ENVIRONMENT - 1991

JANuARy - June
JOHANNESBURG. - South Africa had one of its driest years in 1990, with some areas having the lowest rainfall in 87 years, the Weather Bureau said.
Mr Mike Lang, the bareau's deputy director for climate said the entire Transvaal had recorded a rainfall figure far below normal. From 5 percent in the Lowveld to as low as 50 percent in Potgietersrus, Northern Transvaal.
In December the entire Transvaal was still well below normal in spite of good rains in the Lowveld and parts of the Highveld.
Mr Lang said the north-western, west and south-western Transvaal were the worst hit regions.
Thabazimbi, in the northern Transvaal has ${ }^{\circ}$ had 89 mm rain since July. The normal is 295 mm . The whole Transvaal received from as little as 21 mm in Ellisras to 176 mm at Phalaborwa.
Mr Lang said the downpours in December had done nothing to alleviate the situation and a couple of areas were still in trouble last month.
The eastern Highveld town of Carolina had only 44 mm rainfall against the normal 123 mm , Potchestroom had 58 mm against the usual 99 mm .
OFS SUFFERS
The OFS also suffered a lot during the season. Wepenaar recorded 106 mm , which is only 43percent of the normal 246 mm , Frankfurt had $119 \mathrm{~mm}, 33$ percent below the normal 355 mm , Bloemfontein had $99 \mathrm{~mm}, 48$ percent of the normal 206 mm . The lowest was $26,1 \mathrm{~mm}$ in 1948 .
However, conditions improved in December in some areas. A total 1 amm was received in Fourismith and 69 mm in Bloemfontein. Temperatures were close to average.
The Eastern Cape also fell well below the normal. Middelburg had 232 mm against the normal 362 mm . Queenstown, with a normal 551 mm , had only 336 mm rain. Aliwal North had 361 mm against 536 mm - the lowest since 1982 which had $201,8 \mathrm{~mm}$.
Natal, West and Northern Cape were not problem areas, Mr Lang said.
Eastern Cape and Karoo had 41 mm against 49 mm , Queenstown had 38 mm against 73 mm after several bad months. The area has had 106 mm rain from July to December. The normal figure for the area being 226 mm .


JOHANNESBURG. - South African diamond giant De Beers has become involved in an ecological slanging match with the Botswana government oyer a plan to use water from the Okavango swamps.

The controversial plan to siphon water from the ecologically fragile swamps in northern Botswana has been designed, according to a governmentsponsored environmental impact report, to supply water to the De Beers-controlled Orapa diamond mine.

But De Beers, equal partners with the government in Orapa, say they do not need the water and want nothing to do with the scheme to siphon it.

Cynics might believe the De Beers stance is the result of a threatened "Diamonds are for Death" campaign being orchestrated by international environmentalist groups against the diamond giant if the Okavango scheme goes ahead.

But despite a similar threat to include the Botswana beef industry in the "death" tag threat the government seems determined to press ahead with the controversial scheme.
This week the Botswana Minister of Water Affairs, Mr Archied Mogwe, addressed a traditional "kgotla" (tribal chiefs) meeting in Maun to explain the scheme to irate leaders who complain that they have not been consulted by the government over the scheme, which could have a major impact on their farming and cattle-ranching.

Furious environmentalists in Botswana are also lobbying against the plan and at the same time orchestrating concerned overseas "greens" to bombard the Botswana government with threats in order to force it to abandon the scheme.
Environmentalists say that the scheme will lead to the degradation of more than 600 square kilometres of wetland, a claim disputed by the government, who say just 60 square kilometres will be affected.
? 5
The government also says it has appointed an ecologist to oversee the project, including the replanting of grasses and sedges and the routing of roads to spare trees.

According to a report by the Australian-based Snowy Mountains Engineering Corporation (SMEC), which investigated two dozen different schemes to siphon water from the Okavango, "all of the alternative schemes considered assume the existence of Maum reservoir and are directed towards improving the surface water supply to Orapa in dry years".

The Botswana government has said that the main aim of the scheme is to provide water to farmers and ranchers in northern Botswana as part of a "self-sufficiency" scheme and to guarantee a supply to the town of Maun.

However, the SMEC report pooh-poohs both ideas.

It says the soils in the area are too acidic, thin and sandy to support farming without constant watering and the supply of all nutrients needed by the crops grown.

The report found that the cost of irrigation, transport, fertiliser and other factors meant that an outlay of R 600000 on 100 hectare irrigated farm would return less than 5 percent profit, while increased running costs on larger units would mean no profit at ail.

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It also partially contradicted government asser tions that the Okavango scheme was necessary to provide a reliable water supply for the town of Maun, finding that alternative ground water supplies had not been fully investigated.

Finally the 'report contradicted De Beers' assertions that it had plenty of water, pumped from boreholes, for Orapa's needs, adding that De Beers engineers had vastly overestimated the area's ground water reserves.
Indeed it found that at present usage, if ground hat clogged pipes and plant.
De Beers would not be contributing anything toward the estimated R100m cost of getting Okavango water to Orapa.

The report concluded that if the scheme to tap the Okavango was not implemented it would cost De Beers an extra R100m over the working life of the mine. water supplies were not replenished by rains, Orapa would run out of water by 1994.

It also said that the cost of water from the Okavango would cost just 20 percent of the cost of pumped ground water, which also added to main-

By DALE KNEEN, Deferice Rëporter
RESIDENTS of Rooi Els on FalsétBay are poised to declare war on an explo Overberg.
which occupies land in the ovemises to be a pro-
The first salvoes in what promise by the Rooi Els tracted battle are likery this month
Local Council inicourt this month.
Armscor subsidiary Somchem lam but many of land around the suy the lease is invalid.
Rooi Els townsfolk say the come from the Pringle
Support for this Bey Residents' Association and Bay and Betty's Bay Resid Association
the Kogelberg Landowners' Association. the land for
But Somchem, which has occupied the court.
11 years, is prepared to batte sikely to be the va-
The crux of the itigation defunct Caledon Divilidity of a decision, by the land to Somchem.
sional Council, to lease the land people
Water for the per
Water for the people Rooi Els Council, whional Council failed to safe1989, claims the Divisional Council fa water supply guard the land as the source of the whem.
for "the people" by lexplosives testing company signed the lease The explosives testick coted eight years.
in 1987 but it was backated to review Somchem's
The court may be asked extensive buildings on decision to erect additional extensive of the Rooi Els the site, said the acting chairman.
Council, Professor Denis Cowen. He said a proposal by somegal because" "this deciportions of land was also illegal becasministrator's sion is in direct conflict with the admine site".
wise direction against subdivis to provide security
Somchem had undertaken ane dam and to ensure
services in the accurred.
no pollution occurred.

\section*{Pollution fines too light, says study \\ PRETORIA - Heavier penalties for pollution offences are recommended in a CSIR report on waste management and pollution commissioned by the Department of Enviromental Affairs. B|Pay $14 / 1 \mid 91$ \\ The report says fines generally are too low and prosecutions not an adequate deterrent, as many offenders willingly pay admissions of guilt \\ Staffe involved in the administration and enforcement of existing laws are also:inadequate \\ To counter the problem, industries should be encouragéd to increase pollution monitoring and environmental auditing. Spot checks should. be made. \\ The report notes, howev- \\ GERALD REILLY \\ er, that industries are becoming increasingly aware of environmental issues because of the growth of the green movement, and political parties are beginning to integrate environmental issues in their mainstream policies. \\ Littering remained a serious problem and waste recycling had to be encour- \\ aged. \\ More than 60 findings and recommendations are made in the 1400 -page report. \\ The report is the work of experts from three universities. \\ The study examined land, air, freshwater and marine pollution control. \\ More than 750 private and public sector representatives co-operated.

## Kaolin: Pienaar's 'not the final say' <br> CHLT TuF 26

MR Louis Pienaar, the Minister or-Environment Affairs, did not have the final say over whether to allow kaolin mining in the Chapman's Peak area, Mr Jeremy wiley said yesterday.
Mr Wiley, a prominent Noordhoek landowner who is opposed to the kaolin mining, was reacting to remarks Mr Pienaar made in an interview published in the Cape Times yesterday. Mr Pienaar said the country would suffer a great loss if the mining did not go ahead.

Mr Wiley said the decision on whether the mining would go ahead lay with the Department of Mineral and Energy Affairs, and not with Mr Pienaar.
Ironically, Mr Wiley's Good Hope Development Company owns the land on which the proposed kaolin mining is to take place, but he is powerless to stop it.
"We own only the surface rights. Serina (the kaolin mining company) bought the mineral rights from the previous owners. Very little protection is given to the owners of the surface rights," he said.

Mr John Butterfield, a member of the Save Chapman's Peak Action Group, said he wished the new minister all the best in his new job, and he did not wish to take issue with him.


















 glass, domestic waste and used syring-
es, needles, drips, blood bags and oth-

 playground for local children who eat S! 'sdew [pionjo uo pumose suods



 perts agree can pose serious health hazShocking pictures and details of this
and other dumps, which medical ex-

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sites - and the offenders face a
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 Health hazard ... scavengers at the Katiehong clump which contains toxic waste.


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large municipal dump had been 'stejuraqo गux07 yo sumap




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 Branch co-ordinator Henk
Coetzee said at least two dumps



 At a news conference yesterto the community. sys!u पך age to the environment and toxic waste around the wit-
watersrand - causing damspread dumping of illegal
toxic waste around the Wit-



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## We'll look into hospital - TPA

THE Transvaal Provincial Administration in Pretoria has announced an investigation into allegations by Earthlife Africa that Natalspruit Hospital had dumped unincinerated medical waste at the Kathlehong municipal dump. (56)
TPA spokesman Jan van Wyk said the waste removal at all Transvaal Provincial hospitals was the responsibility of the relevant local authority. In the case of Natalspruit, Kathlehong municipality had a subcontractor remove its waste.

Human tissue was incinerated at all TPA hospitals except Baragwanath, where it was removed for incineration elsewhere. Star 2611191

Earthlife Africa alleged this week that Natalspruit Hospital was illegally depositing unincinerated medical waste, including blood bags, used needles, plaster casts and medicine bottles.

Experts believed this waste could cause the spread of hepatitis and Aids, as the dump was unfenced and a mere 30 m away from residential houses, Earthlife said. - Sapa.


## Moratorium call on kaolin <br>  <br> eatre have in their report on the ef-

fect of property values, in particular, grossly mislead the authorities and other interested parties by isolating only the initial deposit and claiming that a mine would have little or no that a mine term effect on property values," said Mr Wiley.

Serina managing director Mr Carl Tarrant confirmed that his company had the mining rights to one of two other deposits - a small, high grade deposit on Trenthan farm - ebut said mining it would not affect property values.

Mr Wiley said he hoped government would deproclaim mineral reserves and ban all mining activities in the Noordhoek amphitheatre.

## By ESANN van RENSBURG

## Environment Reporter

NOORDHOEK could become known as "Kaolin Corner" if Serina mining company gets a permit for kaolin mining on the slopes of Chapman's Peak, according to landowner Mr Jeremy Wiley.
De Goede Hoop Development Company, of which Mr Wiley is a director, is the owner of land in Noordhoek and has been campaigning behind the scenes for the probibition of opencast mining in the area.

Mr , Wiley said at a Press conference this week that the area had at least three kaolin deposits and Serina, who own the mineral rights on the Chapman's Peak slopes, have publicly' acknowledged their intention'to secure mineral rights to the other deposits...

50 years
According to Mr Wiley this' meant kaolin mining would be with Noordhoek for at least 50 years and it would lead to "very intensive mining activity within a five square kilometre area".
A spokesman for the Noordhoek Districts and Civics Association said they wanted a moratorium on kaolin mining on Chapman's Peak until other deposits have been fully investigated.

Mr Wiley said "Serina and its con-
sultants, in not assessing the effect of the mining of the other two or three deposits in the Noordhoek amphith-

## More airlines

 to operate in SA - Dur 8tar 7124 CAPE TOWN - Two more international carriers - Austrian Airways and Hong Kong's Cathay Pacific Airlines - are to start services to South Africa this year as the country's diplomatic, trade and tourist relations with the world improve.The latest boost, announced last night by Minister of Trade and Industry and Tourism, Kent Durr, comes amid indications that South Africa attracted "well over" one million tourlsts last year, half from Africa.

This "magic figure", Mr Durr said, would create a new basis for growth in tourism.

## Gearing up

SAA is gearing itself for major expansions in expectation of the lifting of sanctions which will see the airline flying to Australia and the US again.

An SAA spokesman yesterday said the airline was buying 11 new aircraft following indications by the Australian government that direct flights by SAA to Australia could resume soon.
The Star's Foreign Service in Perth reports that SAA's regional manager for the southwest Pacific, Trevor Henry, predicts flights will resume "within weeks". - Political Correspondent, Pretoria Corre'spondent.

## Aussie govt to ease viss <br> restrictions

Star Foreign Service
MELBOURNE - The Australian government plans to relax tough and time-consuming visa restrictions on South Africans visiting Australia.

For more than five years South Africans wanting visitor or business visas have had to have their applications processed through the Australian High Commission in London.

This was because of an Australian ban on consular facillties at its embassy in Pretoria as part of sanctions against apartheid.

The ban meant inconvenience and delays of up to six months in getting visas approved.
The Australian Foreign Minister, Senator Gareth Evans, said the first sanction to be eased would be in the areas of people-to-people relations.

## Sports

LONDON - International moves to break down sanctions against South Africa gained momentum yesterday when the Commonwealth Secretariat confirmed that a special meeting of the nine-member Foreign Ministers Committee on South Africa would take place in London next week.

Britlsh Prime Minister John Major and, for the first time, his Australian counterpart, Bob Hawke, are putting pressure on the Commonwealth to ease sanctions and boycotts, particu-


## Firm explains (56) cooking oil:8tar spill on dam <br> By Jacqueline Myburgh

Mechanical failure and a thunderstorm were responsible for the cooking oil spill at an Edenvale Dam on Friday, Epic Oil managing director Trevor Wilkinson said yesterday.
At least three birds have died and fish are endangered as a result of the 75000 -litre sunnower seed oil spillage.
Mr Wilkinson sald there was a total work stayaway at Epic that day, and the staff handling the oil when the accident octhe on when the accident occurred were voluntary workers.
The spill took place while oil was being pumped from a tanker into a storage tank. A pump system failed and oil was siphoned back on to the siding
"Before the staff could react, there was a storm which washed the spilled oil into the stormwater drainage system.
Epic staff, in conjunction with the Edenvale Municipality, Department of Water Affairs and an expert on oil spillages, Greg Parton, have recovered most of the 15 -ton spillage. A most of the 15 -ton spillage. A
scientific adviser to Epic said scientific adviser to Epic said
there were no signs of dead fish.
Yesterday, 35 drums of oil which had been siphoned out of the dam stood on the banks.
Resident Peter Coates said he took a walk around the dam every morning, but now the smell had become unbearable.
He also remarked upon the disappearance of a family of Egyptian geese from the dam. - Edenvale town clerk Pieter Jacobs said he was satisfied with the cleaning-up operations, and believed the spill would not have any long-term effects.

# rhese arice (1) TH OTSE  

THE "population explosion" is the greatest percelved threat to the future of South Africa in the eyes of South Africans of all colours Pollution especially air oollution, comes second.
According to a survey Project Ecos, just published in Johannesburg by MRA the marketing survey firm - most marketing survey firm - mos
educated whites, blacks and Ineducated whites, blacks and In-
dians are personally concerned dians are personally concerned
about the unknown effects of ozone depletion and global warming.
Project Ecos is an on-going nation-wide survey which explores the South African public's awareness and knowledge of green issues and provides insights into why, when it comes to the environment, some people destroy and others conserve.
The first two phases of the study consisted of a series of group discussions and a nationgroup "iscussions and" nationwide a

It tested nine groups, each consisting of 12 people.

Four groups were from the white community (well-educat ed adults, poorly educated adults, students, schoolchildren); three groups were from the black community (well-educated, poorly educated and schoolchildren); there was one schoolchldren); there was one Cape Town coloured group (well-educated professionals) and a simila

Before the question of environment was raised among the respondents - they were interviewed in segregated groups and in their own language they were asked what issues they were asked what issues" were n
in life.

Not one spontanenusly mentroned environment.

But when the subject of environment was mentioned, one in five of whites, Indians and coloureds said they viewed "environmental deterioration" as the most serious problem facing South Africa today

Only eight percent of blacks agreed with this line

Respondents listed, in the words of the survey, the following issues as being "worth working for": world peace, no war, success, money, money in the bank, independence, freedom, career, good employment, happiness, housing, food, family and honesty and integrity.

The survey found that "challenges on the political front

JAMES CLARKE looks at the results of an important survey on what South Africans think of their environment and thelr future.
(made) respondents unwilling to classify environmental and ecological issues as the most pressing they are facing. (But) ceoloing was seen as very important, gy was seen as very important, with the majority showing con-
cern and keenness to become more knowledgeable about the subject"
Most whites put security aspects highest on their list. Blacks, generally, put eduration at the top. Poorer blacks put food and housing as first priorities.
When it came to purely environmental issues the poorer groups saw air pollution and litter in their immediate vicinity as the pressing issues The more educated the respondent, black educated the respondent, black
or white, the more likely he or or white, the more likely he or
she was to look beyond immediate surroundings.
The second phase of the study was scientiftcally chosen to represent 90 percent of whites, and 90 percent of urban blacks.
Nearly all respondents showed concern and awareness and believed the planet was threatened but most felt the problems were "too big and confusing" for them to do much about personally.

They mostly held industry responsible for global damage and felt industry should be and felt industry
cleaning up the mess.
The great majority of all respondents thought industrial polluters should be exposed and even more thought they should be fined.
When it comes to development, said the survey, all the groups felt that Environmental Impact Asessments (EIAs) should be done on major deshould be done on major deried out by impartial and inderied out by impas

While most named general pollution, pollution of air, pollution of water, litter, forest destruction and species extinctions as being issues which affect society, only a few thought the misuse of water, soil erosion and noise pollution were important.

When asked what environ-
mental aspects specifically threatened this country, most respondents felt South Africa's gravest threats were the same as the world's. "Only one or two felt different issues were involved".
Threats singled out by the better educated groups as specifically relevant to the South Africa situation were the threats being put on "declared natural areas like Kruger Park and St Lucia"; dumping of toxic waste (specifically mercury) and the lead content in fuel.
People generally were concerned at the fallure of the education system when it came to environmental awareness and the white well-educated group was prepared to give money towards environmental care and said the money was best directdu the environmental edu ed to cation The need for more information was repeatedly menioned.
Most said they were influenced to care about the environment by their parents but were also influenced by newspaper articles and television paper articles and tellensing programmes (specifically men-
tioning the SABC's $50 / 50$ programme).

Blacks, coloured and Indians and low-income whites all declined to name issues which they felt posed little or no threat. But the "well-educated" white group and the students and scholar groups named vanand scholar groups named van-
ishing species, vanishing black rhino (specifically), soil erosion, soll pollution and noise pollution as being "not particularly threatening".
Asked if they worried about what sort of world their children and grandchildren might inherit, most were worried about future educational standards and political aspects.
"Other race groups were more pessimistic than whites. They felt pollution could shorten their children's lives, that everything will be artificial and 'all nature will disappear' and that the -population explosion would spoil natural areas with children having to play on durnping sites."
The greatest ecological threat to South Africans by the year 2020 was perceived as the population explosion, with pollution second, followed by nuclear weapons, chemical waste being dumped in South Africa - and Aids. $\square$


## What the

TOST environment experts 1 believe the greenhouse effect is Earth's biggest threat, with the ozone hole a close sec ond.

Most experts (75 percent) questioned in the Project Ecos environmental awareness survey named air pollution as a major South African problem major South African problem
while 55 percent gave socio-poWhile 55 percent gave socio-po-
litical problems as another litical problems as another
major challenge, followed by major challenge, followed
overpopulation ( 50 percent).

Globally: 70 percent named
global : threat $二$. age and as major In named $u$. ploitation sources pollution One in major ${ }^{-1}$ major
Most follow $=$ Iationtiz socis.

## Cleaner air

M
ORE than one in two South Africans are prepared to pay substantially more for cleaner air More than one in two are prepared to pay more for electricity if it means less for electr
pollution.
And 78 percent of white car owners are prepared to pay R500 to have their cars converted to cleaner fuel, while 72 percent want lead-free petrol.

These were among the find-
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## TOURISM

## PROMOTING ZULULAND

Lengeslembering northern Zululand is finally coming out of hibernation. It's launching another attempt to attract more domestic tourists. FIM 81249
This time the effort will be spearbeaded by the Zululand branch of the Tourism Associ-
ation of Natal and KwaZulu. It will be chaired by Rob Deane, MD of Zululand Safaris and Bushlands Game Lodge. The association consists of representatives of 32 tourist bodies, including the provincial administration and KwaZulu government.

The initiative is in line with the tourist authorities' plans to relieve pressure on the Kruger National Park by developing the attractions of peripheral game parks.

Much needs to be done. Zululanders will have to be persuaded to contribute to a fund to popularise the region's attractions. Past experience shows this won't be easy. Some of the existing accommodation will also have to be upgraded. Natal Parks Board seems to have done a good job of game conservation but it will have to learn the niceties of promoting tourism - or let private enterprise take over.

Previous attempts at promotion were stymied by those who questioned the need to sell the area to South Africans, especially those outside of Durban and Natal. They argued that the SA Tourism Board does a good enough job of attracting overseas tourists.

Some game farms derive nearly all their income from foreign tourists. Deane, for example, says he earns $99 \%$ of his income from foreigners - Britons, Germans, Italians. Swiss and a growing number of Taiwanese. Most of them are reluctant to surrender this valuable custom in favour of domestic tour-

Contrme $\rightarrow$
ists but they realise that, without a boost from the local market, Zululand will not be able to counter the increasing competition from principal game parks.

The potential is certainly there. Northern Zululand offers the big five (lion, elephant, buffalo, rhino and leopard) in four reserves - Hluhluwe, Umfolozi, Mkuzi and Ndumu. In addition, it boasts SA's largest fresh water
estuary, Lake St Lucia, historic battlefields and resorts that introduce visitors to Zulu culture.

The area is also attracting overseas investment. The Zoological Society of London has reportedly formed a consortium with British financiers J H I International and Londolozi, a local safari company, to acquire 8000 ha in northern Zululand for an hotel
and safari camp.
Peter Ruddle, MD of Mkuze Trails and manager of the Ngweni Hotel, says the property is at Phinda, 35 km from Hluhluwe on the road to Sodwana.

He believes the society intends using it to improve the genetics of its animals in captivity, particularly rhino, but says it may allow limited hunting for culling.

## (56) CMRE This <br> From page 1

A city fire control officer late last night described the fire as "still big", and burning a swathe down De Waal Drive into District Six and Deer Park.
More than 15 firefighting parties were still struggling to contain the blaze, he said.
Earlier yesterday smoke fanned by a southeaster billowed down over the entire city bowl. The only suburbs visible were Tambours Kloof, Schotsche Kloof and the Bo-Kaap in the West, and a small part of Woodstock, Mowbray and District Six in the East. Metro workers and the traffic department were kept busy administering eye-drops to dozens of civilians, firemen and forestry workers.
The lush gardens surrounding the Dis Park towers in Highlands Estate were completely destroyed by the fire, which came to within 10 m of the three circular towers.
Mr Kelvin Alston, manager of the Dis Park flats, said: "This was the biggest scare of my life. The flames jumped the road and within metres were right down in the gardens.
"My biggest problem was to control the panic. People came running out of their flats and I was worried that a car would catch fire, blocking the road," he said.
He added that a part of the creche on the premives had caught alight.
"Concerned" Gardens MP Mr Ken Andrew received news of the fire during the no-confidence debate on the cabinet in Parliament.
He raced to the scene of the fire, and arrived in Vredehoek about 2.30 pm .
"This mountain has a funnel effect on the wind and drives flames down the mountain. Four years ago we fought a major battle to prevent 150 braai places being allowed at Van Riebeek Park, and now you can see why," he said.
Residents in the area were stunned by the speed at which the fire raced down the mountain, leapt across Table Mountain Road and came to within metres of their homes.
"At ten past two I was told by the fire department that there was no danger to our homes," said Mrs Lis Cloete of Frank Road, Highlands Estate.
"It was incredible - by the time I got home 20 minutes, later the fire was in our garden and metres from our home," she said.
The first thing she and her husband, Mike, did was to grab their insurance policies, photographs and other valuable documents, which they loaded in their car.
Residents in Oak Tree Village emptied their homes of prized possessions, while Dr Laura Hill of Mountain Road managed to move all her furniture within ankhour.
i Ms Charmaine Walmsley, also of Oak Tree Villase, was' at the dentist when her domestic servant called -her to come home, but police stopped her from going up to her house in Mountain Close.

Mr Parrot said a natural firebreak behind the age, and only destroyed from causing major damIt and only destroyed the fynbos.
It was reliably learnt yesterday that a Court helicopter pilot had contacted emergency services at 8.30am to see if their services were required, but was "turned down". Court were only called in to help with observations over two hours later.
with a suspended fire bucket mable that a helicopter quell the blaze before it ran out have been able to "fogged" the city. fogged" the city.
ment, which is involved in of UCT's botany departDevil's Peak and Table Mn ecological research on vised Cape Town's Table Mountain, last night critifor "inept management of cal management systems for "inept management of the ecology in the metroolitan area"
He said old vegetation should not have be allowed to pile up close to the city, andibeds of short vegetation should be planted on the perimeters of the city to act as fire barriers.
City council spokesman Mr Ted Doman denied reports that the fire had been caused by a controlled fire getting out of hand.
Mr Doman said a fire break could not be built because the fire had started at oppelskop, an inacfirebreak.

## He said.

He said the fire would be halted once the wind - blew the fire towards the existing firebreak, just

Mr Doman Estate.
plaints about fire the council had received comdiately, and a full investigot being acted on mmeed on Monday.

- Another big mountain fire raged in the Hangberg on the slopes above Hout Bay harbour last night but was soon brought under control, according to a Regional Services Council spokesman. A third fire between Kommetjie and Ocean View was also brought under control, he said.


## Flood warning forgttN Natal residents  <br> DURBAN:

 yesterday, warned that local flooding could quite $S 6$ possibly occur in their areas - particularly if there was more heavy rainfall overnight."We're expecting heavy rains in Northern Natal,"
said a Durban weather bureau spokesman. "There
could be the possiblity of local flooding in areas
such as Vryheid and Richards Bay."
"However, we're not expecting whole towns to be washed away, otherwise a flood warning would have been issued. There may be one or two local bridges washed away, but that's about all," he said.
Meanwhile, Ladysmith officials were keeping their eyes on the level of the Klip River, a noted flood danger spot.

Mr Andries van Eck, town secretary, said yesterday afternoon that the river seemed to have subsided for the moment, but if they had heavy rains again they "could have problems".

Some 2200 telephone services in the Pretoria area are out of order as a result of the recent continuous rain and heavy lightning:
The ${ }^{18}$ areas particulary affected are Lyttleton,
Waterkioif, Silverton, Pretoria North and Brits.
Post office spokesman Mr Willie Swart said yesterday that technical staff had been withdrawn from other work stations to assist ${ }^{\text {w }}$ with repair work.
Repair teams would also be on duty throughout the weekend to repair faults. - Sapa




















Picture: BRENTON GEACH, The Argus.
SCORCHED EARTH: The 240-hectare wasteland left by the fire on Devil's Peak stretches from University Estate to Vitedehoe Burnt patches indicate where firemen fought holding actions against the blaze as it jumped De Waal Drive in several plains

## Mayor calls for urgent look at fire procedures

By CLIE SAWYER, Municipal Reporiter
AN URGENT reassessment of how mountain fires are handled and of the Table Mountain management'system has been called for by the mayor, Mr Gordon Oliver, following the disastrous blaze on Devil's Peak.

A major row has developed over the time it took firefighters to respond after first sightings of the blaze on Friday.

Mr Oliver spotted the fire at llam that day when it was "a wisp of smoke" high on the mountain.
"My first reaction was that a bucket of water from a helicopter could have prevented its disasrous spread" he said.

## ALARMED BY REPORTS

Mr Oliver said: "I am alarmed by newspaper reports of offers of help from a private helicopter firm which were refused.'
Allegations of fire department tardiness would need to be thoroughly investigated. Mr olver said he hoped the city council executive comorrow.
would ask for a report at
Questions about the effectiveness of the co-ord nation of the response and remained to be answered all sponse to the fire would need to be be revealed.
while he could not comment on the effectiveness and co-ordination of the firefighting response, "I do understand, however, that the parks and fores team is the best-equipped to handle such fires".
The management of Table Mountain was dis-
cussed at a council meeting last month.
"There was a general feeling we had not ad-

## Devil'; Peak

## 'a moonscape

 By JOHN VILJOEN Staff ReporterFROM the air Devil's Peak after the fire resembles a moonscape.
The vastness of the destruc. tive power of the fire was starkly evident when an Argus eam flew over the mountain in a helicopter yesterday. The monster blaze hading a all in its pat wasteland.
Small plumes of smoke rising from smouldering tree of the smoke-cloud that shrouded the city
The paths burnt into residential areas below and above De Waal Drive were terrifying evdence of how close the blaze came to developing into a ma jor civil disaster

The flames leaped across roads, scorching playing fields igniting vacant grassland and
threatening gardens.

One house standing alone bethreatened by fire raging through tinder-dry vegetation on three sides. The flames must have licked the garden walls, but somehow the house survived.

The overwhelming impres sion gained from looking down at the many houses periously close to blackened borders where firefighters had turned back the blaze was that the homeowners had been ver lucky. dressed the problematic issue so many different authorities. This matter will have to be reassesșed in depth." TRAGIC
Mr Oliver said it was tragic that so much valuable fynbos was destroyed.
"Just a year ago, I took a group of children up the mountain to plant fynbos as part of a Fairest Cape Association pro ject. I was saddened to realise all "Nat has been destroyed "Nature will heal itself, though this has disrupted the ing previous fires" he said


## Houses saved miracle’ <br> By WILLEM STEENKAMP

RESIDENTS on the slopes of Table Mountain expressed relief yesterday that, miraculously, no houses were destroyed in Friday's mountain fire.
The fire came right up to the back garden of Mrs Rosemary Beech's Oaktree Village home She was still trying to clean ber house of thick soot yesterday.
"My windows are all taped up at the back to orevent ash and soot getting in," she said, "but I'm pleased that at least I have a house left to clean."
Wisps of smoke yesterday marked still-smoulder-
ing spots behind the Oaktree village house of Mrs Una Grainger, who expressed amazement at how quickly the fire spread down the mountain once the south-easter picked up
"It was up there behind those trees," she said, pointing to a spot about 500 m away, "and 15 mmutes later it was on top of us."

## Too late

The fire, which came within two metres of her back fence, was only checked because residents had soaked their gardens and the surrounding veld be-
fore leaving, she said fore leaving, she said

The firemen did a very good job, though; we didn't think we would have a house when we got back."

Canadian immigrant Mrs Judith Boyd, Mrs Grainger's next-door neighbour, had "never seen anything like this before"
Forest fires occurred in Canada, she said, but the fire prevention system was highly organised there.
The fire brigade of this could have been prevented. by then it was far toge great when they got here, but
The Tafloerg Creche, she added.
The Tafelberg Creche in District Six. well below De Waal Drive, was surrounded on three sides by the slope into the playground.
A creche supervisor, who declined to be named said she and other staff members evacuated the 40 children at about 330 pm on Friday, after being "literally smoked out"
The groundsman sprayed the fire with a hose, and the school's eight fire extinguishers were also employed to douse the flames, she said.


CLOSE CALL . . . Flames dot the mountaifiside above the Disa Park complex on Friday night, showing just how close the fire came to homes before being checked.

## Officials probe handling of mountain blaze

Municipal Heporter BENIOR city councll offictals of all departments involved in fightling the Table Mountain fire met later yesterday to thrash out a response to criticism of the council's management of the blaze. Among those present at the meeting - chaired by city admin istrator Mr Gys Hofmeyr - were the town clerk, Dr Stanley Evans, Clayton the director of parts and
forests, Mr Peter Rist, the director of security services, Mr Eric Bult, and representatives of the ire and traffic departments. Brigadier Philip Delport and Colonel JH Basson of the police and representatives of the BADF lso attended.
City council public relations offlcer Mr Ted Doman said no statement wound be made untr the itical boscer on the coumcil'
executive committee. Meanwhile, claims that the council should have known about the fire sooner than 10.57am have not stood up well.
The managing director of Court Helicopters, Mr Jeremy Labus chagne, said he had read reports about an early call from the company offering helicopter assis tance to "emergency services" "I found no substantiation for that," he said.

## Pik investigating Kurd refugees

## Staff Reporter

SEVEN Iraqi Kurd stowaways seeking asylum in South Africa decined to appear at a press conference about them yesterday.
The men, who had arrived in Cape Town by ship on Sunday, were afraid of retribution by Iraqj President Saddam Hussein, Foreign Minister Mr Pik or the part of Iraq from which they come

On the issue of granting the Kurds asylum, Mr Botha said the government was investigating wheth er they were in danger of persccution in their own country because of religion, nationality, race, clas or politics.
"They have permission to stay here temporarly... (so that we can) sort out the matters I have mentioned" Mr Botha sard.

Labour Party MP Mr Miley Richards, acting as a sokesman for the Kurds, said he did not expectany trouble from local Muslims because Islam taugh them to help those in need, irrespective of politics.


# Hartbeespoort development Stat 132919 stuns residents 

By Louise Burgers Municipal Reporter

Major industrial development and pleasure resorts planned for the Hartbeespoort Dam basin have shocked residents who have vowed to fight an attempt by the Kosmos municipality to encourage development.
The Kosmos village council has applied to extend its boundaries west of the dam by incorporating several farms to attract developments such as townhouses, low-density cottages, upmarket hotels and retirement villages.

Though agreeing it would be unacceptable to permit ec onomic activity that could af fect the sensitive nature of the area surrounding the dam, the municipality did not preclude the establishment of "clean" industries such as laboratories and computer, pharmaceutical and other high-tech companies.

## 'Capital web'

The municipality has undertaken to create a development structure that could serve as a "capital web" to attract investment from developers.

