

# GROUNDWORK

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groundwork



## Waste Pickers United!

environmental justice action in Southern Africa

*groundWork is a non-profit environmental justice service and developmental organisation working primarily in South Africa, but increasingly in Southern Africa.*

*groundWork seeks to improve the quality of life of vulnerable people in Southern Africa through assisting civil society to have a greater impact on environmental governance. groundWork places particular emphasis on assisting vulnerable and previously disadvantaged people who are most affected by environmental injustices.*

*groundWork's current project areas are: air quality, waste (including environmental health) and corporate accountability.*

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## **In this issue**

3	From the Smokestack
5	Lead Article - EIAs and the People
7	Air Quality - Linking India with SA Activists
10	Waste - India is an eye opener for SA Waste Pickers
12	Environmental Health - Nurses are impressed by Indian Hospitals
15	Corporate Accountability - Sometimes the system does work!
17	groundWork USA - Bush's Parting Gift
19	Corporate Accountability - Obama's Proactive Role in Mercury Treaty
21	Air Quality - The VTAPAAQMP
25	Guest Article - Danes in South Durban
26	In Brief
28	The Back Page

#### **AFFILIATIONS:**

*groundWork is affiliated to the following international organisations:*

*Health Care Without Harm*

*International POPs Elimination Network*

*Basel Action Network*

*Oilwatch International*

*Global Anti-Incineration Alliance*

*groundWork is the South African member of Friends of the Earth International*

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**Cover photo:** Waste Pickers in Pietermaritzburg marched on the City Hall in order to hand over a memorandum regarding their access to the New England Landfill and abuse suffered by them on the site, to city representatives. Picture by groundWork.



## From the smoke stack

by groundWork Director, Bobby Peek

Dear Friends

Over the last three months I have had the privilege to be with community people and 'out in the field' as I often put it. It has brought back the reality of the need for groundWork, the need for more environmental justice and peoples' organisations to be able to respond to the continuous pressure people have to face. At times I feel desperately depressed because all it seems we are doing is fighting a rear guard action, as government and industry continue to do what they want. However, then I read what an old school friend of mine had to say about power and I think we have hope:

'I don't think that people should think small and have this idea that because the Engens and Saprefs and the Mondis are so powerful they can do nothing about it. It is useless sitting back for then you give that idea to your children too. You should open their minds to the possibilities that the bigger you are the harder you fall. When communities are fed up, and when they stand together, they can make a difference. Change comes about through people wanting to see change' (George Ruiters, community health volunteer, Timmerman Road, Wentworth, Interviewed by Marijke du Toit, 10 July 2007)

This message struck a high note with me during my time of depression. Coupled with the vision of a young two year old protesting with her mother outside Gallagher Estate at the South African Climate Change Conference then you realise there is hope. It was with sadness and joy that I witness this young girl shoving her hand up in protest. You see, children do and repeat what they see most often. Here was a child who no doubt had been with her mother in various protests before as they jointly fought for a better life.

As we approached the gates of Gallagher Estate, chanting 'this is what democracy is, this is what democracy feels like' the gates rolled down to make sure that we could not disturb the peace of the Climate Change negotiations inside. The process outside must have felt very disturbing to those on the inside where outcomes were managed by tracking people through bar codes scanned as you entered various debates. The last thing that the South African government wanted was a protest or debate about real issues from real people on the ground – people who live at the fenceline of climate change and poor energy.

I look back and think of those heady days of discussion and debate in 1995, during the development of the environmental Green Paper. And then I think again and ask myself: were they so good when you consider that the final decisions were ultimately taken by small committees, two years later, away from the public?

And I descend into depression again.

This depression is further entrenched when I think that over the last three months government has agreed to lay a petrol pipeline in south Durban despite the south Durban community saying no and that government has passed a mix and match set of policy and regulations that will allow the burning of waste in cement kilns, after groundWork and community people living adjacent to cement kilns have clearly said: no, we do not want this. Hell man, can't you hear us, are you bloody deaf! What else must we do to get you to hear us? If this reflection does not go down well with the officials in DEAT, then please note: you do have a right to reply!

But I realise that this is not peculiar to the South African government; it is a reality of government



globally. Consider the Canadian government which is supposed to be one of the leading democracies in the world. In more than three decades of extraction of oil from oil sands in Alberta they have yet to turn down an application to develop on environmental or any other grounds<sup>1</sup>. I know there has been resistance, even from less radical groups.

But let us not despair. There are still victories. The fact that people are mobilising to resist is, in itself, a victory. And they are indeed mobilising. Victory is also gained by using the legal system. The LRC has just proved this in Mossel Bay with the Tergniet and Toekoms community (which you can read about on page 15).

So friends, depressed I may be now, but I know that there is hope in struggle. One has to reflect on the

conclusions of the 2005 groundWork report where oil and power are considered and in conclusion this is said:

‘... even if these social and environmental justice movements do not succeed against the enormous power of the current regimes, and the descent into a post-fossil-fuel (and post-US empire) era of uncertainty and collapse continues, then the spaces of self-reliance and local democracy created through such struggles will emerge as the only viable basis for re-building a new world.’

Aluta continua...

For now,

Bobby

Protesters outside  
the Gallagher  
Estate conference  
centre make their  
stance clear.  
Photograph by  
groundWork.



<sup>1</sup> National Geographic, March 2009

# EIA<sup>s</sup> and the People

By Bobby Peek

## What started out as strong environmental law is gradually being undermined on both the legal and the public participation fronts

On Friday, the 13<sup>th</sup> of February, the Ministry of Environment and Tourism published Draft Environmental Impact Assessment Regulations. During the last few years there have been various changes to the Regulations and according to the Department of Environment Affairs and Tourism (DEAT) it was best that they be republished for comment in their entirety. I hope that the comments that DEAT receives will be seriously considered and that it is not using this 'invited space' as a 'spin-doctored' process.

Imraan Baccus, writing in the *The Mercury* on Wednesday, the 25<sup>th</sup> of February, reflects on spaces for public participation and suggests that it is an active and vibrant movement of people that ensures that genuine democracy is delivered through the involvement of people. Genuine public participation is 'messy and often conflicted' with what government – and indeed ever expanding corporates – have in mind. It is my hope that the new Regulations will allow for real spaces for participation and engagement that can deliver real people-centred development. I fear, however, that this is not the case and I will reflect on some of the reasons why South Africa is failing its citizens in its attempts to 'manage the environment' as development bullets along in 'managed participation spaces'.

Part of what I am about to reflect upon you have read before, but it is critical at this time that we revisit some of the weaknesses within regulations and processes that seek to manage the environment.

In an attempt to manage spaces so that developments are not contested by the public in a meaningful way and to ensure that society does not use democratic spaces to further entrench democracy, government departments and 'independent' environmental assessment practitioners contracted by corporates have concocted the approach of 'focus group

discussions'. In this process public meetings are not held where the public can hear an open debate about the proposed developments and have an 'opportunity to develop the understanding, skills and capacity necessary' for 'equitable and effective participation' as Section 2(4)(f) of the National Environmental Management Act of 1998 requires. Rather, this 'cabal' have decided that there will be invited 'focus group' discussions on the proposed development. Through this process, you do not have to engage in the messy process of meaningful democratic public participation and as the consultant and, indeed, the proponent of the development, you choose to whom you are going to speak.

Over the years I have witnessed many environmental practitioners who undertake EIAs and the startling reality is that, firstly, there are few black people involved in these processes and, secondly, the practitioners are getting younger. This combination is alarming. It is critical that we have more black people involved in order that, as in all aspects of life in South Africa, we become a society that is truly integrated. Why black practitioners are not being developed needs to be considered. Secondly, with youth comes inexperience and often this inexperience is not only at the level of the work that they are expected to do but also at the level of political suss. Many of the practitioners are from a pure science background. They have little understanding of the broader development politic and the politics of public participation that underscore many of these developments or society in general. This understanding comes from a social science reading at university and secondly from experience in the field. The image of 'blonde young surfer dude' undertaking an EIA is real and alarming. All they can do is tick the boxes of what needs to be delivered on an EIA while having little understanding of the 'real politik'.



## Lead Article

Then there is the talk of the independence of practitioners. As I did in the nineties, I still question whether this is possible. Even more so now! Imagine an environmental practitioner saying to Sasol or Eskom: 'actually the people's concerns about pollution are legitimate, your pollution as a result of the new development is not acceptable and therefore, as a practitioner, I cannot condone this development'. The person will be out of business shortly. You cannot be independent when the majority of your work comes from one buyer – industry. This is a monopsony<sup>1</sup> where the buyer – industry in this case – controls a large proportion of the market.

