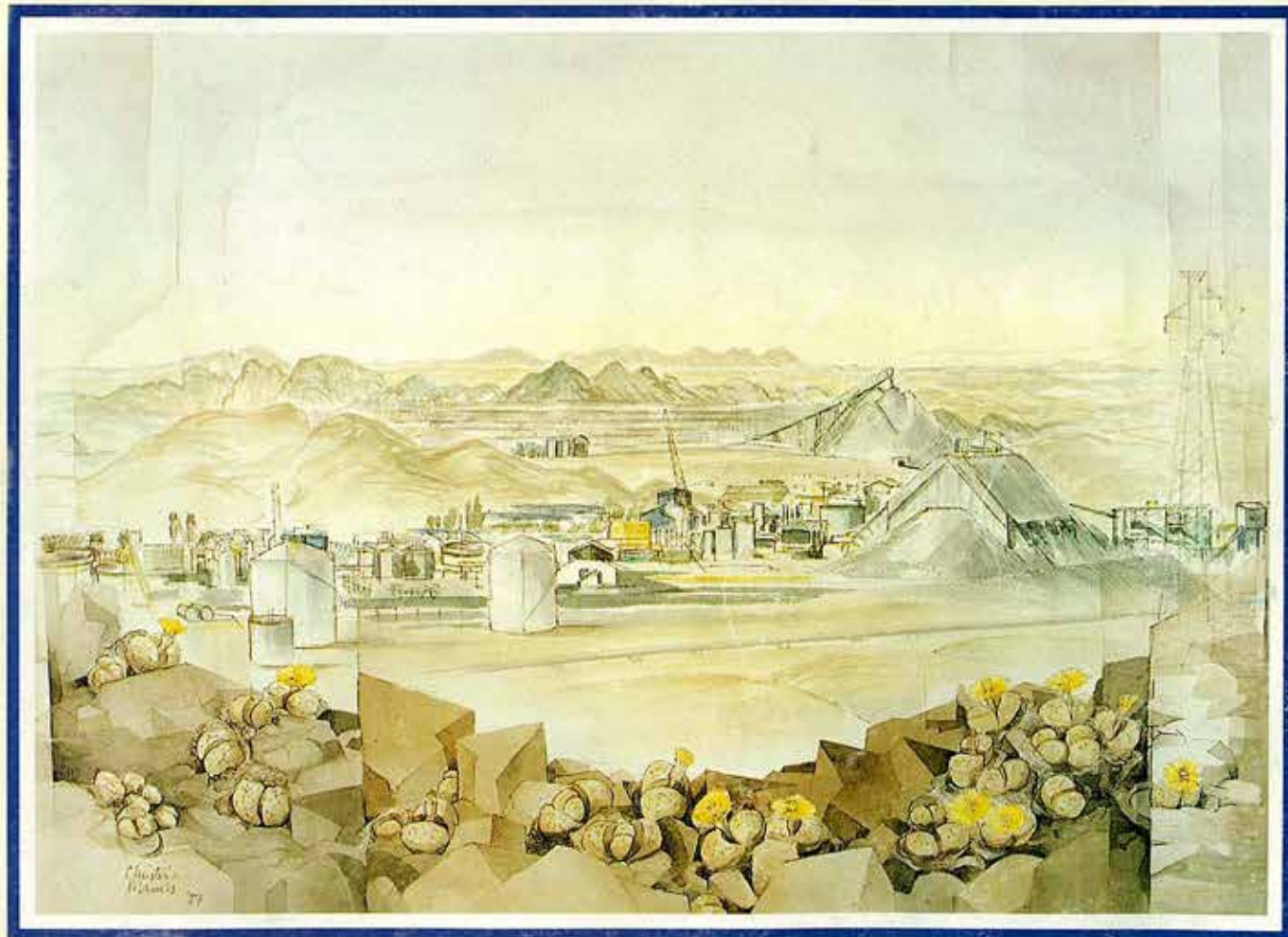


Rössing Uranium Limited



AN ENVIRONMENTAL IMPACT STATEMENT FOR THE RÖSSING URANIUM MINE, NAMIBIA



Compiled by
Division of Water Technology, CSIR



Cover illustrations by Christine Marais

Synopsis

AN ENVIRONMENTAL IMPACT STATEMENT FOR THE
RÖSSING URANIUM MINE, NAMIBIA

PREPARED FOR: Environmental Health Services Department
Rössing Uranium Limited
Private Bag 5005
Swakopmund 9000
Namibia

PREPARED BY : Water Quality Information Systems
Division of Water Technology
CSIR
P.O. Box 395
Pretoria 0001
Republic of South Africa

COMPILERS : P.J. Ashton
C.A. Moore
P.H. McMillan

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This report presents the documentation of a detailed Environmental Impact Statement (E.I.S.) that has been drawn up for the Rössing Uranium Mine in Namibia. The primary purpose of this document is to provide a comprehensive compilation of the information relating to all aspects of the activities that have been conducted, or are likely to be undertaken, at Rössing, and an evaluation of the impacts which these activities have had, or will in future have, on components of the local and regional environment.