Entertainer Jeremy Taylor, a resident in neighbour-
ing Broederstroom, accused the Kosmos municipality of trying to steamroll residents.
"Certain people want to turn the area into a playground. They just want to make money out of the area - they don't have to live here. The damage it's going to do to the area is incalculable."

He and Chris Martinus, the chairman of the Broederstroom Residents. Action Committee, believe a redevelopment policy for the region should be drawn up.

Mr Martinus said objections to the Kosmos application were being lodged and a public meeting would be held on February 28.

## Fresh air

"They apparently want to create an industrial area. This is frightening for residents who want to preserve the rural character."

Action committee secretary Beverly Balusik said the region was a breath of fresh air they did not want to lose.
"We have a nature reserve on the banks of the Hartbeespoort Dam, a Cape vulture colony, a bird park and Iron Age sites. We are very concerned as to how this is going to affect the environment.
"This is a ${ }^{\text {" }}$ very special area. We cannot allow our cultural, historical and environmental heritage to be destroyed."
1


## By ESANN VAN RENSBURG

Environment Reporter
THE government has decided to temporarily suspend all commercial seal harvesting on the South African coast, the Minister of Environment Affairs, Mr Louis Pienaar, said today.
"No further decisions on aithe harvesting or culling will be taken by the government until additional scientific research has been done and evalrated."

Mr Pienaar said the studies would include research into more acceptable methods of harvesting or culling and said the public would be kept fully informed of progress.

TRAINING
The report of the independent scientific committee, chaired by South African Nalure Foundation executive director Dr John Hanks, was made available today.

Among the most important findings of the committee were:

- There was no scientific reason for halting the proposed harvest of seal pups or bulls, provided scientifically reconmended harvest levels were applied.

The committee strongly recommended that there should be no further harvesting until a system of licensing and training sealers was in place to ensure the highest possible standards of humaneness.

2 -MILLION

- The committee noted that the st al population along the South African and Namibian coasts has grown from less than 10000 C at the beginning of the century to approymately 2 -million, despite the tan. that some 2700000 seals wert th vestal.

Despite the findings of the scientific committee that there was no scientific reason for halting the proposed harvest, the government had decided to suspend all such harvesting until after a further scientific report.

This report is expected within two years.
"Judging from the scientific report, a number of seals will probably have to be controlled in future. We do see seals as a resource for human utiliseion," said Mr Pienaar.

## Govt won't 9 ant pay out for $r_{s / 2 / 2 / 21}^{\pi / j}$ seal venture

 THE government has no intention of reimbursing a Taiwamese businessman with the R2 million he invested to harvest and process 30500 Cape fur seals intended for dog food and aphrodisiac products.This was said yesterday when the government announced it would "temporarily suspend" commercial seal harvesting in SA for at least two years.
No further decisions on harvesting or culling will be taken by the government until additional scientific research has been done and duly evaluated.

Environment Affairs Minister Mr Louis Pienaar said Mr Hisien Hsu took "a risk" when he decided to take part in the proposed venture.

- Mr Hsien invested about R2m for permits to harvest the seals at Kleinsee and process the remains at a factory in Port Nolloth.

Following a huge outcry, former Environment Affairs Minster Mr Gert Kotze suspended the venture until an in-depth scientific study was completed.
Commenting on whether Mr Hsien stood a chance of receiving financial compensation. Mr Pienar said: "The condition of the permit did not give him the absolute right to harvest the seals. The condition of the permit was subject to government's wishes."

He said future studies would include research into more acceptable methods of harvesting or culling.
Conservationists have welcomed the news as a "major victory".


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 manship of the City Engineer of Cape ment area of Flase Bay，stit on this com－
mittee，which functions under the chair－ all local authorities situated in the catch－ jo sanplepuasarday Keg aspey ol yount 14 December 1990 to address，inter alia， nating committee was establshed on On the initiative of the Department of
Water Affairs and Forestry，a co－ordi－ management options for controlling these
sources of pollution．
 Town，it is well aware of the contribution әdeว pue puens uәamiaq sluәшaplas areas，as well as runoff from the informal pollution，such as storm water runoff
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dards be detected，the Department acts










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## Govt plans cost cuts

 on water irrigation 8 (Day 2012 | MARIETTE Du plessis (56)GOVERNMENT was set for a multimillion-rand expenditure cut when the proposed commercialisation of its irrigation schemes came into effect this year, a Water Affairs and Forestry Department spokesman said yesterday.

The transfer of government irrigation schemes to new irrigation boards would allow for completed schemes to be operated at lower running and maintenance cost than the department's R44m in 1990, he said.

In addition to savings through rationalisation, overhead costs would be reduced through the use of cooperative services and infrastructure available locally.

Revenue received from levies on users totalled R30m last year. Department of Water Affairs chief engineer Piet Pretorius said if boards found they had to impose higher levies to meet their obligations, government would provide bridging finance to subsidise the difference until the boards were fully operational.

Before negotiations could begin on any transfers, those using the water would have to vote in favour of the transfer. This could include municipalities and farmers.
"Only then can an irrigation district be declared and instituted according to prescribed statutory procedures." Although the schemes would still be state-owned, with government remaining responsible for the allocation of water from dams and rivers, the boards would be responsible for financing the operation and mantenance, subject to reguiations and supervision of the department.

G
 treams . 'rmonarn-n Investigations conducted by The: Weekty Mail this month uncovered a vast thump of arsenic-contaminsated waste in the veld surrounding the piant of the New Consont Gold Mine. located some 204 mm from Barberton, tan is cansing huge amoumts of the tiadiy poisoin to leakinio local riv$\because 3$.
nes in the Barberton area that prones in the Barbeaton area that pro -ce arsenic as a byproduct of their $\rightarrow$ concemed that contamination of : air and sufface water around the init belt, the oldest in the conmtry. becoming a serious hazard to the alth of pecole living in the area.

Samples of sediment and water that washes off the dumps al New Con-$=-i t h$, owned by the Anglovaal corration, were sent to an indepen--nt laboratory that specialises in uining work.

The initial readings for arsenic were so high that they exceeded the upper limits of poison capable of being measured under the lab's sophisicated methods of analysis.
After "tousting the gauges" in the laboratory, our samples were retested under a different technique and found o corranin levels of alsenic that far exEsd the legal maximum for industrial ginent laid duwn by law in South African standards, which are themelves much more relaxed than those -iforced in otber pars of the world.
Acconding to our tests, fast flowing ater athort a kilometre from the $=\mathrm{mp}$ contained $0,96 \mathrm{mg}$ of arsenic arrevery litre- neanly double uxe loanl limit of $0,5 \mathrm{mg}$ for industrial effluant that is meant to be enforced tomper Scuth-Aficicalaw.
The sediment samples contained zen more staggering levels of ar--nic. The highest reading, taken fim à sampte of max directly below the dump, revealed an arsenic coneent of 4500 parts for every million parts of soil.
Friends of the Earin, a respected in-- bational envirorment organisation sed in Lomion, Teports that very $=1$ amoums of arsenic, ingested "- : - Antity via tiut can cause ma, thamints; skin lesions, mus-
".-. whativiss as well as car, nose "uäi díseases ".. Y?
The Nootulkap river, which runs the Neت Consort dump and rinet the mining belt, flows "- فhezuily populated agricul-
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Winling more than gold on the Now Consort Gold WIne near Barberton


Pool of polson in Ihigh percentages of arsenic were found in samples of water washing off the dumps
tural region then, some 30 km downstream, into the Crocodile River on whose banks is located the township of Matsulu, one of the biggest black settements in the Eastern Transvaal. The dump itself was not fenced and unprotected. Apart from a few old signs saying "Beware. Dangerous Ground" there is no warning that the dump is toxic and the public has easy access to the site. The Weekly Mail team was able to take samples on the turnp and on the banks of the river withoat seeing any employees of the mine. .

A report from Friends of the Earnsays: "Arsenic causes death in doses of 70 to 180 mg . But poisoning pccurs in doses of between three to six milligrams per day if taken over an extended period. Chronic poisoning of this natiure gives rise to muscular weakness, loss of appetite, nausea, skin lesions and inflammation of the mucous membranes in the eyes, nose and throat. It can also cause malignant tumours in vital organs of the body." A Worid Health Organisation lask force has also discovered that lifelong exposure to water comaminated
with even tiny amounts of arsenic can increase ue chances of people contracting cancer of the skin.
Anglovaal assistant public relations chief Julian Gwillim said: "We cannot comment on your results as we are unsure as to the timing and location of the samples taken by your laboratory.
"Eastern Transvaal Consolidated Mines has been monitoring, on an ongoing basis, arsenic levels in the mime area and their resuits indicate that they that they have not exceeded the SABS effluent standard.'

But there is growing evidence that arsenic produced in the gold mines of he Barbetton beit is one of South $A$ rica's major - and litule reported anvironmental problems.
On 1985 large amounts of arsenic were found in a dam near Batbento and the toxins resulted in the dealh of five head of cattle and severe illness in another 21 animals.
-More recent press reports de scribe a dam near Barbenon which contains fish that have been blinded by exposure to heavy levels of the poison.
-The district surgeon in Nelspruit town not far from Barberton, ha confirmed to The Weekky Mail that scores of workers from one of the cold mines in the area had to be tested for arsenic poisoning after being ex posed to the toxin at anearby mime late ast year.
-Large areas of vegetation around the Fairview Gold Mine in the disrict have been stripped bare, apparenly by arsenic vapours that precipitate from the chimney stacks of the mine's smelting plant.
Empioyees from the New Con sort mine also report that birds which fly over the mine's slimes dam frequently drop dead into the water from inhaling arsenic vapours. The anecdote is not iraprobable given the high respiratory rate that birds produce in mid-flight.
OUp unuil the late 1970s, the discosal of arsenic dust that accumulated in various parts of the mines was onsidered so dangerous that convid abourers were taken out of the nearby Barberion prison to do the job.
$M_{\text {ining enginers and environ- }}$ mentalists working inside the gold mining industry have agreed that air and water pollution from arsenic procuced by mines in the area has created the potential for an environmenta disaster.
"The gold-bearing ore in this area, as well as Botswana and Zimbabwe, is different to that on the Witwatersrand. It is located in rock with a high contant of arsenopyrites," says a mining engineer who asked not to be named.
"The classic method of gebing the gold out of the rock is to roast it in a huge furnace. This sends volatised arsenic gases up the stacks and into the air and creates a fime arsenic dust that has to be disposed of. The mines try to sell some of this and treat the rest before they dump it. But it's an exiremely dirty process which generates all kinds of problems."

The arsenic problem in this area is so great that Cenmin has pioncered a unique method of using bacteria that grow on slimes dams to erode the sulphides in arseno-pyrite ore. This makes it umecessary to use the dangerous roasting method of separat ing the gold from the rock.



## Cape's own becoming

ROBBEN Island - in its time a leper colony, a naval base, a security prison and, more recently, venue for a meeting of the SA Cabinet - received 33000 visitors last year.
With Table Mountain and Cape Point, the island is now a must on the tourist's Cape itinerary, says. Alta van Wyk in the March issue of RSA Policy Review.
Robben Island has aroused worldwide interest as a result of its sinister and enigmatic image as the Alcatraz of SA, Van Wyk says.
But it has its brighter aspects too.
She says a decision taken a decade ago to close the two prisons on the island was reversed in 1986 when it was found that replacing them would cost R80m.
A subsequent decision was taken to make the island more accessible to the public, she says, although government is holding out against fullscale

## 'Alcatraz's touristust

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PATRICK BULGER
commercial exploitation of what is, in effect, a unique 574 ha piece of the Karoo stranded in Table Bay.
Just one of Robben Island's fascinating historical features is the Herbert Baker-designed Church of the Good Shepherd. Not only is it a men's only church, it also has no pews because the lepers would not have been able to sit on them.

A comprehensive conservation programme is being launched by the Department of Correctional Services - the old Prisons Department - and interest groups.
Nearly 4000 jackass penguins have chosen the island as their home, making it the world's sixth largest penguin colony. It also boasts the biggest seagull breeding colony in the southern hemisphere.



## Pollution poses health threat

By CIIVE SAWYER, Municipal Reporter POLLUTION from motor vehicle exhausts is threatening Cape Town residents and the environment, and acting medical officer of health Dr Nula Durcan wants action to clean up the city's air before it is too late.
vi The pollution, called photochemical smog is the brown haze formed by sunlight acting on furmes from petrol-driven engine exhausts. Apart from being ugly and smelly, photochemical smog causes smarting eyes, running noses and impaired. lung function. It attacks vegetation,

## Early warning signals

Dr Durcan said in a report tabled at a city council amenities and health committee meeting that "early warning signals of a deteriorating quality to Cape Town's air is an Indication that planning should be initiated now to avold serious environmental damage and health bazards developing".
"The institution of control measures will be a lengthy process and so planning should not be delayed.
Graphs contained in the report showed that nitric oxide levels exceeded the limits more than 40 times in one-hour periods during June last year.
At the same time, nitrogen dioxide exceeded permissible levels almost 30 times, and oxides of nitrogen levels passed the limit about four times
Three years before, nitric oxide levels passed the limit about 24 times, nitrogen dioxide more than 10 times, while oxides of nitrogen levels wer similar to 1990 levels.
Dr Durcan noted that in 1968 the city ampitheatre was coated in soot and sulphur dioxide from fumes emitted by three power stations, coal-burning locomotives operating on the Foreshore, coalburning tugs - including the Infamous Smokey sue - as well as industrial and commercial lnoin erators, and, heavy fucl-burning appliances. ituebrn Among world's cleanest

- The councll launched an air potlution control programme which improved the city within 10 years to "one of the cleanest in the world
Insppite of this success and a decade of relative cleanhiess, motor vehicies now posed a photochemical smog threat.
In 1984, new measuring instruments found the potential existed for a photochemical smog probem in Cape Town
In urban areas, motor vehicles were the largest contributors to oxides of nitrogen and hydrocarbon emissions. Uitraviolet light acted on these to form secondary pollutants.
Other causes were solvents from paints and the printing industry.
The problem is worsened by calm days with long hours of sunlight.
"As a rule when the guidelines have been ex ceeded a breeze has occurred around noon and carried pollutants around the Peninsula and out to ea," Dr Durcan sald.
Higher tolls and parking fees
Control measures had to be aimed at reducing production and emission of pollutants, for instance by encouraging the use of publtc transport and dis. couraging private vehicles by high tolls and parking fees.
In Cape Town, a possible solution would be removing lead from petrol and fitting catalytic converters to car exbausts.
Dr Durcan recommended the council ask the government to fund more research into photochemleal smog, appoint a commission of inquiry, and take action to control the developing problem. The matter was referred to the executive committee.


## Number of times ${ }_{x}$ hr limif exceeded Cape Town April - June 1988-1990

 ble limits during autumn and early winter from 1984 to 1990.

## Queen wants FW at the Palace

The Argus Foreign Servise
LONDON. - The Queen wants to grant President De Klerk an audlence at Burkingham Palpee next month and s end jhore than 30 years of es
 But her wish to talke tea with the. Mr and Mre De Klerk is causing headaches at the Foreign Office whe headacbes at the Foreign Office, who fear particularly Zlmbabwe, could take of, fence at any early royal seal of an: proval for South Afrlea.
Nigel Dempster writes in the Daily Mail that the Foreign Office's main

## Emergency

 cases only as health cuts startBy VIVIEN HORIER
Medical Reporter
STATE hospital superintendents are beginning to implemeagures announced this week with in the words of one doctor, "my head in my hands"

Only emergency cares are being admitted to wards, nonessential operations are being portments are closing early or being more selective about whom they treat.
At Khayelitsha day hospltal, 24-hour orifRary hepltbrfar
concern "Is whether the Common wealth summit in Zlmbabwe later this year might not feel that Buckingham Palace was anticipating their readi-
 wagts kept for $t 5$ : time being."

It Is underttood bere spal ghe Qdeen has already been in contact with senior Foretgn Office officials and in formed them of her wish to entertain Mr De Klerk, who arrives for a short Wisit In late April.
I During his stay Mr De Klerk is due for talks with the Prime Minister, Mr Donglas Hurd and other minlaters


## Water price in PWY to increase by $115 \%$

THE cost of water in the PWV area will increase by $11,5 \%$ on April 1, the Rand Water Board announced yesterday.
Rand Water Board CE Vincent Bath said the tariff for industries, mines and municipalities would rise by 6 ,4ic a kilolitre from $55,75 \mathrm{c} / \mathrm{k} 1$ to $62,16 \mathrm{c} / \mathrm{kl}$ Water to households outside municipal areas wrelld increase by $10,82 \mathrm{c} / \mathrm{k} 1$ from $94, \mathrm{Qyc} / \mathrm{kl}$, to $104,89 \mathrm{c} / \mathrm{kl}$.
Bath said the bourch was able to limit its tariff increases to well below the inflation rate because of the relatively small in-

THEO AANANA
creases in electricity tariffs announced early this year.
Planned capital expenditure levels, which gave rise to a relatively small increase in loan costs, also helped, he said. A Sacob spokesman said the rise would have an effect on production costs of large users.
The total cost of raw water the Rand Water Board bought from the Department
of Water Affairs from April 1 would be $21,20 \mathrm{c} / \mathrm{k}$. "Included in this amount is a levy of $7 \mathrm{c} / \mathrm{kl}$ to provide finance for the construction of the portion of the Lesotho Highlands Water Project for which SA is responsible," Bath said.

No provision had been made in the latest tariff to absorb the increase in the levy which becomes effective on October 1.
Bath said the increase was expected to be $3 \mathrm{c} / \mathrm{kl}$ and the Rand Water Board would adjust its water tariffs at that time.
11,5 par ingi91. in water taric for Reef for Reef use
Municipal Reporter
Rand Water Board yesterday announced an increase of 11,5 percent for purified water supplied to municipalties, the mines and other direct consumers.
The tariff for major consumers will rise by $6,41 \mathrm{c} / \mathrm{ki}$ olitre from April 1. The tariff for small consumers supplied directly by the board outside municipal areas will increase by $10,82 \mathrm{c} / \mathrm{kilolitre}$. The cost for ratepayers Will depend on tariffs palities. There wival municipalities. There will be no immediate increase for the ordinary ratepayer as most municipalities budget for the yearly increase
The board said in a statement to clarify the increase that a householder consuming on average 30 kl a month Board pay an additional R2
Board chief executive Vincent Bath said that although there had been considerable increases in the costs of chemicals, coal, transport, materials and raw water, the board was pleased it was able to contain its tariff increase to 11,5 percent.







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 Control of these plants passed from central to




 being sidelined," said Cope. for a conference to prevent ecological issues from
 sponse was anything but positive. struggle for national liberation. However, the repeople's opinions on ecopolitics and its link to the Last year the group sent out a questionnaire to, said Cope.




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THOHOYANDOU - More dead fish were removed yesterday from nets in the polluted Levubu river in Venda, while clinics reported they were treating scores of villagers for stomach ailments.

Though no indisputable evidence was available, it is thought many of the patients unwittingly drank water from the river and ate fish before warnings about the situation had reached them.

The Venda Department of Nature Conservation has estimated the number of dead fish at about half a million.

No action appears to have been taken yet against the alleged culprit, a fruit farmer whose negligence apparently caused poison used for citrus trees to land in the river.

## Reprimand

No statement has been issued by the Transvaal Nature Conservation division, who are conducting an in-depth investigation into the cause and source of the pollution.

Yesterday there were rumours that the Minister of Environmental Affairs had sternly reprimanded officials of his department for not informing him of the situation's gravity.
It seems likely that both Venda and National Parks Board officials will push for a prosecution in terms of nature conservation legislation.

The threat to fish life in the Kruger National Park has apparently been averted by the rapid dilution of the.poison as it was carried downstream. Yesterday no dead fish were found at the furthermost nets erected by Venda conservationists about 40 km from the park.
-
$\left(\begin{array}{c}3 \\ 3\end{array}\right.$



# Environmental health services in Soweto 

This article has been adapted from an article which first appeared in Crilical Health Number 28 o October 1989. It was written by the Centre for the Study of Health Policy, Department
of Community Health.
University of the
Witwatersrand.

Several years ago Suweto, like many other townships, started a rent boycott in response to rising rentand service costs. At the same ume, socio-economic conditions were geting worse, which made the charges more difficull to afford.

Other issucs related to housing and environmental health services increased the residents' dissatisfactuon. There was an overall housing shortage, as well as a controversial government charge for the transfer of home ownership to tenants of long stauding. As far as water supply and sanitation services (cewerage and reluse removal) were concemed, the existing infrastructures were inadequate and poorly maintained. But these services were nev ertheless expensive

Is should be noted that the high service costs are linked to the separate tax base for Soweto and Johannesburg Whereas taxes in Johannesburg benefit substantially from township labour and purchasing power. these taxes support Johannesburg servires alone in effect therefore, Johannesburg rates are subsidised by Soweto residents and Soweto services are underfunded

The local authority in Soweto tred unsuccessfiully to break the rent boycott. One of its methods was to disrupt services intentionally and unnecessarily. The wa ter supply was cut frequently and for long periods Sewerage pipes were left blocked and leaking and refuse was removed irregularly or not at all. It was apparent that the intention of these cuts was to cause residents so much discomfort that they would have to start paying rents again

The Soweto Delegation emerged to represent the communty in discussion directed at resolving the crisis. One of the Sowcto Delegation's decisions was to commissıon PLANACT, a service organisation concerned with urban development. to evaluate housing and service provision in Soweto. PLANACT in turn requested the Centre for the Study of Heallh Policy to assess whether water and sanitation services $n$ Soweto were a danger to the health of Sowetans.

This artucle briefly describes the Centre's findings. It shows how the health hazards caused by inadequate water supply, sewerage and refuse removal infrastructures were made worse by the local authority's deliberate policy of disrupung services. As these findings are applicable to other townships in siffilar positions, we make suggestuons as to bow communities could respond to the disruption of already inadequate services.
inadequate service infrastructure, service disruption and heatth risks (P) $(56$ in Soweto

25 (56)
PLANACT's report indjcated that the service infrastructure in Soweto was not adequate for the population it served. It emphasised that these inadequactes were exaggerated when the local authority disrupted services. There is no formal information on the overall health eifects of this disruption. Yet, as we will explain, it is obvious that the service disruption must indeed have constituted a health hazard The frequent and long cuts in the water supply seriously reduced the availability of water in Soweto. Residents bad to walk far to collect water from distant supplies In addition, the water shortage affected the functoning of the sewerage system. Tollets could not be flushed normally, but had to have water poured into the cistern by hand I his meant that often wilets were not flushed after each use. As a result, pipes blocked and then leaked and overflowed, contaminating yards and streets This problem was made worse by the long delay before repairs were made

When water supply and sewerage systems break down, the spread of infectious diseases will increase Less water is used for washing hands, bodies, clothes, food and cooking utensils. Thus, although the initual quality of the water is good, the rusk is greater that water-bome discases (diarmeas) and water-washed diseases (dtarrheas, dysenteries, worm infestations, skin and eye infections, lice) will be transmitted As darrhea is a kilter ol chuldren in developing countries, ts certainly increased incidence in Soweto should be viewed with particular concem.

The risk of outbreaks of serious diseases such as polio and typhord is also increased by cuts in water supply. Foodborne diseases, including food porsoning, may arise sunce food may be cooked less frequently and left standing longer.

Excreta-related infections may result from conlamination of the environment by leaked sewerage These diseases include both the water-washed discases mentioned above and infestation by beef and pork tapeworms. Discases transmitted by flies will also increase, particularly as flies can be expected to breed more readily in leaked sewerage and piles of rotung refuse.

Although houschold refuse collectuon had improved by the time this artucle was written, bins were in bad condition and few had lids There was little attempt to clean up the unprotected piles of refuse which occurred in most open spaces. The fly problem associated with open refuse has already been mentioned; rats also breed more readily in such conditions and the threat of rat-borne diseases may be expected to increase. Unprotected refuse also increases the danger (especially to chuldren) of poisoning and injurtes, pollutes water and poses a fire nsk. The polluting effect of refuse and sewerage is worsened when poor dramage allows stormwater to lie in stagnant pools.


In addition to the playsical cffects of Ince disruption we must also consider the effects of mental and social stress Dally life is filled with difficulties and undignities. Although it is difficult to measure the effects of such suresses, it is no doubt that the community's mental and social health was seriously endangered by the poor water and sanitauon serviecs. It seems too that those most at risk were the elderly, the disabled and mothers of young children.

The local authority's policy of service disruption therefore threatened the physical, mental and social health of the Soweto commumby Unkess Soweto is different from the rest of the world, we may say with a fais degree of certanty that this disruption led 10 an increased prevalence of discase. Therefore, in the interests of health, residents of Soweto and other townshups need to addiess the problems of poor services and service disruption.

## A basic infrastruciure at afiordable

 costsIn order to protect a community from the health hazards described in this artucle there should be:

- an uninuerruptexi, plentiful flow of good quality water, supplied by tap to each property;
- a water-bome sewerage system or. in smaller townships, a suitable alternative (Note that the bucket system is hazardous and should always be opposed);
- regular and frequent removal of both household and community refuse; sufficient well-constructed bins should also be provided.

Although the communities have such services in name, poor mamienance (e.g. delayed repairs) is stıll a major problem. The opinion of an engineer would be use ful in evaluating the water and sanstation services because of the complexity of the technical detarls.

Without these services, appropriately designed and efficiently maintained, urban populations face unacceptable health risks. We must also mention that many other environmental factors have an impact on health. For example, ruad construction, electucity supply, stormwater dramage and housing. Demands foc ussing on water and sanitation thus address only the most urgent of such factors.

Not only must basic services be adequate; these services must be provided at reasonable and affordable prices. In Soweto whilst residents accept that there should be service charges, there is great resentment that the currently poor services should be provided at such excessive cost. Arriving at a charge which is faur depends on proper commuuty consultation and involvement in planning ln Soweto. as in other town ships, it may depend on the restructuring of the unequal tax base

Community action in response to service cuts

The residents of townships where gervices have been cut in response to a rent crisis may react in a number of ways to this threat to their health. Firsily, residents may choose to organise around the issue of health risks arising from service disruption. Secondly, they may decide to negotiate with the relevant local authority, If this secms to be an appropriate strategy under prevailing conditions. Thirdly, they may consıder takıng legal acton agaıns the local authority.

The communty may also consider taking drect legal actuon against the vanous health authontes, it may be possible to lay charges against them in the event of neglect of their lutes in terms of the law However the legal issues are complicated and to our knowledge, have never been tested in court Expert legal opinion should thus be sought by any community wanting to take a case to court Threats of legal acuon nevertheless remain a strong bargaınıng point

Tugela River: effluent pipeline $(S G$
*7. Mr M J ELLIS asked the Minister of Water Affairs and Forestry: Heusad $12 / 3 / 91$.
(1) Whether his Department has sanctioned the building of an effluent pipeline into the Tugela River for a certan company, whose name has been furnished to the Minister's Department for the purpose of his reply; if so, (a) when is this pipeline to be built, (b) where will the pipeline actually discharge the effluent into the river, (c) what will be the nature of the effluent and (d) how many litres of effluent will be discharged into the river on a daily basis;
(2) whether a study has been made of the possible effects this pipeline may have on the environment; if not, why not; if so, what were the findings of the study?

B359E
$\dagger$ The MINISTER OF WATER AFFAIRS AND FORESTRY:
(1) Yes.
(a) The completed pipeline has been in use since December 1990.
(b) The point of discharge is downstream of the confluence of the Mandini and Tugela Rivers, approximately 200 metres upstream from the John Ross Bridge.
(c) The effluent contains pollutants mainly of organic origin.
(d) Approximately 44000 eubic metres of effluent dally. (56)
(2) Yes. The discharge of efftrent directly met the Mandm River was unacteptable I as the assimilative capacity of the water is insulficient for the amount of pollutants discharged by the industry. Dissolved oxygen has been identified as the most critical variable as regards water quality Aesthetical problems regarding colour and foam are still being anvestigated for possible improvements.
The Department of Water Affairs and Forestry required that an impact study be done by an independent consultant to determine the effect of dissolved oxygen on the recogmised water uses in the lower Tugela River downstream of the point of discharge The CSIR who acted as consultant found that if the organic substances of the effluent in terms of the biological oxygen requirement be limited to 315 milligram per litre, there will be no detrimental effect on the dissolved oxygen in the water environment. This finding and subsequent recommendation was accepted by the Department.

Business interrupted in accordance with Rule 180C (3) of the Standing Rules of Parliament.
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 The MINISTER OF NATIONAL HEALTH： Glizg（b）felament．
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 Whether any changes were introduced in the
$199(1-91$ financial year by hospitals falling Healh：（56） 86 Mr M J ELLIS asked the Minsterdif National 40．Mr M ELILS asked the Misp National


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prises：
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will be eliminated？Hanserry
The MINISTER OF MINERAL AND EN－
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## 1661 HOUVW EI ' $\lambda$ VGSENGIM

CURRENCY volatility has beeome one of the most important variables in the world paper and pulp industry, says Davis Borkum Hare analyst Pierre Greyvensteyn in a recent report.

He says currency volatility destroys the predictability of the business and erodes competitive relationships between sellers. In particular, it stimulates the cyclical movements of pulp prices, causing higher highs and lower lows.

Currency volatility is a

## Volatility erodes competitive edge <br> exporters are deriving <br> $10 \%$ to $20 \%$ in one year

new phenomenon which emerged in the 1980s. The period 1944 to 1970 had stable exchange rates because they were pegged under the Bretton Woods agreement. Even in the 1970 s , fluctuations in the world's major currencies were relatively modest.

Since 1985, the exchange rate of the overvalued dollar at the time has fallen significantly against most currencies. With the weaker dollar, American
huge benefit by selling their goods abroad within the limits of their production.

## Fluctuations

However, the benefits of an advantageous exchange rate cannot last over time and so cannot be used as a basis for longterm commitment. When the dollar does change course, experience has shown that fluctuations of
are common.

Greyvensteyn says US pulp producers in particular are reaping benefits from the weaker dollar. By lowering prices, their mills can operate at full capacity.
On the other hand, the fall in the dollar is forcing European, Canadian and Latin American producers to lower their prices to bring them into line with
the reference price - th dollar price of US pulp.

One way the industry can protect itself against currency volatility is to maximise the efficiency of the mill. Another defensive technique is to minimise debt levels.

In addition to currency hedging, another approach is to sell product in a baszet of currencies such as the ECU. Buying into downstream businesses such as the Nordic pulp industry is another strategy, says Greyvensteyn .

## Industry committed to conservation <br> fling the progress so neces- <br> In addition, the Southern

THE forestry and forest products industry has a vested interest in environmental conservation because it depends on the integrated functioning of nature for its raw materials.

Because of this, Forestry Council promotion committee chairman Bruce Mackenzie says the industry's continued activity in conservation can be counted on.

He says in creating an asset vital to SA, the industry has inevitably caused some changes to the environment, as have other industries.

## Counter

However, not all the changes caused by afforestation have been harmful. For example, trees synthesise certain airborne chemicals and so help counter the rising carbon dioxide level which is a factor in creating the "greenhouse effect".

Mackranzer says the forestry industry is acusely aware all reasonable meaaware all reaso taken to consures must be taken to conserve the environment, but without unreasonably sti-
sary to accommodate the SA's growing population.

He says it is precisely because the forestry industry is scientifically managed, and hence profitable, that it can increasingly afford to promote environmental conservation.

The Forest Act, introduced with the full cooperation of the industry, contains strict measures for the planting of trees in river catchment areas to conserve water resources.

The industry is the only dryland, or non-irrigating, user of land that is controlled in this way.

Its activities cover a vast and increasing area of land, which includes numerous natural and historical sites and features worth conserving.

All the large forestry companies have appointed conservation officers and they all include conservation practices in their operational policies, as do many of the smaller operators in the industry.

Twelve sites have been registered by forestry companies in the National Heritage project.

African Institute of Forestry, to which more than 400 foresters and related scientists belong, has a strong conservation ethic and spends at least a third of its time on, conservation matters.

Mackenzie says the forest products industry, which produces sawn timber and pulp and paper products, is also doing its produst to operate with the minimum possible impact on the environment.

## Spotlight

The kraft pulp mills, whose gas emissions have a characteristic smell, come under the environmental spotlight most often.

He says there is a tendency to assume that because the emissions are odorous, they are harmful to health. But these gases also occur naturally, arising from vegetative decay in marshy areas.

International health authorities concede that pulp mill emissions are not harmful to human health, but the pulp manufacturers are still taking positive steps to reduce them wher-


All the large forestry companies have appointed conserva tion officers.

## ever possible.

Looking to the future, a multi-disciplinary group of experts from across the forestry industry last year drew up an industry-wide set of "guidelines for the application of conservation practices in production forestry", similar to codes already adopted by
individual companies.
The code lays down guidelines for the mangement of commercial forests to ensure the protection of the ecology, fauna and flora, and it focuses attention on the importance of environmental conservation within the in dustry.
That is the place to start with protect- tinued existence of the spect



 "I can say at this stage that thos
 serve the wive to be ultra-sensitive to the needs Transkei, says any attempt to con-
serve the Wavecrest forest would tional Union of Mineworkers in co-operative project run by the Na Sonwabo Mzezeli, co-ordinator of a
 which are said to be worth R5-billion

 Maves' project proposal has not been The size of the reserves at
Wavecrest is not bet known as Rand skins and warhead coatings. rial that can be used to make aircraft is valued by armaments manufacturis valued by armaments manufactur-



$p$LANS by a South African corporation to stripmine a pristine stretch of dune forest on the southerm shores ecological disaster. Conservationists this week told The Weekly Mail that a project by Rand Mines to stripmine the Nxaxo and Kobonqaba forests would cause environmental problems that will eclipse those associate
The destruction of the Transkei forests, one of the few indigenous habitats of their kind left in Southern Africa, will have a disastrous effect on the rare combination of plant and animal life that live among the dunes," says Keith Cooper, of the Wildlife Society of Southern Africa.
Rand Mines has so far been able to proceed with exploration and prospecting in the Transkei forests, mining activities which have already caused extensive damage, have already caused extensing atracting the huge controversy that without attracting the huge cons to stripmine the erupted last year over plans world's recogSt Lucia dunes, on
nised heritage sites.
"It is important to preserve the St Lucia "It is important to preserve the St created dunes but the impression has been created
that these forests are the most pristine in the that these forests are
country," says Cooper. "Yet those in Transkei, which host a tems, have been left out of the spotlight."
Cooper is chief conservation officer for the Wildlife Society as well as the country' foremost expert on indigenous forests. Digby Wells, manager of Rand Mines' environment protection department, told The Weekly Mail the project was sul in th ex ploratory phases and that the next phase in his company's feasibility
place only in Septembe
"Once we have reached a position where we are satisfied the project is casible will hen conduct a study blso convinced the Transkei govern-

# Stripping its natural assets <br> wimail $1513-2 \mid 3191$ <br> The forests contain some of the biggest 

dune forests are in danger of being destroyed in the search for titanium.

