THOR
MINING PLC

Molyhil Tungsten - Molybdenum Project

DRAFT WEED ENVIRONMENTAL MANAGEMENT PLAN

ENVIRONMENTAL MANAGEMENT PLAN PRODUCED TO ACCOMPANY MOLYHIL TUNGEN-MOLYBDENUM PROJECT PUBLIC ENVIRONMENTAL REPORT

June 2007

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1.0 INTRODUCTION

1.1 BACKGROUND

The Molyhil Tungsten-Molybdenum Project (Molyhil Project) is a proposed open cut mine and processing facility to be constructed in the Northern Territory. The main objective of the proposed facility is to produce scheelite and molybdenite concentrate for sale.

Thor Mining PLC (Thor) owns 100% of the Molyhil Project, which comprises EL 22349, totalling 829km^2 in area, and includes Mining Lease Application (MLA) 23825, which covers the deposit (former open pit, waste dumps and Run-of-Mine stockpile). In addition, Molyhil Mining Pty Ltd (formerly Sunsphere Pty Ltd) (a 100% owned subsidiary of Thor) has applied for MLA 24429 to further extend the mining operation and MLA 25721 to cover the project infrastructure requirements. The combined mining lease applications cover an area of 247 ha.

Approximately 300,000 tonnes of ore is expected to be treated annually at the mine, with an expected mine life of 4 years. Mining is planned to be undertaken by conventional truck and shovel operations.

1.2 LOCATION

The Molyhil deposit is located 240 km northeast of Alice Springs (320 km by road) at latitude 22° 45’ S, longitude 135° 45’ E, on the Huckitta (SF 53-11) 1:250 000 and Jinka (6052) 1:100 000 scale maps, Northern Territory (Figure 1). Molyhil is serviced via Alice Springs (population approximately 25 00), a modern city with full amenities and infrastructure.

The mine site is located on the Plenty Highway, approximately 25 km north from the turnoff to Jinka Station along a single lane unsealed road (Figure 1).

