocodile Gold	No	Au	Potential AMD from WRD. Erosion.
Moline (Darwin Region)	Crocodile Gold	No	Au	AMD from WRDs. Ongoing requirement for water management. Open Pits water quality. Radioactive tailings buried on site.
Mount Bonnie (Darwin Region)	Crocodile Gold	No	Au/Ag	AMD from WRDs and old Tailings Dam. Erosion. Open Pit water quality.
Mount Diamond (Darwin Region)	None	No	Cu	AMD from WRDs.

Site	Operator	Currently Active	Commodity	Legacy Components
Mount Todd (Darwin Region)	Vista Gold	No	Au	AMD from WRD, Tailings Dam and Heap Leach Pile. Stability of Tailings Dam. Water quality in Open Pit. Ongoing requirement for water management.
Nobles Nob (Barkly Region)	Emerson	No	Au	AMD from Tailings Dams. Erosion of Tailings Dams. Dispersal of tailings off site. AMD from WRDs. Erosion.
North Point (Darwin Region)	Crocodile Gold	No	Au	AMD from WRD. Erosion. Open Pit water quality.
Orlando (Barkly Region)	Emmerson	No	Au	AMD from WRD. Erosion.
Peko (Barkly Region)	Savage/Sitzler	No	Au	AMD from Tailings Dam. Severe site contamination. Dust dispersal of tailings towards town.
Pine Creek goldfields sites (Katherine Region)	Crocodile Gold	No	Au	Residual AMD from WRDs. Ongoing requirement for water management.
Quest 29 (Darwin Region)	Primary Gold	No	Au	AMD from WRDs. Erosion. Open Pit water quality.
Redbank (Katherine Region)	Redbank Copper	No	Cu	AMD from WRD, stockpiles and Tailings Dam. Water quality in Open Pit. Ongoing requirement for water management.
Rum Jungle (Darwin Region)	None	No	U/Cu	AMD from WRDs. Currently being managed under a National Partnership Agreement with the Commonwealth Government.
Rustlers Roost (Darwin Region)	Primary Gold	No	Au	AMD from Heap Leach Pads. Erosion.
TC8 (Barkly Region)	Emmerson	No	Au	Potential AMD from Tailings Dam. Structural failure of Tailings Dam. Dispersal of tailings off site.
Tennant Creek Region	Various	No	Au	Mainly public safety issues relating to open workings.
TMJV Sites (Alice Springs Region)	Tanami Gold	No	Au	This site includes a large number of Open Pits, WRDs and a 75 ha Tailings Dam and earlier tailings storages. Potential AMD from WRDs and Tailings Dam. Stability of Tailings Dam and storages. Erosion. Water quality in open pits.

Site	Operator	Currently Active	Commodity	Legacy Components
Tom's Gully (Darwin Region)	Primary Gold	No	Au	AMD from WRDs and Tailings Dams. Stability of Tailings Dam. Water quality in Open Pit. Ongoing requirement for water management.
Union Reef (Darwin Region)	Crocodile Gold	Yes	Au	AMD potential from WRDs. Ongoing requirement for water management. Open Pit water quality.
Warrego (Barkly Region)	Emmerson AARD Metals	No	Au/Cu/Bi	AMD from Tailings Dams and WRDs. Structural stability of Tailings Dams. Severe site contamination.
White Devil (Barkly Region)	Emmerson	No	Au	AMD from WRD and stockpile areas.
White Range (Alice Springs Region)	Intermin	No	Au	Potential AMD from WRDs and Tailings Dam. Stability of Tailings Dam. Impacts on Heritage Sites.
Woolwonga (Darwin Region)	Crocodile Gold	No	Au	AMD from WRDs. Ongoing requirement for water management. Open Pit water quality.
Zappopan (Darwin Region)	Crocodile Gold	No	Au	AMD from stockpile areas. Open Pit water quality.

AMD: Acid Mine Drainage
WRD: Waste Rock Dump

Commodities:

Ag - Silver
Au - Gold
Bi - Bismuth
Cu - Copper
W - Tungsten
U - Uranium

Current Activities with Legacy Sites

Redbank Mine:

- Groundwater drilling program to commence in mid-June 2014. The aim of the drilling program is to validate the results of the electromagnetic survey (completed in May 2014) and to identify potential paleochannels and/or preferential pathways for the off-site migration of mine impacted water.
- Undertake aquifer testing to determine the hydraulic conductivity of the aquifers at the site. This will be undertaken in house.
- Installation of two solar powered pumps into two down gradient bores, to intercept mine impacted groundwater prior to discharge to Hanrahan's Creek. The mine impacted water will be returned to Sandy Flat Pit on-site. The pumps will be solar powered and be self-sufficient in operation and controlled remotely from Darwin. Installation of monitoring equipment and associated telemetry. This will include the installation of a pit level gauging station, water level gauges and electrical conductivity meters in a number of groundwater wells, a weather station including a rain gauge and associated telemetry. This will allow DME to remotely control the groundwater pumps from Darwin, and will also provide data regarding the surface water and groundwater interactions at the site during the wet season. It is noted that access to the site is restricted to the dry season, therefore, we have limited information regarding how the groundwater and surface water interacts during the wet season.
- Surveying of the new groundwater wells and pit level gauging station. Combined with the telemetry mentioned above will provide valuable information regarding the migration of mine impacted water from the site.