There is also the sheer incompetence of these environmental practitioners. Imagine undertaking four basic assessments on one industrial development, and still not knowing what the permits are for the operations of the plant. As Ripley would say, 'Believe it or Not', this really happens. Is this incompetence or just plain, downright, purposeful avoidance instigated by the company wanting a development to occur without much scrutiny? I believe it is both.

It is common knowledge that the environmental departments throughout South Africa have a serious backlog with developments awaiting approval. This has resulted in serious delays in projects. I agree with industry that this is not acceptable. What is needed is for the various environmental departments to employ more effective people who have the ability to efficiently deal with complex development proposals. But, rather than seeking to improve service delivery by improving staff, the regulations were rewritten to fit the situation of incompetence on the ground. So what we have now is the process called 'basic

assessments' where environmental practitioners follow an overly simplified process which is nothing more than ticking off boxes to get to the end point of an assessment as quickly as possible. It reminds me of 'Bantu Education' multiple choice questions. Enough guess work and you could get through. So you have major plants such as cement kilns and oil refineries that are undertaking expansions using basic assessments rather than full EIAs.

And then there is the process of how to exclude participation, rather than foster it. While in the Southern Cape a couple of months ago, working with the Toekoms community fighting a creosote facility (read about this on page 15), I noticed a white placard in the bushes about 100 meters away from the nearest home. Upon investigation, I see a notice for a new housing development and a call for participation. There is no phone number for people to call, rather a fax number and an e-mail address. This is a working class neighbourhood with no easy access to a fax, let alone e-mail.

Finally there is the age old political interference or nuanced threats. We just have to mention the following bigwig names: ex-president Mr Mbeki, Minister of Housing, Ms Sisulu and Premier of KwaZulu-Natal, Mr Ndebele. All these people have spoken about how EIAs delay projects. If your President and Premier are saying this, is a bureaucrat honestly going to question a development?

I hope that over the comment period the Minister of Environment, Mr van Schalkwyk, in what could be his last tenure, allows for meaningful participation and honest responses from government.

A number of recent industry expansions have required only a Basic Assessment, creating an easy route to approval for polluting business.



<sup>1</sup> A monopsony is similar to a monopoly except that a large buyer, not seller, controls a large proportion of the market and drives the prices down.



# Linking India with SA Activists

By Siziwe Khanyile

## The Air Quality Campaign's community exchange to India

For the four daring campaigners who landed in Mumbai during the widely televised terror attacks in early December 2008, India presented a society that's a melting pot of rich culture, determined activism and an industry-friendly State.

We quickly adjusted to the chilli but delectable food, became used to the pampered goats and cows who have freedom of movement and association with both cars and people and gained insights into appropriate dress for women. Driving one night we found ourselves smack in the middle of India's wedding season. We passed festivity after festivity and on one road at least six weddings were taking place, all of them Very Grand! Also noteworthy was a jam-

packed, all-night train ride from Delhi to Bhopal... need I say more? India's transport system in a city like Delhi can only be described as organised chaos. The three-wheel taxis were definitely the most fun.

As an activist, I was impressed by the strong, resilient and determined activism that I witnessed, and was part of, in Bhopal. The 2<sup>nd</sup> of December, 2008 marked the 24<sup>th</sup> anniversary of the 1984 Bhopal gas leak disaster from Union Carbide, now Dow Chemical. In commemorating this tragic event we supported the Bhopal survivors as guests of Sambhavna Clinic in Bhopal and held a night vigil and protest at the gates of Dow Chemical. We carried banners and shouted slogans in Hindi, all in solidarity and in our hearts



Pheneus Malapela, Bongani Mthembu and Shweta Narayan (back) and Siziwe Khanyile, Mr Prafulla Samantra and Lebohang Mokoena (front) in Bhubaneswar, India.  
Picture by groundWork



## Air Quality

The 'Board that Never Changes' in North Chennai, India.  
Picture by groundWork.



identifying with injustices that we ourselves face and challenge daily in South Africa. I won't spare mention that we also trekked for three hours in the scorching sun at the end of which a couple of effigies were set alight. If I had not been shown up by the grannies and children who were leading the procession, I would have felt a great sense of personal accomplishment.

In Delhi we were hosted by the Centre for Science and Environment who impressed us with many things, but most notably the work they did over the previous ten years to improve air pollution in Delhi by litigating for the introduction of compressed natural gas (CNG) for the whole public transport system in that city. We were told the improvements were significant, particularly in relation to carbon monoxide and particulate matter, and that some private vehicle owners have also turned to using the gas.

For the majority of our trip we were under the very capable care of Community Environmental Monitoring campaigner, Shweta Narayan, who organised and accompanied us as we watched, listened, learned and shared our own experiences with the various diverse pollution and industry impacted communities.

North Chennai saw us visiting the Manali Industrial Complex of about 50 industries, ranging from petrochemical to fertilisers and allied industries both big and small, built on a wetland. Most notable on this toxic tour was constant flaring by

Chennai Petroleum Corporation Limited (CPCL), the indiscriminate dumping of spent lime waste by a petrochemical industry, a water recycling centre that supplies recycled sewage water to the industries, poorly maintained pipelines of CPCL where there were constant leakages and effluent discharges, a strong smell of tar and tar-like sludge and effluent leaching into the canal and a municipal dump yard near the CPCL effluent outlet. The smells were enough to make the strongest of us nauseous. This particular community has about 120,000 residents who could potentially be affected in case of any disaster, particularly because there are only two main outlets to the location which are often blocked by the numerous trucks that service the plants.

The highlight of this toxic tour was the online monitor of CPCL whose results were displayed on a large electronic board on the industry fence for all to see. Displayed were date, time, temperature, parameters, values and permissible limit. Interestingly the values never exceeded the permissible limit when we were there (in fact from what the locals told us, they never do), but even more interesting is that the values remained the same, which we were told, they always do. The wonders of PR!

We moved from Manali to Cuddalore, SIPCOT for a night patrol and community visit. Our hosts arrived in the dark on motorbike, sporting flowing robes and



interesting headgear to do the night patrol. It felt like we were about to be involved in a conspiracy! We followed in our vehicle, mostly with the windows closed and stopping intermittently to smell the pungent, the rotten egg, the sweet sugar cane and the human excreta odours. Needless to say we left with headaches, watering eyes and nausea. It was hard to believe that people who live a rural lifestyle, which is generally associated with tranquillity and clean air, live their lives in that toxic stew and that their daily lives have been turned into warfare with polluting industries.

One of the main reasons for going to India was to make linkages between South Africa's fenceline neighbours of Mittal and those of Orissa, where Mittal is proposing to build a steel plant. In addition we went to Orissa in the hope that we could internationalise their local opposition to Mittal and link it with action against Mittal Steel operations around the world.

We reached Bhubaneswar, the capital of Orissa, also 'The City of Temples', in the evening and met local host, Mr. Debjit Sarangi, who had organised visits for us in the Keonjhar district where Mittal Steel is proposing its new steel plant. That same evening we met Mr Nishi Kanta who accompanied us to the proposed site the following morning.

We visited the Nuagoan village of Keonjhar District along with Mr. Nishi Kanta and Mr. Chaudhari, who is one of the leaders of the group opposing the Mittal proposal. As we neared the village we were advised not to take any pictures as that would compromise our presence in the community. Villagers had learned to distrust outsiders and would be suspicious that we may be linked to Mittal. The drive was scenic, lush green and agricultural. It is characterised by a number of smaller water bodies, borehole water sources and an excellent network of canals that were in the region for irrigating the agriculture. It was apparent that the village was extremely self-sufficient in terms of their local economy, with land, plants and cattle and, in meeting the people, they expressed that they did not need a steel plant to "develop" them.

We had the privilege of an audience with the head of the tribal community who is also spearheading the resistance. He is called Sardar (meaning leader)

by the villagers. He explained to us that Mittal's proposal is to acquire 12000 acres of land, of which 8000 acres is agricultural land for the village and 4000 acres is forest land owned by the government, to build their steel plant. The Baitarini River, which we visited and saw children bathing and women washing in, would be the location of a proposed dam that would be built on the upstream of the river and the water diverted to the steel plant. Effluent would be sent out into the downstream of the river.

A total of 17 villages and about 13000 villagers would be affected due to the proposed project. However, their resistance is very strong and the people are willing to sacrifice their lives to save their lands.

Sadar and the other hosts explained to us that their resistance to the proposal started in the year 2000 when an MOU was signed between Mittal and the Indian government and has grown ever since. They have the full support of all villagers. Over the years they have staged protests and demonstrations and have broader support from similarly affected villages in Orissa.