## By EDDIE KOCH

ment of the need to follow internationally accepted standards involved in an integrated cepted standards involved approach."
It appears that Rand Mines' exploration of titanium mining in Transkei, a process already well under way, has been able to go ahead without yet attracting serious opposition because the dunes are in a remote home land area that lacks an established white tourist industry and other interest groups capable of leading an anti-mining lobby in the region.
The Nxaxo and Kobonqabo forests, located near a small holiday resort called Wavecrest on Transkei's southern border with South Africa, shelter at least nine rare or vulnerable mammals and indis as wemb trees, says Cooper. The forests also contain ancient cycads.
The animal species include the rare blue duiker; tree dassie, a very rare species that occurs only in the forests; giant golden mole and samango monkeys. Rare birds that nest in the forests include the Cape parrot, Cape bard owl, the extremely vulnerable ground hornbill and the mangrove kingfisher, a species about which little research has been done and could be on the endangered list.
specimens of white milkwood, yellowwoods, forest mahogany and quinine trees. "The trees do occur in other parts of the country but never in these sizes and combinations. They are therefore unique and the Wildlife Society is determined to protect them," says Cooper.
Other conservation bodies are gearing up to protest against the Transkei mining scheme and to lobby the homeland government to find alternative ways of generating jobs in the economically depressed region that will allow the forests to survive.
The mining proposal, which promises to provide some 700 jobs over a 30 -year period to local communities that have been shattered by the effects of chronic unemploy ment, highlights the burning need for conservation strategies that promote rather than retard economic development.
The destruction of indigenous and rain forests around the globe is ranked as one of the world's three top environmental crises. Close behind is an ecological crisis that conservationists call the loss of biodiversity. Đonella Meadows, professor of environment and policy studes as reports that the lege in to uncies of life on earth is some number of spect 10 -million and 30 -million Only 17 -million of these have been named and yet one species is being killed every hour in an unparalleled spasm of extinc tions of a kind not seen in the last 65 -million years.
"Biodiversity obviously has something to "ith pansta obviously has some forests" an ays much bigger job than protecting rain fois a much bigger job man prouna. It's the job es or charg all life - microscopic creepyof prolec as well as elephants and condors and all life's habitats - tundra, prairic and and all life's habitats - tas well as forests."
In South Africa the problem of deforestation is exacerbated by the sheer poverty of rural people and the lack of electrification in most of these depressed regions.
Dr Anton Eberhard, head of the Energy Research Institute at the University of Cape Rown has found that if the current rate of deforestation in these areas continues unabated then all forms of natural woodland will be denuded by the year 2020
"Indigenous forests are one of the rares "Indigenous in South Africa Those at Wa habitat types in soll but that is all the mor reason to preserve them," says Cooper.

The forests dotted along the Indian Ocean coast "are hopping stones that provide important habitats for a number or and species. Eliminate these hoppig tom this leaves one more space for them to hop into extinction.
The problem in Transkei for conservationists is that the area has a rate of unemployment higher han need for job-creation an try, making
urgent issue.
urgent issue. favour of mining at Wavecrest going ahead and that it has the support of the local chicf and paramount chief. Many of the people who tive on the green hills above the site are, however, opposed to the scheme as they fear they will be removed to make way for the mine, an anxiety heightened by the fact that Rand Mines is currently prospecting for titanium deposits among their homesteads.
Titanium is used as a pigment in paints and -TO PAGE 19

$\stackrel{1}{1} \mathrm{p}$HE present state of the environment reflects the precariousness of its place within the olitics-making in this country. A number of papers, articles and statements have emanated from African National Congress circles. Most of these are well-informed and wide-ranging. However, the most comprehensive document, entitled "Future Environment Policy for a Changing South Africa", enjoys the status only of a "discussion paper". It was produced in November last year and that remains the position today. A shorter document has been published by the Pan Africanist Congress entitled "An Environmental Policy for the PAC of Azania". It too is described as a "discussion document".
Within the white political sector, the Conservative Party poses a substantial threat to the place in power of the Na tional Party. Yet, it has taken no policy on the environment. It was to have taken such policy on January 28 this year - but that programme was overriden by "political events".
The largest federation of labour in the country, the Congress of South African Trade Unions, has not yet Lak en any policy on environmental af fairs. Certain of its affiliate unions particularly those active in and linked with the chemical industry, have begun to address the issue. It is likely, however, that the greatest portion of this attention will be directed towards matters of health and safety
$T$
hese policy statements may be characterised as consisting of broadly phrased statements of principle, laud able in themselves, and liberally sprinkled with approving refcrences to and positive statements of intention concerning international conventions, these statements therefore endorse the perspective that many critical environmental issues are trans-national (and, by implication, trans-political).
Few of these declarations have any regard to what will present itself as an acute political and policy dilemma the conflict of interest between a dramatic upsurge in demand for material goods and comforts on one hand and a beleaguered resource and environmental framework on the other. That upsurge in demand will be an unavoidable, yet necessary, consequence of the process of democratisation.
The point of balance which is struck will be a political decision, reflecting the dominant values and interests. That environmental affairs are political has been recognised by many, including kaNgwane's former Chief Minister Enos Mabuza.
He is at once a conservationist and a politician. If a single priority can be distilled from all that he has said, it is that the most urgent need is to set aside the ravages of the long decades of apartheid and to bring about the restoration of all people to the position and rights which are inherently theirs.

# Whispering in the wilderness 

Grand and comprehensive party policy statements are rich with promise. But at the end of the blustery day only a few small coppers will have been deposited, argues KAREL TIP

They are socio-economic and political problems which have to be addressed and solved first and only then will all the people of this country be receptive to the issues of conservation, ecological restoration and the like.
Mabuza is not alone in that approach. The environmental policy proposed by the PAC highlights the following: "The environmental policy of the PAC will adopt an holistic approach one which takes into account,releont social, historical, economical, political and environmental, factors. The PAC commits itself to the conservation of ecosystems and biotic diversity. The PAC accepts the concept of sustainable development: the wide and non-destructive use of resources, with the understanding that a prerequisite for sustainability is that disparities in social, economic and political development be ended."
The implication of that "prerequisite" is also that environmental issues occupy a secondary position in the scale of matters which require the attention of fuure policy makers.
W e have to recognise that we confront not only environmental degradation but also a legacy of massive political, social and economic degradation diate points of impact of the policies of diate points of impact of the policies of colonialism and apalves with hich envi not trouble hacmses be redressed
Correspondingly, the principa claims now being made relate to the capacity to cast a vote, to have a properly filled wage packet, to have a light switch whily works, to have a restored family unit. A corollary or uis view is that concems winh the environment are may properly be suspended We face the prospect of a keen conflict between demand and resource. finct betwans will be among outhers, The demands wate, among ouns, for the tangible fruits of political iberation. Such demands fall directly
within the field of what has to be donc within the field of what has to be donc by way of redress. However, this re-
dress will in no material way be acdress will in no material way be accomplished unrough no more than isting funds and resources.


Positive devclopment is essential. The provision of greater material henefits will involve a conflict with the interests of the environment. H hat conflict will be resolved?
Assume an impoverished community and a proposal to establish a mediumsize industrial plant, which will provide employment. Assume further that the capital resources for this enterprise do not extend to the provision of costly pollution filtering devices. The state will not provide funds; there will be demands on those funds for housing and other uplifment programmes.
Another example concerns land. The
macmilan boleswa writers' Competition 1991


Promotion of Environmental Awareness in southern Africa
This year as part of its anmual Writers' Compctition, Macmillan Boleswa aims to promote the writing of stories cor
preservation of our southem African environment.

Stories can
categories:
Higher Primary - 10-12 years old
Higher Primary -10-12 years old
Junior Secondary - $13-15$ years old
Serior Secondary $16-19$ years old
Senior Sceondary
Newly-literate adults
A prize of a three-day adventure for two in the Okavango Swamps (inclusive of accommodation, all meals and airfa
will be awarded for the best manuscript overall.
How to enter : Guidelines for authors and entry forms are obtainable from
fontein 2017.

Dr J Ledger's

## SOUTHERN AFRICA'S

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This is a book that particularly fascinate young eople - the custodians
of
world
made in respect of white residential areas have generally been attended to. The government recently effected the passage of the Environment.Conser ation Act of 1989. The Act provides an elaborate administrative structure which is designed to facilitate coordinated action regarding environmental conservation between different government sectors as well as agencies in the private sector. The legisla ion still reflects a hands-off approach. For instance, as recorded in a memorandum produced at the time of the Bill, it was a "basic approach" that it is "not practicable to be prescriptive in respect of govemment institutions". In a statement released by the then minister of environment affairs "Probably the biggest single challenge facing us in applying our environmen tal conservation policy is to balance the ideals and expectations of the Firs World with the realities and needs of the Third World. We base our ap proach on sound economical, scientif ic and practical principles ... taking into account the health and well-being of all levels of our population and the long term objectives of conservation.
A
A nalysing that passage does not produce an answer as to who or what will be first when conflicting demands have to be determined. It seems clear that it will not be the environment.
The ANC too appears potentially to take the view that environmental matters will only be successfully addressed once freedom reigns. In its discussion paper it states:
"...it is impossible, in the political sense and in the socio-economic context, to pursue a rational environment protection policy under the apartheid political system.'
It is interesting to examine the summary in that paper:
"The ANC's position on environment emphasises three key elements, namely: protection of environment; construction of environment; and management of environment."
To identify the three key elements as being "protection", "construction" and "management" of the environment, suggests a philosophical dimension of reification. It places the environment in the category of a remote object. If that is so, it will be all the easier for the ANC to allow the environment to pay a substantial part of the price of its im portant objects of socio-economic and political advance for the people of this country. But the environment is no something that can be repurchased. The Democratic Party also has produced a comprehensive statement of environmental policy. However, this policy document fails even to begin to address the difficulty that the political/ environmental cake is not indefinitcly large. It nowhere suggests where it would make the slice.
As necessary as it may be for ideals to be set out in policy documents, it is more important for those ideals to be located in the realitics of the debate which is unfolding in this country. The problems attendant on the achievement of those ideals must be entrenched on the agendas of the parties and groupings, as well as on the agenda of whatever multi-party form should crystallise in the future.
The process of politicisation of the environment must be engaged. To hold that the environment will be better off if protected from "politics" will be as foolish and counter-productive as was the attempt to do so with sport.
Karel Tip is a member of the Wildlife
Society Legal Committee

# AFRICA <br> HINTERLAND 

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HONEYDEW 2040

East Rand Regional Services Council plied for a $21 \%$ increase in evy rates.
This would boost the council's income by

R26,19m and was almost
Fintain to be approved by Finance Minister Barend du Plessis, a council spokesman said.

RSC chairman Leon Ferreira told an RSC meeting earlier this week increases ad become inevitable.
The services levy whill be tax on salaries will be increased from $0,275 \%$ of salaries paid to $0,333 \%$; the establishment
levy - a tax levy - a tax on turnover $0,133 \%$ up from $0,11 \%$ to
Ferreira said the increase was the minimum amount needed to reconcile income with projected expenditure, and would help meet the backlog of

RSC R26m requests a 110
$20(3 / 9)$ R1,088bn B iDü $20(3191$
set as its ultimate target
The increase is likely to meet opposition from the 33000 East Rand employers. The council is preparing a brochure for distribution to businesses to defuse criticism and to show what projects are being completed with their money.
The R26.19m increase is roughly in line with the $\mathrm{R} 22,63 \mathrm{~m}$ the TPA has asked the RSC to set aside as bridging finance to make up for current expense backlogs caused by township residents' non-payment of services.
Ferreira said no final de cision had been taken on the bridging finance. The in-
make up for backlogs and Was not linked to the bridging finance.

Last September the council agreed to make R27m available as bridging finance.
It went towards paying water and sewage costs as well as the partial removal of waste.
The TPA is likely to ask the council to put more money aside at the end of the month when council as the month when council as-
sistance with township running costs officially ends, the source said.
Certain capital projects were shelved to pay for the running costs
The counai
R157,89m for $1991 / 2$.

## Concern over Vaal Triangle air

AIR pollution in the Vaal Triangle could be
linked to health disorders including bronchitis, chronic coughs and other chest illshows, a survey of 10900 children has shown. Boxuy 2 al 391 Research Council (MRC), said concentra tions of ozone and particle matter intra area were cause for concern.
MRC said the first released yesterday, t indicated the Vaal results of its research tial problematic" environgle was a "potenits varied and complex enment because of tion. These included sources of air polluburning coal and pollen.

A pilot study involving
Vanderbijlpark showed th 31 teenagers in measurements taken that in $51 \%$ of the culate matter" was, exposure to "partipollution health standards than US air
"Among other things,
industry and motor vehicles contribuoke,
contributed,"

They believed the extremely high levels of pollen and fungal spores ingh levels Triangle put the allergic population of the area at risk.
Possible health effects caused by air particles inciuded chronic coughs, bronchiis and other chest illnesses. The Vaal Triangle Air Pol Study was commissione Pollution Health Health and Populationed by the National partment last year to inevelopment Defects of air pollution to investigate the efThe study is funded by, among area. groups, the MRC, Eskom by, among other the National Health and, Pscor, Sasol 1 and opment Ministry.
Researchers will attempt to identify and quantify problems so that recommenda tions can be made to National Health and Population Development Minister Dr Rina Venter to improve the situation.

The first results of the Vaal Triangle air pollution health study have revealed that the concentrations of ozone and particulate matter in the area are causes for concern.

Researchers from the Medical Research Council (MRC) believe that, given the varied and complex sources of air pollution in the Vaal Triangle - from major industries and domestic coal-burning to a region rich in pollen - the situation is ex-: tremely complicated.
This makes the area a "po-: tentially problematic environ-1 ment", they have decided.
The MRC study was commis-i' sioned by the Department of: National Health and Population; Development last year.

More than 10000 children' have been involved in the first, phase of the study, which dealt: with air pollution.

Other results from the "first" stage show that the average sul- phur dioxide and nitrogen oxide, concentrations measured in the Sasolburg area from August to, November last year were acceptable and should not pose a health hazard.








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## Public servants want say in allocating increases

PIRETORIA - The Public Servants' Association (PSA) will start negotiating next week with the Commission for Administration on how the R3,7bn Budget allocathe R3,7bn Budget alloca- pensionable earnings.
tion for government work-
The benefits are no ers' salaries and benefits The benefits are not exwill be spent. (35) $m$ pected to come into operaPSA GM Hans- Otivier ${ }^{\text {tion }}$ from April 1 and will said the association's main $N$ probably be introduced retconcern was how much of $N$ rospectively later. the money would be allo- 5 MPs ane touncement that the money would differenti- MPs are to get increases of cated to career differentiated pay hikes.

Finance Minister Barend du Plessis angered public servants by failing to give a detailed breakdown of the R3,735bn set aside in the Budget for public sector benefits.

There were more than 140 career groups in the service who had fallen far behind private sector pay levels, Olivier said.

The amount to be spent on across-the-board inon across-the-boardment workers would also be negotiated.
Olivier said a second

## GERALD RELLLY

major issue was whether last year's $10 \%$ non-pensionable allowance would be incorporated in basic $27 \%$ has caused "unhappi ness" ( $-x$ Last year MPs voted themselves a similar increase.

- Comment: Page 12


## Pollution threat to river

A RIVER running through Sandton faces a major pollution threat from domestic garbage dumped by residents of nearby Alexandra township. The Sandton Chronicle newspaper reported this week that the Jukskei River was threatened with pollution from household garbage being dumped on Alexandra's Far East dumped area. $\$(0) a \sim 422(319)$

The refuse should have been deposited at the Linbro Park dump.
The newspaper asked who would take responsibility for ensuring the refuse reached the dump as, it said the Alexandra Town Council had to all intents and purposes been taken over by the Alexandra Civic Organisation (ACO).

Sandton councillor Jo Marais, through whose ward the river flows said the problem was growing.

## WILSON ZWANE

"Not only is there seepage from the tons of garbage, but effluent from the nightsoil along the spruit is also a problem," Marass said.
She said Far East Bank residents were also suffering "as they have to put up with the stench and the flies".
ACO general secretary Richard Mdakane said yesterday his organisation was aware of the seriousness of the problem but said it lacked the resources to address it.
"ACO is involved in the development of the township but we are not a development agent. A regional body comprising, among others, Sandton and Randburg should be set up to address these environmental issues," Mdakane said.

INTERII
for the six
31 Dec


## New environmental laws being drativn up <br> PRETORIA - Legislation was being prepared to provide for compulsory environmental impact assess ments in certain cases National Education and Environmental Affairs Minister Louis Pienaar said yesterday. <br> ed areas and new areas being identified. <br> Pienaar warned, how ever, that soil erosion was continuing at an alarming rate.

In one of his most wideranging speeches yet on his environment portfolio, Pienaar told a conference organised by Pretoria University's Institute for Strategic Studies that officials were preparing a preliminary list of the activities requiring assessments.

Draft legislation might be published during the first half of next year.

He said an environmental auditing policy to monitor the activities of industrialists and developers was also being studied.

Government favoured developers' voluntary participation in environmental impact assessments and the integrated environmental management procedure proposed by the Council for the Environment. However, the response had been disappointing.

SAis nature conservation record was good, with about:8\% of:the country already proclaimed protẹct-

The Karoo had spread 70 km in the past 10 years and the desert was advancing along a 500 km front in the north-western Cape.
Many rivers, streams and estuaries were biologically degraded, and many wetlands had been degraded or destroyed.

Pienaar said government intended to remain self-sufficient in the safe disposal of its wastes, including toxic waste.

While monitoring the situation, Environment Affairs was also maintaining a strict embargo on the importation of toxic wastes, and agreements with neighbouring countries had been reached for them to do the same.
An investigation into hazardous wastes was being carried out by the Foundation for Research and Development.
The results would be published during the second half of the year.

## AMENT

Poor pay 5.6
'impeding conservation,

Prëtoria Correspondent
The "sextremely unfavourable" salaries of nature conservation officials was "seriously impeding" nature conservation in the Transvaal, MEC for nature conservation Fanie Ferreira said yesterday

In ádocument tabled before the extended Public Committee on Provincial Affairs; Mr Ferreira said while 15 percent of posts in the mature conservation branch were vacant, the main cause for ${ }^{3}$ concern were the numerous vacant senior posts.
"This must receive urgent attentiontin ${ }^{-2}$ view of "the ever. increaŝing envirońmentál degradation and the serious consequences this has for the envisaged ecốnomic and social development programmes."

The goal of the TPA's nature conservation policies was to put 1,5 perexent' 'of the province's land under formal protection within five years. This meant about 35.000 ha of land had to be bought each year.

## LIAMENT



Pretoria Correspondent
The "extremely unfavourable" salaries of nature conservation officials was "seriously impeding" nature conservation in the Transvaal, MEC for nature conservation Fanie Ferreira said yesterday.
In a document tabled before the extended Public Committee on Provincial Affairs, Mr Ferreira said while 15 percent of posts in the nature conservation branch were vacant, "the main cause for concern were the numerous vacant senior posts.
"This must receive urgent attention in view of the everincreasing environmental degradation and the serious consequences this has for the envisaged economic and social development programmes."
The goal of the TPA's nature conservation policies was to put 1,5 percent of the province's land under formal protection within five years. This meant about 35000 ha of land had to be bought each year. open to all races overnight - MEC Pretoria Correspondent(C)

Guidelines have been formulated for the opening of provincial hospitals to all races, but "practical arrangements" have prevented full implementation of the new policy, says MEC for health services Fanie Ferreira.

Replying to a question from Jac Rabie, United Democratic Party MP for Reiger Park, during the provincial budget debate in Pretoria, Mr Ferreira said "culture, language and eating habits of patients" had prevented the opening of hospitals "overnight".

He said the process of implementation of the new policy guidelines was at an advanced, but transitional, stage.

## Wildlife says no to mining at St Lucias

THE Wildlife Society of Southern Africa this week expressed its opposition to mining activities at the St Lucia conservation areastal 30/3/91

The organisation sald besides opposing mining in nature conservation areas in principle, dune mining was a relatively recent mining practice in South Africa.
"Its rehabilitation characteristics have not had time to demonstrate adequate predictability of long-term enviromental impact."

Executive director Tony Ferrar said this was particularly the case in areas supporting mature coastal dune forest and dune grassland, which were recognised as threatened habitats of high nature conservation value.

He sald, given the two main-land use options, Wildlife preferred ecotourism to mining.

Wildlife has called for a thorough investigation of the St Lucia issue which "followed accepted Class One Integrated Enviromental Manage ment procedures". Sapa.

SEE PAGE 10.
















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# Mr Graham said the ${ }^{\text {t }}$ egional ser 4 

 vices had used a grader to make a firebreak to stop flames spreading to a forest of pine and bluegum trees.A Helderberg Village resident who saw "three riverlets of lightning strike the mountain and burst into flames instantly", said the fire was "disastrously handled".
"They shouldn't only use the municipal firefighters but should call in the help of local regiments on which taxpayers' money is being wasted," she said.
Commandant Gerrie Albertse of the Stellenbosch Commando said soldiers had started fighting the blaze at 2am yesterday and were expecting to fight through last night.

A third fire, possibly started near Soetwater around 1pm on Saturday, spread across to mountains above Scarborough coming to within metres of houses. It then spread to Red Hill near Simon's Town.
Scarborough resident Mrs Antoinette Wetmore said forestry fire-
ighters and ${ }^{\text {Pocal residents had bat }}$ tled from Saturday afternoon through the night to keep the flames from spreading to houses.
A forestry department spokesman of the Western Cape Regional Services Council said a firebelt had been fire" the blaze as it swept closer to the houses.
By late yesterday afternoon the Hangklip and Helderberg fires were under control, according to an official spokesman. Troops and helicopters had been withdrawn, and the situation was being monitored.
Late last night irate Scarborough residents said flames were heading down a nearby kloof.
An RSC spokesman said last night that the fire was being fanned by a now south-westerly wind. Some houses in Misty Cliffs could be threatened. A team was stationed on a mountain road between the kloof and the houses.


## Pringle Bay, Scarborough mountain fires <br> Caledon, but were called out again to

## Staff Reporter

THE imountain fires that raged at Pringle Bay and Scarborough on Monday were put out yesterday, fire department sources said, and there was po longer a danger to houses.

Mr Sass Maree, the chief director of the Overberg Regional Services Council said yesterday that the fire around cil, said yesterday Betty's Bay, which Pringle Bay and Bett had destroyed about 7 00ha, was out.
"The firemen left the scene about 9 pm (on Monday) and went back to

Pringle Bay, where two houses were threatened.

"The houses were evacuated, but the fire was put out by 11.30 pm and the firemen went home," Mr Maree. said.

The fire at Scarborough, which spread to Red Hill and came close to homes at Ocean View and Capri Village in Sun Valley, was contained by 4am yesterday, said a Western Cape RSC spokesman.

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Kotzé, Meiring see fire damage

## Staff Reporter

WATER Affairs and Forestry Minister ${ }^{\mathrm{Mr}} \mathrm{Gert}$ Kotze and Cape Administrator Mr Kobus Meiring yesterday made a helicopter flight over the areas around False Bay and Stellenbosch that were devastated by bush fires at the Easter weekend.
With them went Dr Johan Neethling, the chief director of Nature Condirector of Natu Grevile Ruddock of Nature Conservation, the man who co-ordinated all fire-co-ordinateo efts over the fighting efforts, over the media.
The flight over the Rooi Els, Pringle Bay, Betty's Bay and Helderberg areas showed how about 7500 ha had been destroyed, with large patches of veld blackened. Smudges of smoke "marked still-smouldering spots above Pringle Bay.

When the party arrived at the Jonkershoek nature reserve yesternature Nature Conservation workers were busy with counter-fires in an attempt to contain the fire there.
This fire has destroyed about 3500 ha of fynbos so far.

At a briefing at Jonkershoek, both Mr Kotze and Mr Meiring stressed that the co-operation between the public and Nature Conservation, Forestry and RSC officials had been instrumental in successfully containing the fires.




will be made in the near future. proposed revised broad curriculum for schools
will be made in the near future. indicated that announcements concerning these subjects is in no sense threatened. He

 According to him, pupils will also be free to
offer Bitlical Studies as an academic subject
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NAAR, MP. MINISTER OF NATIONAL.
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## Tanker to take on oil from stricken Alloore ${ }^{5 b}$ By STEFAANS BRÜMMER Staff Reporter THE＇Norwegian tanker Happy Fighter is due in False Bay at first，light tomorrow to take on 222844 tons of crude oil from the stricken Iranian supertank－ er Alborz

A Department of Transport spokesman said weather was the only factor that could hal or delay the transfer．
A 20 knot south－easter was blowing in False Bay today， but the shipping forecaster at the weather office in Pretoria predicted the wind would swing to light north－west by to－ morrow morning，freshening later．Sea conditions would be light．
The Alborz，at anchor at Ro－ man Rock with a seriously damaged bow，has been de－ scribed as a＂pollution time－ bomb＂by shipping sources who believe her cargo should be transferred urgently．
The department has dis－ closed that the ship was initial－ ly refused permission to anchor in Table Bay because of＂rough weather and the danger of oil pollution＂．She was also or－ dered out to sea when it was suspected she was not insured against oil spillage．

Director－General of the De－ partment of Transport Mr Ron－ nie Meyer called a Press con－ ference last night to＂clarify certain matters＂after The Ar－ gus reported how seriously the situation was regarded，in some shipping circles．

## \＆゙

FIFTY MIXES ${ }^{\text {mit }}$
A statement released at the conferefice said a department official had boarded the Álborz last Thursday，twó days after she was refused permission to anchor in Table Bay，and found no documentary evidence that she was insured against claims for oil pollution．
：The ship was ordered at least 50 miles from the coast， butwias allowed into South Af－ rican territorial waters when her ${ }^{\text {a agents proved she was in－}}$ sured．

The tanker has a Civil $\mathrm{Li}-$ ability Cónvention certificate （CLC），which covers it for claims in the event of an oil spill，and is a member of Tova－ lop，a voluntary association of tanker owners，which provides coyer for any further claims．

The department said permis－ sion，was given to anchor in the calmer waters of False Bay for the damage to be inspected， subject to conditions．These in－ cluded putting a salvage tug on standby．

Mr Meyer said all the equip－ ment necessary to get the Al－ borz and the Happy Fighter to－ gether was available．
If all went well and the weather held，the transfer would take a minimum of 72 hours．
＂We cannot say there is no risk but the firm（Pentow Ma－ rine）contracted to do the job has all the necessary know－how and experience．
＂If the ship had been on the open sea it could have resulted in further damage or tearing of the hull and absolutely greater pollution than possible with any pumping operation，＂he said．

## MP OBJECTS

Mr Meyer gave the assur－ ance that＂at this stage there is no spillage．The crack which could possibly have extended has been contained．At this stage the ship is not sinking and is not breaking up．＂
The MP for Simon＇s Town， Mr Jannie Momberg，said he had not been told or consulted before the ship was brought into False Bay and he wanted ＂to reiterate my strongest ob－ jections against bringing tank－ ers into False Bay＂．
He said he had been in con－ tact with the Ministers of Transport and Environment who had reassured him that ＂the government is fully aware of the magnitude of the crisis＂， and the steps taken should avert the potential disaster．
Captain Bill Dernier，of the department＇s marine division， said there were two holes in the bow below the waterline on the starboard side and several cracks，with a major crack running forizontally between the two．holes．

## more money

The Council for the Environ- 1 ment would not be able to con. tinue its activities efficiently unless its budget were at least : doubled, the organisation said in its annual report tabled in Par- liament yesterday.

The report also voiced con- 1 cern that little had been done to ' implement the Environment Conservation Act of 1989.

The council is the official body that advises the Minister of the Environment on policy.

In the council's budget, controlled by the Department of Environment Affairs, R328 000 had been budgeted for the 1989/90 financial year.
"As a result of circumstances beyond (the council's) control, this amount falls far short even for the current financial year. It is clear that the council will not be able to continue its activies efficiently if this allocation is not at least doubled."

The committee for terrestrial and freshwater systems recommended authorities involved in road building publish their programmes at least five years in advance to allow time for comment on environmental impact.

The committee was particularly concerned with the environmental impact on potential farmland of the quarrying of marble in a special natural area of the OFS. - Sapa.


Municipal Reporter
A YEAR after Cape Town was covered by a photochemical smog, one of the national guidelines for pollutant substances was exceeded again yesterday.

The Minister of Health, Dr Rina Venter, reported in Parliament last year that on April 17, 1990, Cape Town had experieniced a photochemical smog in which guidelines for the nitrogen oxides, Nox or NO plus $\mathrm{NO}_{2}$, nitric oxide, NO, and hydrocarbons were all exceeded.

Many people complained of streaming noses and eyes on that day, when a strong temperature inversion had trapped car exhaust fumes and smoke close to the ground.

PO117410 other photo-chemical HeVE1' cAf TMp enced, he said. ' the nitrogen sxides Which have a guideline-
limit of 1504 microlimit of 1504 microhad been as follows:

At 6 am the reading was 474; at 7am 1 226; at 8am it was 1566 , which exceeds the limit; at 9am it was down to 1171 again; and by $10 a m$ it was 539 . The spokesman said Nox:was a good indicator of vehicle pollution. The concentrations of another chemical, nitrogen dioxide, $\mathrm{NO}_{2}$, was a better indicator of photochemical activity (which is when new noxious substances are formed by the action of sunlight on smog).

 few instances an increase was recorded.
The levels are all withn internationally constant, a number decreased and in a
few instances an increase was recorded. (2) the results vary - most levels remain
 ue ui ampord ol snoutun!on ool si jinsar details are available on computer. Since
some parameters are measured hourly the smoke at 150 monitoring stations. The
details are available on computer. Since was continuously measured at 115 and able for 1989 and 1990; sulphur dioxide



(3) whether any action is contemplated in the
light of these results, if so, what action? if so, to what extent:

(2) whether these results indicate an increase these results,

 her Department, local authorities, the
Council for Scientific and Industrial Reher Department, local authorities, the
(1) Whether any results are available from $265 \mathrm{Mr} R$ J LORIMER asked the Minister of
National Health: $\mathrm{Hanscr} 19 / 4 / 9 \mid$ spaja uo!n!iod div
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$\qquad$ INTERPELLATIONS UNDER NAME OF MEMBER


> Foreign Affairs, 429
Gerber, Mr A-
Own Affairs:
Education and Culture

Chetty, Mr K-
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Law and Orde $\ddagger, 681$
Eglin, Mr C W-
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Own Affairs:
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 Momberg, Mr J H-
General Affairs:

 three-day visit to Britain today which will focus on the continuing viotenceand the need for investmen and help in the creation of a new South Africa.
Government sources noted the talks were taking place against the background of the violence.
There was concern at the violence, what appeared to be growing differences between the President and Mr Nelson Mandela and whether this would have a negative effect on the negotiating process.

Another source said that at present British investors were waiting to see what would happen about the violence before they made a decision.
If hard questions are going to be put to Mr De Klerk, then Mr Mandela is not going to have it any easier when he arrives in London on Wednesday and would be would be asked his reaction to Mr De Klerk's three-point peace plan.

## Sanctions

Meanwhile government sources said the decision by the Danish parliament to reject the European Community's decigsion to lift the ban on sales of iron, steel and Krugerizands, would not affect the ending of those sanctions by the other 11 EC members.

The source said the decision was obviously psychologically important, and it was hoped to set up meetings with the opposition Social Democratic Party, which had opposed the lifting of sanctions.

This morning, President De Klerk will hold a meeting with Minister of State for Foreign and Commonwealth Affairs and Overseas Development, Mrs Lynda Chalker, before meeting financiers.

In the afternoon he will meet MPs from all three parties before holding talks with British Prime Minister Mr John Major.
*The British Anti-Apartheid Movement announced a programme of activities aimed to tell Mr De Klerk to stop the violence and repression.

AAM chairman Mr Robert Hughes said in a statement President De Klerk had broken his promise to release all political prisoners and grant indemnity to exiles as well as repeal all repressive legislation.

The AAM will launch its campaign by presenting an open letter from MPs to Mr Major.

Major protests outside South Africa House and other venues were also planned for today.

## Call for strategy ${ }_{86}$ <br> 

By VIVIEN HORLER .

## Staff Reporter

THE Council for the Environment has called on the Minister of Environment Affairs to table its national environment strategy in parliament without delay.
The council, which is made up of environmental experts and exists to advise the minister, has drawn up a management strategy which it has recommended be adopted as formal government policy.

## Independent body

Professor Roelf Botha, chairman of the council, said today he hoped the strategy could be introduced in parliament by the Minis' ter, Mr. Louis Pienaar, and daópt ed in the current parliamentary session
委学The adoption of a pational en"vironment strátegy is -provided for in the current Environme Conservation Act of 1989 , and. when adopted will enable that to function properly
noise control have been promulgated in terms of the Act.
Professor Botha presented the council's annual report to the minister in Cape Town today.

The strategy model supported by the council for the structure of a future environmental protection body is an independent statutory central organisation outside the present government.

Professor. Botha said the recommended policy had tried to set realistic and adequate goals for the use of environmental resources, both natural and cultural, to sustain the needs and aspirations of all South Africans.

To achieve environmental protection goals, such as the preservation of plant and animal life rand essential eco-systems, it was vital that the interdependence of conservation and development be recognised.
"The policy recognises the growing interdependence of international economic and political systems as a major influence on environmental issues.
Already regulations relating to
"Demography, agriculture,
communication and infrastructure, technology, finance and so-cio-political issues are key determinants in the creation and solution of environmental problems."