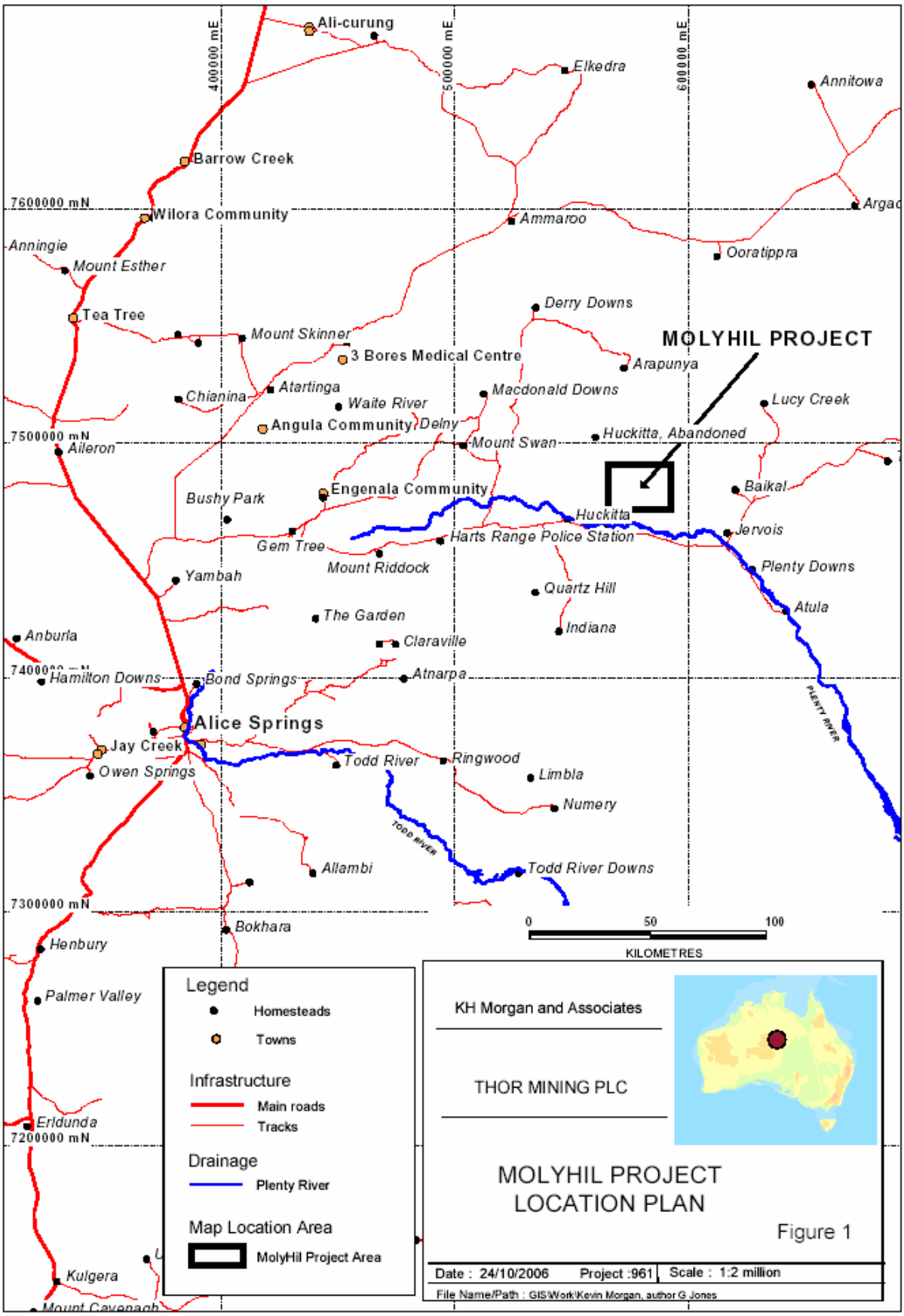

Figure 1 - Molyhil Project location map

1.3 OBJECTIVE

The purpose of this weed management plan is to:

- ensure that Thor's activities do not lead to the introduction or spread of weeds;
- identify weed establishment that may result through regular monitoring; and
- control weed infestations or potential outbreaks.

This management plan has been produced to accompany the Molyhil Project Public Environmental Report, which will be submitted to the Northern Territory Environmental Protection Agency (EPA).

1.4 VEGETATION AND FLORA

There are three habitats present within the mine lease: sand plain, alluvial riparian and rocky hill slope habitat. Heavy grazing of grasses, forbs and small shrubs in the understorey as well as clearing during previous mining activity, has resulted in much of the Molly Hill area being highly disturbed.

The dominant vegetation associations are open Gidgee (*Acacia georginae*) woodland over short grass and open Ironwood (*Acacia estrophiolata*) woodland over short grass. According to Perry et al. (1962), Gidgee communities are extensive in the north-eastern region around Jervois Station. "Sparse low tree" communities mostly characterised by Acacia estrophiolata, occur in a range of habitats and are a widespread community. Ground layer vegetation is mostly dominated by Buffel grass (introduced) and Bogan flea (associated with disturbed areas). In general, dominant species for the area are wide spread and their persistence is not dependent on the Molyhil area.

1.4.1 Flora

The dominant vegetation includes *Acacia georginae* overstorey, *Senna* spp. shrubs, and heavily grazed *Cenchrus ciliaris* and *Calotis hispidula*. Riparian zones were dominated by *Eucalyptus camaldulensis* overstorey, *Acacia farnesiana* tall shrub layer and *Cenchrus ciliaris* and *Zygochloa paradoxa* in the ground layer.

A search of the EPBC Act (1999) website listed no threatened species known in the area. Likewise, none of the species identified are listed in the N.T. list of threatened species (Parks and Wildlife web site).

1.4.2 Weeds and Plant Disease

Currently, Buffel Grass and to a lesser extent Ruby Dock are the main introduced species throughout the area.

2.0 RELEVANT LEGISLATION

Related acts, regulations and standards relevant to the management of adverse impacts on vegetation, flora and fauna from all phase of Thor's Molyhil Project are listed below.