The study was commissioned by the Health, Safety and Environmental Services Department at Rössing, with the express intention of providing as detailed a picture as possible of the impacts caused both by mining and associated activities. Staff members from various Departments at the Rössing Uranium Mine were nominated to provide the compilers of this report with all the information available on their sections. Their active and enthusiastic support for this project is gratefully acknowledged.

The body of this report consists of seven text chapters, followed by a list of detailed conclusions and recommendations. A list of the reference materials used during the study is contained in the final section of this report.

The first chapter consists of a short discussion on public perceptions and the need to evaluate environmental impacts as well as the level of investigation required. This is followed by Chapter 2, which contains a description of a probable pre-mining baseline, describing as accurately as possible the conditions that must have prevailed prior to the start of mining activities. Because of an almost complete lack of detailed ecological information from the Rössing area prior to mining, Chapter 2 is based on the conditions prevailing now at nearby undeveloped areas and is therefore somewhat speculative.

Chapter 3 details the extent of current mining activities at Rössing and includes information on the local and regional infrastructure, together with details of important socio-economic features. Chapter 4 examines in detail the impacts that mining activities have had to date and lists the criteria used in the description and evaluation of these impacts. In any evaluation of environmental impacts, the desirability or otherwise of an impact will depend largely on the attitude of the assessor. There is, therefore, an unavoidable component of subjectivity in this analysis.

Chapter 5 describes the extent of projected future mining activities during the remainder of the life of the Rössing Uranium Mine. Wherever possible, details are given of the extent and variety of activities that are foreseen. This is then followed by Chapter 6, which uses the same criteria as listed in Chapter 4 to describe and evaluate the probable impacts that future mining activities will have. Chapter 7 then describes the available information on the proposed decommissioning plans for the Rössing Uranium Mine at the end of its economic life. Particular attention is given to the type of remedial and ameliorative works that will be necessary.

The report closes with a list of detailed conclusions arising out of the findings of this study in Chapter 8, followed by specific recommendations for further action in Chapter 9. The references used during the course of the project are listed in Chapter 10.

This study has revealed clearly the extent to which Rössing has modified the existing environment and the variety and extent of remedial actions that have already been undertaken. Ideally, an Environmental Impact Statement (E.I.S.) such as this one should be considered as a "living document" and form the basis of regular evaluations of environmental impact during the remainder of the mine's

life. These evaluations or audits should take the form of short annual surveys where the preceding year's data from the environmental monitoring programme is evaluated. This information should then be used to update the E.I.S. so that it will always contain relevant and up-to-date information to guide management actions.

Terms of Reference

This report has been drawn up at the request of Mr A.W.J. Jooste, Superintendent of the Health, Safety and Environmental Services Department, and Mr P.N. Vernon, Technical Controller at Rössing Uranium Limited.

This report represents a compilation of all the available information relevant to the environmental impacts experienced during the uranium mining operations at the Rössing Uranium Mine. Virtually all the information pertaining to both current and proposed mining developments at Rössing has been provided by the staff of Rössing Uranium; this report could not have been compiled without their active interest in the project. The relevant individuals are listed in the acknowledgements section of this report.

The specific requests made by Messrs Jooste and Vernon were:

1. The report should provide a comprehensive and detailed compilation of all the environmental impacts that have taken place since the inception of mining operations at Rössing.
2. The report should be based on an evaluation of the information that is available from Rössing and other local and, if appropriate, overseas sources. No attempt should be made to initiate additional data-collection or monitoring studies at the Rössing Uranium Mine until this report has been finalized.
3. The report should provide as detailed as possible a picture of the "baseline" conditions that existed prior to the commencement of mining activities. It was accepted that any assessment of the long-term, post-decommissioning impacts would be very difficult since the remaining mine development and decommissioning procedures have not yet been defined.
4. Nominated Rössing Uranium staff members, representing each of the major Departments at the Rössing Uranium Mine, would liaise with CSIR to provide information relevant to their sections. Mr A.W.J. Jooste of the Health, Safety and Environmental Services Department would act as co-ordinator for the project.
5. All information received from Rössing Uranium Limited and all reports and correspondence generated in connection with this assignment must remain strictly confidential.

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