Another member of the council, Professor A E F Heydorn, said it was vital that the realities of the Third World be taken into account when formulating a national environment strategy.

## Last opportunity

"You can't build a healthy economy on a damaged environmental resource base," he said.

The current generation was probably the last which would have the opportunity to set aside areas for protection. If the natural environment was to be successfully proctected, the aspirations and perceptions of all South Adfricans had to be taken into account.
"We cannot ignore the impact of vast population movements and the development of squatter areas in the shaping of the destiny of the country," he said.


## 18 injured in city gas explosion <br> on an ararm that had gone <br> geant Stuwen Sander and <br> ploding in the shop.

A powerful gas explosion today destroyed a central Johannesburg pawn shop and badly damaged several flats and a car, leaving at least 18 people injured.

The explosion happened at 1.30 am in Twist Street, Jou bert Park.

Police officers on the scene at the Bing-Bong Bargain Bar, were today described as heroes by people brought to safety through the flames which engulfed the shop after the blast.

Confused occupants in Park Court flats above the shop scrambled from their beds and were brought to safety as the policemen braved the flames to rescue them

Witnesses said the owner of the shop - Gerhardus Jacobs - went to the premises at about 1 am to check
off. The explosion occurred as he was opening the front door.

The shop burst into flames, endangering the lives of residents in Park Court above the Bing-Bong

Nine policemen in the vicinity rushed through flames to get to the flats, returning through the blazing shop with 13 people suffering from shock and minor injuries.

Colonel Frans Malherbe, police liaison officer for the Witwatersrand, said the injured were admitted to hos pital.

Mr Jacobs was admitted to Johannesburg Hospital with severe burns.

Eyewitnesses said the policemen acted "very bravely" dashing to and fro through the flames to carry injured residents downstairs.

The policemen were Ser-

Sergeant Grant Smith, both from John Vorster Square Sergeant Kokkie de Jager of Hillbrow Hqusebreaking, Sergeant Amós Ntsabalala, Constable Chris Hough and Constable Gordon Holmes of the Dog Unit at Langlaagte, Constable Andre van Staden of Radio Control, Brixton, Constable Francois Coetzee of the Hillbrow Police and Lance-Sergeant Martin Cloete of Business Watch.

Colonel MaIherbe said the municipal fire brigade arrived soon after the blast, but the fire was so fierce that it gutted the shop within minutes.

A car parked outside was "a total wreck", and an adjacent hairdressing salon had its facade blasted away.
"After the initial blast, minor explosions were heard for a while. These were obviously caused by goods ex-
"At this stage the police believe the explosion was caused by gas, but are still investigating," he said.

A Park Court tenant who lives on the first floor said he woke up after a "big bang"

Initially he saw nothing but 10 minutes later another 10 small explosions followed. He and his wife then rushed out of the building.
A woman on the fourth floor said she was woken up by a loud thundering noise. She thought lightning had struck the building, but when she looked outside she noticed black smoke was enveloping the building and she and her husband ran out.

A 65-year-old man living on the first floor said he slept through the explosion and only became aware of the chaos when the fire engines arrived.

Picture - Page 2

White Paper on Land Reform
＊12．Mr J CHIOLE asked the Minister of
Planning，Provincial Affairs and National
Housing：$\ddagger$
（1）Whether any documents or copies of
documents regarding the Governments
intention or proposals in connection with
the White Paper on Land Reform were
furnished to the ANC，officials of the
ANC or bodies allied to the ANC，or
discussed with any such person or body，
before the said White Paper was officially
released；if so，what was the（a）nature
and b）purpose of the liaison concerned；
（2）whether，after such laison，any changes
were effected before the esaid White Paper
was released；if so，what are the relevant
details？
B808E

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industry in South of Yes．The investlgation has shown that the
privatisation of Foskor may form part of

The MTION AND PUBLIC ENTERPRISES： The MINISTER FOR ECONOMICCO－ORDI－











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in the beginning of 1992．Any individual

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 （3）whether he will make a statement on



 ＊13．Mr R F HASWELL asked the Minster of
Environment Affairs： E！ont is pe sumun

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SOOH TVNOILVN aNV SYIVAHV TVID The MINISTER OF PLANNING，PROVIN－

 8cII 95


## Good management iș vital, says Kotzé

GOOD management of resources is the answer to future water supply, says Minister of Water Affairs and Forestry Mr Gert Kotzé.

He :said he was confident that President De Klerk's initiatives would improve relations between South Africa and its neighbours.

Botswana, Mozambique and Swaziland had maintained co-operation and liaison with South Africea; on water matters through joint permanent technical committees.
Clóse co-operation had also been maintained with Lesotho which had resulted in benefits such as the Lesotho Highlands project, Mr Kotzé said.

Although there are many new water supply schemes being developed, and existing ones are being expanded and upgraded, the R5,5-billion Lesotho project has captured the nation's imagination.

One of the most ambitious multi-purpose water schemes being undertaken in the world, it took 40 years to plan and 108 contracts were awarded for its construction.

In terms of size, the project overshadows all previous water schemes, Mr Kotze said.

## HIGHEST DAM

It includes construction of the highest dam in South Africa, as well as the longest tunnelling vens,ture. It is designed to supply sufficient water to the Pretoria-Witwatersrand-Vereeniging area well into the next century.

The first phase should be completed in 1996 and will feed South Africa with up to 18 cubic metres (the contents of an average swimming pool) of water every second through tunnels to the PWV.

It could take up to 30 years to complete all phases, but eventually up to 70 cubic metres of water a second should flow to South Africa.

Financing the project has been one of its most complex parts and international co-operation through the Development Bank of Southern Africa was an important and significant breakthrough.

Projects such as Lesotho Highlands were essential for the growing water needs of South Africa's people, Mr Kotze said.

A rough estimate showed about nine to 10 million people would move to urban areas in the next few years. The additional sewage systems alone wọuld cost about R4-billion

## $\sin$ Tint $/ 56$ <br> Pollution

 levels published from todayTODAY the Cape Times starts a daily check on starts a daily check on
air pollution. Every morning, we will publish the previous day's maximum readings of two pollution indicators.
The readings, along with the guideline levels for both of them, will appear with the weather information at the top of Page 2. The maximums are for each 24-hour period from 2 pm .
One of the indicators, NOX, is a combination of several different chemicall, the nitrogen oxides. Its main components are nitric oxide and nitrogen dioxide.
NO is a good indicator of emissions from motor vehicles, especialby since the readings are taken on equipment in the City Hall building. The other reading we will publish daily, with the help of the Cape
Town City Council, is the
maximum hourly average for $\mathrm{NO}_{2}$, or nitrogen dioxide.
$\mathrm{NO}_{2}$ is one of several indicators of photochemical activity, which is a group of processes set in motion by the ultraviolet portion of sunlight interacting with pollutants such as nitrogen oxides and hydrocarbons.

DUBLIN. - In a major diplomatic coup for President $\mathrm{F}^{\mathbf{W}} \mathbf{W}$ de Klerk, Irish premier Mr Charles Haughey yesterday ordered a complete review of all relations and contacts his country has with South Africa.
Speaking after their first meeting here, Mr Haughey said that despite the complexities involved, the reform process Mr De Klerk had embarked on was indeed "irreversible and fundamental".
"He needs support and full understanding.
"It is clear that south

Africa has now embarked on a definite process, the ultimate end of which is the complete and final abolition of apartheid."
At a press conference later, Mr De Klerk's comments clearly indicated he was pleased with the results of his first visit to Ireland, which has been in the forefront of international sanctions against South Africa.

On his overall impression of talks with Mr Haughey and Foreign Minister Mr Gerry Collins, he said: "For a long time, relations between Ire.
land and South Africa have been what could be described as 'strained' - that has changed fundamentally because of a new reality in South Africa.
"I would conclude relations now are warm, positive and constructive.
"I found my whole discus. sion with the Irish government to be particularly encouraging."

Mr De Klerk said bilateral relations and prospects of future trade had been dis-


FWMCTMixy 56 cussed, in zqufitiontte wide-ranging discus sions in which he had explained in detail the present situation in South Africa and difficulties in the way of getting discussions on a new constitution moving.

Mr Haughey had earli. er said he looked for ward to Ireland estab lishing diplomatic tie with a future democrac: in South Africa.
He explained there was already a full anc open channel of commu nication with Irelan through South Africa': embassy in London.

Mr Haughey said sane tions had not been dis cussed.

Mr De Klerk, on th third leg of his three-nt tion European tour, due to return to Londo this morning before $r$ turning to South Afric this evening.

Meanwhile, a shol powercut caused by Iris Electricity Supply Boa workers striking fi more pay disrupted $N$ De Klerk's press confe ence.

About 150 members the Irish Anti-Aparthe Movement and oth groups yesterday stag a protest outside $t$ ! a protest outside Dublin offices of he talks over a worki lunch with the preside - Sapa


## ENVIRONMENTAL IHDUSTRY

Living in the clutches of the throw-away consumer society, it is difficult to imagine a country where you cannot buy beer in a can and there is no such thing as a nonreturnable beverage container.
Such a country exists. It is not Cloud Cuckoo Land but Zimbabwe, which, when it comes to recycling and re-using scarce resources, shows up SA as being a nation of fat cat litterbugs.
Making that observation brings down a ton of statistics from the packaging industry to underscore SA's prowess in recycling. Furthermore, claims Owen Bruyns, executive director of the industry mouthpiece, the Packaging Council of SA, Zimbabwe is a bad example to hold up.
Recycling is big business in SA, employing about 6200 people in more than 150 plants. It is rapidly getting bigger, with a number of projects under way by major companies as well as developments such as the waste extraction plants being built at dumps run by Johannesburg and Randburg municipalities. Judging by what's happening overseas, growing concern over the environment will ensure that this trend continues.
Zimbabwe has been short of resources since Rhodesia declared UDI in 1965, creating an overwhelming motivation to conserve things such as bottles that we take for granted. At service stations and cafés, you normally cannot buy a soft drink to take away without handing in an empty.
I spent nine months there last year and, strange as it may seem, life carries on without nonreturnable beverage containers, plus there are major benefits. The roads are clean. So are the national parks. If you see a can or a dumpie lying along the roadside chances are it has been thrown there by a visiting SA or Botswanan tourist.
-To my eye, SA's roads, cities and country arcas are becoming increasingly littered despite the efforts of organisations such as Keep SA Beautiful and its various associates. That's debatable, says the organisation's chairman, Daan Kocks.
Bruyns questions just how serious litter is as an environmental issue. A survey by University of Cape Town researchers showed that professional ecologists rated litter only the 18 th most serious of 19 environmental issues; the top three were population growth, water availability and soil erosion. Business leaders surveyed for the same study agreed with the ecologists on the first seven issues but rated litter as the eighth most serious.

The researchers suggested that this might be the result of public criticism of litter. They pointed out that only $24 \%$ of the business leaders polled opposed the statement "bottles used for beverages should carry a refundable deposit" and that many of those opposing it were in the packaging industry.

I can think of one other reason - littering can hit businesses right where it hurts by affecting the tourist trade The Federated Hotel, Liquor \& Catering Association of SA is trying to push the number of tourists visiting SA from 500000 a year to 2 m in five years. But where would you rather go on holiday, or shopping for that matter? Somewhere clean or where you trip over the litter?

Litter represents a careless attitude to the environment with serious ramifications on what some people eventually believe they can get away with - if you can chuck a beer can out of a car window why not dump your rubble in the Braamfontein Spruit and your effluent where you choose?
Recycling is one key solution and SA is doing a lot. Council statistics show that firms recycle about $11 \%$ of the total tonnage of plastics produced annually, compared with about $2 \%$ in the UK and US. About $14 \%$ of glass, $21 \%$ of tin plate and $29 \%$ of paper and board produced annually in the country are recycled.

That's increasing and there is plenty of scope for improvement. Pulp and paper giant Mondi is putting in a R 155 m plant to recycle 85000 t of newsprint annually and has set up a network - Paper Pick-Up - to collect the newsprint from households in 30 municipalities.
The packaging industry sees education as the other key solution. The industry policy is: packaging doesn't litter, people do, and it has thrown its weight behind projects involving schools, community organisations, Keep SA Beautiful and recycling schemes such as Col-lect-a-Can and Bottle Banks.


Bruyns says the biggest waste disposal problem concerns paper generated by uses other than packaging, so why pick on the packaging industry in general and nonreturnable beverage containers in particular?
Well, for starters, it depends on where you get your statistics. The Cape Town City Council estimates that half the 40000 t of street litter it collects annually is packaging. Next, beverage cans and bottles are certainly the most visible and long-lasting bits of litter along roads.
Bruyns says mandatory deposit legislation has been tried in one state in Australia and several in the US and been shown not to work.
He says the main result is a sharp jump in costs to the consumer. The laws have dramatically reduced litter but haven't helped much to boost recycling.

Some SA bottlers run extremely successful voluntary deposit systems. SA Breweries marketing director Peter Savory says $75 \%$ of all beer sold is in returnable glass bottles mainly the quart bottle, which is the cheapest way to buy beer.

Hennie Viljoen, president of the SA Federation of Soft Drink Manufacturers, says returnable packages - both plastic and glass - account for $70 \%$ of soft drink sales.

That being the case, surely it cannot be that difficult to widen the returnable net and provide similar incentives to get back the cans and dumpies? No, say industry executives, who maintain that the administration logistics and hassle for retailers and bottlers are too great.
"We are happy with our product mix, which runs completely counter to the trend overseas where, in the US, $80 \%$ of beverages sold are in nonreturnable containers," Viljoen says.

The trouble is that litter education programmes are long term - our children should be much more litter-conscious than we are - but meanwhile the cans and dumpies are piling up.
The public needs to be more litterconscious and should support the bottle bank, collect-a-can, paper pick-up and other recycling schemes, but there's more that should be done to sort this one out by the packaging industry. Greater financial incentives are needed in one form or another to convince the public to bring those nonreturnable cans and bottles back for recycling or choose returnables over nonreturnable packages in the first place.

Brendan Ryan
FINANCIAL MAIL • APRIL • $26 \cdot 1991$ • 71

## A direct attack on loss of water

SOME town and city coun- number of loss-points; cils are allowing SA's most precious resource - water - to seep away.

But in Johannesburg, a team from civil engineering firm De Leuw Cather joined forces with the city water and gas department to cut water loss.
-DLC ${ }^{2}$ associate Dennis Behrmann says: "The Jo-hannesburg-Soweto area was losing around a third of the: water it bought from the Rand Water Board -84-million litres a day.

Over the past three years, we have helped bring that figure down, to $19 \%$."
, The first step was to Identify where the water loss was occurring

Behrmann identifies a
leaks; theft; fire hydrants used illegally to wash factory floors; construction sites where contractors tap directly into water supply lines; flushing out dirty water after repairs on a pipeline and reservoir overflows. Bloay $30 / 4(91)$.

In addition, he says, apparent loss•may relate to accounting errors.

Domestic, industrial and bulk water meters, if not replaced or refurbished regularly, can give false readings.
"When looking into a water management system we ask for an open brief that enables us to investigate and advise on most aspects of the process," says Behr-

In Johannesturg , the main problem proved to be leaks.
Behrmann says a level of $10 \%$ water loss is desirable in most situations.
Less than $10 \%$ would be so extraordinary it would warrant a check on the control systems.

Effective water management is of paramount importance, especially in the Reef area.
"The run-off capacity of the Vaal Basin is 4,3 -million megalitres a year, of which only half can be beneficially exploited.
."This means the PWV area is using around $15 \%$ more water than the Vaal Basin can supply."

TOWNSHIPS are dormitory towns - reservoirs of cheap labour. dumping grounds for blacks (satisfying the demands of the racist Group Areas Act), pondoklie land for the dispossessed and dis placed Tirey are divorced from natural beauty and the green heritage. They are plagued by criminal violence and gangsterism; by disease and vandalism. They lack basic amenities. They are occupled by pov-erty-stricken people in a bleak and unhealthy environment.

Township ecology equals the politics of dispossession. They must be destroyed. A new environment must be created which is conducive to the development of our peoples' humanity. Before any decision can be e the people who inh them must be consulted. Decisions on the future of these townships must also take into account present realities which paint a grim pleture of millions who need shelter, those who live in magnum kennels in the urban areas. Do we have the resources to both destroy these human rubbish dumps and simultaneously build homes for the homeless in a friendly environment? Under the present regime this huge operation will not be undertaken. They are the problem and not the solution.

## Electricity

While the battle continues for the establishment of a democratic order that will dramatically change this dreadful legacy, we must bear in mind that re-

sources to effect change cannot be plucked out of the sky. Not only will workers be expected to maximise their productive capacity but industrialists will no longer be left to their own avarice. There can be no profit-making without social responsibility. In the meantime demo-
cratic forces and their environmental allies must identify issues around which campaigns should be launched.

Soweto and the PWV area, home to eight million people, are under a perpetual haze of carbon dioxide resulting in alarming growth of serious chest, ear, nose and eye diseases.

People are obliged to use coal and paraffin for energy, thus adding to the serious pollution. Although we have a national grid supplying electricity nationwide, few township dwellers have electricity. There are more than 200 townships but only 21 are provided with electricity. The principal cause of air pollution is Eskom and heavy industry emitting pollutants into the atmosphere through the use of low-grade coal. They
have done little or nothing to reduce this pollution because of the expense involved in cleansing their operations. Worldwide, this country is the worst offender in emitting substances that damage the ozone lay er.

## Schooling

No environmentally concerned planning can be undertaken without compulsory integration of the black townships into the rich racist town councils. The regime wants this to take place on a voluntary basis. To us this means removing apartheid scaffolding and keeping the racist monument intact.
Schooling in townships is a disaster area. We are told we have an enlightened regime with a leader in the shape of Mr De Klerk who is enraptured by liberal "visions" for a "New South Africa." Why then are we presented with a budget that allocates four times as much to a white chıld as to a black child. Why should white schools only open their doors by consent of white parents? Why are millions of black kids out of
school because of lack of facilities when more than 200 white schools have closed down for lack of white pupils? Why should this gencration be interested in the environmental-ly-related issues while those in control treat them like unwanted luggage?

## Secretary

Seek ye an old age home in the townships and you will not find. Compare the pensions of whites to those of blacks and you will despair or become insanely angry. That we do not seek to beautify the ghetto townships is evident from what I have already said, but do we voluntarily have to live surrounded by filth? The PAC does not think so. At Atteridgeville township on the outskirts of Pretoria, we launched a campaign to clean up the streets, which was led by advocate Dikgang Moseneke, deputy president of the PAC.
I am particularly proud that at our second conference after an enforced break of 31 years, the PAC decided on the creation of the post of secretary for the environment. We hope others will follow us in generating public concern.
We say that a new constitution must give the public locus standi - the legal right to go to court to protect their environment and quality of life.

We propose an environmental ombudsman, independent of the state and the private sector, to mediate in environmental issues. $\square$ Barney Desai is Secretary for Information of the PAC. This is an extract of a recent address on the PAC's erivir onmentral policy.

## Minister fumes at study on pollution

 THE Minister of Environmental Affairs, Louis Pienaar,says criticism of him in a recent CSIR reporton pollution is "unfair". 56
The Report on Waste Management and Poilution Control in South Africa was instigated by the minister himself.

It said he acted on environmental issues only under pressure from environmental activists, and added: "It appears that the minister has not always handled the campaigns from action groups in the appropriate manner.

The public is not aware of any proactive or positive steps which the Department of Environmental Affairs has taken on the prevention and combatting of pollution."

Mr Pienaar said this week; "This is not fair and these people are being too impatient. The department has not been dragging its feet. Since the new environmental Act was formulated in 1989, the department has been doing research to prepare the way for a new policy.

The environment is dynamic, bringing new issues to deal with every
day. But while dealing with these problems when they arise, we are continuing with our research campaign."

However, the Endangered Wildlife Trust director Dr John Ledger said Mr Pienaar's department had a history of "not functioning properly and being bogged down by reports".
He added: "They have done many investigations but that is often where it ends. Let's hope this time the department will follow through with what they've started."
The report criticised the fact that pollution and waste management laws are administered by a plethora of government departments.

$\square$


ANTI TANKERS: Earthlife Africa protesters take a stand against tankers being allowed in False Bay following the Alborz incident. The placard demonstration took place on Saturday at Glencairn. The crippled Iranian supertanker's cargo of crude oil has been transferred to another ship but she is still anchored in the bay.

## Another supertanker anchors in False Bay

## By STEFAANS BRUMMER

 Staff ReporterANOTHER stricken supertanker, the 261000 -ton World Emsnence, has anctored in False Bay for inspection and possible repars

The vessel arrived just atter dark yesterday after d cond tional go ahead from the Department of Transport

The Liberian-registered tanker was on her way fiont the Gulf to Europe when she developed turbine trouble surveyor buarded her off Dut ban and reported that she could not complete her voyage
'PLIRELIY MECHANICAL'
A Department of Transpor: spokesman said the ship's 21 m draught was too deep for Rich ards Bay or Saldanha. False Bay was the only alternative. He emphasised that there was no pollution threat.
"It's purely mechanical," he $\frac{1}{t}$ 体 $t$

(5t) ARLT L $7 / 91$
Pirture ROY WIGIfy The Argus TReUBLED TANKERS: The 261000 -ton supertanker World Eminence, right, has joined the 245000 -ton Alborz off Simon's Town. The World Eminence has engine trouble and the Alborz has a cracked hull and had to have her cargo of crude oil transferred. The picture was taken from Muizenberg.

The ship was allowed into False Bay after an inspection yesterday and on condition she was linked to a large tug.

The relative calm of False Bay was needed for a full inspection. Repairs would be done if necessary, he said.

A spokesman for the salvage company Pentow Marine concompany Pen the tug Wolraad Woltemade was on stand-by.

He said it was normal procedure in winter to bring tankers into False Bay where they were protected from northwest gales. In summer Table Bay was used.
NO POLLUTION DANGER
Simon's Town mayor Mrs Nicky Holderness said she had been assured by the Department of Transport that there was no pollution danger and she could not complain.
"This time we were advised and we were prepared. I have to accept the realities," she said.

There was a public outcry last month when the Iranian crude carrier Alborz was allowed into False Bay with a cracked hull. More than 220000 tons of crude oil were trans ferred to another tanker.


PRESIDENT F W de Klerk has voiced concern over the ANC's focus on strong central government, saying that while fundamentals and rules can be written into a constitution, enonomic policy cannot.
"And inasmuch as mietrogranmetitiesto do that, I don't think it is acceptable," De Klerk said in a six-page survey on SA published in the London Financial Times yesterday.
The survey also sald that the investigation into alleged share dealing irregularities on the JSE and the controversy over the recent merger of four banks to form Amalgamated Banks of SA was grist to the mill of critics like the SA Communist Party and those who thought activities of the financial sector have little beneficial impact on pressing needs in the economy.
"In a country that boasts an influential and unapologetic Communist Party, such perceptions are important," said the article.

Another article looked at ANCHeputy president Nelson Mandela's views that the world was moving too quickly ín Iifting sandions and ${ }^{c}$ rewarding De Klerk, and concluded that ${ }^{-}$ Mandela's case "lacked conviction".

To Mandela's observation that "we are the victims, yet they reward the jailer for letting a

little more light into our hell hole", Michael Holman wrote, "Mandela might well' drreet his wrath on states much closer home" - a refer: ence to increasing SA trade with Africa.

Asked about possible alliances between the NP and other parties, De Klerk said he cauld not see an alliance with the ANC so long as it remained allied to the SACP.
However, KIN BENTLEY reports that.Dé Klerk hinted at a future alliance with the Inkatha Freedom Party.
De Klerk said a moderate alliance, which included the NP, stood an even chance of winning an election when "the real electoral process" started.
Asked whether, in terms of power sharing, he foresaw a time when the NP did not have "at least one hand on the tiller", De Klerk repned that the NP was a young and dynamic party which would play "a leading role", but." "not in dominating sense".
He said the NP, "because of its inherent strength", would have one hand on the tillef for a very long time.

## Highveld emits $50 \%$ of nation's air pollution <br> the special circumstances relating to mining

AIR pollution in the Transvaal Highveld amounts to almost half the national total, a new government report says.
The Environment Affairs Department commissioned the Council of Scientific and Industrial Research (CSIR) to undertake a study into waste management and pollution control in SA.
The report's findings, which highlight "some major inconsistencies and discrepancies", will $D$ be used as a starting point to formulate new legislation between 1992/93 to control and manage waste and pollution.
In one shocking disclosure, the 420 -page report states that "one South African power sta- $\infty$ tion, Lethabo (in the Eastern Transvaal), will on completion produce as much fly ash annual ly as the whole of France".
Waste production in SA is high "because of
and power generation". (56)
Solid waste stream, exchuding agricultural waste and sewage sludge, amounts to about 300 million tons a year.
"The costs (of pollution) control are high but so is the potential cost of not controlling the pollution," the report warns.
Properly supported research was needed to decide on a course of action.
About $95 \%$ of all waste in SA is disposed of of land, the report said.
"It is therefore essential that effective corntrol and guidelines should be created for safe and acceptable land disposal practices. Problems with illegal dumping and littering require immediate attention." - Sapa.

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## New legislation on way to control waste and pollution ${ }^{56}$

New legislation to control and manage waste and pollution will be implemented by the Department of Environment Affairs within the next two years.

Existing policy was "fragmented" preventing effective control and management, said Koos Stander, environmental protection director for Environment Affairs.
Mr Stander's announcement this week follows the recent publication of the "Report on the Situation of Waste Management and Pollution Con trol in South Africa" by the Council for Scientific and Industrial Research.
At present, dozens of laws
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administered by different government departments, at both national and local level, control waste and pollution.
"This leads to confusion, administrative overlap and difficulty in pinpointing departmental responsibilities," the 420-page report stated.
"In general, the legislation and adminstration of pollution control and waste management has lost sight of the need to maintain a holistic outlook on pollution regulations."

Mr Stander said: "We can expect new environmental, legislation between 1992/3."
The aim of the CSIR report was to highlight the fact "that a solution to the problem is an
integrated environmental management approach".
By October, the departmentwill have held seminars in all major centres, at which the report's findings will be discussed in detail.
"Eventually, this report and the proceedings as described above will lead to formal policy formulation by the depart ment in terms of the Environment Conservation Act.
"We want to get ... across to all the parties that this fragmented approach causes problems in effective environmental management, resulting in pollution and degradation of the environment," Mr Stander said. - Sapa.

## HOW GREEN IS MY VALLEY fm

Ask the average businessman if he's green and He th think you're referring either to his length of service with the company or the state of his health after a heavy night out

Environmentalism, the First World's dominant sociopolitical issue, tends to be overshadowed in SA by apparently more pressing constitutional questions. But should it be? $\Lambda$ fter all, a healthy environment and sound resource base form the foundation on which the new SA will be built.

Some business leaders are aware of this and there's clear evidence that green issues are creeping into corporate stratcgy. But much of the business community along with the public sector, most politicians and many consumers, remain largely illiterate on environmental issues.

The public has tended to trivialise the absolutist rhetoric of some grecn groups that have been regarded as a lunatic fringe. But greening gained considerable respectability when Anglo American Corp executive Clem Sunter joined the fray and it is now becoming a mainstream management function in big corporations.

At a "Greening of Business" conference in Cape Town recently, organised by the Fairest Cape Association, Sunter said businessmen also tended to be suspicious of green groups that lumped all environmental problems together and often presented them without qualification or conclusive scientific evidence.

However, some businessmen had become blue greenies - people who believed that for each environmental problem there was a technical solution.

Sunter said environmentalism was becoming part of mainstream business planning and no longer simply an aspect of social responsibility programmes. "We must confront these issues. We can't simply sweep them under the carpet."

But while leading industrialists have generally responded positively to greening, it seems that most small businessmen and the public sector are still ignorant and inactive on crucial environmental issues. Not only is the cnvironment suffering as a result, but marketing opportunities, both domestically and overseas, could be slipping by.

Bates Wells Partners MD Darell van Zyl told the conference that businessmen and government were apathetic on green issues. "They get away with words and deeds that would have consumer lobbies overseas bay-
ing for blood.'
Van Zyl said honesty in marketing was crucial to success in exploiting the changing scene. It was tempting to believe that the environmentally aware segment of consumers was small and could be ignored, but this was a mistake.

Marketers couldn't simply make cosmetic changes or run a green campaign. They had to be seen to be doing something positive. Consumers were generally a lot smarter than they are given credit for.

Pick 'n Pay chairman Raymond Ackerman agreed. He said consumers were not apathetic to green issues. After politıcs, environmentalism was the most crucial question facing the country.

He urged co-operation between businessmen, manufacturers and government to plot strategy in such a way that none of them was stigmatised.
Sappı MD Eugene van As said greening of business was a complex issue that needed to be seen in context. There was almost no way of avording pollutıon in industrial manufacturing but, at the same time, industrialisation benefited society; it represented
 progress and was necessary for economic growth and job creation.
"The issue is not whether or not industry should pollute, but how to deal with it," he added.

Anglo Amerıcan Corp Chairman's Fund chairman Michael O'Dowd said the perception that someone other than consumers was going to pay for pollution was incorrect. "By and large there are no free lunches. The perception that somehow the cost can be absorbed by industry is a fallacy. If we want safer cars or green products we can have them, but they will cost more. One gets the unfortunate impression that consumers want green products but are not prepared to pay for them."

Roy Siegfried, director of the Percy Fitzpatrick Institute of African Ornithology at the University of Cape Town, said the state of environmental literacy was appallingly low as was the political will at all levels of government to act on these issues.

He disagreed with Sunter that most businessmen were already reacting to the green revolution "Most big business yes, but not a vast array of small businesses." He argued that small businessmen generally had neither the literacy nor resources to address adequately the issues. "What to do about these small operators is the question. Don't worry about big business; they are bornagain environmentalist."

Siegfried said the environmental movement could not be beaten; it necded to be joined. "Bring some reason to the debate. Sunter brought good sense to bear in what was seen until then as a lunatic fringe lobby. Join the environmental movement and try to influence it from withm."

He also suggested more carcful consideration by businessmen of spending on green issues. While it was all very well to donate money to various causes, far better returns could be achieved on investments in projects such as job creation and education. Young black mothers, for example, had to be pursuaded that smaller families were in their interest; and the civil service, where decisions on environmental issues are made, needed to be better informed.

Award-winning environmental journalist Paul Myburgh said business leaders had to be totally committed to environmentalism. They needed to replace production for profit with production for need "We are drawing on the world's capital instead of living off the interest."

Ian MacDonald, senior research officer at the institutc, said the attitude of businessmen towards green issues had up to now been equivocal. He urged business support for research aimed at reducing the current uncertainties about global environmental change.
"Either SA goes the First-World route and funds development and plans strategies to cope with change, or it goes the ThirdWorld route and becomes the victim of unplanned and unpredicted change," he said.

In summing up the discussion, Southern African Nature Foundation CE John Hanks said poverty was a unifying theme in our green debate. Forty percent of the population lived in poverty and about one-sixteenth of them in extreme poverty.

High population densities in the homelands severely affected the natural environ. ment; the resource base crucial to the survival of the people who lived there.

## Late salute to a maligned 'Minister of $\underset{8+\omega}{\operatorname{damn}}$ all' <br> T <br> HE former Minister of Environment, Gert Kotze - dismissed by many (including me) as an ineffective environment Minister - has done something for South Africa that deserves the thanks of every environmentalist. <br> It has now become apparent that in April last year he called in the <br> 

Council for Scientific and Industrial Research and asked that they go into the state of the environment and make recommendations.
The report has just come out and it lays bare the sorry state of environment control. It also reveals, in passing, the extent to which the Department of Environment Affairs is hamstrung.

Indeed the former Minister himself once told a colleague: "I am the Minister of damn all".

The report reveals how the Department of Health is just not the appropriate department to administer the Clean Air Act. After all air poilution is not only about health it is about the environment as a whole.
The former Minister must have realised the report would, in fact, allow his department to vicariously criticise a "senior" department.
Being an independent body the CSIR was able to delve into the efficiency of other departments. Traditionally Government departments never criticise each other.
Mr Kotze's initiative was a neat sidestep of the rules.
The technical and legal teams
which produced the CSIR's 400 -page report included Professor Andre Rabie (Stellenbosch) and Jan Glazewski (UCT) who have always been unequivocable in their criticism of environmental laws.
They were concerned that under environmental laws nobody can take an issue to court unless he can prove locus standi - that is, he must have a direct interest in the matter. So, for example, if the Government was about to allow farming in Kruger Park the Wildlife Society would be unable to appeal to the courts.

The CSIR team says this deprives the public of an important regulatory tool in terms of pollution control laws. Yet if locus standi provisions were "liberalised" it would probably not lead to a stampede on the courts.

Litigation costs preclude cranks from holding up projects simply by going to court, as has happened in the United States.
Sadly, had this report and its quite snappy recommendations come out last year Gert Kotze would have had quite a different image. Now he will not receive the accolade he deserves.





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 the Eastern Transvaal Highveld at the request of
the Department of National Health and Popula－








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dren in this area． Researchers of the CSIR could not find any
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 ＂Mr C B SCHOEMAN：Mr Chairman，a recent
investigation by the CSR into the management
of waste and atmospheric poilution in the RSA，

 If one takes into account that the Eastern
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South－Eastern Transvaal Highveld，that is the
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 *Mr J Chiolé: Mr Chairman, environment



































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Debate concluded.



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 *Mr C B SCHOEMAN: It comes from this
annual report! scientific research. working on assumptions which are not based on behind our monitoring. The hon member is points of departure in pollution as a whole
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## Air pollution not excessive, says Venter <br> CAPE TOWN - National Health De. partment monitoring stations showed clearly that eastern Transvaal air pollution was within acceptable limits, Health Minister Dr Rina <br> Venter said in Parliament yesterday. <br> She said SA air pollution control was based on the best available methods, and the department's inspectorate was not reluctant to prosecute. However, more air pollu- <br> tion control officers were needed. <br> Research had shown that eastern Transvaal air pollution levels were a third to a half of internationally accepted safety levels. <br> Witbank readings were lower than <br> Pretoria city centre and researchers had found no meaningful effects of pollution on the health of schoolchiliren or plants and water life. <br> An investigation into corrosion caused by acid in the atmosphere had shown no negative results. (56) <br> But Joseph Chiole (CP Pretoria West) said the region had one of the worst air pollution problems in the world. Rain with a Ph of four, making it almost pure acid, had been measured. <br> The eight inspectors employed by the department were not enough to look after Vanderbijlpark, let alone the whole of SA, he said. - Sapa.