- *Mining Act* 1980
- *Territory Parks and Wildlife Conservation Act*
- Environment Protection and Biodiversity Conservation *Act* 1999 (EPBC)
- *Soil Conservation and Land Utilization Act*
- *Planning Act*
- *Pastoral Land Act*
- NT *Environmental Assessment Act.*

3.0 RESPONSIBILITY

Table 1 lists the roles and responsibilities of the personnel responsible for the Weed Management Plan.

Table 1 - Roles and Responsibilities

POSITION	RESPONSIBILITY
Resident Manager	• ensure that all declared noxious weeds are identified and eradicated as required by regulations • ensure that this weed management plan is implemented
OHS&E Manager	• ensuring that all personnel are aware of and adhere to these procedures • ensure that regular surveys are undertaken to identify the occurrences of noxious weeds and to undertake any eradication programs as required by regulations
Employees and Contractors	• report any occurrence of noxious weeds

4.0 WEED ENVIRONMENTAL MANAGEMENT

Weeds will be controlled through prevention, monitoring and early eradication as follows:

- Avoiding or minimising disturbance to areas with, or vulnerable to, weed infestation where practicable;
- Inspecting vehicles and machinery for soil and seeds when entering the site and washing them in designated areas if required;
- Inspecting disturbed and rehabilitated areas for weeds (particularly after rainfall events) and consulting with the DNRETA as to the treating of infested areas;
- Raising awareness of the workforce in weed control;
- Rehabilitating disturbed areas progressively to discourage weed establishment.

4.1 MOBILE EQUIPMENT WASHDOWN

The most effective way of preventing the introduction and spread of weeds into an area is to ensure that all mobile equipment (especially earthmoving equipment), regardless of size and design, is free of all vegetative and soil matter prior to arrival.

A Weed Hygiene Program is shown in Table 2.

All mobile equipment shall be washed down and clean of mud, earth and seeds prior to entry to site. It is the responsibility of the Contract Manager or Department Manager to inform all earthworks contractors of the requirement to thoroughly wash their equipment prior to it arriving on site.

The Contract Manager or the Department Manager is also responsible for ensuring all earthworks equipment is inspected prior to commencement of work to ensure they have been adequately washed down.

A wash down area, with drainage water directed to a dedicated sump, will be located near the office area. All vehicles requiring entry to the site will be required to wash down before proceeding into the site.

Sumps will be managed to ensure that they do not overflow during high rainfall events and discharge seed stock and hydrocarbon contamination into the surrounding environment. Purpose built washdown bay facilities will feature a silt trap/sump that can easily be “bogged out”, and an oil/water separator if practicable

The haul truck fleet are dedicated vehicles that are not used on other sites. They remain on established roads and highways and are considered to pose minimal risk to the introduction of weeds. These vehicles are not required to wash down at each return trip to the mine site.

4.2 INVASIVE SPECIES REGISTER

The project area will be regularly inspected for invasive species by the OHS&E Manager or their delegate. Locations of any populations shall be recorded in a designated Weed Control Register. The following information will be recorded:

- Location (in MGA coordinates if possible);

- Species type (if known);
- The extent of the area infected;
- General topography of the infected area (i.e. drainage, disturbed areas etc).

The OHS&E Manager will organise:

- That the impacted area is demarcated to ensure that no person or mobile equipment enters the area;
- A contractor to conduct weed-spraying to eradicate the infestation;
- The post application inspection and the photographic monitoring to assess the success of the eradication program;
- Follow-up spray programs as required.

Photographs of weed species known to be problematic in the area will be posted on noticeboards such that all employees may be able to identify any populations around their work areas and report them to the OHS&E Manager. The site induction will include information and photographs of a range of common weeds. This ensures all personnel on site are aware of weed species and their management.

The Weed Identification program is shown in Table 3.

4.3 MANUAL AND CHEMICAL CONTROL

The OHS&E Manager shall implement a manual or chemical control program wherever new weed species are identified on the Molyhil Project and access tracks, roads, and service corridors. Advice on the most effective control means for each weed species shall be sought from the DNRETA.

The most likely locations of weed introduction on site include the wash down bay and sediment sump, visitor parking area and stores/laydown yards. Routine spraying these areas will be undertaken to eradicate all germinating plants, prior to seed set, to ensure any weeds are eradicated from site.

