

Executive Summary

Title of Proposal

Quest 29 Project – Commencement of Mining & Processing Operations

Name & Address of Proponent

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Background to the Proposal

Since December 1996, Sirocco Resources N.L. (SRO) has been progressing planned re-commencement of operations at it's Tom's Gully gold project near Darwin in the Northern Territory. Kakadu Resources N.L. last operated the Tom's Gully mine in 1995.

A three staged development concept has formed the basis of this plan as follows:

Stage 1 - Re-commissioning of the existing Tom's Gully process plant using open cut ore sources from the nearby Quest 29 prospect. Dump leach ore processing at Quest 29 will commence as part of this Stage.

Stage 2 - Commence mining operations from underground at Tom's Gully and blend this ore with ore from Quest 29.

Stage 3 - Optimise the operation.

In the pre-feasibility study it is noted that the operational timing is not prescriptive. Current thinking involves allowing about 6-12 months for Stage 1 to settle down and at least 12 months for Stage 2. The staging is being undertaken to minimise capital expenditure from capital reserves. The pre-feasibility and feasibility study focuses on Stage 1 of the plan.

This PER has been prepared for Stage 1 at Quest 29 (open cut mining and dump leach processing) only. It is planned to transport high grade ore from Quest 29 to Tom's Gully for processing through the existing approved carbon in leach (CIL) facility. The annual MEMP will be prepared for Stage 2 (re-commencement of mining operations from underground) at the appropriate time.

Purpose of the Proposal

The purpose of this PER is to assess the existing environmental conditions at the proposed location and to identify actual and potential environmental effects of the proposed development, which will allow design and development of appropriate and effective management strategies aimed at minimising environmental risks and adverse consequence.

The PER is required to facilitate environmental approval for the proposed development by the Northern Territory Government in accordance with the Environmental Assessment Act 1982. The PER has been prepared by Sirocco Resources NL in conjunction with Consultants in order to address the requirements as outlined in the guidelines prepared by the Department of Mines and Energy and the Department of Lands, Planning and the Environment.

Description of the Proposal

Detailed drilling to shallow depths (<50m) at Quest 29 in 1997 and 1998 delineated a total resource of 2.6 million tonnes at 1.7 g/t Au (145,000 contained ounces of gold) in four zones at Quest 29, the West Koolpin, the Zamu Dolerite, Taipan Hill and the North Koolpin. During the feasibility study, preliminary pit design showed that a reserve of 800,000 tonnes at 1.9 g/t Au (0.4 g/t Au cutoff) can be mined from three shallow pits at a waste to ore ratio of 3.2: 1. The North Koolpin requires more drilling before a pit design is possible and is not included in the reserves.

Comprehensive metallurgical testwork has been undertaken on composite samples from all resources at Quest 29 to determine the cyanide leach gold recovery within the resources as well as physical testwork parameters. These tests have allowed characterisation of two main ore types viz. oxide and sulphide (primary). There may also be a transitional zone in the Zamu Dolerite zone. Gold recoveries in the oxide zones are excellent exceeding 90%. Lower gold recoveries occur in the Zamu Dolerite sulphide zone in particular. Further development metallurgical testwork is being undertaken to resolve the issues.

Infrastructure and services at Quest 29 will be established generally using refurbished secondhand equipment. The access road from the Arnhem highway to Rustlers Roost Mine road requires upgrading from the turnoff to the Quest 29 site (about 10 kilometres) as well as along a fenceline back into Tom's Gully for ore haulage and access for equipment. Site roads, power and water supply, office and workshop, a dump leach pad, associated ponding and stripping columns, pit bunding, creek diversion and a siltation pond and waste dump site(s) will need to be established for Stage 1 at Quest 29. An office upgrade and refurbishment of the process plant and re-erection of a crushing plant at Tom's Gully will also need to be undertaken for Stage 1.

SRO proposes to employ personnel on individual contracts and will operate on various shift arrangements depending on the final configuration of Stage 1. An accommodation strategy involving nearby available local motels, as well as own housing with bussing from Humpty Doo and Palmerston is being considered as most cost effective.