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## Bulldozers

Regional Services Council bulldozers were sent at 3am today to create a path for water pouring off Karbonkelberg aboye Hout Bay Heights where a fire damaged the slopes on the same day as the Devil's Peak blaze.
A Hout Bay Heights resident said the water pouring off the mountain had threatened houses on the hightest slopes of the suburb.

Mr Melvin Meyer of Neptune Road, Hout Bay Heights, said his dog woke him at 1.50 am and he heard a gushing noise.
"I opened the top of the front stable door and everything outside was floating. I turned on the light and realised I was standing in water," he said.

The raging mud river tore down part of his retaining wall and forced out panels of a concrete wall.

Mr Meyer said the watermark on the retaining wall was shoulder-height.

City Council spokesman Mr Ted Doman said the council had been working on Table Mountain in 15 places since the wind started blowing on Sunday.
"There are problems with mudslides on to De Waal Drive, in Vredehoek and in Fresnaye, but our workers are attending to it."

## Few accidents

Mr Doman said although people who had encountered the mud would not agree, the council was grateful there was less cleaning up to do "than could have been expected after all the rain we have had".
The traffic department confirmed a report of minor rockfalls on the coast road between Bakoven and Llandudno.
Cape Town Traffic Chief Mr Wouter Smit said "relatively few accidents have occured since the rain started last night and only slight injuries were reported".

Mrs Barbara Maguire of Devil's Peak, whose garden and swimming pool were swamped, said it was the second time in 12 years this had happened.
Her mini-car was standing in bumper-deep mud and a guest's car parked in Derry Street showed a "high water mark" about half-way up the door.

In spite of clearing skies today, another cold front is on its way and will hit Cape Town by tomorrow afternoon, according to the weather bureru.

## Hout Bay

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may land $\cos _{3}^{3}-941$ RSC in court

By Julienne du Toit
Earthlife Africa and the Hout Bay Ratepayers' Association are threatening to take the Western Cape Regional Services Council to court to stop them pumping raw sewage into Hout Bay.
Recently the Western Cape RSC rejected a request by attorneys acting for Earthlife Africa and the ratepayers' association to submit the dispute to a professional mediator.

According to lawyer Perino Pama, reputable reports have shown that the present sewage pollution in the sea around the Peninsula as a whole exceeds safe bathing standards set by experts and the Government for when effluent is pumped into the sea by pipeline.
A recent six-monthly report by the Cape Town City Council found pollution levels to exceed these standards by ten times at Mouille Point, and by eight times in False Bay.
The Foundation for Research Development, in a Government report in March last year, highlighted eight danger spots for swimmers in False Bay and two in Hout Bay.

Mr Pama, who represents Earthlife Africa and the Hout Bay Ratepayers' Association, said the response by the Western Cape RSC had been to say that a pipeline discharging raw sewage into the sea was the most viable system.

## Collapsed

This was despite the fact that the Green Point sewage outfall pipeline recently collapsed and caused "untold damage", he said.
The Camps Bay sewage outfall pipeline, according to a press report this month, is in danger of breaking up in high seas and is being shored up with car tyres.

In Peru, a threemonth cholera epidemic has broken out as a result of sewage being pumped into seas and rivers.

American federal legislation forbids coastal cities from considering ocean dumping, and the disposal of sewage sludge on land is becoming a more popular option. This is the system Mr Pama's clients would like the Western Cape RSC to consider.
"Unfortunately, governmental and quasi-governmental institutions which should be protecting the environment for future generations are often the prime culprits, and South African law is quite deficient in'redressing this," said Mr' Pama.

He has received funding and support from Pick 'n Pay, Checkers, the Wildlife Society," the Hout Bay Ratepayers', Association and Earthlife Africa to challenge the disposal of raw sewage by pipeline in Hout Bay.

Mr Pama said the case would set a precedent for similar court actions in the future.

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 Mr Doman said council offi-
cials had known since the huge cleared silted-up streets. Ted Doman said yesterday as Town City Council spokesman Mr Mudslides in Vredehoek had
been worse than expected, Cape

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"The way we are going Professor Moll said yesterday

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An unmistakable sign of the onsct of the Highveld winter is the brown shroud that hangs over Johannesburg and much of the Vaal Triangle in the early mornings.

It's an appropriate time for the CSIR to make public its most intensive study on pollution so far: "The Situation of Waste Management and Pollution Control in South Africa" commissioned by the Department of Environment Affairs.
Among a number of hard-hitting findings, the CSIR objects to the confidentiality surrounding the present system of air pollution control and the lack of legislated ambient general air quality standards. It wants major changes in the way the controlling department - the Chief Air Pollution Control Officer (Capco) - is run.

What standards should be introduced and the economic costs of meeting them are topics worth studies in themselves, according to Petro Terblance, chief medical researcher for the Medical Research Council (MRC). "You've got to be pragmatic. US air standards are very conservative and set to protect the health of the most sensitive individuals."
The MRC is co-ordinating a programme to monitor air quality in Sasolburg, Verceniging, Vanderbijlpark and Sharpeviile. It will soon add Edenvale and Kempton Park to the project which is sponsored by the Department of Health and companies like Eskom, AECI, Sasol, Iscor, EMSA, NCP and SAA.
Initial work carried out by the MRC points a finger at arguably the major source of sulphur and total suspended particulates (TSP) pollution in residential areas - coal smoke from the burgeoning black townships and squatter camps. This is no respecter of municipal boundaries and controlling it poses a serious problem to the practical enforcement of general ambient air standards.
Measuring the pollution to which a small sample of schoolchildren in the suburbs of Vereeniging and Sebokeng were exposed over a 12 -hour period revealed $23 \%$ of the Vereeniging sample exceeded the limit of $260 \mathrm{mg} / \mathrm{m}^{3}$ of TSP compared with $100 \%$ of the Sebokeng sample. Some of the Sebokeng children were exposed to four times the limit which is a US standard.
The reason is the coal stoves used in almost all black homes. There is an intense debate under way in which Eskom argues that, instead of it being forced to spend about


Pollution ... are the controls really effective

R6,5bn on cutting its sulphur emissions, the money should be used to electrify the townships.
The CSIR study suggests it won't be that simple. There are about 2 m stoves in use, increasing at a rate of about 40000 a year. Bought on HP over 24 months, each stove represents an investment of about R5 000 . The CSIR reckons any stoves displaced will be sold to someone else - most likely the squatters flocking to cities and now burning coal in oil cans.
A better solution would be to follow the European example and develop a cheap, smokeless fuel for coal stoves to replace the low-grade coal being used now.
A gloomy situation painted by some experts is that, while heavy industry is spending between $\mathrm{R} 200 \mathrm{~m}-\mathrm{R} 300 \mathrm{~m}$ a year on pollution control equipment, this is undermined by blacks spending about the same on new coal stoves.

Ruling legislation - the Atmospheric Pollution Prevention Act (45 of 1965) - aims at controlling pollution at source through a concept known as the Best Practicable Means which Capco says is the most appropriate option, "provided a few minor shortcomings be corrected."

An example of a major industry often cited for causing air pollution is Highveld Steel \& Vanadium but the group maintains it is working to acceptable standards. It spends R35m in operating costs mainly electricity charges - annually on its air pollution equipment which has a replacement capital value of R 260 m . MD Trevor Jones says the installed piant works to acceptable cleaning standards and reduces stack particle emissions to $150 \mathrm{mg} / \mathrm{m}^{3}$ "of air which still shows as a visible plume of smoke."Surprisingly, Jones says Hiveld does not measure directly what is still going out of its stacks but the condition of the cleaning plant is monitored daily.

The CSIR acknowledges the permit and Best Practical Means system has been effective in preventing major degradation but says it may fail to bring about major desired improvements in air pollution. The CSIR appears concerned that Capco may have too cosy a relationship with the industries it is supposed to be controlling.
The report says it appears there has never been a prosecution for air pollution. It adds that while air pollution is best controlled as close as possible to source, ambient air stan-
dards are required by which to judge success or failure.
The CSIR finds it unacceptable that the Best Practical Means standards are variable and entirely dependent on the subjective evaluation of Capco. Also, Capco is undermanned with eight inspectors to cover the whole country though about 2000 permits for noxious and offensive gases have been issued.

Capco rejects the cosiness charge by saying the success of air pollution abatement cannot be judged by the number of prosecutions but by progress made through close liaison between the control authority and industry.
"Industrial emissions in areas like Witbank, Pretoria, the Vaal Triangle and Cape Town have progressively been reduced by a policy of realistic goals and the cost effective use of funds for abatement rather than expensive litigation," Capco says.

It adds that its system of issuing a notice to an offender, demanding compliance with pollation regulations or face closure, has been effective. Only two factories have had to be prosecuted. Capco concedes manpower is a problem but says all major industrial sources have stack monitors and the results are checked. Hiveld, for one, does not. Which others don't?

Capco maintains it carries out extensive ambient monitoring showing pollution levels are dropping and within acceptable standards. Tell that to anyone having seen, and smelt, what the Witbank, southern Johannesburg and other Highveld industrial areas are like on a winter's morning.
Penalties are laughable with the fine for a first air pollution offence set at a maximum R500. These should be jacked up to realistic levels. That will make smaller firms think twice about chancing their arm but, whether the fine is R5000 or R50000, these amounts are still no financial deterrent to the giant industrial undertakings.
Public pressure is a good way to get at them, by hitting their corporate profiles, and better still is peer pressure. That's why organisations like the Eastern Transvaal Highveld Air Pollution Liaison Committee are valuable - its members include the major polluting industries in the area.
Capco's views on co-operation versus confrontation are entirely understandable. Corporate executives often have a knee-jerk reaction to heavy outside criticism. A balanced, reasonable approach is usually far more successful but, if nothing happens because of corporate inertia or an unreasonable resistance to change, legal action and associated publicity should be applied without delay.
Capco should publicise the issuing of notices to offenders. The watchdog should be seen using its teeth.

Brendan Ryan

Growing public concern on environmental issues has attracted the attention of many organisations. Both the African National Congress and the Pan Africanist Congress recently released discussion documents outlining their stance on the question. Thus far, however, little has been heard from the South African Communist Party as to its position on the environment. To gain a clearer understanding of the SACP's approach, FARIEDA KHAN, of

## the Department of Environmental and Geographical Science, spoke to Garth Strachan of the Western Cape region's working group. <br> CP: How we'll clean up our capitalist trash <br> FK: Does the SACP have an environ- <br> nomic restructuring is going to be

mental policy?
GS: We don't have, at this point, a fully articulated environment policy. FK: What are the reasons for this? GS: We are emerging from 40 years of underground struggle in which the first priority was obviously the destruction of apartheid. Our priorities at this point are to rebuild our legal structures. But in so doing we obviously have to pay attention to the future democratic transformation of South Africa and its long-term socialist transformation.
FK: Are there any future plans to formulate an environmental policy? GS: As from July, which will be our 70th anniversary, the Communist Party will be drafting a new programme for the present phase of struggle. This will obviously include an environment policy and lead up to the adoption of a strategic programme for the transformation of South Africa at our December conference.
FK: Which environmental issues do you regard as especially relevant within the South African context? GS: I can't pre-empt the environmental policy, which still has to be widely discussed prior to its adoption.

However, the guiding principles for the adoption of such a policy are Firstly, we clearly have to protect our
Secondly, the racial and capitalist systems of government have done very little to protect our environment. The extent of environmental degradation here has, apparently, been one of the worst in the world. That environmental degradation has been for the benefit and material been of the small white section of our population and to the cost of the overwhelming majority of South Africans who suffer from the most appalling environment and living con-

$\square$ CLOUDED OVER: Capitalism to blame for massive environmental degradation worldwide.
ditions. The townships themselves are blights on the environment, no to mention the conditions that our working class must work under. Those are some of the principles and perspectives' which would guide the adoption of SACP policy.
FK: You say that the greed underlying capitalism has led to massive environmental degradation in South environmental degradation in south Africa and elsewhere. Surely, in the light of the growing evidence of the massive exten which has taken place in Eastern European countries, this is a somewhat short-sighted view?

GS: It is clear that capitalism alone hasn't been responsible for the deg radation of the world's natural environment. However, we need to blame capitalism. First and foremost, capitalism as a system is guilty of the rape of our natural environment - there are so many examples of that. But we also need to accept that ... the Soviet Union in particular has been guilty of serious perhaps even criminal neglect of environmental questions in Eastern Europe. Those of us in South Africa who support socialism need to ex
amine the very serious errors made in socialist countries regarding economic planning in order to be able not only to compete economically with capitalism, but to compete in a way which serves the interests of wherking people - incluaing through adequate protection of the natural environment

Having said all that, we are still convinced that socialism and a so cialist economic reconstruction of our society does have the possibili ties for the protection of the envi ronment and that the serious errors of the socialist countries were a distortion of the fundamental democratic character of socialism which led them to making the kind of mistakes they made.
FK: In undertaking post-apartheid economic reconstruction and in attempting to redress historical intempalities don't you think that South equalica will face similar problems Arrica will face similar problems strined industrialisation and develsraned could have on the environment and natural resources?

GS: Clearly, in efforts to democratise and reconstruct our society, eco-
primary - an economic reconstruc. tion which doesn't only serve the interests of a few but will begin to actually address the very serious imbalances which a century of capitalism and exploitation have brought to us. That's going to be a massive and long-term programme We have obviously been left a legacy of a terribly lopsided and one-sided economy and in attempting to restructure, there will obviously be a temptation to answer the immediate material needs of the massively underprivileged and exploited section of our population. Clearly there will have to be a very careful balance. It should be realised that the restructuring and development of the economy which serves the short-term interests of the mass of our people through environmental degradation, leads to the long-term suffering of our people and therefore will be counter-productive.
FK: How do you see the future role of the SACP within the environmen tal arena? For example, is your organisation amenable to iaison with mainstream
organisations?
GS: The SACP would very much like to develop strong working relation ships with all democratic organisations in civil society. One of the mis the Communist Party failed to 10 the Commanist Party falled to re cogise for itself in civil socity w a role for itself in civil society. We would like to see a dynamic and ac tive civil society which only not exclude a multipheity of organisations, but would activel seek to encourage them
We would like to see the development of a much stronger environmental lobby in South Africa, with independent positions and constitu encies. We would hope we could de velop a strong working relationship with such organisations.







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| Sasol ash-heap falls,ster 25791.'contaminates' 56 ) |  |
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| THE collapse of part of an ash heap at Sasol's | JAMES CLARKE |
| huge Secunda petro-chemical plant in | until June 14 to reach |
| the Eastern Transvaal | him. |
| Highveld has caused a | Mr Reynolds said "I |
| slug of agricuiturally | cannot alter my sched- |
| zardous water to enter | ule because that will af- |
| the Vaal system. | fect the harvesting time |
| And it has triggered a | which is critical. I stand |
| toe-to-toe fight between | to lose R200000 - and |
| Sasol and farmer Paul | that would break me." |
| Reynolds on the Water- | A Sasol spokesman |
| val River which feeds | told the Star "there is no |
| the Vaal. | chance that the brackish |
| Mr Reynolds is | water presents any dan- |
| wnstream from the | ger to crops'. He said |
| ash heap. Pollution | the alkaline water "acci- |
| ruck just as he was | dentally seeped through |
| about toplant wheat and | an ash heap". ". |
| was preparing land for | He said a full investi- |
| potatoes. | gation revealed no |
| Sasol technicians told | threat to crops or soil. In |
| him to go ahead and irri- | a written statement he |
| gate "and see what hap | said Mr Reynolds had |
| pens". | been using the water |
| "I refused," he said | when Sasol visited him |
| last night. "It would ruin | yesterday. |
| my soil. It would be the | Mr Reynolds said: "I |
| equivalent of dumping | was forced to use it on |
| around 12 tons of salt on | my rye grass which is |
| each hectare." Experts | already growing. It's my |
| at Potchestroom and | winter fodder and I sim- |
| Pretoria universities | ply have to risk irrigat- |
| agreed. | ing it." |
| Sasol told the farmer | Sasol said farmers |
| would release a slug of | downstream need not |
| fresh water to flush the | worry about the pollu- |
| river but it would take | tion. |

## Interdict sought

 on sewage plansCT $27 / 5 \mathrm{al}$ Municipal Reporter (S8)
ATTORNEYS for the environmental group Earthlife Africa were instructed to seek an interdict against the Regional Services Council to stop raw sewage from being pumped into the sea at Hout Bay.

Funding for the action has come from Pick'n Pay Checkers, the Wildlife Society and the Hout Bay Ratepayers' Association, attorneys said yesterday.
No court date had yet been set for the interdict.
Recently the RSC, which is building a R7m pipeline $1,8 \mathrm{~km}$ out to sea from Badtamboer beneath the Sentinel, rejected a request by attorneys acting for Earthlife Africa and the Hout Bay Ratepayers Association to submit the sewage dispute to a mediator.
The RSC says a pipeline is the most viable solution to the problem of sewage disposal.
Earthlife Africa claimed government and quasigovernment institutions "which should be protecting the environment" were "often the prime culprits" in not doing so.
It said South African environmental law was deficient as individuals could not take legal action against polluters, and theyseldom had enough money to bring applications in the Supreme Court.
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 The MINISTER OF NATIONAL EDUCA－
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 （1）Whether，with reference to his reply to
Question No 16 on 23 April 1991 ，the
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 the environment－I want to ask for when the
 $\dagger \mathrm{Mr} \mathrm{J}$ CHIOLE：Mr Chairman，arising from the （3）No． meetings of the main committee not considered necessary to hold more place at subcommittee level，as is pro－
vided for in section 14（4）of the Act，it was deliberations and co－ordination took
（2）Yes．In light of the fact that most of the to 30 April 1991. ne meeting was held 1 April 1990



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 Committee for Environmen completed during the first half of 1993.


 （2）Yes：The Hoedspruit town area was auto－ （a）and（b）Fall away；

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Panel power . . . most of this Karoo farmhouse's electricity needs are supplied by solar panels and batteries.

## The sun has ennugh power for Africa <br> black and white TV set.



But Dudley Filippa of Johannesburg asks: "Who needs pylons?'

He offers as proof the above picture of a well-lit Karoo farmhouse many kilometres from a powerline.

Mr Filippa, of BP Solar, says that for R40 000 one can install a system, which uses solar panels and storage batteries, to run everything in the house except the kitchen stove and hot water system.
"It can run a colour televi sion set, all the lights, the dishwasher, washing machine, refrigerator, power drill, welding machine. .
"Maintenance is negligible. The batteries last five years and the photovoltaic panels 20 years."
On a much smaller scale a single R1 000 panel, the size of a desktop, runs six lights ( 15 W fluorescent tubes) all evening, or three lights amd

The R1 000 battery will last five years. That's the main running cost. It works out at R16 a month - a third of what farmers normally spend with diesel generation.
Mr Filippa says solar power is more reliable than wind power because the sun shines most of the day and provides energy even in overcast conditions.

JAMES CLARKE

## River of sludge (6) hits menassisfan Vredehoek

## y SHARKEY ISAACS <br> \section*{Staff Reporter}

ROADS in Vredehoek were turned into rivers of sludge af ter heavy rain caused a topsoil washaway down the slopes of Devil's Peak.

It was the second mountain soil washaway in a week.

Water spewing from a blocked stormwater gully at the top of Derry Street yesterJay carried thick mud, stones logs and branches into streets amid growing fears of a major landslip from the fire-denuded slopes of Devil's Peak.

A river of debris gushed towards the Aloe Street home of Mr Ivor Hayward, manager of the Greenmarket Square fleamarket, about 1.45 pm yesterday.
"The whole street was a river of sludge, water and debris, including big rocks. Part of it came towards my house as it hit the corner kerb.
"I quickly repacked paving stones to block its path and Enged to divert some of it h:: muddy streams still filtered through into my yard. A municipal worker also came to my aid and he helped further by digging a trench.
"It was really incrodible There was nothing háppening when I returned home about 1 pm after packing up at the market and 45 minutes later there was this flood."
Mrs Barbara Maguire, also of Aloe Street, found her swim ming pool awash with mud for the second time in a week.
She said: "The city council workers have been marvellous. The trouble is they should never have allowed people to build so close to the mountain because it spoilt the natural flow of water."

Large stones were also strewn across the intersection of Derry Street and Bella Donna Avenue

Parts of Derry Street, Bella Donna Avenue and Aloe Street were closed to traffic while teams of municipal workers cleaned up the roads and removed a jammed log from the blocked gully. Others diverted floodwaters with sandbags.

City council spokesman Mr Ted Doman said topsoil, washing down the mountain despite efforts to stabilise the slopes after February's fire, had carried the $\log$ into the gully and blocked it.

He said: "It was all over in 15 minutes.'

- Last week another log carried by a more severe washaway jammed a gully stormwater pipe of Aloe Street, sending a continuous jet of mud and rubble into the area.
- More mud - page 2.


Picture: DOUG PITHEY, The Argus: TOE-SQUELCHING MUD: City council workers leave their mark in the silt that clogged Derry Street in Vredehoek yesterday after heavy rain washed topsoil off the slopes of Devil's Peak:


Pictures: DOUG PITHEY, The Argus SILTSLIDE: Water laden with silt is diverted by sacks filled with sand, as workmen struggle to clear a blockage caused by a jammed log in Derry Street, Vredehoek.

## Plan to curb Devil's Peak washaways

## By CLIVE SAWYER <br> Municipal Reporter

QUICK-GROWING annuals whose seeds were sown on Devil's Peak after the first rains may save the slopes from further washaways of silt, say city engineer Mr Arthur Clay ton.

Contacted by The Argus as more soil choked Vredehoek streets in yesterday's downpour, Mr Clayton said it had been expected that stormwater would carry heavy loads of silt into the area in the wake of the February fire.
However, it was incorrect to call the washaways "muds-
lides", he said.
"If a thick layer of soil is saturated, then you would get mudslides, and while there is a possibility of this later in the year, it has not happened yet," Mr Clayton said.

Anti-erosion measures had stood up well to the battering of the first winter rains.

Despite last week's rain which brought silt into Bella donna, Derry, and Barnham roads in Vredehoek, moistur had not soaked deep into th soil.

The mixture of renostervel and annuals seeds which ha been planted would also pa off, Mr Clayton said.



PRESSURE increased today for the owners of the damaged bulk carrier Kashee to transfer its cargo of iron ore as public fears mounted about the threat it could pose to False Bay.
The giant vessel anchored in the bay more than a week ago after its bow had been badly damaged in a storm off Cape Point. There is a $5 \times 15$-metre hole under the waterline and the Kashee is down by the bows.

Department of Transport officials say the vessel is safe in the relative calm of False Bay, but they believe she could break up in the open sea.

However, they are upset that the owners have taken no action to resolve the problem. Today they were putting pressure on them to transfer the cargo to another vessel.

## Catch-22

A representative of Four Winds Shipping of Cyprus, the owners of the vessel, arrived in the city at the weekend to try to resolve the Catch-22 situation.

Repairs at sea will be difficult and expensive and could involve the time-consuming transfer of "the iron ore. But leaving the relative safety of "the bay to reach a harbour for offloading and repairs could be riskier... +2
"If the" Kashee steams out to seadithere is a good chance she will break up and sink," said Captain Bill Dernier, an officer in the Directorate of Shipping (Department, of Transport).

Departmental spokesman Mr Don Boyd said an ultimatum was being prepared. "Today sometime we're going to confront them," he said.

## Legal advice

Assistant Director of Shipping Mr Cecil Coetzee said legal advice could be sought.

He said the vessel was not in danger of sinking but his department wanted to force the issue because the owners were taking their time and "treading water".

The department wanted the process speeded up because "one does not want a big ship like that lying there indefinitely',


THE bulk ore carrier Kashee lies low in the water in False Bay.
$\square$

Captain Dernier said an "ultimatum is too harsh a word" but the department wanted the ship outzof False Bay and "pressure. was being applied to get the owners to transfer the cargo so repairs could be done.
The Kashee's bow has dipped since her arrival in the bay, sparking public fears that she might founder. But a spokesman for salvors Pentow Marine said her pumps were working around the clock to get rid of water

## Moved closer

She had not "settled any more" since Thursday, he said.
On Saturday the Kashee was moved closer to shore, about three kilometres east of Fish Hoek, so that she could be afforded "the full protection of the bay".
Captain Dernier said this was tor the safety of divers and to stop plates from flexing and tearing further.


## Boycotts aid conservation aims <br> :Boycotts are becoming <br> at the whole marine en-

 powerful weapons in the whands of conservation groups.When Botswana recently decided to dredge the Okavango Delta mpartly for a new diamond mine - a threat to call a world boycott of diamonds killed the plan. A worldwide boycott of ivory by Western nations has brought prices tumbling - and now tourist boycotts of Mauritius and Thailand are being considered.
South Africa's Dolphin Action and Protection Group (DAPG) - a pressure group based in Cape Town which looks
vironment - has warned that a tourist boycott of Mauritius might be called unless Mauritius stops aiding Taiwanese trawlers which carry driftnets.

The DAPG has pub lished the acitivities of the Taiwanese trawlers at Port Louis, Mauritius, saying tunny, caught in driftnets - also known as "walls of death" are being offloaded.
In helping the driftnet fishermen, Mauritius is negating South Africa's recent ban on boats carrying driftnets from entering its waters.
Nan Rice of the DAPG
says the nets are banned over most of the world and their use is stripping the seas around the South Atlantic and Indian Ocean.

Meanwhile the World Wide Fund for Nature (WWF) in Switzerland is calling on tourists not to visit Thailand following evidence the country has become the main laundering point for illegal wildlife products and is thus aiding the extinction of elephants and rhino in Africa.
"Thailand is the wildlife supermarket of the world," says the WWF. JAMES CLARKE


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 environmental degradation leads Haile Selassie，Colonel Mengistu
THE dramatic role of the pling factional disagreements and
full－scale wars is the focus of a new and ground－breaking report
 Written by 11 Sahelian writers， it sounds a note of warning in a
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## Overseas trading pärtners may demand better 'green' standards from SA exporters

AgGUC $8 / 6191$ BLAISE HOPKINSON, Business Staff

SOUTH Africa could lead the Afri- countries had become a major issue can continent in the "green" revolution and become a leading world player on the environmental stage, says a visiting British academic.

Mr Peter James, a guest-lecturer at the University of Cape Town's Graduate School of Business, said this week even if South African industry didn't choose to pursue high environmental standards for itself, its trading partners might require them.
"Many South African exporters will find that their manufacturing facilities will be subject to an environmental audit by their overseas customers," he said.

Regarding the debate of whether transitional South Africa could afford international environmental standards Mr James said it was a question of whether the country could afford not to have them.

With the environment a key issue in international diplomacy the return of South Africa to these circles meant it could have a strong voice and become the spokesman for the continent.
Concern as to the management of the environment by many African
amoung world powers and the need to develop a trade-off between economic growth and environmental protection was crucial.

Mr James warned that South Africa would have to comply with international standards and would also have to adapt to the "internationalisation" of environmental issues.
"South Africa is quite far behind many of its trading partners as far as environmental issues are concerned but this, in itself creates opportunities," he said.

While many very established industrial nations were locked into "bolt-on" solutions to, for example, pollution, South Africa could "leap' frog" this and bring in new, environmentally acceptable technology from the start.
Other opportunities existed for South African manufacturers to find environmental solutions which would be applicable elsewhere in the world, particularly in the mining field.

Mr James, a senior lecturer at the University of Stirling, is in Cape Town to teach at the GSB's Retail Distribution Programme.

## Directory for green fingers <br> GREEN'groups who want to communicate their <br> the channeled into environmental issues on

activities and network with other groups locally and internationally can do so through the next update of The Green Pages, a comprehensive directory of organisations, groups, publications and projects involved in environmental issues.
All those involved in "green" issues are invited to list their activities, services or projects for free in The Green Pages
Directory project director Bev Geach says: "This year's Green Pages will be a major networking resource comprising 200 pages of information.
"Our data-base already contains comprehensive information on over 1000 groups, organisations and projects, as well as a wealth of information on services and resources. The directory will take a holistic, integrated approach to the environment, and will include a wide variety of categories, with special emphasis on education, sustainable development and grass-roots projects," she adds.

The Green Pages will publicise the energies

Southern African sub-continent, says Ms Geach, and offers an opportunity for all those involved in green issues to communicate their activities and network with others not only locally but internationally as well.

The Green Pages directory will include a comprehensive listing of major international environmental groups.

Listing categories in the directory will include: alternative energy, animals and anti-vivisection, botanical and horticultural, conservation and wildlife, environmental development and rural advancement, economic/social, educational, farming, fishing and forestery.
Also included are government/parastatal or ganisations, medical, outdoor, publications and electronic media services, new age, political, private sector initiatives, science and research and women's groups.
For more information, telephone (011)
1712 .

## Smog in city tov high (56) again

## Municipal Reporter

POLLUTION indicators monitored daily by the Cape Times yesterday exceeded national guidelines for the fourth time in four weeks.

The highest hourly nirogen oxides (NOx) reading, at 9 yam yesterday, was 2316 - wel over the 1504 guideline Also at 9 am , the nitro-
Also at 9am, $\mathrm{NO}_{2}$ ) reading was 377 , just one microgram per cubic metre crogramper guideline above
level of 376 .
Dr Michael Popkiss, Cape Town's Medical Officer of Health, said air ficer of Healion had been evident on 15 days between April and June last year, with photo-chemical with phobably occurring smog probab of those days.
"We will have to start looking at ways of stopping the pollutants from getting into the air, as one can't always rely onse the weather to disperse it," he said:
it," he hoped a commission of inquiry would be held into what should be done.
"Without anticipating "Without 1 think we its findings, I thisk may need legisiations that catalytic convert to should be attach vehicle exhausts. Dr Popkiss said that within the next year the council woud acque equipment to meas to different pollutants to indicate the health polassoion.

## Transvaal ranks among world's dirtiest regions B ID Millalit. darius sanai

EVERY city has its pollution problems, to the extent that motorists in Tokyo and Mexico City can buy air from vending machines and cyclists in many capitals wear filtering masks.
The municipality of Los Angeles, prompted by its photochemical smog, leads the world in pioneering car exhaust regulations.
But the Transvaal should not be one of the world's most polluted areas: the concentration of industry to surface area is lower than in many other industrial regions.
Rhineland-Westphalia in Germany, the West Midlands in Britain, the Lorraine in France and areas in Ohio and Pennsylvania in the US all have higher concentration of heavy industry than the PWV area.
The relative lack of cars and the good "drainage" of pollution on the Highveld provide further evidence that the region is more polluted than it should be.
One expert points out that the entire car population in SA is less than in the metropolitan area of Los Angeles.
Many major polluted areas, including Sheffield, Nancy, Milan, Cologne-Essen, Los Angeles and London, are in smog-inducing basins.
The reason offered by government for the thick smoke in the Transvaal has been that the pollution is highly visible, emanating from coal-fires in the townships.
Coal fires were outlawed in London in 1948. In SA many towiship residents do not have a choice as their homes are not electrified.


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## CITY/CAPE

## Row looming over proposed dam <br>  <br> Dr Neethling said a dam in the

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THE United Nations has at last agreed to consider South Africa's argument for the Kogelberg to be declared a biosphere reserve.
Dr Johan Neethling of the Directorate of Nature and Environmental Conservation said he had heard the United Nations Educational. Scientific and Cultural Organisation (Unesco) would consider the application for the area to be given this special conservation status.

He said South Africa had tried for years for United Nations' permission to apply, but for political reasons this had always been denied.

However, the breakthrough brings the directorate into direct conflict with the Department of Water Affairs which wants to build a dam in Kogelberg reserve to supply much-needed water to the Cape Peninsula and Dr Neethling believes a confrontation is looming.

In biosphere reserves, a holistic approach is made to conservation which emphasises the interdependence and harmony between man and his environment.

Dr Neethling said it provided for balanced conservation in developed areas and this was exactly what the Kogelberg needed. It would mean community involvement from towns such as Rooi Els, Pringle Bay, Betty's Bay and Kleinmond which fall in the proposed Kogelberg conservation area.
The heart of the Cape floral kingdom would be destroyed if a dam was to be bult, said Dr Neethling.
The directorate would be failing the public, the taxpayer and its duty if it sat back and did not highlight the problems of constructing a dam in the Kogelberg, he said.
It would constitute an irreversable act of destruction and one which could lead to international criticism of South Africa's inability to protect its natural environment.

Kogelberg would lead to deterioration in water quality, increased development which would increase threats of fire, and spreading of alien vegetation.
It would destroy recreational possibilities, be unsightly, occupy the core of the proposed biosphere reserve and rob the Kogelberg of all its exclusive qualities as a wilderness area.
Although a dam in the reserve would be the cheapest option for providing much needed water for Cape Town, it would provide only enough for 10 years, he said. "We will then have to find new water resources and the Kogelberg will have been destroyed."
A spokesman for the Department of Water Affairs said it would be a pity if certain parties were to stir up emotions over the proposed dam in the Kogelberg prematurely.
"We are busy organising a meeting next year where all concerned can state their views and where an acceptable solution can be worked out without damaging nature in any way."
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Debate concluded



 The fact of the matter is that this Government
puts one question above all others，namely what Namibia





 ation．That party is not doing so The party which the inhabitants of Walvis Bay fully into consider－ ＊The MINISTER：Mr Speaker，the simple fact is
that this Government is takng the interests of ＊Th MinISTER：Mr Sper， to apply it．The hon the Minister may proceed ask hon members to bear that ruling in mind and nicknames or shout them out across the floor I ruling to the effect that hon members were not to must resume his seat A few years ago I gave a ＊Mr SPEAKER：Order！The hon the Minister do that the political party in that area ．．． ＊The MINISTER：They know just as well as we ＊An HON MEMBER：Give us a Pik show then！
 Mr Speaker，there is nothing to which I really ＊The MINISTER OF FOREIGN AFFAIRS： boundaries of the colonial time nulst remain．
［Time expired．］ on South Africa＇s side，because Africa said the In regard to Africa，too，this argument is surely and as from 1975 there are also points in Pretoria has been measured on Church Square since 1959 tional information Smoke and sulphur dioxide normal and internationally accepted standards． we take great pains to keep these levels within ber listened to what I said，he would realise that HThe MINISTER：Mr Speaker，the hon mem－
ber＇s question astounds me．Had the hon mem－ ment done to reduce these exceptionally high
levels？ $\dagger$ Mr J CHIOLÉ：Mr Chairman，arising from the
hon the Minister＇s reply，what has the Govern－ Smoke： 25 soiling index units per cubic
metre．
 nual winter averages are： （c）accepted international safe levels for an－ and 1965 and age for smoke concentration during 1964 ？
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winter average and
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 5．Mr D H M GIBSON asked the Minister of
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'Green lung' in Gardens threatened by purchase of square by developers By CLIVE SAWYER Muniçipal Reporter (56) ARG $126 / 91$ HOPES of preserving a "green lung" in lower Gardens may be dashed if the City Council does not finalise a deal to buy Dunkley Square by the end of the month.
Negotiations between the council and the owner of the square have stalled over the price. The of theil jet aside funds last year to buy the square, next to Barnet, Wandel and Dunkley streets.

