



# CIVIL SOCIETY



# WALKING THE TALK...

## 24 YEARS OF CIVIL SOCIETY ACTIVISM



## WHO IS SDCEA?

- The South Durban Community Environmental Alliance (SDCEA) is an alliance of 16 organisations concerned with industrial pollution, spatial developments, environmental justice and the community's rights in the South Durban.
- SDCEA has embarked in creating awareness in south Durban about people's environmental rights and ways in which we can all get involved to ensure that industries that operate on our fence-line adhere to their permits and regulations. There had been an overwhelming response by the community in understanding the issues that the people of south Durban are plagued with.

# WHAT DOES SDCEA DO?

- The SDCEA hosts activities such as awareness campaigns, workshops, protests, meetings, etc to discuss any facets of environmental justice, including community health, unsustainable development, industrial pollution, and disproportionate governmental representations.

## ➤ **Information dissemination:**

- GIS Mapping of South Durban
- Community newsletters
- Books & reports about Industry and the effects they have on people
- Health study publication
- Distribution of posters & pamphlets
- Environmental educational material
- Talks at educational institutions



# WHAT DOES SDCEA DO CONT...

## ➤ **Community empowerment:**

- Regular workshops to create awareness.
- Petitions ,protests & marches
- Beach clean-ups and other projects
- School projects engaging youth
- Toxic tours to teach people about the situation in South Durban
- Bucket brigade monitoring air quality with community members.

- ❖ We are also involved in many youth based projects and activities.



# INDEPENDENT WATCH



# OVERWHELMING SMOKE FROM ENGEN REFINERY, 11 OCTOBER 2006

- Engen Refinery - Residents of Wentworth, Merebank and Treasure Beach report a pall of black smoke emerging from the stacks for over an hour, caused by an electrical shutdown prompting fuel gas to be sent into the flares. Residents sought out information on whether or not they should evacuate but received no help.



# FIRE AT ISLAND VIEW STORAGE, 18 SEPTEMBER 2007

- Island View – Six tanks at Island View Storage were gutted and four others damaged in a chemical blaze. One worker, Meshail Reddy, was killed and thousands tried to evacuate their homes until the blaze was under control, but it took 2 hours to call an evacuation, and when it was called, there was nowhere for the people to go and no one to help.
- This accident released 64 times the emissions that are the upper limit of leukemia and bromomethane, another carcinogen. This date is remembered in the present among South Durban residents as a testimony to the lack of support for accidents they experience daily. Reddy's body was found one week later. At the time, forensic investigators speculated that the storage tanks were welded incorrectly, which allowed the fire to be life threatening and hard to control.
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24TH MARCH 2017 - TRANSNET PROPERTIES SHED, BURNS OUT 50 YEARS APART. **SOUTH DURBAN RESIDENTS STILL WITHOUT AN EMERGENCY PLAN...**





# THE LAUNCH OF TOXIC CITY

The Toxic City book was compiled as a way of displaying the companies' in South Durban and their harmful emissions in a concise book that is available for public knowledge. Not only are the emitted chemicals listed, but the corresponding short term (acute) and long term (chronic) health impacts of each of the chemicals is also included. This book aims to educate and create public awareness around what chemicals are being put into our air, by these companies and essentially hold them accountable for the multitude of health issues these residents of the south Durban basin face on a daily basis.



