

Air Quality and Health

The background of the slide is a photograph of an industrial facility, likely a refinery or chemical plant, silhouetted against a bright orange sunset. Several smokestacks are visible, with thick plumes of white smoke rising into the air. The sun is a large, bright circle in the center of the sky, creating a strong glow. The overall scene conveys a message of industrial activity and its potential impact on air quality.

Presentation to Parliamentary
Committee 12th March 2024

HEALTH IMPACTS
OF CHEMICALS EMITTED
BY COMPANIES IN THE SOUTH DURBAN AREA



SAFE HEAVEN

A

B

CHINA TOWN

JACOBS

STANVAC

TREASURE BEACH

COLAS

Macdonald Steel

Engen Ezray Convenience Centre

Wentworth Police Station

Fairvale Secondary School

Treasure Beach Educational Centre

Oaklands Lodge

Lanxess (Pty)

Clairwood Park

Merebank Shree Parasakthie Temple

St Monica's Home

CHINA TOWN

Basl February Rd

Christ The King Parish, Wentworth

Engen Refinery

Marine Dr

KFC Merebank

Merebank Community Centre

Ethekwini Municipality Parks

Travencore Dr

Merebank Secondary School

Omega Worship Centre

Dolphin Rest Guesthouse

ML Sultan Saint Marys Primary School

Badulla Dr

Merewent Islamic Trust Masjid

Marine Dr

Google

Engen Refinery: 16 April 2006

- Large **explosion** shakes Wentworth and Merebank residents, leaving one worker injured.
- The worker was burnt when asphalt fell on his arms as the fire was being extinguished.
- The fire raged for 20 minutes before being brought under control, located at the vacuum unit producing oil from crude in the early stages of the refining process.
- Residents left and sought refuge at the entrance of the Clairwood Racecourse.



Engen refinery: 19 November 2007

Storage tank with 7 million litres of Petrol burned to the ground for over 58 hours. Residents evacuated to the Clairwood Racecourse.





Fire at Engen Refinery: October 2011



ENGEN Explosion

04/12/2020



Early hours 07:30am
04/12/2020



Flats Burnt & Over 300 houses affected by the explosion & people traumatized



Child suffers from face body burnt





ENGEN Refinery

- ▶ We received over **50 pollution/flaring complaints** from the period **December 2023 to January 2024** emanating from **Engen**.
- ▶ Status of ENGEN Refinery operations in regard to the Local Authority licensing and scheduled trade permits.
 - ▶ Why was there no public participation?
- ▶ Presentation required from the City regarding data from the eThekweni Municipality Air Quality monitoring Stations.
- ▶ Data from ENGEN refinery fenceline monitoring
- ▶ Just Transition in regard to ENGEN Refinery a presentation required from the company.
- ▶ What methodology was used to consult the residents of South Durban.

- ▶ The role of **National department of Agriculture and Environmental** on this matter.
- ▶ We require information on what activities are been done at ENGEN refinery.
- ▶ We require information on who gave the **permission** and on what basis the permission was granted
- ▶ What is the long term **Plan of Engen?**
- ▶ Are they still within the perimeters of the **bylaws** of the City
- ▶ What are the people of S.D view on the Engen's future, ***public participation required.***

List of pollutants monitored across the eThekweni AQM

Sites	Start Date	End Date	SO ₂	NO ₂	O ₃	CO	PM _{2.5}	PM ₁₀	Wind Direction	Wind Speed	Relative Humidity	Barometric Pressure	Solar Radiation	Amb Temperature
Alverstone	2005	Present			x			x						
Amanzimtoti	2014	Present	x		x		x	x	x	x	x	x	x	x
Cato Ridge	2014	Present	x		x		x	x	x	x	x	x	x	x
City Hall	2005	Present	x				x	x						
Ganges	2005	Present	x				x	x						
Grosvenor	2005	2015	x						x	x	x	x	x	x
Hambanathi	2015	Present	x	x	x		x	x	x	x	x	x	x	x
Jacobs	2005	2014	x	x					x	x	x	x	x	x
New Germany	2014	Present	x	x			x	x	x	x	x	x	x	x
Prospecton	2005	Present	x											
Settlers	2005	Present	x				x	x						
Southern Works	2005	Present	x				x	x	x	x	x	x	x	x
Umkomaas	2018	Present	x	x	x		x	x	x	x	x	x	x	x
Warwick	2005	Present	x			x	x	x						
Wentworth	2005	Present	x				x	x	x	x	x	x	x	x

