



Northern Territory Government

Office of Environment and Heritage

PART A

INFORMATION FOR THE PUBLIC

**GUIDELINES FOR PREPARATION OF
A PUBLIC ENVIRONMENTAL REPORT**

**ARAFURA RESOURCES NL
MT PORTER GOLD PROJECT**

OCTOBER 2004

TABLE OF CONTENTS

| | | |
|----------|--------------------------------------|----------|
| 1 | PURPOSE | 1 |
| 2 | THE PROPONENT | 1 |
| 3 | DESCRIPTION OF PROPOSAL | 2 |
| 3.1 | INTRODUCTION | 2 |
| 3.2 | GEOLOGY | 2 |
| 3.3 | RESOURCES | 2 |
| 3.4 | MINING | 2 |
| 3.5 | MINING WASTE | 2 |
| 3.6 | ORE PROCESSING | 3 |
| 3.7 | WATER MANAGEMENT..... | 3 |
| 3.8 | INFRASTRUCTURE | 3 |
| 3.9 | WORKFORCE..... | 3 |
| 3.10 | DECOMMISSIONING..... | 4 |
| 4 | PER PROCESS | 4 |
| 5 | ADMINISTRATION | 4 |

1 PURPOSE

The Northern Territory Minister for the Environment and Heritage has determined that this proposal requires assessment under the *Environmental Assessment Act* at the level of a Public Environmental Report (PER).

These guidelines have been developed to assist Arafura Resources NL in preparing a PER for the proposed Mt Porter Gold Mine in accordance with Clause 8 of the Administrative Procedures of the *Environmental Assessment Act*. The object of these guidelines is to identify those matters that should be addressed in the PER. The guidelines are based on the initial outline of the proposal in the Notice of Intent (NOI).

These guidelines consist of two sections:

- Part A (this section) is the introduction and brief description of the project and the PER process; and
- Part B details the type and extent of information to be included in the PER.

The object of these guidelines is to identify those matters that should be addressed in the PER. The guidelines are based on the initial outline of the proposal in the proponent's NOI. The guidelines, however, are not necessarily exhaustive. They should not be interpreted as excluding from consideration any matters which are currently unforeseen that emerge as important or significant from scientific studies or otherwise during the preparation of the PER and the public consultation process.

This section of the guidelines has been developed to assist members of the public and other interested parties in preparing comments on the PER.

2 THE PROPONENT

The proponent is Arafura Resources NL.

3 DESCRIPTION OF PROPOSAL

3.1 Introduction

The Mt Porter Gold Project is located approximately 20km north of the Pine Creek township, adjacent to the existing Frances Creek Iron Ore Mine.

Mt Porter falls within the Mary River West pastoral lease (PPL815, NT Portion 1630). No pastoral activities currently occur in the immediate vicinity of the proposed mine site.

3.2 Geology

The Mt Porter gold deposit is a stratiform gold mineralisation hosted in metasedimentary rocks of the Palaeoproterozoic Koolpin Formation, which is characterised by carbonaceous and sulphidic shales.

3.3 Resources

The current published Identified Resources total 878,000 tonnes at 1.9 g/t Au using a 0.5 g/t Au cut-off grade. This includes an Identified Resource of 355,000 tonnes at 3.0 g/t Au using a 1.7 g/t Au cut-off grade.

3.4 Mining

Arafura Resources propose to mine the Mt Porter deposit by conventional open-cut methods. Mining will be conducted during the dry season each year from one or more open pits. It is currently planned to mine up to 574,000 tonnes of ore at a grade of 2.1 g/t Au over a two-year period.

There is the potential for the identification of further ore reserves and satellite pits within the Mineral Lease.

3.5 Mining waste

Mining operations for the proposed pit design will produce 2.4 million tonnes of waste rock and overburden, which will be placed in a purpose built waste dump adjacent to the open pit. The waste rock is expected to include both non-acid forming oxide rock and potentially acid generating primary waste. The operator proposes to encapsulate potentially acid generating material using the oxide rock.

3.6 Ore processing

The NOI states that no processing of ore will be undertaken on site. After temporary stockpiling on site, it is proposed that all ore produced will be trucked to an existing processing mill in the region (Union Reef).

3.7 Water management

The proposed mining operations will require dewatering of the open pit. The NOI states that all pit water is expected to be used for dust suppression during operations. Previous analysis of bore water has established that it is unfit for human consumption, due to elevated levels of arsenic and other base metals. It is proposed that a wetland filter will be constructed immediately downstream of the mine to remediate any acid water discharging from the site. Information on the predicted groundwater quantity and quality has not yet been provided by the proponent. Surface water runoff will be directed off site via bunding, with sediment traps installed to minimise sediment transport.

A temporary earthen dam will be constructed to store freshwater. The location of this dam has not been finalised.

3.8 Infrastructure

On-site infrastructure will be of a temporary nature and will include:

- Access road from the Frances Creek Road;
- Mine office including generator and ablutions;
- Contractor lay-down areas and workshops including generator;
- Freshwater dams/bores;
- Fuel dumps; and
- Magazine and explosives store.

It is anticipated that ore will be transported to Union Reefs Gold Mine Mill, approximately 10km SSW of Mt Porter. The proposed route will require upgrading of existing public roads and possibly the construction of a new haul road.

3.9 Workforce

Up to 30 people may be employed for mining and haulage operations during the dry season. These people would be accommodated at Pine Creek. When operations are suspended over the wet season, the workforce will comprise of 1-3 people in a caretaker/security role.

3.10 Decommissioning

The main objective is for all disturbed areas to be restored to a safe and stable landform that blends in with the surrounding landscape. Rehabilitation will be undertaken progressively wherever possible. It is proposed that the open-cut pit will remain and may or may not contain permanent non-potable water. The waste rock dumps will be stabilised, contoured and revegetated.

4 PER PROCESS

The proponent has been directed to prepare a PER. Once prepared, the PER will be exhibited for public review and comment for a period of 28 days, during which time advisory bodies will also comment on the document.

The Office of Environment and Heritage will prepare an Environmental Assessment Report and Recommendations based on the PER and any comments received. If the Minister approves the Report and Recommendations, these are forwarded to the responsible (consent) Minister(s) for inclusion in permit, lease or license conditions and in relevant management procedures (e.g. Environmental Management Plans).

The Assessment Report and Recommendations are included on the Office of Environment and Heritage webpage and hard copies are provided to respondents and selected public libraries and viewing sites.

5 ADMINISTRATION

The nominated Action Officer for this project is David George from the Office of Environment and Heritage, Department of Infrastructure, Planning and Environment (DIPE). The contact telephone number is (08) 8924 4049 and facsimile number (08) 89244 4053, e-mail: david.george@nt.gov.au.

Copies of the final guidelines will be posted on the DIPE website www.ipe.nt.gov.au/enviro.

Copies of the PER will be available to the public for purchase from the proponent.

Comments on the PER should be forwarded to the nominated Action Officer.