All weed control activities shall be recorded in a Weed Control Register, including the weed species, location, date and the type of control methods used.

The Weed Control program is shown in Table 4.

Table 2 - Weed Hygiene Program

<table>
<tr><td colspan="3">THOR MINING PLC ENVIRONMENTAL MANAGEMENT PROGRAM – WEED HYGEINE</td><td>Program No. 1</td></tr>
<tr><td colspan="4">OBJECTIVE: Prevent the introduction and spread of weeds by equipment</td></tr>
<tr><td colspan="4">TARGET: Prevent establishment of weed species through hygiene management</td></tr>
<tr><td>Target Date:</td><td colspan="2">Accountable: Resident Manager</td><td>Approved:</td></tr>
<tr><td colspan="2">Action Required:</td><td>Other Resources:</td><td>Action by:</td><td>Date:</td></tr>
<tr><td colspan="2">1. Identification of weed infestations of areas susceptible to infestation adjacent to or within the proposed disturbance area during pre-clearance surveys.</td><td>Resident Manager</td><td>Prior to clearing</td></tr>
<tr><td colspan="2">2. Restriction of vehicular access to the pipeline easement and designated tracks.</td><td>Resident Manager</td><td>On-going</td></tr>
<tr><td colspan="2">3. Log to be kept of all vehicles and machinery entering ROW during construction to ensure all machinery has been blown down and cleaned.</td><td></td><td>On-going</td></tr>
<tr><td colspan="4">Key Performance Indicators (KPI’s)</td></tr>
<tr><td colspan="4">• Establishment of nil weed species</td></tr>
</table>

Table 3 - Weed identification program

THOR MINING PLC ENVIRONMENTAL MANAGEMENT PROGRAM – IDENTIFY WEEDS		**Program No. 2**	
OBJECTIVE: Identify location of weed species			
TARGET: Ensure potential weed establishment is identified			
Target Date:	**Accountable:** Resident Manager	**Approved:**	
Action Required:		**Action by:**	**Date:**
1. Identification of weed infestations of areas susceptible to infestation adjacent to or within the proposed disturbance area.		Resident Manager	Prior to clearing
2. Conduct inspections during construction and operation to identify potential weed establishment.		Resident Manager	On-going
3. Thor will train their personnel in the identification of the main weeds that could potentially occur in the area.		Resident Manager	On-going
4. Thor personnel instructed to report any weed occurrence to the OHS&E Manager.		Resident Manager and all staff	On going
5. In the event that a particular weed species infestation is identified, targeted management measures will be developed and implemented in consultation with the Department of Natural Resources, Environment and Heritage.		Resident manager	On-going
6. Report on potential weed establishment in environmental reporting		Resident manager	On-going
Key Performance Indicators (KPI's)			
• Effective weed identification			

Table 4 - Weed Control Program

THOR MINING PLC ENVIRONMENTAL MANAGEMENT PROGRAM – WEED CONTROL			**Program No. 3**
OBJECTIVE: Control potential outbreaks of noxious weeds			
TARGET: Prevent further outbreak and spread of weed species			
Target Date:	**Accountable:** Resident Manager	**Approved:**	
Action Required:		**Action by:**	**Date:**
1. Identify suitable control methods for individual species. Approved control mechanisms.		Resident Manager	On-going
2. Implement control measures for emergent populations prior to seed set.		Resident Manager	On-going
3. Liaison with Department of Natural Resources, Environment and Heritage regarding weed control activities		Resident Manager	On-going
4. Ensure seed collected for use in rehabilitation is free of weeds.		Resident Manager	On-going
Key Performance Indicators (KPI's)			
• Weed establishment does not spread to surrounding areas. • Control of potential weed infestations.			

5.0 REFERENCES

Perry, R.A., Mabbutt, J.A., Litchfield, W.H. and Quinlan, T. (1962) Land Systems of the Alice Springs Area, Northern Territory, Australia. CSIRO, Canberra.

Northern Territory Threatened species list. Northern Territory Parks and Wildlife Website:
http://www.nt.gov.au/nreta/wildlife/threatened/specieslist.html#plants