SDCEA  
SOUTH DURBAN COMMUNITY  
ENVIRONMENTAL ASSOCIATION

COMPANY NAME	CHEMICAL EMISSION	HEALTH IMPACTS	
		ACUTE	CHRONIC
ENGEN PETROLEUM REFINERY	Nitrogen oxide	Coughing and wheezing	Respiratory problems, inflammation of the lining of the lungs and bronchitis
	Sulphur dioxide	Coughing, shortness of breath, sore throat, red and painful eyes	Bronchitis and asthma attacks
	Sulphur oxide	Damage to immune system	Heart damage, liver and kidney function damage
	Octane	Vomiting, dizziness, drowsiness, headache, nausea, sore throat, red & painful skin and eyes	Unconsciousness
	Carbon dioxide	Dizziness, headache, elevated blood pressure and increased heart rate	Frostbite, unconsciousness and suffocation
	Methyl tert - butyl ether	Drowsiness, dizziness, headache, weakness, red skin and eyes, nausea and vomiting	Unconsciousness
	Liquid petroleum gas	Dizziness	Hallucination or heart failure
	Liquid asphaltene	Coughing, shortness of breath, red and painful eyes	Serious skin burns
	Bitumen	Affects respiratory system	Potentially cancerous, asthma and bronchitis
	Poly-aromatic hydrocarbons	Irritation of throat and stomach, difficulty breathing	Pneumonia, affects immune system, lungs, liver and kidney function
	Hydrogen sulphide	Headache, irritation of eyes, nose and throat	Unconsciousness or death



**SDCEA**  
SOUTH DURBAN COMMUNITY  
ENVIRONMENTAL ALLIANCE

COMPANY NAME	CHEMICAL EMISSION	HEALTH IMPACTS	
		ACUTE	CHRONIC
VOPAK	Acrylonitrile	Dizziness, drowsiness, headache, nausea, redness of eyes and skin, vomiting, weakness and skin blistering	Convulsions
	Propylene oxide	Coughing, sore throat, red and painful skin and eyes	Burning of eyes
	Vinyl acetate	Irritation of eyes, nose and throat	
	Hydrogen cyanide	Confusion, drowsiness, headaches, nausea, shortness of breath and redness of eyes	Unconsciousness or death
	Ethyl acrylate	Coughing, shortness of breath, sore throat, diarrhoea, nausea, vomiting, red and painful eyes and skin	
	Butyl acrylate	Coughing, sore throat, shortness of breath, nausea, vomiting, diarrhoea, redness of skin and eyes	
	2-ethylhexyl acrylate	Skin, eye and respiratory tract irritation	
	Butanol	Coughing, headaches, dizziness, vomiting, nausea, wheezing and headaches	Irregular heartbeat
	n-butanol	Drowsiness, dizziness and irritation of skin and eyes	
	1-butanol	Coughing, sore throat, headache, dizziness, drowsiness, vomiting, diarrhoea, redness of skin and eyes	

# CANCER REGISTRY

The increasing pollution and associated health impacts experienced in the South Durban is something that residents and business owners have suffered with for many years. The air pollution caused by the surrounding industries and refineries have had a negative effect on people's health and wellbeing; it has escalated to an alarming point where more and more people are being diagnosed and even dying from cancer. Asthma prevalence has also increased and this is of major concern to SDCEA and should be of concern to all those residing in the South Durban region.

The "community cancer surveillance" also known as the cancer registry aims to serve as a database for cancer information, and statistics are drawn regularly from this data. These statistics are proposed to be used as evidence and motivation for the implementation of 24 hour clinics in areas of high pollution. The more people that come forward with their cancer information, the larger our database will become and this will hold a greater weighting in our fight for a better and cleaner environment and in turn improve the health of those suffering from pollution.

	Category	Stats
<b>Total patients</b>		<b>130</b>
<b>Gender</b>	Male	63
	Female	64
	Unknown	4
<b>Age range</b>	0 – 20	4
	21 – 40	9
	41 – 60	27
	61 – 80	10
	81 – 100	1
	Unknown	79
<b>Type of Cancer</b>	Breast	9
	Lung	23
	Colon	7
	Prostate	9
	Stomach	6
	Other: Cervical	4
	Womb/ uterus	2
	Kidney	2
	Throat	4
	Leukaemia	1
	Bladder	2
	Rectal	1
	Brain tumour	1
	Endometrial	1
	Bones	2
	Blood	1
	Everything	1
	Chest	1
	Intestinal	1
	Knee	1
	Colon and breast	1
	Kidney and lung	1
	Bladder and liver	1
	Womb and stomach	1
	Colon and breast	1
	Breast and liver	1
	Unknown	45
<b>Survival</b>	Alive	38 (29.2%)
	Deceased	83 (63.8%)
	Unknown	9



