

WASTE KHORO 2019: Asbestos and Land Remediation Summit
18-20 September 2019

"Good Green Deeds towards a Recycling Economy and Sustainable Land Remediation"



Perspective on Secondary Asbestos Remediation Plan

Waste Khoro Conference,
Mittah Seperepere Convention Centre, Kimberley,
Northern Cape
18 September 2019



environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Website: www.environment.gov.za | Email: callcentre@environment.gov.za | Call Centre: 086 111 2468 | Environment Crimes Hotline: 0800 205 005



Find us:
Department-of-
Environmental-Affairs



Follow us:
@EnvironmentZA



Follow us:
@EnvironmentZA



Watch us:
@EnvironmentZA



Presentation Outline

- Introduction
- Findings of the Secondary Asbestos Remediation Plan(SARP)
- Impacts of Asbestos Exposure
- Remediation options identified in the SARP
- SARP Implementation Progress
- Challenges in Implementing the SARP
- Conclusion



INTRODUCTION

- Asbestos is a group of fibrous mineral silicates.
- Raw asbestos is naturally occurring, but has been exposed by mining activities.
- Asbestos has been mined in Mpumalanga, Northern Cape, Limpopo and North West Provinces.
- Due to its durability, asbestos was used in a variety of ways, including building materials, cement products, textiles, fireproofing, and several other uses.



INTRODUCTION CONT....

- The study was completed in 2006 and showed that there are different levels of contamination in four provinces (NC, LP, MP, NW).

Asbestos contamination:

- **Primary asbestos contamination:** contamination from areas where asbestos was mined, milled, stockpiled and transported prior to processing into final product. This include areas located within the jurisdiction of the Department of Mineral Resources.
- **Secondary asbestos contamination:** any asbestos contamination (or pollution) of the general environment resulting from the transport, storage or use of asbestos as a result of historic mining operations. This include areas outside the jurisdiction of DMR.



INTRODUCTION CONT....

- DEA was tasked by Cabinet in 2004 to undertake a study to assess the extent of secondary asbestos contamination in SA.
- Following the 2006 study, the DEA took the study further by developing (in 2008) a remediation plan & costing model for contaminated areas.
- The 2008 study (Secondary Asbestos Remediation Plan) included the social impact assessment (SIA) to assess how exposure to asbestos has affected the socio-economic aspects of relevant communities.



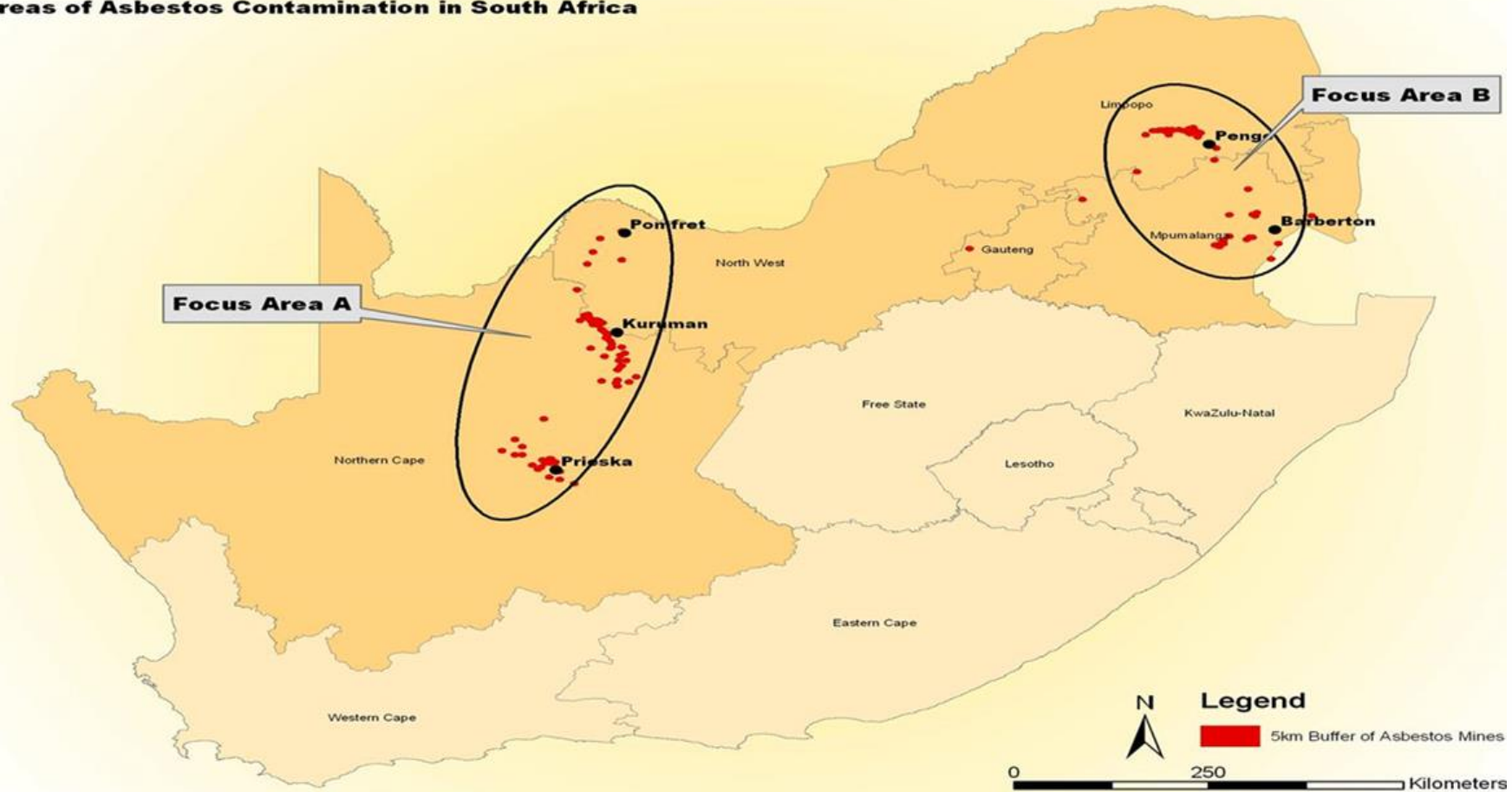
INTRODUCTION CONT....