The following day we met with Mr Prafulla Samantra in Bhubaneswar who gave us a detailed background on the resistance movements in Orissa for the protection of land and livelihood. He also gave us the history of various actions against mining and proposed plants taken by the tribal people in different parts of Orissa.

He talked about the Mittal project and told us that Mittal has not been able to release their Rehabilitation and Resettlement (R&R) policy as the people have resolved not to bargain for rehabilitation. They have resolved not to give their land up at any cost.

India was indeed fascinating and many lessons were learned, but unsurprisingly much of it rang true to our own contexts and to that of any country in the developing world. Poverty is rife, the rich are very rich and the poor are very poor, government favours the rich, corporations are powerful and the protection and preservation of lives, livelihoods and lands by governments... well that's just theory. 



# India is an eye opener for SA Waste Pickers

By Musa Chamane

## South African waste pickers gained real insight and knowledge through their visit to India

On the 28<sup>th</sup> of November, 2008, terrorist attacks were taking place in India's commercial capital, Mumbai. Several South Africans were destined to visit India on groundWork's international exchange programme. Activists, waste pickers, nurses and field workers were prepared to risk their lives despite scary terrorist reports. The sacrifice made by these environmental activists reminds me of the sacrifice made by political activists in campaigning against oppression; in this case they are campaigning for environmental justice in South Africa. There were various cities visited by waste pickers in Mumbai, New Delhi, Trivandrum, and Chennai.

### Exchange of experiences: Caste discrimination

South Africans are blessed when compared to countries such as India because they have access to social grants in the form of housing, child support grants and free kilolitres of water per month. While in India we visited the cities of Mumbai, New Delhi, Trivandrum and Chennai where we had a number of discussions with waste pickers, trying to trace the similarities and dissimilarities amongst them. The struggles of the waste pickers from India and those in South Africa are different. Waste pickers from India suffer more from caste discrimination: meaning that if most of my family members are working as waste pickers then I will be forced also to work as a waste picker. In South Africa we are a bit different - one is not discriminated against based on family history but one is discriminated against based on wealth and power. In South Africa if one is poor one does not have a voice and suffers discrimination.

### Bhopal visit: Thousands of people were poisoned to death

The visit to Bhopal town where thousands of people were poisoned by Dow Chemicals was very enlightening. A Bhopal commemoration takes

place every year on the 1<sup>st</sup> of December. The plant is still not cleaned up since the accident on the 3<sup>rd</sup> of December, 1984. This accident is amongst the worst environmental injustices in human history. South Africans gave their support in trying to force the government of India to order the corporation to clean up and compensate the victims. The plant closed down soon after the accident and part of it moved to Johannesburg in South Africa.

### The most gigantic landfill of my life

I have never seen such a big landfill in all my life; it reminded me of a saying that due to poor management of waste on earth we might, in the near future, need another clean earth to live on. The earth we are on is suffering from severe abuse by human activities, and it looks like one day soon this is going to catch up with us. Gazipur landfill is in New Delhi, political capital of India. I could not see the beginning nor the end of the landfill. The landfill was often on fire and there was no urgency about the fire. There were no fire extinguishers coming to the rescue as in some landfills in South Africa. Life was normal for most people who live around the landfill and waste pickers were continually working without worrying about fire.

### Poor and hard working people

I have noticed how lucky one is to be a South African. Waste pickers in India work for about five Rands a day while here in South Africa a waste picker does not work for less than 20 Rands a day. What was very interesting in India was that waste pickers were very hard workers. They will carry a big load of recyclables on their head even though the amount of money one gets for that big load is minimal. India is very like South Africa in instances such as poverty and the gap between the poor and the rich. What makes these two countries different is what South Africa has inherited from the apartheid system, such as social grants.



### Land is an issue in India

Due to the lack of land in India most buildings are built high. Composting is a huge practice in India - there is no town without a vast composting area. Indians are very attached to nature. One finds a garden in every little corner, even on rooftops.

### Waste pickers back in South Africa

After a two week trip in India waste pickers from different landfills, especially those that had a representative on the India trip, have been reported back to. New products have started to be made from the experience acquired from India. Previously, there were types of waste that our local waste pickers thought was useless, but after their experiences in India they have started recovering these materials to make new products. Cloth off-cuts, for example, have normally not been recovered at most landfills but now, at the Sasolburg landfill, off-cuts are recovered and new products are made from them.

### Conclusion

Waste pickers, as a vulnerable, hard working group amongst poor South Africans, are interested in having a voice in policy making that affects their livelihoods. groundWork is working towards empowering waste pickers in this country so that they can speak for themselves and with one voice. Informal traders, housekeepers, police and teachers are organised in South Africa: now it is time for waste pickers to be organised. The work done by waste pickers is doing all South Africans a favour. Waste pickers create air space at the landfills and by their so doing government is saving the (tax) money that would be needed to buy new land for new landfills. Waste recycling is a good practice for the benefit to our environment and we need to encourage it.



Anu Pandey (from NGO Chintan, New Delhi) walks with Maria Nonzane (Pmb landfill), Simon Mbata (Sasolburg landfill) and Douglas Maphumulo (Pmb landfill) through slums near Gazipur Landfill.



# Nurses are impressed by Indian Hospitals

By Nomcebo Mvelase

After her visit to India, Nomcebo realises that without information, knowledge and motivation, South Africa is a lost nation

South Africa, as in other countries, is still experiencing many challenges when it comes to health care waste management. Currently, in South Africa, most of the medical waste treatment and disposal activities are being outsourced to external companies who tender to provide this service for a particular period of time and the general observation has been that these companies are profit orientated and are not concerned about preserving the health of our environment. Some of the medical waste is treated by incineration, which contributes to air pollution as, during the process of combustion, pollutants like furans and dioxins are being released into the environment. Some waste has been found illegally dumped in the fields, posing another health risk to communities.

This goes in the face of legislation on proper health care waste management, handling and safe disposal. Implementation and enforcement of such policies and even proper training of health care workers about the different categories of health care waste is another area that still needs further and immediate attention.

## **Aim of the health care waste management exchange**

Nurses from South Africa can compare, share and learn better strategies to manage health care waste from Indian health care institutions. Nurses are the major component of health care workers in the health care system and are the major generators of health care waste as a result of their nursing duties

Two nurses from the department of health, KwaZulu-Natal, from two different districts - one from Umgungundlovu District, Miss P. B.Mthembu

who is the head of Quality Assurance Officers and Fikile Zulu from Umzinyathi District representing Ngwelezana Hospital as the Infection Control nurse - were part of an exchange that was organised by groundWork.

Currently KwaZulu-Natal is the only province in South Africa that has managed to do away with the incineration of health care waste. There is, however, still room to improve and implement a lot of new and better strategies as far as health care waste management is concerned.

## **Our visit to Sir Ganga Ram Hospital, New Delhi**

On the 1<sup>st</sup> of December, 2008, we visited Sir Ganga Ram Hospital. This is a 650-bedded private hospital of which 40% of the general wards are free wards. The way that the hospital helps those who cannot afford to pay the bills and the strategy that they use to sustain their fund is to charge the rich more so that the poorer ones can be treated without paying.

This hospital has a waste management committee made up of doctors, microbiologists, infection control officers and nurses. All their health care waste management policies are based on the national rules and are monitored by the National Accreditation Board for hospitals and health care providers.

Sir Ganga Ram hospital also benchmark their standards from other private hospitals in their country and from other countries, and gained international recognition for Infection Control at an infection control conference in Bangkok in 2007.



### **Health Care Waste Management highlights**

This institution has been a mercury free hospital for the past 4 years and is working hand in hand with the manufacturers and suppliers of mercury free products who provide training on how to operate the equipment.

#### Other types of training provided:

- Nurses get one hour, on-the-spot training and workshops every Monday, Tuesday and Wednesday on different topics, of which health care waste management is one of the topics.
- To ensure compliance, regular inspections and audits are carried out, of which some are general and structured but some are unannounced inspections.
- Floating awards are given to those health care workers who demonstrate compliance for that particular period of time and punishment, like forfeiting a day's leave, is given to those who fail to comply with the stipulated standards of functioning.

India in general has a very low HIV prevalence rate - about 1: 10 000 - but they still discourage nurses from recapping the used needles and generally there are only about two or three reported needle stick injuries throughout the hospital in a month. Each and every ward has a needle burner that is used to destroy the metal part of the needle and then the plastic syringe part is recycled.