**NATHANAEL BEDESSY: 3,**  
died last year from leukaemia.



**TASLEEM OMAR: 3,** sick with  
leukaemia.



**Suffer little children**

**CANCER AND AIR POLLUTION IN SOUTH DURBAN: FACT OR FICTION?**

**A SPECIAL INVESTIGATION BY TONY CARNIE Chief Reporter**

**Is it the air they breathe?**

**THE MERCURY INVESTIGATION PAGE 5**

**DR TONIE ELAMON**

**THE POISON**



# HEALTH STUDY & HEALTH RISK ASSESSMENT

A screening level risk assessment was conducted using the air quality measurements and current toxicity estimates. This assessment identified a number of toxic contaminants that warrant attention because the calculated health risks were high and because concentrations monitored in Durban exceed international norms, e.g., guideline values and levels found in other large urban areas. For cancer, most of the risk is contributed by a small number of pollutants: Among the VOCs, benzene poses the highest cancer risk. Other VOCs, specifically 1,3-butadiene and formaldehyde (not measured in this study) are also likely to present significant risks. Among the semivolatile compounds, selected dioxins, furans, and PAHs (naphthalene) are present at elevated levels based on risk calculations. Among metals, chromium, nickel, lead and manganese pose the highest risks. Several other pollutants (e.g., nickel, ethylbenzene, chromium, PCBs and styrene) pose lower risks. The total estimated lifetime cancer risk due to inhalation of all measured carcinogens ranges from 18 per 100,000 at Ferndale to 25 per 100,000 at Wentworth, well above guideline levels. While these totals assume additivity among pollutants and thus represent only a simplified screening level estimates, the calculated cancer risks are not worst-case estimates. For chronic non-cancer risks, the most important pollutants include manganese, benzene, p,m-xylene, phenanthrene, naphthalene and lead. Most of the measured concentrations fell below the significance level (e.g., hazard quotient of 0.25), thus non-cancer risks from inhalation of measured pollutants appear unlikely on average. However, biological monitoring showed that 12% of children had blood manganese levels above the guideline value (14 µg/dL), and 3.4% of children had blood lead levels above current guidelines (10 µg/dL). The study design did not permit an examination of acute non-cancer health effects, except for hydrogen sulfide which clearly exceeds standards and guidelines, and which poses a nuisance to many individuals in the DSIB.

# LEGAL ACTION

PRESS RELEASES  
ADVOCACY  
WATCHDOGS  
MITIGATION  
HOTSPOT  
SURVEYS

ANALYSIS OF  
INFORMATION





**CARING FOR OUR COMMUNITY**

# YOUTH EMPOWERMENT:

- It is important to SDCEA that the youth are empowered as they are young and carry much passion and energy to fight for environmental justice and as they are the future leaders. Creating Social awareness for justice is a very important skill on developing a strong voice towards the future of our planet.



- Children and youth are the future and our task is to allow them to take the lead and therefore all effort and energy should be provided now to fight in the present to ensure that present and future generations are protected. We encourage youth to join forces in their energy, ideas and passion to bring forth the future we “really” want.



**ASSISTING PEOPLE WITH ISSUES  
RELATED TO ENVIRONMENTAL  
DISASTERS**

Since its formation 24 years ago, SDCEA has been the foremost organisation on environmental justice issues and has been given worldwide recognition. Also, it has been regarded as an environmental watchdog fighting for the rights of peoples lives



**“When we breathe  
the air of freedom we do not wish to  
choke on hidden fumes”**

*Judge Albie Sachs*