- After verifying the problem of asbestos contamination in the 4 provinces, the 2008 detailed study was aimed at developing a Remediation Plan and Costing Model for the remediation of the contaminated areas.

FINDINGS OF SARP



Areas of Asbestos Contamination in South Africa





ASBESTOS EXPOSURE IMPACTS

- Asbestos can cause several lung diseases (referred to as asbestos related diseases: ARDs).

Main three types of ARDs:

- **Asbestosis** : is a dust disease of the lungs.
- **Mesothelioma**: a disease of the lining of the lung and abdominal cavities.
- **Lung Cancer**: occurs when certain cells in the lung divide uncontrollably.



REMEDIATION OPTIONS IN SARP

- **No Action Alternative:** In this regard all the contaminated areas will be left the way they are (not rehabilitated).
- **In-situ Remediation:** In this regard there will be a need for temporary relocation of the community while remediation is being carried out (estimated 10 years).
- **Permanent Relocation:** In the regard minimal or no remediation will be applicable, but will be case specific. This can be regarded as the most reliable and permanent solution to the problem. However, this is dependent on whether the communities are willing to relocate and the extent of contamination.



SARP IMPLEMENTATION PROGRESS

- Construction of 2.5km road in Penge area in 2016.
- Construction of 8km asbestos free road at Ga-Mafefe village and five asbestos free classrooms at Sealane Primary School in 2017/2018 financial year (see next slides for the pictures).
- Paving of Ga-Mopedi primary school and construction of asbestos free Ga-Mopedi community sports ground in Northern Cape.
- Construction of 10km roads in Heuningvlei and Mafefe.



SARP IMPLEMENTATION PROGRESS



Before: Classrooms made of asbestos material



After: Asbestos free classrooms at Ga-Mafefe



SARP IMPLEMENTATION PROGRESS



Before: Gravel road at Ga-Mafefe
Mafefe



After: Asbestos free road at Ga-Mafefe

SARP IMPLEMENTATION PROGRESS



- 15km free asbestos road in Northern Cape, Prieska will be constructed in 2019/2020 financial year.
- While acknowledging the progress, all stakeholders still need to do more in the integrated approach to invest in this plan (SARP) which includes building homes, schools, clinics, roads, churches, government buildings, open spaces, dump sites, playgrounds, community parks and sports field, police stations and post offices, railways and stations.

IMPLEMENTATION CHALLENGES



- Funding; and
- Fragmentation/lack of integration within the government departments.



CONCLUSION

- Houses, churches, clinics and other infrastructure have been constructed from asbestos contaminated soils and materials exposing populations to asbestos on a daily basis and remediation of these facilities would help significantly.
- Implementation of these asbestos remediation projects will revive local economy in distressed old mining towns, promote Small Enterprises/Cooperatives and create jobs.
- Government departments and companies need to work together in order to implement the SARP so that we can have asbestos RISK free country.

WASTE KHORO 2019: Asbestos and Land Remediation Summit

18-20 September 2019



"Good Green Deeds towards a Recycling Economy and Sustainable Land Remediation"

THANK YOU!

Takalani Telekisa
Department of Environment, Forestry and Fisheries
Land Remediation Directorate
Tel: 012 399 8549
Email: ttelekisa@environment.gov.za



environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



Website: www.environment.gov.za | Email: callcentre@environment.gov.za | Call Centre: 086 111 2468 | Environment Crimes Hotline: 0800 205 005



Find us:
Department-of-
Environmental-Affairs



Follow us:
@EnvironmentZA



Follow us:
@EnvironmentZA



Watch us:
@EnvironmentZA