Infectious waste is placed in a blue plastic packet instead of a red one as it apparently contains high levels of cadmium, which is a heavy metal. All the infectious waste is first disinfected in a sodium hypo chlorite chemical solution in the wards and is then taken to be autoclaved, shredded and finally sold for recycling.

Waste is minimised as much as possible and all the condemned linen is used to make theatre shoe covers and even linen savers. All plastics are biodegradable; this helps reduce the space needed for the waste that is taken to the landfill sites.

Anatomical waste is sent to crematoria.

As far as e-waste is concerned, Sir Ganga Ram Hospital has worked closely with Toxics Links and there are national rules drawn up on the safe management of this type of waste.

They have an accredited company to dispose of used oil and batteries. The central pollution control board approves the company to deal with this waste.

### **Comments and observations in general**

India is such a highly populated country and unfortunately not so very economically fit. It will take more than just government intervention to ensure effective management of health care waste and waste in general but from what I saw in Sir Ganga Ram hospital, I can say that the health care workers themselves have the drive and the passion to ensure that, amongst all the crippling and limiting factors, they act in a very responsible manner to deal with their waste, proving how much waste can be avoided altogether. This hospital has proven the saying "Trash is cash!"



A health care worker disposes of hazardous medical waste. Picture by groundWork.



### **PVC and Mercury Free Products**

The government hospitals cannot afford to make a total switch to PVC and mercury free items because they are very expensive and even though they got buy-in from New Delhi Government in 2006, it is still not feasible to achieve a total mercury phase out. They have to deal with poverty, maternal health, and high incidences of TB and all of these are financially draining. They have, however, started awareness programs on how mercury spills can be managed without further contaminating the environment and putting the workers and the patients at risk. In 2007 all government hospitals were ordered by government to procure no more mercury containing items.

As yet, nothing has been planned in terms of having the obsolete mercury safely disposed of, but some are selling it to the mercury vendors while others are keeping it until such time that they will have an environmentally sound plan to safely dispose of it.

### **Community Initiatives**

- Communities have been informed on how to segregate waste from source to make life easy for the waste pickers.
- Regular campaigns are being rolled out to ensure that children are immunised against Hepatitis B infection and adults get regular screening for this as well.

### **Conclusion**

South Africa has a lot of resources and capabilities to adequately deal with health care waste management compared to other countries that are more poverty stricken.

The very fundamental component that is lacking in South Africa is the drive and passion. No one wants to own the health care waste management project and, as a result, it is always seen as a responsibility for the outside companies that come at the very last stage to collect and dispose of waste. The responsibility should start with each and every health care worker to make it a point that waste is segregated according to the prescribed colour codes and according to its ability to transmit pathogens.

The principle "Duty of Care" should always be enforced from cradle to grave.

### **A big thank you to all our Indian Hosts**

We would like to extend our thanks to all the people in India who helped to make the trip so successful. There were many of you, and we really appreciate the time and care that you committed to organising and hosting us. In particular, we'd like to thank:

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[www.cseindia.org](http://www.cseindia.org)

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# Sometimes the system does work!

By Bobby Peek

## The LRC, Tergniet and Toekoms score a victory for the people in court

We need more!

Well done to the Legal Resources Centre and the Tergniet and Toekoms community for taking on Outeniqua Kreosootpale, along with government, and forcing the courts to close them down after the Department of Environmental Affairs and Tourism (DEAT) could not. Not that they did not try. And herein lies the irony.

In the small community of Toekoms<sup>1</sup> in the Southern Cape, Outeniqua Kreosootpale, a plant that treats wooden poles with creosote and, in the past, chrome has been operating. When one travels throughout South Africa you see Telkom wooden poles standing high and solid. The reason for this is that these poles have been treated with toxins such as Lindane and, at times, chrome which is blended in with the heated left over gunk from crude oil refining and coal-to-liquid processes. This is often called 'the bottom of the barrel' and is the most toxic fraction of oil production. This is the reason that these poles survive! They are toxic and so insects don't eat them!

groundWork got involved in 2008 after the case went to court. I managed to go down to Mossel Bay and there I saw how a working class and middle class community worked together in resistance. The land the Toekoms people had was gained through a hard and long struggle in the apartheid era. But the fact that they got it during such difficult times makes them proud of it. While driving through this small community and speaking to its people you can see the pride of place that is so violated by Outeniqua Kreosootpale. The air samples that groundWork took in both Toekoms – next to the installation – and in the Tergniet community two kilometres away, contain the signature pollutants of the plant which shows that pollution from the plant reaches these areas.

For many years the Toekoms and Tergniet community had to put up with Outeniqua Kreosootpale, despite them raising concerns repeatedly about this insult to their environment. They went to the local municipality, the provincial government and finally national government. It must be recognised that the DEAT did start taking action and descended on the plant, setting in place a series of directives which Outeniqua Kreosootpale had to follow. This they failed to do entirely and, as a result, DEAT sent off



<sup>1</sup> An Afrikaans word meaning future



## Corporate Accountability

a series of correspondences stating that they would close the plant. But the plant continued operating.

Frustrated by the lack of action from the authorities to actually shut the plant, the community turned to the Legal Resources Centre for assistance and, to cut a long story short, the LRC went to court and got an 'interdict and restraining order against the company conducting any activity described in item 16 of the Second Schedule of the Atmospheric Pollution Prevention Act No 45 of 1965 on portions 31 and 41 of the Farm 136, Great Brak River unless and until: i) it is issued with a registration certificate authorising it to do so; and ii) the said property has been zoned.'

We understand from the response of the company that it will discontinue its creosoting process.

Government was concerned that the case went to court and in conversation indicated that actions like this might scuttle their bureaucratic process. They wanted to understand what the rationale was for going to court when they were close to shutting the plant. Well, from interactions with the community there appear to be a variety of self evident reasons. The DEAT did not bother to stay in constant communication, the DEAT process was long and indeed bureaucratic, i.e. Outeniqua Kreosootpale could use this process to stay open longer. The community also had been at this for many years and, after repeated failures by government to act, were not too optimistic that they would have acted in the community's best interests. So, well done to the community and LRC for taking this issue the legal route. 

Children have free access to the factory and are here seen coming in to collect potentially toxic firewood.  
Picture by groundWork.



## Bush's parting gift

### Bush leaves office with the United States' environmental regulations in tatters

Even as the people were celebrating the election of Barack Obama, President Bush and his team were working hard to dilute a number of environmental laws before his term ended. The legacy left behind by ex-President Bush will have a long term impact as he has given industries a license to pollute. President Bush has been known for his anti-environment policies and many of his efforts were geared towards benefiting industries, at the cost of undoing legislation which has been there for years to protect people and environment. According to a report by the Washington Post, as many as 90 new regulations were put into last minute play — and many of them were aimed at easing environmental rules governing everything from commercial fishing to power production.

The changes involved getting animals off the Endangered Species List, allowing power plants to operate near national parks, loosening regulations for factory farm waste, speeding up oil shale development across two million rocky acres in the West and making it easier for mountaintop coal-mining operations. These deliberate changes are part of a long planned strategy by the Bush administration, as the White House chief of staff issued a memo in May 2008 asking regulatory agencies to put together any proposed rule changes they wished pursue by June 1, with the aim of making them final by 1 November 2008. As rules only go into effect 30 to 60 days after they are finalised, if they are not in effect when the next president takes office then he can easily refuse to put those rules into practice.

The changes in the "Endangered Species Act" proposed by US Fish and Wildlife Service under the Bush administration have given government agencies

the authority to approve projects that could harm rare and threatened wildlife or their habitat. The rule change has replaced 35 years of mandatory review by independent federal scientists.



The Polar Bear's status as a protected animal and the safety of his habitat has been undermined by regulations pushed through by the Bush administration. Picture by Thomas Picard.

Known as "midnight regulations", these rules mainly catered to special interests and were hurried into effect without the usual checks and balances. Even citizens were cut out of the process, thus allowing changes in U.S. laws that were not supported by the public. For example, one Interior Department rule that would have taken away the protections for endangered species in favor of mining interests drew more than 300,000 comments from the public, which officials said they reviewed in a week. This hastened effort by the administration was ridiculous as it takes months to review public comments. As rightly put by Andrew Wetzler, director of the endangered species project at the Natural Resources Defense Council, "they had clearly made a predetermined decision to issue it no matter what the public comments say, which is not what we're supposed to do in this country".



According to Rick Meberth, Director, Federal Regulatory Policy OMB Watch, which monitors the White House Office of Management and Budget, through which these regulations must pass to be effective, Bush rushed several of the rules to completion so that Obama could not easily overturn them. Many of the rules have already become effective under the Bush administration and thus it is going to be very difficult for President Obama to undo them, as he has to go through a lengthy Congressional process.