Woolwonga and Fountain Head Mine Sites:

- In February and March 2014 in-situ rain gauges, pit water level data loggers and associated telemetry were installed and commissioned at the Woolwonga and Fountain Head sites. In addition, a weather station was installed at Woolwonga. This allows the pit level and weather conditions to be transmitted to the DME office.
- On-going remote monitoring of the pit levels at Woolwonga and Fountain Head is proposed, along with catchment mapping.

The Redbank scope of works, including the drilling program, aquifer testing, pump and telemetry installation and surveying of the groundwater wells is proposed to be completed within the 2014 dry season.

Monitoring and review of the telemetry data for Woolwonga and Fountain Head will be on-going. Once sufficient data is collected for Woolwonga, the earthworks program can commence. It is anticipated that this will likely occur early in the 2015 dry season, depending on site access.

2. Please detail:

- a) The estimates provided by the Department to the Northern Territory government, prior to the introduction of the Mining Remediation Levy, of the revenue expected to be collected by that levy on mining companies in both 2013/14 and 2014/15 compared with the actual amount collected in 2013/14 and expected in 2014/15,**
- b) Revenue expected to be obtained under the Mining Remediation Levy and applied to the Mining Remediation Fund in 2014/15,**
- c) The funds currently held in the Mining Remediation Fund and all projects funded out of the Mining Remediation Fund in 2013/14 or proposed for 2014/15 by name of project, location, purpose, cost and timing of work,**
- d) Any departmental administrative costs taken from income obtained under the Mining Remediation Levy in 2013/14, and**
- e) The funds currently held in the Mining Securities Remediation Fund and all projects funded out of the Mining Remediation Fund in 2013/14 or proposed for 2014/15 by name of project, location, purpose, cost and timing of work.**

The levy has collected about \$6.5 million to date, and funds a range of activities intended to ensure Legacy Mines are strategically addressed and the current mining activities do not develop legacy issues.

A portion of the funding will go into a legacy mines remediation fund which will be used for undertaking larger projects, for example the Redbank Mine. Details of works have been provided in response to Question 198. WQ 1.

The funding for the remediation have been provided out of operational funds from the Legacy Mines Unit within the Mines Directorate (i.e. there has been no specific expenditure from the Fund in 2014/15 and these funds will accumulate to 2014/15). The Legacy Mines Unit is one of a number of activities in the Mines Directorate that is funded by the balance of the levy.

The funded activities include the Legacy Mines Unit, the administration of the levy and fund, the Technical Support Unit which provides high-quality scientific advice, the Environmental Monitoring Unit which monitors water at sites across the Territory, and Mining Teams in Darwin and Alice Springs.

Question 2 e is a repeat of 2 c.

3. Please detail the number of mining plans approved or amended during 2013/14 including:

- a) the name of the mining operation,**
- b) the purpose of the new plan or amendment to an existing plan,**
- c) the length of time taken by the Department to consider and process the new plan or amendment, and**

d) the number of mining plans subject to review or consideration of approval by the Department as of 1 June 2014.

There were a total of 303 documents submitted for approval during 2013/14 (to 10 June 2014) for exploration, extraction (sand, gravel and rock) and mining operations.

Of the 303 documents, 155 were for operational sites (i.e. mining and extraction) and 148 were exploration.

The specific contents of each MMP are commercial-in-confidence.

For all sites:

- 16 were for new sites, 102 annual renewals and 37 amendments.
- Average time from submission to security request/completion, if there is no request for additional information, is 34.7 working days for operational sites and 24.3 for exploration. This includes time for discussion of security with the operator.
- Average time from submission to request for additional information is 30.5 working days for operational sites and 21 for exploration. This can include the period from referral to the Environment Protection Authority (EPA) until EPA decision is made and discussion with the operator.
- Average time from submission of additional information to request for security is 17 working days for operational sites and 11 for exploration. This includes time for discussion of security with the operator.
- The number of plans currently under review as at 10 June 2014 and not yet approved is 52 (total including exploration is 90).

4. Please provide a copy of the Department's oil and gas exploration agreement template showing details of the application of the government's 'use it or lose it' policy.

Question is addressed in WQON no. 255 Q3