However, if the deal is not finalised by June 31 , the land could be bought by private developers.
"At the moment the square is untidy and derelict, with dust, rodents, rubbish and vagrants," said Lower Gardens Civic Association spokesman Mr Richard Pooler.

Residents had been pressing the council since 1982 to preserve the land as an "arboreal delight". Excitement greeted plans announced last year to buy the square to turn it into an attractive Chel-sea-style park with parking space.

Mr Pooler said he was "fed up" because the council appeared to be dragging its heels.
The square would not be suitable for commercial development because it was too small.
cial development
The land is owned by the Ladies' Christian me which backs on to the squảre.
Home, which backs for the home in said he
An accountant acting the matter and referred incould not comment on the matter and Howell Edquiries to charman until the end of the month.
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# Pollution threatens ${ }^{\text {crigbal }}$ Pollution threatens $(6)$ the upper Liesbeeck 

## By JILYAN PITMAN

A SIGN has been erected at the Liesbeeck River near Bucksburn Road, Newlands, which declares that swimming is not permitted in the river because of pollution.

Mr Barry Berkovitch, a resident in Newlands who often walks in the area, said: "I would like to know why the council put up the sign in the first place - does this mean it has now discovered the river is polluted, or has the river become more polluted? Can the river be polluted so far up?"

Professor Gerrit Marais, professor of water resources and public health engineering in the department of civil engineering at UCT, who lives in the area said: "Swimming here is probably safe because the water is being renewed all the time, but the council is quite right in putting up the sign as there is always a risk."

Profestor Marais added that all water soirces rúnining through densely inhabited areas would be polluted and" conntaminated in some way.-
"Human and animal faeces are always a problem. These get
washed into the water at intervals by the rain and if the river is not flowing strongly bacteria breed. Fortunately, the Liesbeeck flows fast at times."

## Student research

Professor Bryan Davies, profes sor of zoology at UCT and director of the Freshwater Unit at UCT, who lives in the area, said something new was happening to the river system there.

He said: "The river is highly perturbed at the moment and the reasons for this are not clear. A detailed anaylsis needs to be made."

Professor Davies said his second-year zoology students, who studied the river every March, noticed this year a significant drop in insect species. Fly and dragon-fly larvae, the normal constituents of a healthy system, were absent above De Waal Drive.
"This was prevalent particularly between Kirstenbosch gardens and De Waal Drive. This was the first time in the 10 years we have been investigating the river ecol-
ogy that my students recorded this. Perhaps herbicides and insecticides are responsible, or the indigeneous vegetation along the river banks is being disturbed.
"The worst place for faecal contamination is just above the Josephine Mill where people have lived for a long time. The council is quite correct to erect the sign - the water is indeed polluted." Professor Davies added that the presence of trout was one of the causes of problems in the river: "Trout are voracious predators which feed on insects They should not be there in the first place - they have destroyed unique animal communities in the river. Anything that is not indigenous will alter the delicate system."
Mrs Joan Kantey, councillor for the area, said: "One can't accept pollution as part of urbanisation. Walks should not be advocated along the Liesbeeck until this problem has been addressed."

## Rivers in 'bad shape'

She said: "Vagrants who live on the banks along the Liesbeeck River in all suburbs should be moved: every suburb should have a night shelter. Pollution by dogs is a subject we should address as well."

Mr Bill Harding, a senior officer in the scientific services branch of the city council, said: "The rivers along the Peninsula are in bad shape. Everyone must help change the situation since it is everybody's bad housekeeping that has caused it. The public should-report any kind of pollution tolus so we can follow upion the matter,"

Mr Owen Kinahan, chairman of thé mill mánagement committee of the Jósephine Mill int Newlands; said: "We are concerned about human excrement below the Westerford 'bridge, the" pungent effluent from ohlsson's Breweries and the general pollution from the rugby crowds."

One resident in Newlands wanted to know where the Pietmy yrous had gone. Has pollution killed'óff this shy, sensitivé bird which heralds summer in the Whape, or has it been driven off by the building operations that constantly take place?

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## ${ }_{\text {smog question }}^{\text {ci.1blal }}$ <br> Edgemead. She rejected clased no danger to that the smoke posed no action be health, and demandedution by a petrol taken to curb the pollution in the area <br> and a fertiliser company <br> The Advisory Committee mance "a commend that the council commend thate school at UCT A report post-graduate pollution monitoring. A report this week suggested that urged to apof National Health be urged into the point a commission of inquiry air pollupoint a commission of photochemical air pollution. <br> City smog levels on opposite page yesterday that cheing chest local schools were experiencoot that is problems because of biack soothasig and descending on houses in Bothasig and

> Plea to unións around the world ${ }^{50}$
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THE Brussels-based International Confederation of Free Trade Unions has urged union movements throughout the world to ensure that each day becomes environment day.
Speaking on theUnited Nationsdesignated World Environment Day, ICFTU general secretary Mr John Vanderveken said environmental protection could only be achieved with the full participation of workers and trade unions as equal partners with governments and industry.
The ICFTU official, in a statement to Sowetan, said: "The GuIf war showed the environmental consequences of naked military aggression by another dictatorship in the Middle East.
"It is no mere coincidence that the countries with least respect for human and trade union rights are overwhelmingly the ones with least concern for the environment," he said.
Vandcrveken said trade unions in the frontline and the battle to protect the environment had to be fought all hours throughtout the year. Sowetan Reporter.





## These pollution views <br> . are decidedly off-putting

A. GOVERNMENT spokesman gave a business reporter this week a number of views on air pollution which deserve scrutiny.
Two other men, one with Iscor and the other an academic, also repeated some popularly held views among those who should be calling for cleaner skies.
The points the three made:

- There are no plans to cut air pollution levels "drastically" as they were within safe limits.
- Iscor's pollution may be very noticeable, but,Iscor has to care for its employees.
- Pollution looks worse than it is.

The truth is we don't know what air pollution is doing to us because there is no data. We do know that boys brought up in places such as Witbank appear to be, on average significantly 'shorter than platteland boys. And we do know acid rain is beginning to damage forests and corrode concrete and steel.
But we do not know what it is doing to us ...
A recent CSIR report says the Department of Health employs no lawyers and has never prosecuted anybody under the 1965 Atmospheric Pollution Prevention Act.
In fact, if it were not for Eskom, there would be almost no continuous air pollution monitoring going on anywhere in South Africa.
The larger industries are allowed to keep secret all that they put up.

their stacks - and the man who is being paid to look after the public's health, the chief air pollution control officer, would actually be committing a criminal offence if he revealed what the major industries are quietly putting into the air we breathe.
To say there is no need to curb pollution because it is at safe levels is dangerously shortsighted and I wonder if the department can be forced, through the courts, to do the job we are paying it to do?
One must also consider this: at the moment we are in a pretty deep recession with many Eskom power plants closed and many industries ticking over. When the economy picks up we could end up with an Eastern European atmosphere.

As for Iscor saying it cannot cut pollution because it has to care for its employees - this is rubbish. Its employees at Vanderbijlpark and Pretoria West work and sleep in a decidely unhealthy atmosphere.

And as for saying "pollution looks worse than it is" - the most dangerous pollutants are the invisible, and secret, ones.

## February mountain <br> (56) CT $15 / 6 / 91$ fire 'to cost R1m'

## By CHRIS BATEMAN

IT will cost over R1 million to "rehabilitate" the charred Devils's Peak and Table Mountain slopes after the devastating fire which consumed over 230 hectares of fynbos, threatened homes and choked the city bowl on February 8 this year.

This was confirmed yesterday by town clerk Mr Donald Geyer, who said the initial cost of shoring up dongas and preventing mud slides had been R600 000.
"We need at least another R200 000 over the next few months to continue this preventative work," he added.

If operational costs of clearing mud slides, unblocking drains and sewage pipes were added the figure could easily exceed R1 million, Mr Geyer said.

Present work by the parks "añd forests, sewage, roads and cleansing departments concentrated on the stabilisation of the mountain.

The entire project was aimed at
complétion by spring.
The director of parks and forests, Mr Peter Rist, confirmed yesterday that a council disciplinary hearing had found Signal Hill fire watchman Mr Nicolaas Resandt guilty of failing to report the fire. He was given a severe reprimand.
Mr Rasandt, whom city ombudsman Mr Granger Heugh found was either asleep or not at his post when the fire broke out, has been transferred to a mountain rehabilitation team.
Mr Rist denied that Mr Resandt had been reinstated because of "union pressure".

Senior city council officials declined to comment on what improvements were being instituted to improve the council's fire watch system following severe criticism by Mr Heugh.

However, Mr Geyer said he would comment more fully on a detailed in vestigation into Mr Heugh's recommendations in a fortnight's time.
Staff Reporter






 There are more rats around because there's
 Rats romping on the rocks across from the
President Hotel at Sea Point have shocked "I told her: "They're not squirrels madam,
they're rats." pened to the fluffy hair on the squirrels' squirrels. A park attendent told the story of
the worried woman who asked:"What's hapTake a walk through Parliament's Company tween the debris left by litter louts. Take a stroll along the Peninsula's beaches
and ten to one you'll be picking your way betion in layers over industrial and residential
suburbs alike.
 ter garbage. Take just one step from the Argus building,
into either St George's Mall or Berg Street
 campaign has been launched, with threats ing in the latter two - and that's
litter.
 picture book Stellenbosch or pris-
tine Somerset West and you'll be Take a walk through central
Cape Town and then do the same at
 garbage is tipping the balance the rising tide of grime and to səsnid əut 1suiege sumpiqoid Town's pollution, litter and rat When you weigh up cape

 turn on you and attack, they have teeth like
razors; a rat can jump three metres."
He said he had been down into the city sew"Don't ever corner rats," said pest contro woman restaurant worker was treated for
rat bite after cornering one in the kitchen. And at the central public health clinic a
 "There was a nasty one, a 10 -day-old baby cently of two small babies lying in cots side But the head of the truama unit Dr David
Bass said there was the unusual situation re At the Red Cross Children's Hospital the has been a major factor in keeping rats on the
streets, according to pest control firms. The bonus spell of Indian summer weather O7 soiutiddoxp aut әneə pue pooj soj saeq pue
 In central Cape Town, the growing number
of hungry and homeless street people, estiple to clean the streets. Some streets are
swept only once in three months, or even six
months. which have resulted in fewer and fewer peo-
ple to clean the streets. Some streets are A problem as big at the litter louts, said
municipal officials, is the financial cutbacks vice, street sweeping and litter gathering,"
suggested one health department spokesman. pay the ine. Ine way to get the munity ser-
home is sentencing them to commung
vice, street sweeping and litter gathering," because they simply don't have the money to
 spokèsman, but fines or the threat of commu-
nity service will drive home the message
harder. all very well, said a health department
 He said fines were now on the cards for of-
fenders. "We will speak once, may be twice,
then we will be issuing fines." determined to lick the problem of littering.
He said fines were now on the cards for ofGARBAGE



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\text { The Argis } 8 / 6 / 91
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CONTRAST: Recently restored St Stephen's Church in Bree Street. In gross contrast to the pristine paintwork and newly-pointed masonry is the debris and human excrement left by drunks who live behind the church.

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## Checking the <br> environmental accounts Star 1916191 <br> $\therefore$ Firms which are concerned

". about their impact on the regional or global environment are now calling for annual "environmental audits"
Some firms are going to the extent of undergoing voluntary annual environmental inspections.

These are conducted by external environmental auditors who can make the findings public - just like public companies have to do with financial audits

But, warns Eagle Bulletin; a South African environmen-
tal newsletter for professional environmentalists's some firms are being ripped off by underqualified "auditors".
It advises firms which want audits to first set corporate objectives or a corporate environmental policy.
Once standards are set. the auditor can devise environmental balance sheets.

The simplest type of audit is known as a "site audit" and simply checks progress on a problem site. An "activity audit" checks an activity throughout a group of com-
panies or at different sites; a "corporate audit" looks at an entire group's performance against set objectives, and an "issues audit" checks a corporation's impact on specific issues such as, say, the greenhouse effect, or on rain forests or Third World re. sources.
The newsletter recommends various publications to flrms before they go for environmental auditing. (Eagle Environmental, PO Box 3266, Johannesburg 2000). TRENDS REPORTER

## Controversial sewer at Green Point to go ahead <br> of the grasssed area north-east of Green Point

 WORK has begun on the R20,5 million project to reinstate Green Point's controversial marine outfall sewer.The pipe was damaged in a severe storm in July 1989.
There was fierce opposition to the project by members of the public and enviromentalists af ter two failures of pipelines there in the past.
However, the city council eventually decided last year to replace the damaged outfall pipe rather than build a land-based treatment plant. This followed an intensive study by specialist consultants and reviewing all available treatment options. Public opinion was also widely

The pipe will be trenched into the seabed rock and be entirely encased in concrete, secure from wave action and the dragging of ship's an-
chors. ors.
Work is due to be completed by mid-1993, but the council will be able to use the partiallycompleted pipe by the middle of 1992 to discharge waste water one kilometre from shore.

Underwater construction will begin in ear nest in September as weather and sea conditions improve.
The contractors will occupy a small portion
lighthouse between the seeast of Green Point lighthouse between the sea wall walkway and Thevent adjacent to Beach Road.
the impact of the have promised to try to limit the impact of the project on the community.
The walkway along the beachfront will also be obstructed briefly while a concrete pumping line in installed.

City councillor for Green Point, Mr Clive Bilski, said: "We have a system we feel is secure and are confident that this is the best and cheapest method.
"The main reason $I$ voted for it is that the old pipe worked very well - it was because of the design and stormy conditions that it failed.
"I feel it is the best solution for the money involved. A land-based system would cost at least twice as much. It would need far more maintenance and personnel to supervise it and would therefore be costly not only from a capital point of view."
He said the land-based option would have cost the ratepayers a fortune.

Rates throughout the Cape Town area would have to be put up by at least five percent in the event of such a project, he said.

Mr Bilski said there would also be the problem of where to put such a plant.
"Imagine having it on Green Point Common.
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who maintain that mining the St Lucia dunes





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taken into account, the estimated

The MINISTER OF WATER AFFAIRS AND
FORESTRY: 3580ta
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pressed in cubic metres per second?










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QUESTIONS
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2 February 1990 and up to and including him on a personal basis．




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Correctional Services： Prisoners／hunger strikers：particulars

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 applications were refused by the State
President but nevertheless referred to the consulting bodies for advice（ 363 of these － 621 prisoners were released； Out of the total number of applications re－
ceived




 Since 7 November 1990 a total of 6272 appli－
cations for release by prisoners have been
 granting of special remission by the State
President and as a result of the approved ${ }^{2}$ 入（ 1 ） The MINISTER OF EDUCATION AND CUL－ ヨlozig
（3）whether he will make a statement on the
 school concerned；
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sion，（c）what are the particulars of the and／or directives，（b）with whose permis－ distributed on the grounds of this school，
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Staff Reporter
Anglo American Prospecting Services (AAPS) has been served a summons on behalf of the Department of Water Affairs and Forestry on a charge of polluting a stream in the eastern Transval.
$\therefore$ The case will be heard in the Nelspruit Regional Court on Wednesday.
An Anglo American spokesman last night confirmed that a summons had been received.
a According to the department, the stream, which flows into a dam belonging to Luke van Johnston, turned yellow and all the fish in the dam died.

The water was rendered unfit
for humans and animals.
It is claimed that the Bien Venue mine, situated in the catchment area of the Crocodile River near Barberton, discharged a high concentration of zinc and other heavy metals into the stream and dam.

The department said it was expected that no aquatic life would be able to survive in the dam for a considerable period.
""Even after remedial steps have been taken, experts advise that it will take a long time before the dam is dehabilitated to its original status.
*The pollution, was a result of AAPS tipping waste-rock and other excavated material downhill towards and into the stream, sald the department. $\ldots$ Rain and other water was allowed to seep through the rock
dump and into the stream, polluting it.

AAPS allegedly failed to de-- sign, modify or construct all mineral, tailings and wasterock dumps so that rainwater precipitated towards it was prevented from flowing into the stream, according to the department.
Anglo American chief communications officer James Duncan said: "As soon as we be came aware of the difficulties, we undertook publicly to give these our urgent attention and have been engaged in a major, corrective project approved by all parties and costing more than R2 million. The - tex 3 We are more than happy to speak fully on the Bien Venue issue after the court case in Nelspruit next week."

## Smogrativel reading far too high <br> THE "nitrogen oxides"

 (NOX) air pollution monitoring reading was way above the national guideline level at 9am yesterday.Yesterday's' maximum hourly NOX level, measured in conditions of heavy mist, was $2746 \mathrm{mi}-$ crograms per cubic metre of air. The guideline figure is ${ }^{1} 504$

However, the highest hourly "nitrogen dioxide" $\left(\mathrm{NO}_{2}\right)$ level reading, at 302 , was below the acceptable guịdeline figure of 376 .
This indicates' that there was probably no photochemical smog (where sunlight forms new chemicals from the new chtion) in the city.
Air pollution control officer Mr Derrick Oxley said yesterday that there said yesterday in his mind
was doubt that there was some correlation ${ }^{2}$ between the presence of water molecules in the air and the absence of photochemical smog.
"We had a particularly low temperature inversion. Even the tops of the smaller buildings were sticking through the mist," he said.

Polluted stream: charges laid
anglo american Prospecting Services (AAPS) had been charged by the Department of Water Affairs with polluting a stream and a dam near Barberton the Transvaal, a statement said yesterday.
It was alleged that the Bien Venue Mine, owned by AAPS and situated in the catchment area of the Crocodile River, discharged a high concentration of zinc and other heavy metals which resulted in a stream and a dam, owned by Luke van Johnston, being polluted.
Fish in the dam died and the water was rendered unfit for drinking, the statement said.
AAPS is due to appear in the Nelspruit Regional Court on June 26 to face the charges which fall under Section 23 (1) a and the contravention of regulations of the Water Act, Act 54 of $1956 \mathrm{Vb}^{-204 y} 21 / 6 /$ II.

Anglo chief communications officer James Duncan said: "In our opinion, it is in contempt of court to comsaid. on the pending case at this stage

But an ánglo statement said yesterday it had "engaged in a majortcorrective project approved by all parties and costing'more than R2m" after it became aware of and costing more than Bien Venue Mine. - Sápa:

# Foul way to <br> (9) mis-treat the harbour 

## JANIS FRASER Weekend Argus Reporter

THE plastic containers and metal beer and cool drink cans sit on the beer and cool drink cans sit on the
layer of thick, oily slime. It's so layer of thick, oily slime. It's so
dense that it prevents them dipdense that it prevents them dip-
ping below the filthy, sluggish surface.
There are no waves, just a flat grey expanse of pollution coating the water like tar, looking solid enough to stand on.

On the other side of the harbour the waves are breaking - not foaming up chunks of polystyrene foam along with the plastic and debris.
The big refuse hoppers stand half empty on the quayside, around many of them a litter of rubbish which people could not be bothered to drop in-
side.
The strategically strung nets are bulging, not with fish, but with a harvest of litter louts' throwaways.
It's a gross sight, and it's not some rundown banana republic harbour or decaying eastern European sea port either. It's Cape Town harbour at its very un-fairest - just when we are patting ourselves on the back for the magic of the Victoria and Alfred de velopment.
"The dirtiest place we've seen," was how the international yachtsmen de moored ine harbour as they lay before the start of the BOC Ch-berth
"Like parking a Porsche in a ge bage dump," said Australian a garmage Kampa Birtlest. "Yang Birtlest.
tions, officer Barend de Klerk " 'It's huge problem and there are "It's a hime cleaners working from 7 am until the clearing up job is done, every day of the week. We took 60 cubic metres of floating rubbish out near the BOC yachts. People think we are not doing anything. It's a battle.,
The problem is two-fold. Cape Town harbour is man-made, and a mass of storm water drains spew straight into it.
kn wet weather they carry the litter and debris from pavements and guters from around the city centre, along the increasing ciutter of fallen leaves and twigs as street sweeping is
pared back. pared back.

At the same time, depending on the wind direction, the harbour acts as a trap for the floating litter and debris the situation on blustery compound left on the on biustery days, litter ter on the dockside blows into the water.
But the major element of the probIem is educating the litter louts. It's a seemingly impossible task which Cape Town mayor Mr Gordon Oliver says the council is determined to lick.
He's warned that fines are on the cards and during his present official trip to the East he is investigating how Singapore managed to obliterate littering.
Mr de Klerk said the city council had finally agreed to rubbish traps being placed across the mouths of storm water drains.
There are other ingenious clean-up cal engineering dell Portnet's mechaning a scoop to fit a craft which will collect flotsam and jetsam.
In conjunction with Stellenbosc University they are designing and building a dragnet to pick up submerged items missed by the drain nets.
Littering and rubbish dumping at the harbour by ships' crews and by businesses has become a cleaning nightmare.
Portnet hires large bins from the municipality and places them beside ships in harbour. Getting people to actually dump their litter inside the bins is another matter.
Preventing ships from tipping their bilge oil into those rubbish bins is a further headache.
There's a unit on 24 -hour standby to deal with clean-ups. Portnet has a skimmer to lift oil from the surface of the water and has built a floating
boom to contain pollution in a small boom
area.
In desperation over the increasing heaps of metal and wood from ships which is abandoned on the quayside, which had scrap dealers flockinction which had scrap dealers flocking. All this' just to clean up man-made pollution.


CTHE DAY'S CATCH: Nets strung across stormwater drains with their haul of litter washed down to pollute the harbour after every heavy rain.

## -SUCH FILTH: Do

you walk on it or sweep it up? What looks like a dirty expanse of tarmac is actually the filthy surface of the water in Cape Town Harbour after refuse floods in from storm water drains.

\title{

Foul way to <br> (56) <br> <br> mis-treat <br> <br> mis-treat the harbour <br> <br> JANIS FRASER Weekend Argus Reporter <br> <br> JANIS FRASER Weekend Argus Reporter <br> THE plastic containers and metal beer and cool drink cans sit on the layer of thick, oily slime it's so dense that it prevents them dipping below the filthy, sluggish surface <br> There are no waves, just a flat grey expanse of pollution coating the water like tar. looking solid enough to stand on <br> On the other side of the harbour the waves are breaking -- not foaming with white surf though, but heaving up chunks of polystyrene foam along with the plastic and debris. <br> The big refuse hoppers stand half empty on the quayside, around many of then a litter of rubbish which people could not be bothered to drop instde <br> The strategleally strung nets are bulging, not with fish, but with a harvest of litter louts' throwaways <br> It's a gross sight, and lt's not some rundown banana republic harbour or decaying eastern European sea port etther It's Cape Town harbour at its very un-farrest - just when we are patting ourselves on the back for the magic of the Victoria and Alfred development. <br> The dirtiest place we've seen," was how the international yachtsmen demoored in floating rubbish at M-berth before the start of the BOC Challenge. <br> Like parking a Porsche in a gar <br> At the same time, tiepending on the wind direction, the harbour acts as a washed off the beaches To compound the situation on blustery days litter left on the dockside blows into the wa ter. <br> But the major element of the problem is educating the litter louts It's a seemingly impossible task which Cape the council is determined to lick <br> He's warned that fines are on th cards and during his present official how Singapore managed to obliterate littering. <br> Mr de Klerk said the city counctl had finally agreed to rubbish traps storm water drains <br> There are other ingenious clean-up measures as well. Portnet's mechanical engineering department is build collect flotsam and jetsam <br> In confunction with Stellenboscl building arapmet to piskng and merged items missed by the drain nets <br> Littering and rubbish dumping at the harbour by shlps' crews and by businesses has become a cleaning <br> Portnet hires large bins from the <br> DUCH FILTH: Do you walk on it or sweep It up? What looks like a dirty expanse of tarmac is actually the tilthy surface of the water in Cape Town Harbour after refuse floods in rom storm water dralns.
bage dump;" said Australlan yachtsman Kanga Birtlest.
"Yes," says Portnet's public relations officer Barend de Klerk "It's a huge problem and there are 12 fulltume cleaners working from 7 am unthl the clearing up job is done, every day of the week. We took 60 cubic meBOC yachts People thlok wear the doing anything It's a battle
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Pictures BAREND DE KLERK
$\square$ THE DAY'S CATCH: Nets strung across stormwater drains with their haul of litter washed down to pollute the harbour after every heavy rain.


\section*{Settle back this July

## Settle back this July and enjoy a Cocktail and enjoy a Cocktail with Tom Cruise.

 with Tom Cruise.}

Frompage
Trains were alsd de-
layed when a farm dam wall burst and flooded the Muldersvlei railway. The line between Mbekweni and Dal Josafat stations, was also flooded, said Miss Olwage.
In Vredehoek, where overflowing mountain streams had washed sludge down Devil's Peak, council workers used front-end loaders and trucks to clear Deriy, Chelmsford, Aloe and Belladonna roads.
Arspokesman for City Tramways said buses were diverted from Foreshore routes yesterday morning because of fears that the strong winds would blow them winds 25 puta 91.
Regional Services Council spokesman Mr Fred Mostert said there had been rockfalls and mudslides on the Noordhoek side of Chapman's Peak but the road had not been closed
Part of the Rondebosch golf course was under water yesterday after the Vygieskraal
Riverburst its banks.
One house and a cricket field were flooded in Boshof Avenue, Fernwood Estate, Newlands.
Traffic in Claremont was severely disrupted during the morning peak period due to "ponding" at the intersection of Edinburgh Drive and Paradise Road.
A spokesman for the D F Malan weather bureau said Kirstenbosch had the highest rainfall in the 24 hours ending at 8am yesterday, with 209 mm .

Newlands recorded 208 mm and Groote Schuur 109 mm , the air port 42 mm , Franschhoek $88 \mathrm{~mm}, \mathrm{~Pa}$, 120 mm , S'tellénbosch 57 mm , Simon's, Town 74 mm , Cape Aghulhas 37 mm and Somerset West 60 mm .


IHE deluge of the past wo days has turned Chayelitsha into a virtual iwamp, flooding 500 hacks and marooning nore than 1000 people.
The township was hardest hit 1 a day when heavy rain disupted the lives of thousands rroughout the Peninsula and lestern Cape.
In Khayelitsha much of the ackbreaking work in restoring ome order in the squatter racks of Sites B and C was left , the women and children as ost of the men had gone to ork.
A Cape Times team visited the ea yesterday and saw scenes chaos and devastation.
In Site C a woman pleaded for alp as she removed barrow ads of sand from her shack. eporters and photographers tched in to help.
Close by a mother carrying an -month-old baby on her back iled to clear her flooded ack. The baby slipped from rr back and fell into the flood

water before she was able to catch the child. The baby was pulled out frightened but unhurt.
Everywhere women frantically dug trenches around their homes as the light faded and fears of another downpour mounted.
Mr Graham Lawrence, the town clerk of Lingelethu West, under which Khayelitsha falls, said council workers were helping residents but were fighting a losing battle against the flooding.

## Swept away

In the Boland a bridge was washed away and in the Peninsula and on the Cape Flats trains were delayed and traffic disrupted as heavy rain and strong winds continued.
But after the damage of the past few days the weather will clear today, says the weather bureau.
Yesterday the flooding Berg River swept away a 20 -metre section of the bridge on the main Franschhoek-Paarl road about 8 am , forcing motorists to
divert by nearly 30 km to reach the Peninsula road network.
Western Cape District Road engineer Mr Clyde Barnes said the possibility of temporarily repairing the bridge was being investigated. But constructing a permanent structure would take about three years and could cost R3,5 to R5 million, he said.
On Table Mountain, the Hely Hutchinson dam, which was $70 \%$ full last week, was overflowing.
The Wemmershoek Dam has increased its capacity from $41,8 \%$ to $57 \%$, the Voelvlei from $55,2 \%$ to $57,3 \%$ and the Steenbras Lower Dam from $50,3 \%$ to $54,2 \%$ over the past week.
Cape Town train services were severely disrupted when water flooded railway lines, causing a breakdown in electronic signals.
Spoornet spokesman Miss Yvette Olwage said peak-hour trains were delayed for 100 minutes on the Khayelitsha line, for about 40 minutes on the Bellville line and between 10 to 20 minutes on the Cape Flats and Simon's Town lines yesterday Notpage 5

## Surge in city pollution levels

THE level of nitrogen oxide in the central city air at 9am yesterday exceeded the national guideline level-for the eighth time since the Cape Times started monitoring the readings two months ago.
The highest hourly average reading was 1648 micrograms a cubic metre, which is 144 above the guideline.

Councillor Arthur Wienburg has given notice of his intention to propose a motion relating to air pollution': at Cape Town City Council's monthly meeting tomorrow.

He will ask that the amenities and health committee should investigate the desirability of lobbying the government to:

- make unleaded petrol available to South African consumers;
encourrage its use by means of a preferential subsidy;
reduce the level of lead in petrol immediately; - legislate in favour of compulsory use of unleaded petrol by 1996.



By DAVE MARRS and ANDRE KOOPMAN THE Navy has admitted causing an oil slick 25 nautical miles long and 300 metres wide off Port Elizabeth when its biggest ship pumped diesel fuel into the sea.

Last night the Department of Transport said it had warned the navy that if a similar offence should occur, it will be prosecuted under the Oil Pollution Act, department spokesman Mr Don Boyd said.

The warning was issued after the department had taken legal
advice, he said, adding that the navy was not exempt from prosecution under the act.
In a statement released in response to a Cape Times inquiry yesterday - over a month after the incident occurred - the director of naval public relations, rector of naval ph, admitted that Captain $R$ Erleigh, admitted that the combat support vessel SAS Tafelberg had pumped a mixture of bilge water and about seven tons of contaminated diesel oil into the sea.
This had happened after the Tafelberg had "experienced an Tafelberg had fuel" into its eningress of diesel fuel" into its engine room bilges on May 22, while it was "more than 10 km " off Port Elizabeth.

The bilge water and contaminated diesel mixture was
pumped overboard over a tw hour period "in the process sorting out the problem", he sai The SAS Tafelberg was in tra sit between Simon's Town al Durban as part of a task for when the incident occurred:
The slick, which Captain 1 leigh said was immediately ported to the Department of En portedtal Affairs, is believed ronmental Affairs, is bend did 1 have broken up at sea and did 1
wash up on Eastern Cape bea es.
"The slick was extremely lig hardly visible from sea level a was in fact only detected by commander of the task group $d$ ing an inspection by helicopt Captain Erleigh added.


From page 1.
Navy dumps oil ${ }^{(85)}{ }_{c}^{\text {čabl| }}$

Dr Lyn Jackson, of the environmental affairs oil pollution control group, confirmed last night that the department had been alerted about the incident.
While she did not have all the facts at hand, she assumed that no action had been taken, since diesel oil "which is much more volatile and lighter than crude" - would have broken up before reaching the coast. She confirmed that diesel fuel is "much more toxie" than crude, and the slick could have had an "acute effect" on marine life if it had reached
the shore.

- The Cape Times was also alerted to an incident that occurred last week, in which witnesses alleged that a naval patrol boat was purposely steered through a flock of cormorants feeding in the water about 400 m off Muizenberg.

Captain Erleigh confirmed that an initial investigation had revealed that "the boat was in fact steered through the flock of birds".

He said no birds were injured, but a formal investigation has been ordered and disciplinary action could follow.

## Tafelberg spill: Public should be told - $\mathrm{DP}_{\text {san meane }}$ (3)

THE oil'spill by the navy's SAS Tafelberg should have been publicly disclosed immediately, the Democratic Party's spokesman on environmental affairs, ${ }^{\mathbf{s}} \mathrm{Mr}$ Rupert Lorimer, said yesterday.
Mr Lorimer said the implications of the spill for marine life were "very serious indeed".
"These sort of accidents cannot be allowed to occur. I would have preferred immediate public disclosure to have taken place," he said.
He was reacting to the disclosure that the combat support vessel had dumped diesel oil overboard off Port Elizabeth on May 22, leaving a slick 40 km long. The navy had informed the Department of Transport of the spill.
Yesterday the director of shipping for the Department of Transport, Mr Willem Kempen, said his officials were preparing a letter warning the navy that it would be prosecuted if a similar incident were to happen again.
The Oil Polution Act provides for a maximum fine of R200000 or five years' imprisonment for the master of the ship.

However, the navy is protected by law from civil action arising from such incidents.
Asked if if wás usual practice to issue a warning rather than apply the letter of the law, Mr Kempen said factors-such as the avoidability of the spill and action taken tó prevent damage to the environment were taken into account.

## Unleaded petrol to be investigated <br> A•COUNCIL sub-com-

 mittee is to investigate the desirability of asking the government to make subsidised unleaded petrol available now, and make its use compulsory by 1996.It will also look into the feasibility of asking for legislation to make it compulsory for all new petrol engines to be fitted with catalytic converters which reduce the noxiousness of exhaust emissions.

Mr Litewellyn van Wyk said we could not begin to deal with airborne poisons.like carbon monoxide, nitrous ox ides and hydrocarbons, which were emitted by exhausts, "unless lead were removedifrom petrol first.