Factory farming is a cruel and dirty business. Here chickens are stuffed together in a battery. US Pollution rules have recently been relaxed for factory farming.. Picture from [www.freewebs.com/wellcottage/poultry/chicken\\_cruelty.htm](http://www.freewebs.com/wellcottage/poultry/chicken_cruelty.htm)



Under federal rules, it takes 60 days to enact an economically "significant" regulation, which carries an estimated impact of \$100 million or more and other regulations take 30 days. To forgo this process the Bush administration sneakily declared most of these changes to be "insignificant regulations", thus circumventing the legal process in their favour. The process moved especially fast in the case of oil shale as in July 2008 the administration had proposed rule that would eventually lead to leasing two million acres of public land in Colorado, Utah and Wyoming for oil shale extraction. This is despite the fact that serious issues on the availability of resources like power and water, which are already scarce in that region, had been raised.

The other changes made by Bush have led to the easing of limits on pollution from power plants, despite some opposition within the Environmental

Protection Agency. These allow current emissions at a power plant to match the highest levels produced by that plant, overturning a rule that more strictly limits such emission increases. According to the EPA's estimate, it will allow millions of tons of additional carbon dioxide into the atmosphere annually, worsening global warming.

#### **Some rules finalised by former President Bush before leaving office.**

- Relaxed rules for air pollution from factory farms finalised on December 12, 2008
- Rules taking away protections for endangered and threatened species finalised on December 11, 2008
- Rules for mountain-top mining finalised on January 12, 2009
- Easing restrictions on oil shale drilling finalised on November 17, 2008
- Rules allowing firearms in national parks finalised
- Rules permitting burning of toxic waste as fuel finalised on December 12, 2008

The Bush administration worked at lightening speed to dilute environmental laws, delaying efforts to strengthen them, especially when it comes to declaring carbon dioxide a major pollutant, as declared by the US Supreme Court. In the present economic hardship, these environmental rules have been pushed low on the agenda as President Obama is dealing with the economic crisis. One has to wait and see how long it will take for the Obama administration to reverse some of these rules, but one thing is clear: the former President did his job well in keeping his corporate allies happy without caring in the least about the environmental damage he did during his eight years. For now it is mission accomplished. ↗



# Obama's proactive role in mercury treaty

By Tony Carnie

Our thanks to the Mercury for permission to reprint

Nations which a few weeks ago were divided on how to deal with this major public health threat are now united on the need for a transition to a low-mercury world

AFTER decades of obstruction, the world is moving swiftly towards a new international treaty to ban mercury products which have killed or crippled countless victims around the world.

The tide seems to have turned at a meeting in Nairobi last week - largely because of a significant policy swing by United States President Barack Obama, who campaigned vigorously against the dangers of mercury when he was still the senator for Illinois. Now governments from 140 nations have begun to hammer out the outlines of a new treaty to phase out the use of this toxic heavy metal.

But there is still a lot of talking to be done before 2013, which is the target date to finalise negotiations for a legally binding global treaty on mercury.

Despite its serious and well-established dangers for human health and the environment, mercury is still used widely in electronics equipment, in mining and to produce fungicides. It billows from the smokestacks of cement kilns and coal-fired power stations across the world or ends up in people's teeth in the form of dental fillings. Tiny drops are also injected directly into the bloodstream of millions of infants because it serves as a preservative agent for several medical vaccines.

Evidence of its harm has been known for more than a century, with numerous cases of poisoning around the world. The most widely publicised case in South Africa involved the death or severe illness of several workers at the Thor chemicals factory in Cato Ridge, KwaZulu-Natal.

Yet it has other more subtle and crippling effects on the brains and bodies of infants and young children which frequently go unrecognised in a world where humanity and the environment are exposed to such a multitude of toxic or hazardous substances.

## Blocked

Rico Euripidou, a South African environmental campaigner who attended a high-level meeting of the United Nations Environment Programme in Nairobi last week, said he was surprised by how quickly events swung in favour of a global mercury phase-out - given that United States policy negotiators had blocked several previous efforts during the Bush presidency.

Euripidou, who represented Pietermaritzburg-based groundWork, Friends of the Earth (South Africa) and the "Zero Mercury Working Group" campaign, said there had been a categorical "no" from US negotiators during the two previous Nairobi meetings.

"But this time we knew there was a chance of success because our alliance partners in the Zero Mercury group had been in contact with Obama's transition team for some time. Yet we didn't know there would be a total 360-degree turn-around . . . my sense is that the Obama administration has made this international treaty possible. This would not have happened if the USA had not taken a proactive position at the Nairobi meeting."

He noted that Obama had started to take an interest in mercury several years ago.



## Corporate Accountability

In November 2006 the future president wrote to the US energy secretary, Samuel Bodman, urging his department not to sell or release any stockpiles of mercury into global commerce.

"Mercury is a neuro (brain) toxin that can cause serious developmental problems in children, ranging from severe birth defects to mental retardation . . . Given that mercury is a transboundary pollutant that is deposited both locally and globally, any strategy to reduce mercury in the environment must also include reducing the volume of mercury traded and sold in the world market."

In early 2007 Obama also introduced a Bill in the United States Senate to ban the sale, distribution, transfer and export of elemental mercury.

He noted that at least 10% of women of child-bearing age in the US had mercury levels in their blood that could put babies at risk.

Rivers and lakes across the country were contaminated with mercury, to the extent that fish contained potentially dangerous levels of the heavy metal.

Rather than discouraging people to eat fish, the long-term solution was to reduce the levels of mercury released into the environment from human actions.

Obama said the intentional use of mercury in the US was declining because of deliberate efforts to change the way products were made and to find alternative substances to remove mercury from paints, thermometers or electrical switches.

Noting that the European Union aimed to ban mercury exports by no later than 2011, Obama said similar action by the United States would remove large volumes of this metal from global trade, thereby encouraging other nations to start switching towards non-mercury alternative products.

Last October, Obama's bipartisan Bill was finally signed into law by George Bush, committing the US to banning mercury export from January 2013.

### Opposition

Yet there were still significant opposition from other nations, most notably China and India.

According to the Earth Negotiations Bulletin, a reporting service which covers environmental negotiations in the United Nations, the latest meeting in Nairobi marked a "historic breakthrough". The Bulletin reported that for many years, the opposition to a legally binding global mercury treaty was led by the US, Argentina, China, India and Mexico, with Australia and Canada taking a more "reserved position".

But when the US negotiators announced their dramatic about-face, the countries which normally hid behind the US were faced with a stark choice - to stand alone or be swept along.

"Australia, Canada, Argentina and Mexico were quickly swept along, while China and India (with support from Indonesia and Pakistan) continued trying to convince others that a legally binding instrument was unnecessary and untenable."

But after a strenuous negotiating session which lasted most of last Thursday night, a compromise was struck with India and China, which insisted on delaying the formal international negotiations until 2010.

The Bulletin reported that the agreement was greeted with applause and back-slapping in the corridors, with some delegates hailing it as "a new dawn".

United Nations under-secretary Achim Steiner, who also heads the UN Environment Programme, said his agency had been working for the breakthrough for seven years. "Only a few weeks ago, nations remained divided on how to deal with this major public health threat which touches everyone in every country of the world. Today we are united on the need for a legally binding instrument and immediate action towards a transition to a low-mercury world."

On its website, the UN Environment Programme notes that 50000 lakes in Sweden have fish with mercury levels above the safe international health limit, while shark meat eaten in other parts of the world is contaminated with mercury levels up to 40 times above safe limits.

On the Philippines island of Mindanao, it said, up to 70% of small-scale gold miners were thought to be suffering from chronic mercury intoxication.



# The VTAPAAQMP

By Rico Euripidou

## Comments and further questions on the VAAL TRIANGLE AIRSHED PRIORITY AREA AIR QUALITY MANAGEMENT PLAN (VTAPAAQMP)

### Energy Strategy in the VTAPAAQMP

#### Basa Njengo Magogo (BNM)<sup>1</sup>

The persistence of the DEAT to rely heavily on this unproven methodology to make significant improvements in domestic and general ambient air quality is questionable. Although the method has been shown to achieve vast reductions under controlled conditions the reality is that where the method has been rolled out in communities very little improvement has been observed in either DEAT field trials or Anglo Coal field trials. The observations in ambient air quality in fact point to a further deterioration in air quality following the rollout of the methodology at community level.