Not Monitored	
Monitored	x

School learners gassed



COMPANY OFFERS TO PAY MEDICAL COSTS

Children gassed by factory leak

TONY CARNIE

AT LEAST 27 people, including several schoolchildren, were taken to hospital or treated by ambulance staff yesterday afternoon after another chlorine gas leak at Umbogintwini, south of Durban.

The chlorine leak, which was reported 30km away in Glenwood, emanated from the same factory responsible for the gassing of more than 100 schoolchildren in Isipingo four months ago.

It also coincided with an invitation to residents of south Durban to gather at public meetings in Merebank, Austerville and the Bluff next week to protest about the health and air pollution problems highlighted in *The Mercury* this week.

The latest gas leak from Sasol Polymers (formerly Polifin) happened just after noon and affected several people close to the factory as well as residents and children in Lotus Park, Isipingo, about 2,5km away.

Mr Kim Fraser, general manager of the company's chemical division, said the cause of the leak was not clear, although it seemed to have come from a loading area where chlorine cylinders are filled for water-purification purposes.

At Strelitzia Secondary School, at least four pupils - Shantal Isaac, Romano Govender, Sifanile Mabida and Fiona Abdul - were affected, said headmaster Nanda Nair.

Orissa Primary School head Anand Attwarie said several children had complained of chest pains or sore throats, and one child, 12-year-old Sivanda Gambushu, had gone into convulsions.

incident and said his company would pay for all medical costs.

Just four months ago, on May 5, nearly 120 children or teachers from Strelitzia Secondary School were affected or given medical treatment after a similar leak from the Sasol Polymers plant. The factory was closed after the May incident and only reopened a few weeks ago.

Ms Linda Ambler, of the environmental justice group "groundWork", said the latest incident showed that reopening the factory had been premature and indicated that the necessary safety, health and environmental safeguards were not yet in place.

"The incident comes against a backdrop of growing discontent in south Durban about industrial pollution, and 'groundWork' is deeply concerned and disappointed at the apparent disregard shown by industries and the government for community health.

"Both the government and polluting industries need to spend more time, finances and resources on protecting the health of South Africans."