Trucking of high grade ore to Tom's Gully will be undertaken for about 2 years. The dump leach operation will run in parallel for the same period of time. Exploration in the North Koolpin in particular and within the Quest 29 and Mt Bundey joint venture leases in general should provide sufficient ore to allow the dump leach operation to extend for 3 to 4 years. The life of the high grade trucking operation is dependent upon further exploration discoveries and how quickly the Tom's Gully underground operation is brought into production. It is planned to blend this ore with Quest 29 high grade ore.

The initial production rate will be 250,000 tonnes per annum (tpa) of high grade ore from Quest 29 processed through the Tom's Gully CIL plant, as well as 300,000 tpa of low grade ore processed through as dump leach material at Quest 29. The Feasibility Study shows that this will produce about 20,000 ounces of gold in Year1. A total of 29,000 ounces of gold from high grade ore processing and 6,000 ounces from low grade (dump leach) ore will be recovered (excluding North Koolpin and new discoveries).

Description of the Existing Environment

Quest 29 is characterised by low, flat-topped hills with moderate to gentle slopes. Vegetation is characterised by eucalypt woodlands with tropical grass understoreys. The project area lies on the northern flank of the Pine Creek Inlier within a transgressive marine sequence dominated by folded shallow marine sediments of the Early Proterozoic South Alligator Group. The most extensive land use in the vicinity of the project area is pastoral, involving

the grazing of beef cattle over the woodland terrain. The industry is of low intensity with a few improvements made in regards to land tillage.

Tom's Gully is an existing mine site with infrastructure well established to control all potential environmental hazards in accordance with all Government regulations.

Principal Environmental Impacts

Environmental impacts particular to the project include:

- Potential acid generation from mine wastes at Quest 29;
- Management of cyanide used in the proposed dump leach at Quest 29;
- Rehabilitation; and
- Dewatering of acid mine water from the Tom's Gully pit

Quest 29, as a new operational site, will establish controls within the guidelines outlined in this PER.

Licenses are in place for controlled release of acid water from the Tom's Gully open pit into the Mt Bundey creek, during high creek flow events in the 1998 / 1999 wet season. Controlled release in past wet seasons has been shown to be effective. Careful independent monitoring of these releases has shown no damaging environmental effects from water toxicity. At the completion of the 1997 / 1998 wet season, containment of residual water in evaporation ponds during the dry season was necessary.

Continued dewatering of further inflows will be necessary once the pit is dry, however, this water is likely to be neutral to mildly acidic. The landowner has established a shallow containment area for water to be used for stock purposes in the dry season. A wetland filter will be established at the inflow to this area and any excess bore water may then be suitable for discharge through this filter into the landowner's containment area, subject to appropriate permitting and monitoring at that time. The water will be contained in the existing evaporation pond system until these approvals have been obtained.

Proposed Environmental Management Principles and Monitoring Procedures

The responsibility for the environmental performance of the Company at the Quest 29 and Tom's Gully sites rests with all employees (permanent or contract) of the Company. The Site Manager or his nominee will undertake management of the Companies environmental policy. He is directly responsible for enforcing the Companies policy within the guidelines set down by the Northern Territory Government and other relevant legislation. He will be responsible for management of all monitoring and reporting. The Manager will employ personnel including specialists as required.

The final responsibility for the environmental performance of the Company at Quest 29 and Tom's Gully rests with the Directors. The Operations Director will be responsible for internal review of the Companies environmental performance.

Monitoring and management will be undertaken as follows:

- Monitoring of water quality in the water management system;
- Leak detection in the dump leach facility;
- Management of ongoing waste characterisation;
- Monitoring of leachates from the waste rock dump;
- Dust Control; and
- Management of Re-vegetation and Rehabilitation

This PER forms part of the planning requirements for project development involving the Northern Territory Department of Mines & Energy and the Northern Territory Department of Lands, Planning and the Environment. This will enable the Company to respond to Government requirements and enable the project to proceed as soon as possible following completion of the feasibility study, formal Government approval and ultimately the Board's decision to mine is based on this process.