Serious attentions needs to be given to domestic fuel burning and seasonal special heating in the Vaal generally. Initiatives are rightly identified as requiring a multi-government-department approach including the DEAT, DME and the Department of Housing.

We recommend in addition to the VTAPAAQMP initiatives the following:

- All new housing built in the priority area must comply with a minimum requirement for insulation not limited to the installation of ceilings.
- All RDP housing be retrofitted with insulation, not limited to ceilings.
- A feasibility study be undertaken to provide all RDP housing (or means tested lower income households) with subsidised heated water piped from adjacent industry and the provision for seasonal heating through the use of piped gas and fitted gas heaters. These feasibility studies must include a cost benefit analysis comparing the cost of installation vs. the cost of inaction and the subsequent societal and State public health cost of continuing with carbon based heating.

- We propose a (lower) means tested electricity tariff for lower income households with the provision of subsidised electrical heating.
- The immediate participation of Eskom in UNEP's and the US EPA's cleaner coal production partnership facilitated by the IEA Clean Coal Centre.
- Targeted and time defined reductions for large emitters in the priority area.
- The use of cleaner coal in priority areas.

The State must take action to address the problem and to protect the constitutional rights of those affected by formulating a "comprehensive programme which must include different categories of interventions aimed at different aspects of the problem" recognising that indoor air pollution is a complex socio-economic problem which can only be addressed by an integrated programme which creatively incorporates a range of measures appropriate for a particular society with aimed interventions on 1) the source of the pollution, 2) the living environment and 3) user behaviour.<sup>2</sup>

Interventions on the source of pollution are recognised to achieve the largest reductions in indoor air pollution. These interventions include a switch from coal to cleaner and more efficient fuels and energy technologies such as liquid petroleum gas (LPG), biogas, electricity and solar power. In poor communities where access to alternative fuels is limited, pollution levels can be lowered significantly by using improved stoves which are effective in reducing smoke because of better combustion.

Interventions to the living environment are focused on ways to better ventilate the living environment and include the installation of chimneys, smoke hoods and enlarged and repositioned windows. Better housing design and insulation are also examples.

<sup>1</sup>A top-down approach to laying a fire – coal, paper, then wood, and a few lumps of coal on top at the right time after the fire has been lit.

<sup>2</sup>World Health Organisation website – Interventions in Indoor Air Pollution <http://www.who.int/indoorair/interventions/en/>



# Air Quality

Interventions to user behaviour include methods of lighting a fire using something like the Basa method. We, however, don't accept that this intervention on its own can make a significant improvement to indoor air quality in the Vaal triangle. Interventions to user behaviour are the most difficult to make and maintain and are regarded as important supporting measures for other interventions, but not as the main or only interventions to be made. For this reason a more robust Integrated Household Clean Energy Strategy is necessary for this locality and must include a suite of interventions that could reasonably be expected to address the problem of indoor air quality sufficiently.

## Toxic metal and POPs emissions

We believe that there are still serious concerns around POPs and toxic metals emissions as well as many industries, most notably power stations, not being built with the necessary Best Available Technology (BAT) pollution abatement equipment (especially in the context of mercury). We consider it vital that large scale industrial installations in the VTAPAAQMP conform to BAT minimum emission limits for toxic metals and POPs emission as well as be required to routinely measure, monitor and mitigate their emissions over an agreed timeline. Priority industries must be identified and emissions monitoring for metals and POPs must be included in their APPA licensing transition process with the aim of ensuring that a baseline database of emissions is produced in order to inform an action plan for emissions reductions and appropriate emissions limits.

## Health and Environment effects of Particulate matter

Table B below, taken from the report (page vi), shows Ambient Air Quality Standards for Common Pollutants

adopted to be the Air Quality Objectives for the Vaal Triangle Air-shed Priority Area.

The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs and some may even get into your bloodstream. Exposure to such particles can affect both your lungs and your heart.

In this regard we wish to reiterate the WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide Global update 2005 Summary where risk assessments are based on an extensive body of scientific evidence relating to air pollution and its health consequences. It was generally found that an increasing range of adverse health effects has been linked to air pollution, at ever-lower concentrations. The current VTAPAAQMP does not adequately address PM<sub>2.5</sub> which, in the context of public health, should be included as a priority in the Vaal. The recommended standard for particulate matter directly from the WHO guidelines is:

PM<sub>2.5</sub>: 10 µg/m<sup>3</sup> annual mean  
25 µg/m<sup>3</sup> 24-hour mean

PM<sub>10</sub>: 20 µg/m<sup>3</sup> annual mean  
50 µg/m<sup>3</sup> 24-hour mean

Furthermore we maintain that monitoring and controls for PM<sub>2.5</sub> cannot be excluded from the VTAPAAQMP for the following undeniable and urgent reasons:

1. PM<sub>2.5</sub> is recognised as the more sensitive metric (compared with PM<sub>10</sub>) for estimating the human

**Table B: Ambient Air Quality Standards for Common Pollutants as adopted to be the Air Quality Objectives for the Vaal Triangle Air-shed Priority Area.**

Substance	10-minute maximum (µg/m <sup>3</sup> )	1-hour maximum (µg/m <sup>3</sup> )	8-hour maximum (µg/m <sup>3</sup> )	24-hour maximum (µg/m <sup>3</sup> )	Annual average (µg/m <sup>3</sup> )
Sulphur dioxide (SO <sub>2</sub> )	500	350	-	125	50
Nitrogen dioxide (NO <sub>2</sub> )	-	200	-	-	40
Carbon Monoxide (CO)	-	30 000	10 000	-	-
Particulate Matter (PM <sub>10</sub> )	-	-	-	75	40
Ozone (O <sub>3</sub> )	-	200	120	-	-
Lead (Pb)	-	-	-	-	0.5
Benzene (C <sub>6</sub> H <sub>6</sub> )	-	-	-	-	5

health impacts of exposure to particulate matter. (References - WHO documents, and many others in the scientific literature.)

2. In many urban areas, the health impacts attributable to  $PM_{2.5}$  are the largest contributor to overall air pollution health impacts. In view of the mandate of the WG/SC to set standards that address the health impacts of air pollutants, we would not be fulfilling (or at least not completing) our mandate by avoiding the air pollutant with the dominant effect. Internationally,  $PM_{2.5}$  may be considered the signature pollutant in terms of estimating the overall burden of disease (BOD) of ambient air pollution. Burden of disease estimates are frequently hampered (as in the case of SA) by a lack of  $PM_{2.5}$  data. A delay in setting  $PM_{2.5}$  standards will only perpetuate the lack of data for several more years.
3.  $PM_{2.5}$  is both a primary pollutant (directly emitted from sources) and a secondary pollutant (formed through atmospheric chemistry from precursors. More than 50% (generally 50 to 70%) of measured  $PM_{2.5}$  could be the result of atmospheric chemistry. In order to effectively manage PM/AQ it is essential to understand that the measured values are the result of both primary and secondary sources (emitters of precursors). If the focus is on  $PM_{10}$  only, the contribution of secondary sources is masked or ignored. This could lead to substantial errors in drawing up management plans to improve AQ.
4.  $PM_{2.5}$  is the main contributor to atmospheric haze and poor visibility. Thus, while haze is in itself not injurious to health (although poor visibility is important to the aircraft industry and for tourist cities and areas) the characteristic urban haze that is a feature of all major SA cities is an indicator of the presence of secondary  $PM_{2.5}$ , with attendant health impacts.
5. The specific health impacts of exposure to  $PM_{2.5}$  have been recognised for at least 10 years. In 2000 the WHO published Relative Risk factors for both  $PM_{2.5}$  and  $PM_{10}$ . In 2003 WHO reviewed the literature on PM and health, leading to the 2005 guidelines. We propose using the WHO guideline values for  $PM_{2.5}$ , similar to our approach for the other pollutants.
6. A number of countries have already set standards for  $PM_{2.5}$ .

### Sulphur Dioxide

The proposed 24 hour mean for  $SO_2$  (of 125 $\mu g/m^3$ ) is still 5 times above the WHO recommended level of 20  $\mu g/m^3$  which, in the context of a priority area, seems unreasonably high. Worryingly, the 10 min, 1 hour, annual and, most importantly, the 24 hour proposed standard for  $SO_2$  of 125 $\mu g/m^3$  does not commit to incremental improvements between 2009 and 2020. This is a serious oversight and needs to be urgently addressed. Incremental improvements must also be demonstrated for all the other air pollutants contained in Table D and similarly extended for substances such as benzene and lead.