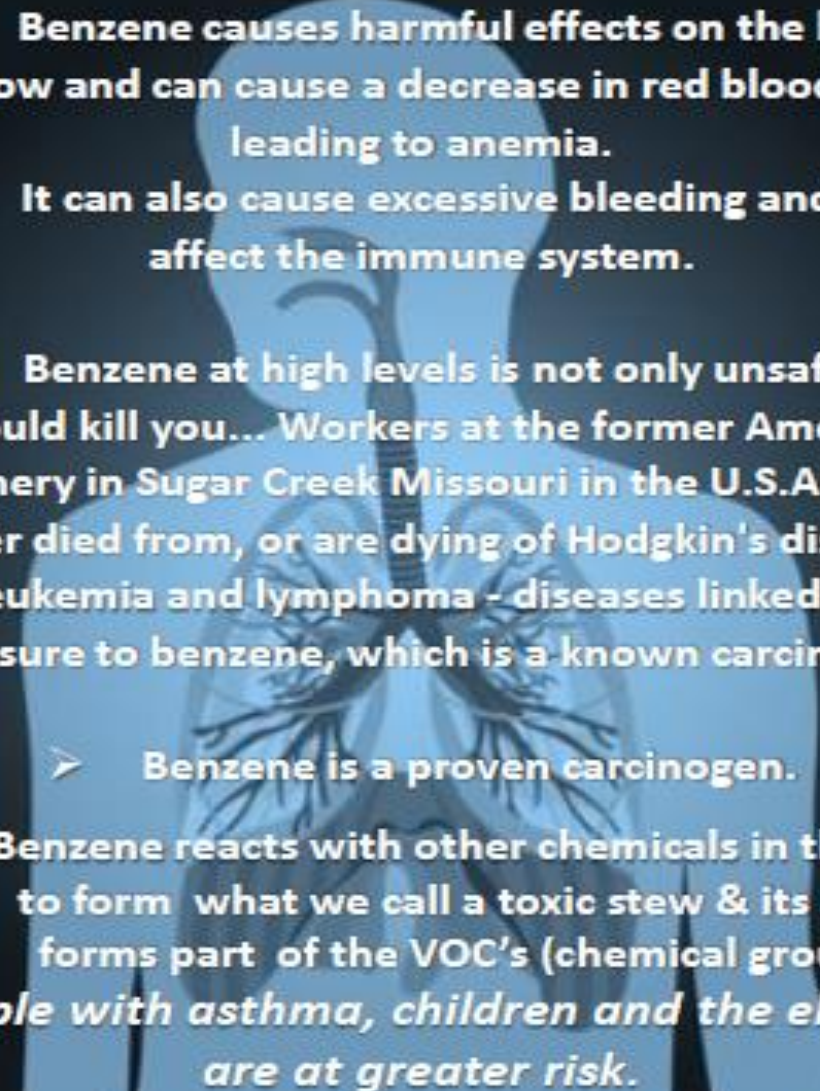
□ The South Durban Community Environmental Alliance has invited residents to a series of "Speak Out!" protest meetings next week to demand a comprehensive health study in the area.

They will be held at 7pm at Austerville Civic Centre, Austerville Drive (Tuesday), Merebank Community Centre, Dharwar Road (Thursday) and Brighton Beach School, 460 Marine Drive, Bluff (Friday).

For information phone: Michelle Simon, project SDCEA co-ordinator, at (031) 461 1991.

Benzene (VOC's Family)

Carcinogenic

- 
- Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells, leading to anemia.
 - It can also cause excessive bleeding and can affect the immune system.
 - Benzene at high levels is not only unsafe - it could kill you... Workers at the former Amoco refinery in Sugar Creek Missouri in the U.S.A have either died from, or are dying of Hodgkin's disease, leukemia and lymphoma - diseases linked to exposure to benzene, which is a known carcinogen.
 - Benzene is a proven carcinogen.
 - Benzene reacts with other chemicals in the air to form what we call a toxic stew & its also forms part of the VOC's (chemical group)
People with asthma, children and the elderly are at greater risk.

South African Constitution

➤ **Section 24: Environment**

Everyone has the right—

- (a) to an environment that is not harmful to their health or wellbeing; and

➤ **Section 41: Principles of co-operative government and intergovernmental relations**

1. All spheres of government and all organs of state within each sphere must

- (b) Secure the well-being of the people of the republic

Withholding information

Section 32: Access to information

➤ 1. (a) Any information held by the state

This includes environmental information which, according to **Principle 10 of the Rio Declaration**, “each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on **hazardous materials** and **activities** in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information **widely available.**”

Air Quality Management Forum

For open democracy to work there must be openness and respect.

***Accountability**

Access to information so that we arrive at sound decision.

*** Putting plans in place to make relevant information easily accessible to the public.**

Desmond D'Sa will elaborate on the following:

- ▶ The visit by the Portfolio Committee and disrespect shown to members by ENGEN management.
- ▶ The site tour to see the damage within the refinery by members of Parliament.
- ▶ The refinery management refusing to provide information despite agreeing to work with the community.
- ▶ The members of ENGEN labour force interdicted by the company
- ▶ ENGENS incidents of gassing the affected since their start up of certain units without notifying their fenceline neighbours.
- ▶ The lack of any action by our local health regulator.



SDCEA
SOUTH DURBAN COMMUNITY
ENVIROMENTAL ALLIANCE

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