Catalytic converters get chokéd by leád," he explained:
"Without" lead we will consume more petrol," Mr Van Wyk said. The lead content could be re-
 level, but'beyond that it became prohibitiyely
expensive 56 CT 8 fal

Municipal Reporter
UNLEADED petrol and the compulsory fitting of catalytic converters are to be the subject of an urgent City Council investigation.
The amenities and health committee was told yesterday to report back within three months on whether or not to call on the government to make using unleaded petrol compulsory by 1996.
Proposing the move, Mr Arthur Wienburg said lead was poisonous and a "significant number" of Peninsula children had been found with too-high lead levels in their blood.

Highly lead-polluted air caused aggression, hyperactivity, decreased IQs and learning disabilities in children.

About 90 percent of airborne lead came from the exhausts of petrol-driven cars.

Petrol companies said that using unleaded petrol would cost from five to 10 cents more a litre.
"One must weight this cost up against the cost of care and up against the cost of care suf:fering trom lead poisoning," said $\mathrm{Mr}^{2}$ Wienburg. $\because$ ns. ${ }^{\prime}$
$\mathrm{Mr}_{\text {Llewellyn van }}$ wyk said acceptable levels of carbon di-
oxide, nitrous oxide andihydrocarbons often" were exceéded.

It was not enough to fit catalytici connverters to cans because these quickly became choked if leaded petrol was: used. The rest of the world used unicaded petrol and if South Africa did not followis süit, it wैuld isolate itself from"stateof the-art engine technology. It nwas time for action, because "maintaining and recording air pollution levels will not do a damn thing," said Mr Van Wyk.

Mrs Joan Kantey said Health Minister Dr',Rina Venter had turned down a council request to appoint an inquiry into photochemical smog.
The motion, calling for unleaded petrol to be made: available immediately, subsidies to encourage its use. its use becoming compulsory' by 1996 and the fitting of catalytic; converters to petrol-driven cars, was passed" unanimously.

## Poster crackdown

THE City Council will crack down on people putting up posters without paying a deposit; said utilities and works committee chairman Mr Leon Marmovitz. - Municipal Reporter

## City pollution soars again(56)

Municipal Reporter
BOTH city air pollution indicators yesterday registered the second highest level's recorded since the Cape Times began monitoring them just over two imonths ago.'
The highest nitrogen oxides reading yesterday was 2951 yestergrams per cubic metre close to double the nationaly guideline of 1504 . encilblí

The nitrogen dioxide was 481 micrograms per cubic metre - far above the 376 guideline.






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 The IWC debate centred on the



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ENVIRONMENT - 1991

JUN - SEPT.


# Minister rejects city plea for smog probe <br> Municipal Reporter (56) <br> But she said decisions would have to 

HEALTH Minister Dr Rina Venter has congratulated the Cape Town City Council on the success of its air pollution programme, but says it is still too early to appoint a commission of inquiry into photochemical smog.
She was responding in a letter to the council's request in April for funds for photochemical smog research.
The council also asked her to appoint a commission of inquiry "at the appropriate time" to hear evidence from all affected parties about introducing measures to control photochemical pollution.
Dr Venter said it was premature to appoint a commission now because so little was known about the extent of the problem, locally and internationally.
be made as soon as sufficient evidence was available.

Regarding lead in petrol, she said removing it completely would cost the country "several thousands of millions of rands".
Expenditure on this scale could be justified only "if the health effects of the additional lead in the environment . . . are sufficient to warrant it".
She assured the council that this important topic" "will continue to be addressed and action will be taken timeously to ensure that our environment is not allowed to deteriorate to the extent of some of the major cities of the world".

- The council is to buy new equipment to measure photochemical smog.


## Support for daylight saying PRETORIA - A proposal to give SA an extra hour of sunshine in summer

 was likely to get overwheiming support, the chairman of a lobby group for extended daytime said yesterday.President FW de Klerk last week announced a President's Council committee would study the feasibility of putting the clock forward.
It would call for memoranda on the issue and assess the response and dvantages of such a step
Durban city councillor and National Action Group on Summer Time chairman Malcolm Prentice said his group had been formed earlier this year and the response had been "more than enthusiastic".
Hundreds of letters had been received in support of the idea, Prentice said, indicating it was likely the vast majority of South Africans would favour an extension of daylight in the summer months.

The advantages included more daylight leisure time, a probable decrease in twilight crime and fewer traffic accidents because evening peak traffic would operate in daylight.
Most letters expressed amazement
that it had taken SA so long to seriously consider the obvious advantages of daylight saving.
Prentice said summer time would not make the day any longer or the night shorter. It was not stealing time from anyone.

Sacob economist Bill Lacey said questionnaires had been sent to Sacob's affiliate chambers to test their views on the issues.

Sacob was likely to support the idea, he said.

The demand for daylight saving was strongest in the eastern part of the country. Areas in the west al ready had about 50 minutes more daylight than eastern areas.
Afrikaanse HandeIsinstituut executive director Joe Poolman said the system worked in the UK and European countries and there was no reason why it should not work in SA.
There were no major obstacles but some distinct advantages, including a "likely significant energy saving".
But the AHI had not taken an official stand on the issue so far.

## Official to talk on smog Cr 3 行 Municipal Reporter 5 5 <br> AIf pollution control officeir Mr Derrick Oxley

 the City Hess a meeting of City Bowl residents in the city, Hall reception room at 8pming tonight on The city's growing smog problem.Valley 'Ratepayers' Association the Upper Table pressed its concern Association, which has exexhaust and oncern about increasing levels of exhaust and other fumes "which more and more Vequently exceed health safety levels".
dents-chairman Mr W G Combrink said resiwere often able on the foothills of the mountain, which resid able to see the "dense pollution' to which residents of other suburbs and city workers are subjected"

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## Another mestini mudslide on Devil's Peak

## Staff Reparters

TONS of topsoil and material used to shore up the fire-ravaged slopes of Devil's Peak washed on to De Waal Drive in torrential rain today

Conservationists' worst fears about the effect of the devastating fire on the mountain in February were confirmed by the biggest mudslide of the winter.

De Waal Drive was turned into a muddy river as water roared off the mountain across the incoming lane to the city.

Cars travelled at a snail's pace attempting to avoid huge pools trapped at the edge of the road and fountains of murky water spurting from stormwater drains unable to cope with the deluge.

Motorists were confronted by at least eight fast-flowing streams rushing across the road between District Six and the Mill Street off-ramp which was under at least half a metre of water
Mrs Renate Martin of Pepper Tree Road, Vredehoek, said she heard a rumbling sound about $9.45 a m$ today.
"I looked out of the window and saw the mountain was coming down.
"That's what it looked like. All the poles the council put up in the river bed were coming down, with a mass of mud. Some of the poles were flying through the air, above the roofs.
"Some of the poles flew over our garage roof and landed in the back yard.
"Just up the road there's a house where
Just up the road through the back door the mud is running
and out the front door.
"When there was that fire on the mountain I phoned the council and they said it would be too expensive to send a helicopter. If you think now of how much they've spent, trying to secure the mountain.
"I walk up there every day, and you could see those poles wouldn't hold. They're just pinned in place with two iron stakes, but when the water comes down there's nothing to hold the stakes," Mrs Martin said.

A spokesman for the City Engineer's department said they had mounted an emergency operation to clear a blockage in the stormwater drains at the top of Vredehoek.
Soil and debris which washed down in the last rains had heen cleared but mure materiail: d conra down cwernight dill stacked the d. ains.
The ceiling of a Sea Point flat crashed

The ceiling of a sea point occupant.
Mrs Yvonne La-Raine Hodge of Alice
Court in Main Road was getting ready for a bath when she heard a "massive crash".
"I rushed out and saw that the ceiling in
my entrance hall had crashed down filling my flat with water about 20 cm deep.

## Could our tap water be

 for our health? too clean for our health?THERE has been a lot of talk lately about whether our tap water is clean enough. On the other hand it could too clean.

Contamination by heavy metals aside, there is a theory that municipal water can be so sterile that it is 'actually unhealthy.

At a Swaziland conference in the 1970s a scientist suggested that overpurification in South Africa could be detrimental to health.
. Rural children, brought up on "natural" water, seemed more disease resistant than urban children - especially when it came to polio, mumps and measles.

Urban dwellers, by drinking sterile water, tended to avoid mumps and measles in childhood (when their system is more able to cope) only to be stricken in adulthood, with far more serious results.

Somemonths ago I wrote about how, when it came to chlorides in tap water (which indicate the presence of faecal matter) the European Community had settled on a limit of 25 milligrams/litre and the World Health Organisation on $200 \mathrm{mg} / 1$.

South Africa tolerates 600 !
Now Inhear the WHO is considering moving towards our figure
The WHO standard, which allows 2,2.faecal coliforms per 100 millitres, was recently described by Hillen Shuval, Israeli environmental health expert, as outdated and unscientific.

At a recent conference in London he saidwesterners are neurotic


about infinitesmal amounts of faecal matter and that their standards are handicapping the Third World.
He studied 1000 health reports ${ }^{* \prime}$ from 50 sites where the count was 1000 faecal coliforms per 100 millitres - almost 500 times the WHO's standard - and found no health effects whatsoever.

And a British delegate felt 10000 coliforms would be safe in low-hu- ? midity hot climates.

US and European delegates were unimpressed by Dr Shuvel's argument, but in Africa he should receive a more sympathetic ear. Western standards are likely to inhibit the development of irrigation schemes that make use of partly treated effluent.

For one, the EC is likely to bars Third World vegetable imports, grown in water with 1000 coliforms $/ 100 \mathrm{mg}$. Yet they consider its perfectly safe for people to swim in water with 2000 coliforms $/ 100 \mathrm{mg}$.
If "neurotic standards" inhibity African efforts to improve its own, nutritional standards then, I imag-i: ine, it will cause much more sickness than would slightly questionable, water.
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## Could our tap warer ne too clean for our health? <br> T <br> HERE has been a lot of talk lately about whether our tap water is clean enough. On the other hand it could too clean. <br> Contamination by heavy metals aside, there is a theory that municipal water can be so sterile that it is actually unhealthy. <br>  CLARKE

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The WHO standard, which allows 2,2.faecal coliforms per 100 millitres was recently described by Hillen Shuval, Israeli environmental health expert, as outdated and unscientific.

At a recent conference in London he said Westerners are neurotic
about infinitesmal amounts of faecal matter and that their standards are handicapping the Third World.
He studied 1000 health reports: from 50 sites where the count was 1000 faecal coliforms per 100 millitres - almost 500 times the WHO's standard - and found no health effects whatsoever.

And a British delegate felt 10000 coliforms would be safe in low-humidity hot climates.

US and European delegates were unimpressed by Dr Shuvel's argument, but in Africa he should receive: a more sympathetic ear. Western standards are likely to inhibit the development of irrigation schemes that make use of partly treated effluent.
For one, the EC is likely to bart Third World vegetable importsin grown in water with 1000 coli-: forms $/ 100 \mathrm{mg}$. Yet they consider itst perfectly safe for people to swim in water with 2000 coliforms $/ 100 \mathrm{mg}$.
If "neurotic standards" inhibit" African efforts to improve its $\mathbf{o w n}^{2}$ nutritional standards then, I imag ine, it will cause much more sickness, than would slightly questionable water.

## Mudslides: © Bungling and apathy blamed

## By SHARON SOROUR

 Staff ReporterMISMANAGEMENT and apathy

- not only the devastating Devil's

Peak fire and heavy rain - are to
blame for the state of Table
Mountain, according to leading
University of Cape Town botanist
Professor Eugene Moll.
He said problems started well before the February fire which ravaged hundreds of hectares of vegetation.
"The fire is not the only problem. A mountain needs to burn and natural fires to occur.
"This could have been a 'natural' fire but even though it wasn't, if the vegetation is 30 years old, it will burn $t$ and a mountain - any mountain erodes," he said.
Most of the erosion, caused by heavy flooding, was on the lower slopes of the mountain where the council had removed gum trees to limit forergn plants from the area.
"And they piled brushwood in rows - for burning but it was never burnt for various reasons, including the sensitivity of Capetonians to soot and ash. People don't want ash in their swimming pools," he said.
slopes of Devil's Peak that further mudslides would not occur.
"They are in for a torrid time if we have more rain. But they are also part of the mountain and should ensure the City Council does its job properly.
"It's our own apathy that has contributed to the problem we face now."
He said the Cape Peninsula Protected Nature Area Advisory Committee operated only in an advisory capacity to the administrator and had no power.
"Part of the problem is politics. The committee is only an advisory one. And in South Africa there is a tendency not to rock the boat. The blame is at the highest level of government."

Meanwhile, Cape Town mayor Mr Gordon Oliver has joined other city councillors in appealing for government funding to conserve and rehabilitate the mountain.

Mr Oliver said: "I really cannot call on them urgently enough ... we just have not got sufficient funding to cope.
The mountain was "our national heritage and a national monument and I do not believe the government has taken this seriously enough."


## block.

He said the council had not cleared the stormwater drains after the previous flood
Oak Tree Village, worst hit in Friday's mudslide down the fire-ravaged slopes of Devil's Peak, was not looded again, but mudy water rushed do bady eroded
Lower down co packed sandbags to divert wa ter from streets and a bulldoz er cleared another street that had been turned into a mudbath.

MORE MUD: Cars crawl along a muddy De Waal Drive into town today.

Deputy city engineer Mr Henk Beekman said: "It's not as bad as last week, but water nd mud are streaming down." He said residents could expect recurrences of the floodnow", but the council was doing its best to stabilise the fire damaged area
"Gabion retainer baskets" -high-tension wire baskets filled high-tension wire baskets filled
with stone to catch solid material but allow water to pass rial but allow water to pass
through - had been placed in Fround || coge vop ep page 8
the kloof above Oak Tree lage, but the system had to be extended.
Mr Beekman said stormwater intakes had been cleared.
At many places Tafelberg Road was virtually impassable, with mud, sticks and rocks bar ring the way.
Parks and Forest officials anxiously watched the erosion barriers al
Devil's Peak

One official said the barriers were holding well and that to day's flooding was not as sert ous as last week

- Heavy rains also caused flooding in Ravensmead, wilh Marion Crescent under almost a metre of water.
A visitor said residents were up in arms because the same happened "every week'

She said a petition was beins planned "One cannot just coo tinue like this."



THE Development Bank of Southern Africa will make R4bn available for devel opment projects over the next three to four years.
Bank spokesman Frans van Rensburg said yesterday funds were for development in SA, the independent homelands, self-governing states, Lesotho and Moz ambique. Bl $0<y$ 10 $171(9)$
Loans would be granted to national, regional or local government structures or their development agents.
Van Rensburg said almost R1bn had been disbursed in the past financial year, an increase of $36 \%$ compared with 1989/90.
Bank loans could be repaid over periods as long as 40 years, as most projects were infastructural.
The bank's Lebowa project manager Alwyn Coetsee said Lebowa had applied for R750m worth of loans for the development of water schemes, transport and energy infrastructure.

Coetsee said 22 water development projects, valued at R181m, were in the identification phase, with a further five approved for funding of R 60 m .
He said water schemes required mas-

JONATHON REES
sive subsidisation due to the high costs of building a dam wall, laying pipelines, and technical support.
The bank had recently supported small water development schemes where communities took responsibility for initial development and maintenance.
The SA government would provide R 500 m to the bank this year and next year through the Industrial Development Corp.
Funds were also generated on the capital market.
The bank had provided R600hn for the Lesotho Highlands Water Scheme since 1986, Van Rensburg said.
Financing was available for rural and agricultural development, business and entrepreneurial development, human resource development, bulk infrastructure development and urban development.

Van Rensburg said development funds were also made available by the Independent Development Trust, Urban Foundation, SA Trust Corp and the Small Business Development Corp.


A COMPREHENSIVE environmental management plan for South Africa is to bee released by the President's Council after an 18-month investigation?
President's Council" chairman Dr Wille van Niekerk said the report, to be debated by the council in September, contained far-reaching recommendations on the management of air soil, water and sea pollution and the disposal of solid waste.
At present there is no central environmental pollution control and monitoring is done at national, provincial and local authority level.

The air pollution control officer for the Department of National Health and Population Development MryLionel Tuckert said the fragmentation caused many problems.
tain areas and institutions in the Cape while the Cape Town City Council and Regional Services Council also have areas under their control. There' is no formal liaison between them.
"Dr Van Niekerk said the fragmentation of pollution control was orie of the items dealt with in the report and he believed it "has to stop now".

The investigation was the first which involved all three committees - social, economic and constitutional - of the President's Council and evidence was heard from 188 individuals representing 50 institutions. More than 170 memorandums were submitted.

解縣 am convinced this will be ma jor document for the future of the environment," he said.

## Ecology think-tank' planned for city

## LINDA GALLOWAY Staft Reporter

gy,-Ecologise Politics" takes plat "Politicise Ecolothis weekend.
The conference, at the University of the Western Cape, is the first of its kind and has been organised by Eco Programme, a joint project of the World Conference on Religion and Peace (South Africa), and thes'Gape Town Ecology Group,' an organisaon promoting awareness of environmental issuies.
Particicants will include community, environmental, "educational, political and religious orgâniGreend, trade unions, government agencies and Ec
differ Programme's aim is to merge concerns of virferent-constituencies into an approach to the en to create" a non-rach "holistic, fundamental and able that is also a healthy and democratic South Africa people"

Workshops and group sessions will focus ontite environment and politics, the environment and de velopment, organising around the environment ecophilosophy, religion, global perspectives," the energy problem, rural issues, health issues and the role of the media.
Speakers include Ugandan environmentalist $\mathbf{M r}$ Moyo from the ${ }^{2} \mathrm{Mr}$ Yemi Katarer and $\mathrm{Mr}^{\text {S Sam }}$ Moyo from the Zimbabwean Environment and'Re-
search Organisation (Zero).

## Campaign launched <br> the Silvermine River Society, <br> linked with the proposed bypass

said part of it appeared to claim that the nature of the ground had changed, become covered with alien vegetation and was therefore worth nothing.

## Roman Dutch law

"I know this is not true because in other areas where the aliens were removed, the fynbos came back. The whole area from the proposed bypass site to the river and up to Peers Cave should be allowed to revert to the original fynbos," Mr Langridge said.
Another environmentalist who leads the Alien Vegetation Control Group, Mr Tom Keane, said they were up against a fund of Roman Dutch law regarding property rights which tended to allow the owner of property to do what he wanted.
He feared that if the development went ahead it would be
road, the canalisation of the Silvermine River and the kaolin mine at the top.
"Each on their own is not so great but it's a different story when they're grouped together. We could easily lose a valuable potential tourist resource," said Mr Keane.

## Concerned

Another concerned resident, Mr Peter Meaker, said the public should be made aware of the amount of development that was already taking place in this vicinity.
"People are very concerned that the nature area will get spoilt and shortly look like the mountain on the other side of Fish Hoek," he said.

Mr T Knoesen, MD of the Ryan Group which owns the property, would not comment.


## Staff＇Reporter

HOUT BAY residents are ap－ palled by what appears to be hu－ man faeces washing ashore，add－ ing to tension between the ratepayers＇association and the Regional Services Council over sewage disposal．

Yesterday，Hout Bay beach was lit－ tered with hundreds of balls of sand－ encrusted excrement driven ashore by south－westerly winds．
Professor Rob Millar，chairman of the sewage subcommittee of the Hout Bay＇Ratepayers＇Association，said the faeces came from a sewage outlet at Badtamboeir，on the Sentinel side of the harbour，which did not comply with the Water Act．
He claimed it had been happening ＂for several years＂because the septic tanks serving the harbour community and leading to the outlet were not functioning properly．
Mr Rory Gilmore，chief of the RSC＇s directorate of engineering ser－ vices，admitted the Badtamboer out－ let contravened the law，but said it had been＂tolerated because＂they know we are working towards getting the situations worked out＂．
The pipeline for a new outlet more than a kilometre offshore between the Sentinel and Chapman＇s Peak had al－ ready beentlaid；：andtwould go into op－ eration later．
果果

He said the harbourt community＇s． sewage went into $^{2}$ large communal septic tanks and the overflow went into，the searat－Badtamboer．＂You
don＇t normally get any solids＂coming from the septic tanks，just fluid．＂
He denied the tanks were not work－ ing．
＂They are functional，but the type of discharge is not acceptable，＂he said．This was one reason why the new system was being developed
Professor Millar said the ratepay－ ers＇association was concerned the new system would not solve the prob－ lem，only hide it．Yesterday＇s beach pollution was＂a vivid demonstration＂ of pollution that could still happen once the new system came into opera－ tion next year．
Because of marine pollution Euro－ pean countries had had to abandon pipelines and switch to land－based systems at great cost．＂Here we are going the old－fashioned route and we are going to have to pay for＂it；ulti－ mately，＂he said．
Professor Millar said that in re－ spect of the new marine outlet，the ratepayer＇s association was pushing for additional land－based processing before sewage was released into the sea．

解
Mr Gilmore said the decision to construct the new marine outlet ins： stead of a land－based system；was ： based on＂the expert advice of sour？ consultants and the CSIR and welr were convinced，and are still con－ vinced，it is the best option for ther area，ecologically and economically：＂
＂The stuff that goes into the＂sea： will be very finely macerated Ittwill： be liquid with fine particles that will be easily assimilated and digestedtby the natural processes of the seami o


RAW SEWAGE? . . . Professor Bob Millar, chairman of the sewage subcommittee of the Hout Bay Ratepayers' Association, inspects what yesterday appeared to be human sewage deposits washed up at Hout Bay beach.

## 

By CHRIS BATEMAN
BALLS of what appears to be human faeces have washed up on Hout Bay beach - prompting an investigation beach - Regional Services Council.

Horrified joggers reported the pollution to Professor Bo末 Millar, chairman of the sewage subcommittee of man of the sew Ratepayers' Association, yesterday.
*, Prof Millar believes the faecés have frof from an overflow pipe for séptic tanks in the harbour.

Recent research on water quality by UCT showed that the incidence of symptoms such as diarrhoea and a sore throat were higher amongriout Bay swimmers than at anyother Pen-' insula beaches investigated.
Yesterday Professor Millar showed reperterday peveral deposits of squash
ball-sized rounded faeces (shaped by wave action) along the high-water wave action) mark on Bay's main beach.
"This pipe - which is illegal overflows all the time because the septic tanks do not work properly and the RSC are taking the easy way out,' he charged.

He said RSC studies had shown that the south-westerly weather conditions (prevailing yesterday and on Wednesday) brought pollution on cto the beaches for about $20 \%$ of the year. "The sheer volume now on the beach just could not be accounted for by dogs," he added.
The Chief Director of Engineering Services for the Western Cape Regional Services Council, Mr Rory Gilmore, promised an immediate investigation but said he had never heard of such an incident before.

## Berg water 'now polluted' <br> cent of Natal's water and nine

DURBAAN - Faction fighting, which has resulted in people seekng" refuge in high altitude areas'of the Drakensberg, the growing of dagga and the encroachment of cattle to these previously unpopulated areas is threatening many popular hiking trails and a significant portion of Natal's water supply.
Director of the KwaZulu Bureau of Natural Resources (KBNR) Nick Steele revealed that extensive dagga planatations and the migration of cattle heights of 2000 m and more, were causing serious slips and washaways in the Upper Tugela area of the northern Drakensberg between Cathedral Peak and the Royal National Park

One of the major concerns of the ,.KBNR',. which administers the conservation needs of the region, is that this area of the Drakensberg, particularly the Mnweni Valley and Ubsingata Valley, produces about 24 per-
percent of South Africa's water.
"It is now evident that the quality of water coming down from the mountains, especially from the Mweni River Valley which feeds the Woodstock Dam, is deteriorating rapidly," said Mr Steele
"Extensive siltation and persistent E.coli counts in the water paint a scary picture of previously clean mountain river water now being polluted."
He said that faction fighting over the past few years had been one of the major reasons for the increase in people moving higher into the mountains.
It is believed that this area of the Upper Tugela extending as far as Weenen is the larges dagga growing area in the southern hemisphere.
Mr Steele said there was an urgent need to attract the tribesmen moving up the valleys back down the mountainside to lower lying areas by developing home industries.

ASSISI -- Religious leaders from the Middle Eas - Inclading Davad IRosen, the former Rabbi of Sea Point, and Shaikh 1 krama al-Sabri, the Imam of the Al Agsa Mosque - have been wrestlang with the impoitant issue of peace. justice and security in Palestine and Israel.
The gatliering, organised by the World Confer ence on keligion and Peace took place a short tistance from lise shrine of the remains of Saint has bean Assisi in 1447) Francisean spirituality has bern a moving testimony to the quest for a 1 horee of $A$ ssist was no colncldence
For the three days of this gathering I joined the gitoup in contronting "the other", pleading with fears and aspiralions. The ownership of land, Zionfears and aspiralions. The ownership of land, Zionparochalism of its adherents, God and community inolated in Assisi, it seemed as if the world out here was wating for us, as if the future of the entire universe hinged on us and our choice of words.
Hours were spent de bating whether a message, which we later presented to the pope shonid refer to "the Palestimian people or the state of Israel" or state hood for the Israelis.

## Environmentalists

I suspect that the recently concluded ANC conference had a similar ard that the underlyin assumplion was that the world rotates on the confelence's axis
Meanwhile. St Francis weaps, for he was also a gieat lover of nature He is regarded as the saint of the entirommentalhis This damension to his spartuallty recelved sant attentoon from us. ANS ancor from the regarded as uf mu urgency
Palestine Africa, as in ronmental issues envi ronmental issues do fea eralion movements However they seldam feature as more than a perfectly legitimate perfectly legitimate stick with which to beat occupying power while there are few places in the wold where envi. ronmental problems are so intrinsirally hanked to

government policy as in often skew the ecologiSouth Africa and Pales- cal balance ine/israet, it is no longer adequate to argue that an end to minority rule or occupation is going to solve all the environmental problems.
A recent study commiscioned by Hiyos, a Dutch institution, indicales how South Africa shares severe ecological of the world in the res can farmers, white and black, luse 20 tons of tup soll for each ton of crops they produce - not the worst figure in the world, but five times the USA rate. Our country's south-western deserts are creeping to Pretoria, expanding across $21 / 2$ kilometres of exhausted pastures a year.
Ecological damage
Clearing of the land for agri-business has re. sulted in large-seale deforestation and where timber is farmed commercially these forests

The ecological damage from poisoned stripmined hillsides caused by mineral extraction is immense In the Umgeni River mercury concentrations have been re-
corded at 1500 times the corred at 1500 times the
level at which the US level at whtch the US
Environmental Agency Environmental Agency
declares materlals toxic. declares materials toxic. As with much else in South Africa, it is the
blacks who suffer most. Blacks continue to pay the price for asbestos mining

The Sappi chemical paper and pulp mill hads devastated the Elands and Crocodile rivers, and, according to Sechaba, the Hartebeespoort Dam is the most polluted in the world

Our country and its people have been rav aged in more than just one way, and there is a lot of healing waiting to be done Our land, seas,

St Francis weeps

## as environment <br> C $15|7| 91$ (56) timebomb ticks



WORLD'S WORST . . . Hartebeespoort Dam, the most polluted body of water of its size in the world.
rivers and mountains ent to our words as we are waiting too.
While we continue to dismiss environmental issues as trendy European issues imported alongside feminism abortion, etc, and we continue to act as if the worid rotates around our end-of-conference communiques, the envi reksental timebomb ticks away, as indiffer

## " shows that

These have already begun but are still In heir infancy and will contınue well beyond December
These will focus on such issues as the eading role of the party, its relation to the white, the 4

## (in) Colleagues

Tuestionts, and such To them. have con-make-up of the - must elect in ${ }^{\text {nt }}{ }^{\prime}$ the thead.

What is certain is that the ANC-SACP alliance is as firm as ever it was. if not firmer, future. The fact that nearly $90 \%$ of the ANC delegates voted Joe Slove on to the NEC is eluguent proof of that
'That the 2224 delefates to the ANC conference. have evinced ths kind of support fot the communists in their leadership, constitutes an ummistakable signal to President De Klerk and his constituitonal advisors.
From now on they will have to debate and
negotiate with communists and prepare
emselves to accept them as colleagues in a
ve Parliament
in this effectively, they will need to rid 'es of the bigotry which has clouded
of what communists really are
hitherto
the negotiations to prosper,
$m$ its ploting to prise
ror the politicians
But they really
'er. The ANC's
'ads are here
$r$ in the
of the
nan
are to its ticking
The last decade has seen a rapid growth of interest in and commit. ment to ecological issues by a large number of activists engaged in extraparliamentary politics. Trom the white community is regrettable. The contribution of this The contribution of this secmunity is truly immense in this regard and there in this regard and there people in the leadership of political movements are begining to listen.

## Commitment

The coming conference on the Environment and Politics organAfrica) and the Cape Town Ecology Group at UWC is a significant milestone in this regard This first major environmental event organised by struggle organisations is an ambitious attempl to bring political organisations, trade unions, religious movements and academic institutions together to discuss the challenges posed to our country's ecological future.
One can only hope that the conference will eschew the debilitating and by now rather boring "blame it all on the state" syndrome and move on to what we can do now to create a greater awareness of the people If our our is a praction of what we be lieve it to be then becould go a lone way in curbing the substantial collection and individ ual damages we inflict upon our common environment.

## Silvermine River hit by pollution <br> Municipal Reporter

SIGNS warning that the Silvermine River is polluted and may not be swum in have recently been erected close to the river mouth by Cape Town City Council:

Clovelly and Fish Hoek conservationists said yesterday. that there were two incidents last month in which sewage had spilled into the river from a Fish Hoek sewerage pump station just a few hundred metres from the mouth.

Conservationists said the pollution was probably caused by stormwater flooding into the sump of the pump station, which then caused the overflow.

Mr Jim Langridge, chairman of the Silvermine River Society, who is a retired engineer, said he had asked the Fish Hoek town engineer to provide stand-by diesel engines to back up the electricallyrun pumps at the pump station.
"That number five station may be overloaded, or there is some sort of snag there," Mr Langridge said. A certain amount of pollution was also caused by 100 or so squatters living near the banks of the river higher up, he said.

No comment could be obtained from the Fish Hoek municipality or Cape Town City Council yesterday.

Two other conservationists, Mr Tom Keane and Mr Jack Fudge, said pollution incidents of this sort seemed to occur each winter.


## Sewage: Pumps <br> idea <br> rejected

Municipal Reporter
ADDITIONAL pumps at a pump station to control sewage flow in Fish Hoek is not the way to prevent pollution of the Silvermine River, says the Town Secretary, Mr Mervyn Marshall.
He was responding to a suggestion from local conservationists that such a plan might help prevent future spillages.
Last month sewage flowed into the river twice via overflow pipes, and now signboards have been put up warning people not to swim in the river.
"You have to provide for overspills due to pump failure, blockages, or excessive rain," Mr Marshall said.
"In such an event, the sewage either flows into the stormwater drains and then into the river, or else it spills into the streets. 'It is not just Fish Hoek that has such an overspill provision. it is standard for virtually all sewage systems."
Fish Hoek had not considered it necessary to put up warning signs on its side of the river because spillages were not frequent.

Churt magistrate yester pepded the sentence Trust Bank manager Giel Graah and ordered him 1800 hqurs' commynity s Van Graan, of Welgelen Table Viet, adnfitted stea most R500 go0 over six ye

Magistrate Mr WA de commented while imposi tence that, as a first of Van Grgan would proba have served much of a $j$ tence had one been imp befge being released on Wan Graan, 29, was se to five years' impris@nm


With improving relations between east Africa and South Africa, the time is approaching to revive General Jan Smuts's idea of a contiguous international wildlife park stretching from South Africa to Kenya, James Clarke, The Star's environmental specialist, said in Johannesburg yesterday.
The purpose of 21st century national parks would not be exclusively to protect wildlife they would also protect ecologically sound human activities such as farming, fishing, logging and hunting.
"When it comes to Africa and the other parts of the world whose ambience has not been wrecked by over-development, visitors are as fascinated by rural life as they are by wildlife and grand scenery."

Mr Clarke said Britain had long recognised this, and its national parks incorporated', farms and even villages

He told the "Iohannesburg central"Rotary Club
burgeon as a global industry.
"Already, according to a recent Government statement, South Africa makes R9 billion a year through tourism.
"Africa is the world's most exciting tourist destination. Its attractions are unparalleled.
"Anthropologically, eastern and southern Africa constitute the world's most important and fascinating region the cradle of man.
"The region's wildlife has no equal. It has beautiful beaches jundiscover a colourful human fabric.
"When it comes to tourism, South Africa's biggest rival is Kenya. Yet we should not be - rivals. We should be planning now how to cooperate in attracting maximum tourists with the minimum environmental impact.
"We must avoid undercutting each other to the point where we start accepting cheap pay-back$\because$ home package tours Which aremore of a pollutant than a blessing."


 Earth in lis Neherlands told the con－ Bert von Pinxxeren of Friends of the the gap．






 religious groupings represented，from



 Council of Trade Unions（Nactu），the
Pan Africanist Congress（PAC）and

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## City pollution nearly treble guide figure(a

 POLLUTION levels for the city were a staggering 290\% higher than the recommended guideline yes terday. CTIM/7làThe NOx guideline (all the nitrogens), which is pegged at 1504 , was almost three timesthigher at 4376 . ${ }^{2}$, $7, i \mathrm{~b}$
The $\mathrm{NO}^{2}$ (Nitrogen Oxide) reading was 559 yesterday, far above the 376 guideline.

- The pollution levels for Wednesday were also significantly higher than the guidelines. 3 Geat tingto severals bape Timesteports on polit tion levels, the Wildlife Society yesterday, said increasing pollution over the city was the result of very poor transport and pollution control planning that-is ravsymptom of the whole of Söuth Africa's recent development".


# Meiring: Turn mountain into national park 

By ANTHONY JOHNSON 56 ( 50 Pitical Correspondent
PABLE MOUNTAIN should be declared a national
park'as' a matter of urgency, Cape Administrator Mr Kobus Meiring proposed yesterday.
Declaring that the "time for molly-coddling add-
ministrative empires has passed", Mr Meiring said
the best way to preserve "this national treasure"; as a natural and tourist resource would be for the mountain to be managed by a single authority
He told the annual meeting of Fedhasa that he was confident that the multitude of authorities and private owners involved with the protected nature areas on the Peninsula mountain chain would support the idea.
The management of the mountain system was one of the most complicated tasks imaginable. "Divided control aggravates matters considerably and undoubtedly creates the greatest management problem'" he staid.