### General comment: Table D, Proposed Ambient Air Quality Implementation for the Vaal Triangle Airshed Priority Area

We reiterate that generally the VTAPAAQMP proposed ambient AQ standards align with the proposed STANSA with some exceptions - however the VTAPAAQMP AQ ambient standards cannot be set below these standards because at ambient levels higher than these standards there will be adverse effects in sensitive populations and this is in contradiction to Section 24 of the constitution! However this does not exclude effects below these levels - particularly for sensitive individuals or those with pre-existing conditions, as is the case in many priority areas in South Africa.

There is also the possibility of combined exposure or exposure to the chemical by multiple routes. Furthermore the synergistic or antagonistic effects of mixtures are not fully understood, and as such there are no guidelines. However, there should be an adequate margin between the guideline and expected adverse effects especially in priority areas.

### Mercury as a priority pollutant

Similarly the VTAPAAQMP does not quite do enough to recognise that mercury is a global priority and that some actions to address mercury emissions in the Vaal priority area are needed.

Mercury emissions from anthropogenic sources, particularly coal fired power stations, is highlighted as a particular concern globally and UNEP are currently overseeing a global process to address mercury globally. For this reason it would be remiss of this VTAPAAQMP not to include specific actions on mercury, and I would strongly suggest the authors



of the plan consider UNEP's strategies to address mercury from coal fired power stations. Additionally, the plan makes reference to the South African Mercury Assessment Project and should consult with the SAMA focal point and make decisions on available data.

### Ongoing existing gaps in the VTAPAAQMP

1. In order to better characterise the air pollution that community people are exposed to on the fence line, particularly in hot spot areas defined within the VTAPAAQMP, the AQMP must consider and make provision for collecting additional fenceline data (on industry specific priority pollutants such as VOCs & metals) from priority industries such as oil refineries, steel mills etc. in order to provide an evidence base aimed at reducing respiratory and cancer related morbidity and mortality among communities living on the fence line within the Vaal Triangle. We suggest that online emissions monitoring will provide the information necessary to hold industry accountable.
2. Further provision must be put in place to provide in-service training on asthma management and documentation to health care professionals including nurses and doctors from the private and public sector. This will result in better respiratory health care to communities affected by pollution and also make provision for collecting health statistics to further inform the VTAPAAQMP and its subsequent revisions in implementing interventions aimed at protecting public health. It is not disputed whether communities are currently affected by respiratory contaminants in the VTAPAAQMP, it is the extent to which they are affected which needs to be urgently addressed.
3. Furthermore a provision must be put in place to provide education on human rights, air pollution and health effects in the Vaal specifically educating learners, their parents and the teachers in how to prevent and manage asthma.
4. Local and Provincial health Authorities must put in place provisions to monitor and document the prevalence of asthma and asthma-related complications among children in the Vaal Triangle.

### Still existent gaps in Exposure-Related Recommendations and Objectives

1. Robust and permanent  $PM_{2.5}$  monitoring sites should be established including traffic-oriented, industry-oriented, population-oriented and background sites are suggested, and continuous measurements should be collected for a period of one year or longer using clean techniques for metal analyses<sup>3</sup>.
2. The South Durban Basin Health study highlighted that a number of pollutants, called contaminants of potential concern (COPCs), warrant concern due to their concentrations and potency that together cause potentially significant cancer and non-cancer health risks. An enhanced VOC monitoring network, particularly where residents live in close proximity to the oil refineries of Sasol, is necessary in the Vaal Triangle.
3. Given the diversity of industry in the Vaal Triangle, a wider set of metals should be collected and analysed. Sampling could utilise  $PM_{2.5}$  filters, as suggested above.
4. Indoor combustion sources, particularly paraffin stoves, are shown to create excessive levels of CO, PM and VOCs, and the potential for serious adverse health effects. Nearly 20% of survey respondents in the South Durban Basin Health Study walk-through survey reported using this fuel. The use of paraffin (and similar fuels) in unvented indoor applications should be discouraged and ideally phased out.

### Possible Specific Intervention

Health System intervention: Asthma experts can be utilised to train local health care providers including GPs and doctors and nurses from government clinics. This should be done in collaboration with General Practitioner organisations and with municipal and provincial health authorities. Training should involve a state-of-the-art update on asthma diagnosis, management and care. In addition, a monitoring system should be established with the aim of determining the burden of disease and determine patterns.

<sup>3</sup>  $PM_{2.5}$  arises from primarily combustion sources, while the coarse fraction of  $PM_{10}$  ( $PM_{2.5-10}$ ) arises from mechanical processes and entrainment, thus, these are fundamentally different pollutants. Analysis of the sources and meteorological conditions associated with high concentrations of  $PM_{2.5}$  and  $PM_{10}$  should be undertaken. This would aid forecasting (possibly to be used in a public alerting system), dispersion modelling, and source apportionment activities.

# Danes in South Durban

By Bjørn Hansen, former teacher at "The world is on fire" course

## After a visit to South Durban, Danish students decide to act

In November last year a group of 13 students and two teachers from Denmark visited South Durban. The day in Durban was the most impressive, or better put, worst – of their one month long trip in South Africa and Swaziland. And therefore, the students decided to act.

The incredible thing about South Africa is its immense wealth. In North Durban, Sandton and other places there are huge numbers of cars and houses that we very rarely see in Denmark. But only five minutes away from these areas it strikes you: South Africa is also something else, if not everything else. The poverty of the many is as striking as the wealth of the few.

### **Headache after one hour**

Nowhere was this contradiction more striking than in South Durban. Here, huge companies, many based in or with links to our own backyard in Europe, do nothing to secure decent living conditions in the area. After one hour in the area with friends from the South Durban Community Environmental Alliance (SDCEA) the students and myself had headaches – seriously. The air quality was that bad because of the pollution. Even though people *live* there, not for an hour or 24, but for *life*, companies continue to pollute.

### **Time to act – the birth of "Global Detox"**

After one day in Durban, literally seeing, smelling and feeling the consequences of the pollution and the impact of corporations, the students decided to act. Inspired by SDCEA, they created the activist group "Global Detox" with four principles, summarised here:

1. Environmental and climate policies cannot be discussed without discussing equality, inequality and justice;
2. All over the world the distribution of environmental risks has a social and racial bias;
3. It is the industrialised countries that mainly stand for the consumption that leads to pollution and release of CO<sub>2</sub>.

4. Our policy is therefore based on two notions:
  - Environmental justice, which means that everyone has the right to live in an adequate place without pollution or other harmful effects.
  - Ecological debt, which means that the west has a debt to the south, and therefore should give support in terms of technology transfer.

### **T-shirts, debate and campaigning**

Now an activist group, "Global Detox" started a campaign with the goal of putting the social and ecological justice issue on the agenda, especially by talking to youth. A T-shirt was made – a trendy one even (at least we thought so) with a logo created by a picture of one of the factories. By selling the T-shirts the campaign will get in touch with youth not usually interested in politics. A web page was designed (see [www.globaldetox.dk](http://www.globaldetox.dk)) and articles were written to Danish newspapers. The group even managed to arrange a public debate with the head of the climate think tank, Concito. A public campaign with posters all over our capital city, Copenhagen, and electronic communication, was launched.

So there you have it: Sometimes seeing the realities and injustices of the world – and being inspired by people like the ones fighting for justice in Durban – gives you no other option than to fight. ■

### **"The world is on fire" and "Global Change" – global activist education in Denmark**

The students who went to South Durban were part of a course called *The world is on fire* at Krogerup Folk High School. In the folk high schools – a tradition in Denmark, Norway and Sweden – the students live at the school for around five months and there are no exams or grades. The students are there only because they really want it. *The world is on fire* consists of two months of education at the school, one month abroad (in South Africa) and one month creating a campaign in Denmark.

*Global Change* is a brand new initiative starting from May 2009 in Copenhagen and run by ActionAid Denmark. *Global Change* is a four-month course aimed at training young people to become either New Organisers or New Communicators. *Global Change* students will also be visiting South Africa in the future.



### **Stunning Environmental Victory in Nairobi!**

On Thursday, the 19<sup>th</sup> of February, 2009, in Nairobi at the United Nations Environment Program 25<sup>th</sup> Session of Governing Council/Global Ministerial Environment Forum, world environment ministers finally agreed the process to establish a global, legally binding international treaty to tackle mercury pollution.

Mercury is a persistent, bioaccumulative, transboundary pollutant that contaminates air, soil, water and fish and can seriously harm human health and the environment. About half of the 6000 tonnes emitted annually into the atmosphere is from human activities such as the burning of fossil fuels, mining and base metal smelting. Mercury circulates globally and can travel very long distances in the atmosphere often affecting human population (such as the Inuit) where no industrial activity occurs.

