ADDRESSING THE TRANSPORT, HANDLING & STORAGE OF MANGANESE AND OTHER HAZARDOUS ORE IN SALDANHA BAY MUNICIPALITY

13th Air Quality Governance Lekgotla 01 – 03 October 2018

02 OCTOBER 2018 BY RENÉ TOESIE
Introduction

• René Toesie
• Civil: Environmental Engineering
• Involved with Air Quality Management since 2010
• ??????????????
SBM Air Quality Network since July 2014

- ELECT DEPT VDB
- RESERVOIR VDB
- JUFFROUSHOOGTE
- AIRPORT
- BLUE WATER BAY
- SALD AQM
- CURRO SCHOOL
DIURNAL TREND FOR SO$_2$, NO$_2$, O$_3$, PM$_{10}$ (SALD) AUG 2018
Figure 4.4.5: Average Manganese concentrations at the Saldanha Bay Municipality sites for Q2 (April 2018 - June 2018)
Figure 4.4.1: Average lead concentrations at the Saldanha Bay Municipality sites for Q2 (April 2018 - June 2018)
PORT OF SALDANHA  (advertisement to the industrial world)  
(extract from Kumba Iron Ore Mine)

EVERY DAY IRON ORE IS TRANSPORTED FROM SISHEN AND KOLOMELA MINES TO SALDANHA BAY BY RAIL. The 861km RAIL SYSTEM that links the Sishen mine to THE DEDICATED DEEPWATER PORT AND BULK LOADING FACILITIES is among the MOST EFFICIENT AND ADVANCED LOGISTICAL SYSTEMS IN THE WORLD.

Saldanha Bay Port is BIGGER than Durban, Cape Town’s Table Bay, Richards Bay and Port Elizabeth’s harbours combined. The ore quay at Saldanha has two berths where two vessels of 310,000 deadweight tonnage can simultaneously tie up at the iron ore jetty. The terminal OPERATES 24/7 and has the capacity to offload 10,000 tonnes per hour onto a vessel.

From ARRIVAL TO DEPARTURE AN ORE VESSEL carrying 170,000 tonnes will be in Saldanha Bay for just 24 HOURS.
Transnet has signed a **seven-and-a-half-year** Manganese Export Capacity Allocation (MECA2) contract with Assmang as part of its strategy to secure **95% of manganese volumes on rail**. Contract expires in **March 2023** and is aligned with **Transnet’s manganese expansion plans** to create capacity ahead of demand in freight, ports, terminals and rail systems in the country.

15% of Transnet’s capacity is available to **new entrants in the manganese export market**.

“The 15% capacity allocation was made available to **encourage new and emerging entrants to take part in mining activities in the country**.

The MECA2 project will result in **12.5-million tonnes of manganese a year** being transported from the Hotazel area through the **Saldanha and Port Elizabeth ore railway lines**.
South Africa has made major changes to the laws regarding mineral rights

Minimising unemployment, alleviation of poverty and inequality as per the Millennium Development Goals (MDG’s). Government adopted industrialisation policies, including Industrial Policy Action Plan 2010/11 (IPAP2) and the New Growth Plan (NGP). These identified infrastructure, the mining value chain especially the final stage beneficiation and manufacturing

Government has approved and adopted the National Development Plan (NDP), which aims to eliminate poverty and reduce inequality by 2030.
INFORMATION GIVEN TO SBM

- Manganese export will be **TEMPORARY** *(since 2012)*
- Earmarked for Coega

CURRENT SCENARIO IN SBM

- Increase in locations storing and handling Mn below 100,000 tons [NO AEL REQUIRED]
- Earmarked for Coega?
- What is the cumulative impact of **TEMPORARY** on our communities
INCREASE IN NON-LISTED SITES
WEST COAST DISTRICT MUN

5 LOCAL MUNS

- Vredendal
- Clanwilliam
- Vredenburg
- Piketberg
- Moorreesburg
- Malmesbury
- Swartland
- Bergrivier
- Saldanha Bay
- Matzikama

Northern Cape Province
Cape Winelands District Municipality
Atlantic Ocean
ORE TRANSPORT ROUTES - ROAD

DIST BETW SALDANHA & HOTAZEL IS 1018KM VIA R27
SBM DEVELOPMENT FORECAST

SIP 5
OPERATION PHAKISA
IDZ / INDUSTRIALISATION

INDUSTRIAL ACTIVITIES
COMMUNITY RESIDENTIAL
Mn/Fe Rail

DEVELOPMENT CONSIDERATIONS IN THE SALDANHA BAY MUNICIPAL AREA
INTERGOVERNMENTAL RELATIONS

Chapter 6 AQA - transboundary air pollution

APPLICABLE STANDARDS:
- SBM BY LAWS
- NEMA
- AEL’s (where applicable)

AQA Ch 5 Section 39(b):
Factors be taken into account by the licensing authority:
the pollution being or likely to be caused by the carrying out of the activity applied for and the effect or likely effect of that pollution on the environment, including health, social conditions, economic conditions, cultural heritage and ambient Air quality
CONCLUSION

• National Development Plan (NDP) 2030 - Our Future-make it work sets goals for sustainable and economic development

• To measure is to know (Dr Thuli Khumalo)

(Dr Tsakani Ngomane):

• Assist & support each other in the context of the NDP 2030

• Co-ordinate actions and legislation in the context of the NDP 2030

• Discuss & agree on emerging challenges & possible solutions in the context of the NDP 2030

• Gaining knowledge whilst supporting the implementation of the NDP 2030

• Impact on communities and OUR responsibility towards the communities because of the NDP 2030

• However, sustainable and economic growth cannot happen in a sick environment

Herewith, an invitation to PLEASE visit Saldanha Bay municipality for a snoek braai and local Rooi Gety Red Wine