Environment ministers agreed that the treaty should include provisions to reduce the global supply and demand of mercury, cut atmospheric emissions, and address mercury-containing waste and the remediation of contaminated sites. It should also provide for "technical and financial assistance" to developing countries to implement their obligations, they said.

Negotiation on the treaty will begin in the second half of 2009 and are expected to conclude by 2013.

New Reports on Mercury include:

Mercury in Fish, a global health hazard

[http://www.zeromercury.org/International\\_developments/FULL\\_FISH\\_REPORT\\_FINAL+.pdf](http://www.zeromercury.org/International_developments/FULL_FISH_REPORT_FINAL+.pdf)

Mercury Rising-reducing global emissions from burning mercury-products

[http://www.zeromercury.org/International\\_developments/FINAL\\_MercuryRising\\_Feb2009.pdf](http://www.zeromercury.org/International_developments/FINAL_MercuryRising_Feb2009.pdf)

### **Story of Stuff banned**

Annie Leonard, creator of 'The Story of Stuff', a succinct short film about waste, says: "I created the film ... to inspire people in the U.S. to think about the hidden environmental and social impacts of our out of control consumption patterns here."

She adds that she has been delighted by how many teachers have adopted it for use in classrooms in the U.S. and, indeed, throughout the whole world.

A high school teacher in Missoula, Montana, showed it to her biology class. An irate parent complained to the school board, which then voted that showing the film violated district policy. This, in effect, bans the film in this school district.

At a time when there is general agreement that the planet is at risk, educators need to help students to think critically about both the causes and the consequences of environmental degradation. The banning of 'The Story of Stuff' in Missoula sets a dangerous precedent and a campaign is being run to try to persuade the school board to reconsider their decision.

To read more about this, or to view the film itself, go to [www.storyofstuff.com](http://www.storyofstuff.com).

### **Cemex, Holcim and Argos fined for price fixing in Colombia**

Colombia's largest cement maker, Cementos Argos, and the local units of Cemex SA and Holcim Ltd were fined 923 million Colombian pesos (\$424 000) each for fixing prices in the second half of 2005. This amount has little relevance given the size of the companies.

The three companies had entered into an agreement to fix prices of Portland Type 1 cement and to divide among themselves the market of this product. Natalia Agudelo, a stock analyst, said that the amount of the fine is very low when compared to the potential profits of such an agreement.



## Climate Justice Now!

Climate Justice Assembly Declaration  
Bélem, Brazil, 1 February 2009

No to neoliberal illusions, yes to people's solutions!

For centuries, productivism and industrial capitalism have been destroying our cultures, exploiting our labour and poisoning our environment.

Now, with the climate crisis, the Earth is saying "enough", "ya basta"!

Once again, the people who created the problem are telling us that they also have the solutions: carbon trading, so-called "clean coal", more nuclear power, agrofuels, even a "green new deal". But these are not real solutions, they are neoliberal illusions. It is time to move beyond these illusions.

Real solutions to the climate crisis are being built by those who have always protected the Earth and by those who fight every day to defend their environment and living conditions. We need to globalise these solutions.

For us, the struggles for climate justice and social justice are one and the same. It is the struggle for territories, land, forests and water, for agrarian and urban reform, food and energy sovereignty, for women's and worker's rights. It is the fight for equality and justice for indigenous peoples, for peoples of the global South, for the redistribution of wealth and for the recognition of the historical ecological debt owed by the North.

Against the disembodied, market-driven interests of the global elite and the dominant development model based on never-ending growth and consumption, the climate justice movement will reclaim the commons, and put social and economic realities at the heart of our struggle against climate change.

We call on everyone – workers, farmers, fisherfolk, students, youth, women, indigenous peoples, and all concerned humans from the South and the North – to join in this common struggle to build the real solutions to the climate crisis for the future of our planet, our societies, and our cultures. All together, we are building a movement for climate justice.

We support the mobilisations against the G20 summit and on the global crisis from 28 March to 4 April, and the 17 April 2009 mobilisation of La Via Campesina.

We support the call for an International Day of Action in Defense of Mother Earth and Indigenous Rights on 12 October 2009.

We call for mobilisations and diverse forms of actions everywhere, in the lead up to, during and beyond the UN climate talks in Copenhagen, especially on the Global Day of Action on 12 December 2009.

In all of our work, we will expose the false solutions, raise the voices of the South, defend human rights, and strengthen our solidarity in the fight for climate justice. If we make the right choices, we can build a better world for everyone.

## Provincial Landfill Visits and Provincial Waste Pickers Meetings

The Waste programme within groundWork intends organising waste pickers in South Africa and will be visiting the various provinces over the next while. On June 4-5, 2009, a national meeting will be convened in Johannesburg.

Province	Visit Dates	Provincial Meeting
KwaZulu Natal	07-10 Oct 2008	13 Nov 2008
Free State	27-30 Jan 2009	10 Feb 2009
North West	03-06 Feb 2009	26 Feb 2009
Gauteng	03-06 Mar 2009	13 Mar 2009
Eastern Cape	17-20 Mar 2009	25 Mar 2009

Province	Visit Dates	Provincial Meeting
Western Cape	31 Mar-03 Apr 2009	08 Apr 2009
Limpopo	14-17 Apr 2009	29 Apr 2009
Northern Cape	05-08 May 2009	14 Apr 2009
Mpumalanga	19-22 May 2009	28 May 2009



## The Back Page

### **The groundWork Report 2009: Wasting the Nation**

Waste was the hidden industry of the 20<sup>th</sup> Century. While producers advertised their wares loudly, the wastes of production and consumption were supposed to disappear from view. But the scale of waste is staggering. For every bin bag thrown out by consumers another 70 are dumped by the corporations in the process of producing goods – from mining and extraction to manufacture, distribution and marketing. This waste is kept on the other side of the boundary between clean and unclean. It's the dirt concealed behind the bright new goods displayed in bright clean shopping malls. Increasingly, this dirty part of the 'value chain' is located in 'developing countries' while the economies of 'post-industrial' nations are said to become cleaner as their economies are 'dematerialised'.

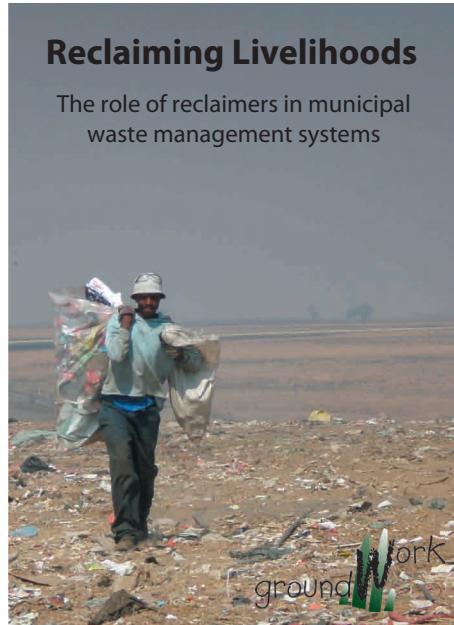
Wasting the Nation documents how capitalist development in South Africa has made trash of people and places in South Africa and how people and environmental justice organisations have resisted this process. It shows that waste management is in a parlous state, abandoned at the end of the production pipe in the flood of waste encouraged by economic policy. As DEAT official Joanne Yawich told the parliamentary portfolio committee, "The bottom line [is] that South Africa [is] a country in need of economic growth and development. DEAT [is] thus trying to manage the negative effects of dealing with waste."

The groundWork Report questions this bottom line. It shows who benefits from the monstrous production of waste and who carries the cost. It documents the wastes of production – particularly mining, chemicals, cement and packaging – and it tramps across the municipal dumps in the company of waste pickers who work on the dirty and dangerous margins of the economy. Finally, it locates waste, and people's responses to waste, in the context of the global depression now getting underway. It notes that 'another world' is now inevitable – but the character of that world is not. The struggles defined by waste are part of the broader struggle to shape the future according to the needs of people rather than capital.

### **Reclaiming Livelihoods**

#### **Reclaiming Livelihoods**

The role of reclaimers in municipal waste management systems



groundWork

### **Wasting the Nation**

making trash of people and places



groundWork

Wasting the Nation

the groundWork Report 2008

This booklet outlines what is happening on the landfill sites, identifies certain key areas and makes recommendations. A pamphlet has also been produced which summarises the main points.

All publications can be accessed from the groundWork website: [www.groundwork.org.za](http://www.groundwork.org.za).