While the various authorities were doing their best to manage the mountain chain, it was obvious that a singlemanagement authority would be in a much better position to do this effectively
The recent erosion and floods off Table Mountain placed a question mark over the ability of the present system.
The MPi for Caledon and chairman of the parliamentary standing committee for environmental affairs, Mr Lampie Fick, last night welcomed Mr Meiring's proposal.

Mr Fick sad that despite the attempts'of the various management bodies, Table Mountain was undoubtedly moving in the direction of an environmental disaster area
"Thes National Parks Board is the one organisation with available expertise, the legal authority and a proven record of successful management," he said.
$\qquad$

# Council urges ${ }_{\text {mimpline }}$ conservation of City Bowl areas <br> CLIVE SAWYER <br> owners' rights were affected, thát 

Municipal Reporter
TWO upper Table Valley areas should bé declared urban conservation areas, the City Council executive committee has recommended.

Included in the areas are Gardens above Mill Street, western Tamboerskloof and parts of Higgovale, Vredehoek and Devil's Peak Estate.

A decision to ask the Administrator for the proclamation was made at yesterdays committee meeting and follows ' 1988 decision to conserve the areas

The plan was kept on ice while the opinion of about 2200 property owners and residents was canvassed.

Response to the proposal, which forces developers to negotiate with local authorities to preserve standards of any planned buildings, was mostly enthusiasticios.

It was welcomed by the National Monuments Council and the Upper Table Valley Ratepayers' Association.

There were eight written objections: that developers' and property






[^2]$\qquad$


## SA ranked among the best on world conservation list DARIUS SANAI

A LOCAL affiliate of the Worldwide Fund for Nature (WWFN) has ranked SA among the world's best nature conservation countries.
SA Nature Federation (SANF) spokesman Brenda Crook said yesterday SA's record of protecting flora and fauna was "the best in Africa and among the best in the world". Bloay 1917191
The extensive National Parks system and government's commitment to ensuring that all major ecosystems were represented in formally protected areas contributed to the satisfactory conservation situation in SA, she said.
A recent report by the SANF said SA, which ceased whaling in 1976, also had some of the most progressive legislation in the worid protecting its marine life.
Meanwhile, a spokesman for the Friends of the Earth, a Dutch-based international environmental organisation, said an ecology conference last week in Cape Town found that SA was lagging behind the rest of the world in several aspects of conservation.
He said air pollution was a major concern in the highveld, adding that unleaded petrol needed to be made available in SA.
He said SA's climate was conducive to soil erosion, with droughts followed by heavy rain. In addition, the homelands policy and a dearth of education programmes in overcrowded areas had also led to "disastrous" soil erosion.
Crook said although highveld pollution levels were high, levels of actd rain - caused by the precipitation of a combination of pollutants - were not as high as in world problem areas such as Norway and Canada.

## Chamber joins call for mountain as national park

 Ct $2017 \mid 91$ staf ReporterCAPE TOWN Chamber of Commerce yesterday joined the Administrator's call for Table Mountain to be declared a national park.
Mr Kobus Meiring made the call this week.
In a statement the chamber said Table Mountain was "the second most popular tourist amenityafter
the Kruger National Park" and it was "nabsolutely vital" that proper funding and it was" "ab"solutely vital" that proper funding was made available to ensure that its full potential was realised
Devastating fires, floods and mud slides had ravaged the rich but delicate mountain eco-system this year"and the situation "should not be allowed to deteriorate further", the statement said.

# Council's eye <br> on pollution 

## Staff Reporter

THE managers of two Milnerton factories could be called to task for what ratepayers believe are unacceptable contributions to major pollution levels

NOX (all the nitrogens) levels monitored by the Cape Town City Council yesterday-dropped to double the acceptable guidelines after reaching triple levels on Thursday.
Mr Hans Linde, the council's principal inspector of pollution control, yesterday viewed the pollution from a traffic control helicopter and is reliably known to have targeted three factories for further investigation.
Mr Linde yesterday declined comment until the Medical Officer of Health, Dr Michael Popkiss, returned to work on Monday, but the factories are known to be (in order of pollution contribution) Kynoch Fertilizers, Caltex Refineries and Hoechst.
Mr Cliver Thorpe, regional general manager of Kynoch Fertilizers, admitted his factory emitted nitrogens.

He estimated its: contribution to total NOx levels as "maybe three percent of the greater Cape Town area;
He said vehicles and "running en-
gines" were far bigger contributors to NOx levels than any factories.
Sophisticated pollution reduction equipment had been installed and the company had begun a multi-million rand campaign for further improvements.
"Our approach is to minimise the process that causes the pollution."

However this was hampered by competitors not adopting the same strategies and producing fertilisers more cheaply, he said.
Mr Thorpe expressed willingness to meet with ratepayers and said one such meeting was "already scheduled".
A Hoechst spokesman said their factory generated fumes from burning oil in the polyester fibre manufacturing process but expressed "total surprise" at his factory being targeted.
Mr Dave Brook, town engineer for Milnerton, said his council shared ratepayers's concerns and held regular meetings with Kynoch and Caltex.

The present air pollution act "only stipulates that they must do all they can within the best practical means," he added.
"I think most people are satisfied with 'Caltex's efforts after several meetings with ratepayers," he added.

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## Gem row threatens PWV INTERNATIONAL contrac tors on the R6,5-billion Lesotho Highlands Water

 Scheme are trying to avert a three-week hold-up on the project which could add millions to the cost.The Supreme Court in Maseru ordered on Friday that work be halted in an area of $200 \mathrm{~m}^{2}$ around the Katse Dam pending the outcome of an urgent application for compensation claimed by two diamondmining firms.
The Lesotho Highlands De velopment Authority (LHDA) and the contractors have until August 12 to reply.

Contractors from Italy France, Germany, the UK and South Africa have skilled staff and equipment worth millions on the site of the dam and three turinels which will help divert water north wards from the Maluti Mounwards from the Maluti Moun tains to the PWV.

## Hitch

LHDA chief executive Masupha Sole was in meetings on Friday, but a transport contractor supplying the site said the injunction halting work had not been served

Group 5 managing director Peter Clogg sald: 'It's unbelievable that this kind of legal hitch could hold up such a uge project.'
Group 5 is a member of the international consortium led by Italy's Impregilo which is building the R1,4-billion dam.
The companies which have applied for R565-million compensation for the loss of their alluvial diamond rights are Swissbork and Rampae Diamonds, both represented by Josias van Zyl. Their rights apparently cover most of the streams and riverbeds in the Maluti Mountains where Katse Dam is bing built.
The 180 m -high dam is the key structure in the project, which is due to supply the first water to the Vaal River system by 1996.
Mr Clogg says construc tion is going well and is either on or ahead of schedule.


New bid to clean up storm water (6)

Staff Reporterstar $y>7$ lal. The method, known as a
A new method of taking urban waste out of storm water before it pollutes streams,dâms and wetlands is being implemented for the first time in the country at the "AECI's'new' office park in Sandton.
traps large items of urban waste. The pond, made of stackable precast blocks, also allows silt contained in the stormwater to settle.

This can then be removed by trucks using ramps.

Consultant on the project, Rodney Corin, said the method was relatively cheap.

Press to sit
in on Exco Staff Reporter
多 What Council has
THE City unusual stêp taken the unusual of inviting the media to a 1ors and executive com spêcial meeting at which mittee meet of last Febru-

 Couticl spokesma preTed Doman sald a sentation on the rem "real measures mountain habilitate be discussed would also on Thursday reports - Meanwhile, rep omfrom the mun H Granger budsman' investigation Heugh's fire will be disinto the fire cussed at Tuesday.


OH postaff Reporter
A LEABGING pollution expert has called for, greater research into the city's'deteriorating air qual ty.
${ }^{10}$ Uníversity of Cape Town professor and director of the Energy Research InstituterRichard Dutkiewicz, warned yesterday" "We need to do a lot more research ${ }^{+}$and quickly. Things are goingto get worse."
Cape Town's. Medical Officer of Health, Dr Michael Popkiss, said yesterday that the monitoring of the polTution 2 levels, which had exceeded national"guidelines 16 times this year would"be a motivation for a commis sion ofsinquiry
Recording the daily pollution, Dr Popkiss, predicted, could result in an inquiry, at the end of next year's "smog seasoni'?
The winter months of April, May and Junie are generally considered the sinog season, but this year it has been extended into Jully, said air-pol lution officer Mr Derrick Oxley
He attributed the extension of the smog season to the mild weather.
In a communication to the Town Clerk last month, Health Minister Dr Rina Venter said it was "premature'to appoint a commission of inquiry into
photochemical pollution in view of the paucity of information".
"There is no doubt that in common with most of the large cities of the world, our cities are suffering increasing vehicular pollution and decisions will have to be made as soon as sufficient evidence is available," the communication said.
Professor Dutkiewicz said there was "too little" research into the city's photochemical pollution and the "brown haze".
The coastal city of Sydney, Australia, has a similar brown haze which research has attributed to the burning of fossil fuels, he said.
In Cape Town the cause has not been established, he said.
Mr Dave Brook, town engineer for Milnerton, said vehicle exhausts were the main cause of pollution and a national move to catalytic converters and unleaded petrol would be an extremely costly affair
The priorities of this country, he said, had "to be balanced by what we can afford and what the benefits will "be".

## 

tion to tion to catalytic "onverters and un leaded petrol would cost in the region of "Several thousands of millions of

SA ${ }^{6}$ green

Consumer Reporter 2377 31
A Housewives' League price survey of a major retailer's Green Range has found the environmentally friendly products are also very often the most friendly to the pocket on the shelves.
The price survey of Pick'n

Pay's Green Range is contained in this month's edition of the League's Rand and Sense booklet.
"In a country like South Africa where conservation issues tend to be entrenched in the upper income groups, the success or failure of a product
must ultimately depend on itself," League vice-president Jean Tatham said.

The range, now part of the group's normal marketing, was compared with competing brands on their shelves. The prices were also compared with similar items at other su-
permarket chains.
"There was the usual wide variety of prices but definitely no indication of loading," Mrs Tatham said.

Prices for the enviromentaily friendly products compared favourably with other products on the shelves.


## City council may seek state's aid (36) to restore fire-ravaged mountain <br> CLIVE SAWYER Municipàl Reporter <br> CAPE TOWN City Council may make a formal request to the Minister of Environment Affairs for funds to restore Table Mountain after the Administrator turned down à similar plea. <br> The future of mountain firefighting is to be discussed at this month's council meeting on Tuesday "when a summary of two reports is tabled, while today city engineer Mr Arthur Clayton is to give a pres of the fire. <br> The reports, by the engineering and legal services departments of the council, are the result of an independent investigation by ombudsman Mr Granger Heugh into the events surrounding the devastating February 8 Devil's Peak fire. <br> The first report includes measures already taken to improve response to fires and reports of fires and will recommend <br> changes to the firefighting system. <br> Changes to be recommended include other methods of fire detection, including "non-human" means, a council source said. <br> The legal adviser's report examines various internal legal issues. <br> The reports were examined by council standing committees behind closed doors earlier this month. A decision to disclose details publicly followed.

## SA firms are going greent for their own

By James Clarke
A couple of years ago if a company "went green" it was usually because its public relations people said it was good for the image.

Nowadays South African companies are being driven to it by their overseas customers. They have started asking for detalls regarding the environmental policies of their South African suppliers.

A few weeks ago a South African furniture manufacturer was formally asked by his British buyers for a certificate to prove his factory was not fouling the environment.

The British also wanted proof that its raw material was obtained from forests managed along sound environmental lines.

The firm, in mild panic, went to the CSIR which. fortunately, had recently inaugurated a service to help industry and commerce conduct environmental assessments.

## Exploiting

The service advises firms on how to conduct "environmental audits" and set up environmental management policies. The Germans too are seeking assurances from South African suppliers regarding their environmental ratings

Behind it all is growing international concern for curbing environmenfor curbing environmental damage, particularly to the atmosphere. There is also concern about the
way some industries way some industries Thight we expioving Third

## ments.

Another stimulus causing South African companies to turn green is the desire to reduce risks and the costs associated with risks. Sappi, after the collapse of one of its settling dams at Ngodsetting dams at Ngod-
wana paper mill last wana paper mill last
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that one.
Yet another stimulus is the very real threat that sooner or later global laws will come into force forcing South Africa to join in a universal clean-up of gasses and other pollutants, or face sanctions.

International pressure and local public pressure for better environmental


Golng green . . . CSIR's environmental boss Dr Dirk Grobler.
behaviour has led the CSIP to establish the new division called Environmental Services

Heading it is former Water Affairs scientist Dirk Grobler (42).

In an interview he explained the recent radscal change in the CSIR's role.

The CSIR was established almost 50 years ago as a statutory research and development establishment to advise Government and indus. try on how to make the try on we of South africa' best use of South Africa's natural resources. Until recently 90 percent of its funding was from Government.

Today the CSIR receives only 45 percent of its income from the State - the rest is earned from contract work on the open market.
The CSIR Environ. mental Services has access to the various strategic units which have all been renamed Aerotek (Aeronautic Systerns Technology), Boutek (Building Science and Technology), Ematek (Earth, Marine and Atmospheric Sciences and Technology), Foodtek, Forestek, Watertek and so on.

Its new role has led to a much slimmer CSIR which still, nevertheless, which stili, nevertheless, employs some of South Africa's top scientists and technologists
Manager of Environmental Services, Dr Grobler, after years as a water quality hydrologist in Water Affairs, now finds himself running a fast growing business unit.
Under him are a dozen professional environprofessional environers and their support ers and their support
staff. The unit includes
heavyweight scientists such as ecologist Dr Gra ham Noble who for years was involved in the running of the national co operative science programmes.

Another staff member is project manager Tina James who was behind the CSIR's recent bomb shell report on the par lous state of South par lous state ond pollution ca's waste and pollution control measures.

The biggest call Environmental Services gets from industry is for help in applying the "in tegrated environmental management" (IEM) process, and for environmental policy development as well as for advice on conducting environmental audits.
"International and public pressures are making it almost obligatory for firms to agree to environmental audits," says Dr Grobler.

These are similar to financial audits except that they assess the firm's progress against its stated environmental objectives.
"Big corporations such as Eskom can audit themselves. They can af ford to employ their own full-time environmental experts as, in fact. Eskom does. They then bring in outside auditors to do checks.
"Smaller firms obviously have to use outside auditors"

## Dismantled

CSIR's Environmental Services is gearing itself to assist firms in apply. ing environmental prining environmental principles which control and
monitor a development's monitor a development's grave
Take a power station: it should ensure that all negative environmental and sociological impacts are monitored and limit ed from the time the first sod is turned to when the structure is obsolete and has to be dismantled.

Some generating companies now publish exactly what they will do at the death. Some, for instance, intend to remove all structures except the reactors which will be buried under artificial landscaped hills
Dr Grobler commented. "What firms are realising is that environmental care is cost-beneficial and not non-prodficial and not non-productive spending



FLOODS AND FIRE . . . Deputy Mayor and keen outdoorsman Mr Frank van der Velde argues against a suggestion of permits for hikers on Table Mountain at a city council presentation on the management of


MOUNTAIN MEDITATION? . . . Councillor Rupert Hurly gave some serious thought to the fire- and erosion-battered Table Mountain at a city council presentation yesterday.

## Pletures: BENNY GOOL <br> ,

## Van deripost due at <br> ENVIRONMENTAL guru and renowned <br> the guest speak Lourens van der Post will be the guest speaker at the Southern African International Conference on Environmen- <br> tal Management in the Cape in October. decisiontmanerence will bring together decision-makers in business and industry, as well às ácadénic,' non-governmental organisations and about 20 of the world's leading environmental policymakers. <br> Speakers include a former Canadian

Business Day Reporter
cabinet minister, a director of the Interna tional Chamber of Business, senior international representatives from Shell and BP , senior members of BAUM, the German environmental business association, and the UN Environment Programme.
The conference is the initiative of the Industrial Environmental Forum of Southern Africa which was created in 1990.


# Devil's Peak fire: Council 

 supports its fire-fightersCLIVE SAGYER


## Municipal Reporter

TWO internal City Council investigations on the February 8 Devil's Peak fire have come out strongly in support of council fire-fighting staff and systems, although recommending some changes.

Reports by deputy city engineer Mr Dave Bradley and director of organisation and methods Mr Koos Marais, and by city legal adviser Mr Barney Botha, are to be tabled at a council meeting this week.
The reports were commissioned after an independent investigation by ombudsman Mr Granger Heugh found human error and system failure played a role in the fire which devastated fynbos and blanketed Cape Town in smoke earlier this year.

The new review of standing instructions and existing procedures for fire-watching and fire-reporting duties said these were "well-documented and fundamentally sound".

Improvements, including monitoring communication and reporting routines followed by the control room and lookout staff, and random exercises to test fire detection capabilities were being implemented.

Equipment has been changed so that all calls to the Central Fire Station are recorded.

There were still other weakesses, such as calls to satellite fire stations not being taped and fire calls having to be taped and redirected instead of being transferred.
There was a multiplicity of phone numbers, authorities and control rooms to which fires might be reported, although the migsibility of a single fire report number was being investigated.

These deficiencies had been known for some.time and it was hoped to improve the syswas haped to impro planned new tem as part of a pl

However, plans for this staion had been dropped and the council was considering moving the communications control to Epping fire station.

Sophisticated technology for early detection of mountain fires was being investigated.

Staff manning the Fire and Rescue and Parks and Forests control rooms were welltrained and fully competent, said Mr Bradley and Mr Marais.

Legal adviser Mr Botha said there was "no cogent evidence" there was no cogere made to the central fire station before 10.56am on February 8.

A call was passed on to the parks and forests station at 10.59 am and was followed by a spate of them, according to Mr Botha's report.

The officers on duty were efficient, capable, experienced and fully conversant with what to do when getting a fire report, said Mr Botha.
The executive committee considered it "unfortunate" that earlier public reporting on the fire reflected on the capabilities and diligence of these officers.
However, Mr Botha's report said there was reason to suspect the log book at the central fire station was not always up to date.
He agreed with Mr Heugh's finding that there was a fire evident early in the morning, but that it died down and flared up again about 11 am .
Mr Heugh said the fire watcher may have been absent or asleep.
A review is being done of the 12-hour lookout system and the selection and training of lookout staff.
An executive committee reprt said Mz Bradley's and Mr Marais' investigation would continue.


Gert Kotze

Strange environment for Kotze
JACQUELINE MYBURGH reviews Water Affairs and Forestry Minister Gert Kotze's recent career.
ignation, saying his environmental portfolios were "obviously beyond his scope".

Adding weight to this opinion, Wildife Society director Tony Ferrar said Mr Kotze had showed little inherent understanding for the issues, carried little weight in the Cabinet and was not serviced by his staff.

The hallmark of Mr Kotze's latter-day career was the measure in which South Africans became more aware of "green" issues.

Despite criticism from many quarters, he did notch up some achievements:
The promulgation of the En-
vironmental Conservation Act - The principle of integrated environmental management was adopted as a mechanism for developers, but no legislation to enforce it was created. - The creation of the first Agreement Park in South Africa - the West Coast National Park near Langebaan, which incorporates local inhabitants. - The reintroduction of elephants into the Knysna forest.
Mr Kotze will remain MP for Malmesbury. Sources say this is to avoid a by-election in a constituency which would almost certainly fall to the Conservative Party.

CNE of South Africa's leäding ecologists says apartheid and the attitudes that developed under it are to blame for the country's ecological plight.

Professor Eugene Moll, head of the botany depart ment at the University of Cape Town, says there is unquestionably an environmental crisis in the country.

Delivering his inaugural lecture on campus last night, Professor Moll said: "It was only when the country was on its knees economically, when almost total erosion of the very fabric of South African life had occurred, that the realisation dawned that the dogma had caused the dongas, and that a shift in paradigm was a prerequsite if life, any life worth living, could continue in South Africa."

Professor Moll, who was one of the first people to predict winter mudslides on Devil's Peak after February's fire, said he believed that attitudes formed under apartheid had stunted ecological development.
"Ecologists and conservationists did not question nor challenge the prevailing dogmas, neither within science nor where politics affected the environment.
"On the contrary, the apartheid mind-set drove South African plant ecologists to become obsessed - with classiflcation, 'which required thescollection of large data sets that had to be carefully 'manipulated to form the desired units.
"This' brand of" ecology hás been unable to answer real ecological questions and provide the understanding that will enable us to meet the present environmental crises, just as apartheid hasn't offered lasting economic and social sólutions."


Highlighting the current environmental crisis, Professor Moll said levels of pollutiốn over Cape Towntand Highveld towns were unacceptably high.
"Throughout the country what little fresh water $\mathrm{r}_{\mathrm{i}}$ we have is becoming more polluted daily by contamination with agricultural chemicals and industrial waste. We pump great quantities of effluent and sewage into the sea and even False Bay is becoming hazardous to health.
"Natal seas are so contaminated from PCBs and agricultural pollution from DDT,

Professor Eugene Moll .. 'the apartheid mind-set drove SA plant ecologists to become obsessed with classification
Lindane and Dieldrin that dolphin reproduction is threatened.
"B'ack" on the land, overgrazing and erosion are real concerns and according to one reference we lose an estimated 20 ,tons of soil for each ton of crops produced from both black and white farming areas.
"Desertification is becoming a reality in the more arid western part of the country where some have estimated that the Karoo is advancing eastwards across $2,5 \mathrm{~km}$ of exhausted pastures annually.
"Bad planning has allowed urbanisation to spread over prime agricultural land and into key water catchment areas, imposing severe health risks.
"A recent Worldwatch Institute report states 'South Africa has treated mining like a sacred cow, fearful of disturbing the cash flow
The extent of ecological damage from mineral extraction is massive, from poisoned streams to strip-mined hillsides'."
"If the New South Africa is to seek a way forward it is imperative that the principle of environmental democracy be implemented.
"We have the right to know what quantities of potentially destructive poisons are discharged into our life support systems. Freedom of information and public participation in government decisionmaking is essential.
"Hopefully from now on development will mean real progress," that new wisdom will bring true wealth in a healthy, environmentally happy and caring South Africa."

## Perilous

ozone on the ground has tripled in the Johannesburg and Pretoria regions since the 1960 s ,

- but it is "decreasing steadily 20 km up, according to a meteorologist at the Pretoria Weather Bureau.

Both trends are dangerous. Ozone high in the stratosphere protects the Earth from solar radiation, but at ground level it threatens health and crops and ozone on the ground will never rise and replace the ozone in the stratosphere.
Mark Zunckel, who has been measuring the ozone in Irene, near Pretoria, for $21 / 2$ years, said he had found levels had risen to about 40 parts per billion.

International standards, which are used as guidelines $\%{ }^{2}$ 'SA, state that above 120 parts per billion, ozone cean cause respiratory ailments.
Ozone has a sweetish smell, and although it is present at ground level in minute quantities it is so corrosive that a whiff of pure ozone could kill almostlỳ instantlỳ

In the Vaal Triangle, the ozone polintion levels have approached 120 parts petsbillion. And these leyelsiswere measured in winter, when ozone levels are usually low.
The íevels probably increase in summer, said Dr; Petro Terblanche ot the Medical Research Council, who is to release a report on the subject soon.

Greg Bodeker, who is doing his Masters thesis on global ozone depletion at the University of Natal, explained that an increase of ozone on the ground is caused by anything electrical car spark plugs, electrical substations, even appliances with high voltages - which split up oxygen atoritis. As free oxygen radicals ithey join up in wunstable sets of three to form ozone.

Ozone is also produced by burning fossil fuels, which give' off nitrogen oxides, and unburnt hydrocarbons. These react with each other to produce ozone.

Ozone damages lungs, and makes eyês itch, burn and water. It also lowers resistance to colds and pneumonia.

Ozone may be the main pollutant that damages plants and weakens some materials such as rubber.
"It's nice from far and far from nice," said Mr Bodeker.

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## Report: Cut cars in city, cut pollution the number of cars entering the city daily - about 42000 during peak hours - may be one of the measures introduced to reduce the high level of pollution in central Cape Town. <br> This is one of the findings contained in a report - one in a series - by the Metropolitan Public Transport Study (commissioned by the city council) on transport and the environment. The study is expected to take three years to complete. <br> It finds that air pollution in the city is caused not only by industrial and commercial activity. Topographical conditions also make the city bowl an ideal trap for pollutants. <br> The report argues that growth of the central city has led to an increase in photochemical smog. <br> The reduction in the number of pet-rol-driven vehicles called for an appropriate transport policy which must include an "inevitable improvement" in the present transport system. <br> Over the past 10 years there had <br> ber of commuters using all forms of transport entering the central busines district between 7 am and 9 am , while the number of cars showed an even greater increase. <br> An increase in smog "should not be taken lightly as it poses a very real warned. <br> A steering committee - including Cape Trown Cow Roads Engineer, the Cape Town City Planner's Department, the Cape Town City Engineer's Department and the Western Cape Regional Services Council - has been appointed to handle the technical aspects of the public transport study. <br> The study will proceed in four phases and these are: Identifying and defining the problems of the present transport system; investigating policies for future land use and movement in the Western Cape; preparing public transport proposals, and the design of a detailed public transport system for a the city. <br> People who wish to comment, can write to the Public Transport Hotline, PO Box 536, Rondebosch 7700.

## Trapped in a bowl of 'photochemical smog <br> <br> CLIVE SAWYER

 <br> <br> CLIVE SAWYER}mid:- Municipal Reporter
CUTTING the number of petrol-driven cars entering Cape Town will help fight air pollution problems, a metropolitan transport study says.
The city bowl was a "perfect trap for pollution" and photochemical smog should not be taken lightly because of the risk to public health, the report said.

The number of cars entering the bow is' 42000 a day - an increase of 35 percent on 1981. Since 1983 vehicle registrations have increased 32 percent:
*
Public trañsport had to be improved to provide an alternative to
private cars, the report said.
Installation of catalytic converters in cars was a difficult solution to apply because it would succeed only if lead-free petrol was introduced.
It would take a long time to implement this solution because South Africans kept their cars for a relatively long time.
Diesel engines; properly adjusted, are significantly less polluting than petrol engines. They produce much less carbon monoxide, hydrocarbons and aldehydes.

Further reports will cover the taxi conflict, road safety, road congestion, personal safety, particularly on trains, and the "quality of service" on public transport.

# Anti-erosion curbs 'waste of money ${ }^{\text {©indm }}$ 

By PETER DENNEHY
CAPE TOWN City Council's initial post-fire mountain erosion control measures, costing R600000, were largely a waste of money, outspoken botanist Professor Eugene Moll says in an academic study published at the weekend.
The remarks were made in a study of alien vegetation on Table Mountain, conducted by Mr Mark Botha and Mr Richard Roth under the guidance of Professor Moll.
"Ad hoc solutions (to erosion) have proven ineffective and expensive, as seen in the recent control measures taken to prevent erosion after the 1991 fire on Devil's Peak," the study says.
"The first" wave of erosion control barriers, costing R600 000, were largely destroyed or rendered useless after the first rains of the season."
The report says anti-erosion measures were directed "primarily at protecting private property at the base of
the affected area"
It claims that the root of the problem upstream was not adequately addressed. Erosion had been aggravated by the canalisation of run-off water, "again designed to protect Tafelberg Road but with no consideration for geomorphological effects downslope".
City Engineer Mr Arthur ${ }^{\text {C Clayton }}$ said it was not true that R600 000 worth of barriers had been largely destroyed.
"Much of that was spent on the stone gabions, which were very successful It is true that quite a few of the timber structures were destroyed, but they were a minor proportion of the expenditure and the material was virtually on site already.'
Mr Clayton added that attempts had been made, with a great deal of success, to protect the urban areas, the mountain and the road simultaneously through the prevention of sheet erosion and the encouragement of growth.

## Tribal war threatens SA's water <br> In a bizarre twist of politics <br> Agricultural Union, was start-

faction fighting in Natal is now threatening a substantial part of South Africa's water supply.

Internecine warfare is causing people to move higher and higher into the Drakensberg where new dagga fields and cattle encroachment are being witnessed at unprecedented heights on mountain slopes. They are threatening one of the most magnificent areas of South Africa - the Upper Tugelararea of the northern Brakensberg between Cathedral Peak and the Royal National Park. The area in question is 47000 ha in size and to make matters worse the land is highly erodable

Much of this part of the Drakensberg, a popular hiking area, is under the control of the KwaZulu Bureau of Vatural Resources (KBNR), which is empowered to administer the region for conservation purposes.

KBNR director Nick Steele says that extensive dagga plantations and the migration of cattle to previously un-

2200 m is causing serious "slips" or wash-aways of soil, which are becoming easily discernible -from the lower slopes. $6=0$

A major Concern is that this area of the Drakensberg, aredominantly two large valleys the Mnweni Valley and the Ubusingata Valley, produces about 24 percent of Natal's runoff and 9 percent of South Africa's water.

## Moving



The quality of water coming down from the mountains, especially from the Mnweni River Valley which feeds the Woodstock Dam, is deteriorating rapidly.
Faction fighting over the years is a major factor in substantial numbers of people moving higher up the montains into inhospitable areas.
A multi-departmental commitre, the Tugela Steering Catchment Committee, involving various private sector representatives and governmenta bodies, including the bureal and the Natal
ed some years ago by the Bergville Farmers Associaton to rehabilitate the area because of its critical catchment situation.
Mr Steele says there is an urgent need to attract the more xenophobic tribesmen moving up the valleys, back down the mountainside to lower lying areas by developing home industries, but there are problems.
"The major tribe in the area is the Mangwane tribe who, along with the amaZizi tribe, were given this ara as a socalled native reserve by the British. It dated as a buffer zone between the marauding Bushmen and the white farmers. These people have been there for decades and the bureau fully understands their sense of belonging," says Mr Steele.

But some of the tribesmen's attitudes towards conservaton efforts and development or social upliftment projects are negative, even hostile, he says.

TRENDS REPORTER

## Environment comes first

LINDA ENSOR
CAPE TOWN - It was time that SA realised that economic development and the environment were inextricably linked, Medical Research Council's Dr Yasmin von Schirnding said yesterday
Von Schirnding, who has just returned from an international environmental conference in Sweden, said while SA was gaining acceptance internationally there was a danger that the country could soon face environmental sanctions. $\because B\left(y^{x}\right)$ G1 $\mathcal{F}|i|$

She said one of the main conclu sions of the conference was the necessity to strive for sustainable development rather than shortterm economic goals.

The environment needs to be planned for to ensure that development does not take place at the expense of the ability of future generations to enjoy the benefits of the quality of life we are presently enjoying."

Von Schirnding is planning to discuss the findings of the conference, organised by the World Health Organisation (WHO) and the United Nations Environment Program, with Health Minister Rina Venter and organisations such as the ANC and the PAC.

BRENT VON MELVILLE
STEEL stocks are still increasing despite inroads into export markets by SA steel producers and reports by Iscor that domestic demand had been holding up better than expected over the past several months.

Latest Central Statistical Service (CSS) figures indicate that stocks of primary steel products for May this year showed a $12 \%$ increase from the comparable period last year.

The largest increase in stocks was recorded for basic primary products, which jumped $105 \%$ to $1,2-$ million tons (May 1990; 573670 tons) while profile products increased $5,2 \%$ mainly due to an increase of $26 \%$ in stocks of wire rod and wire

The only decrease was in stocks of flat products, which showed an $18,7 \%$ decline. However, the decline came off a high stock level recorded last May of 1,8 -million tons.

Flat products are produced by Iscor and Highveld Steel \& Vanadıum (Hiveld), and are used mainly in the motor industry and durable consumer "white" goods (such as large household appliances).

One steel analyst suggested little could be read into the decline in stocks of flat products - which are

Steel products on hand

differentiated into slabs (stocks of which dropped $18 \%$ ), plates (down $16,5 \%$ ), sheets (down 19\%) and tin plate (down $23 \%$ ). It was likely stocks would again show increases for June and July "particularly in view of the problems with the motor industry".
"Generally the domestic steel market is still in the doldrums and producers are struggling with excess stocks of steel. The durable goods market is depressed and steel merchants are curtailing orders."
There had also been some overbuying ahead of this year's second hike in the basic steel price, following January's $16,5 \%$ rise

##  slowed down so much that the civil

 engineering industry finds itself in a parlous situation with many companies facing bankruptcy, says CD Roux of Con Roux Construction.Roux told the 11th Annual Transport Convention at the CSIR in Pretoria on Tuesday that the industry's current crisis stemmed from a number of factors.

These included completion of the current toll road building programme and the general reduction in road expenditure, as well as a reduction in construction by Eskom.

Also, regional services councils had switched from providing new services to subsidising existing ones.

The gravity of the situation was illustrated by labour figures. In 1970 employment was 73000 . By 1975 it had increased to 130000 ; and by 1986 had declined to 85000
"Apart from normal staff turnover, a staggering 164000 workers have come and gone because of the ravages of gross domestic fixed investment in construction fluctuating between $3.8 \%$ and $8,9 \%$ of GDP."
Roux said as SA's acceptance by

## engineering

 the rest of Africa increased, there would be a growing market for civil engineering in sub-Saharan Africa.Roux said infrastructural development had to at least keep pace with population growth
However, this was not happening in SA, particularly in the field of road construction and maintenance.
"And the chickens will come home to roost within five years if warnings are ignored."
"Neglect of an asset of about R53bn would have serious repercussions which would affect socio-economic development and stability," he said.

PAA'íbibed packaging firm Bakke, which has spent $\mathrm{R} 6,5 \mathrm{~m}$ on switching its polystyrene foam operation from CFC gases to' environnent-friendly hydrocarbon's, has in fact turned the clock back to the late 1960's.

MD Ernest Snoek explained yesterday that Bakke was one of the first companies in SA to start using CFC gases. :
"Everyone, all over the world, switchedtto CFC gases when the technology? was developed, before anyone knew athything about their contribution to the greenhouse effect. Now the wheel has turned full circle and we have gone back to hydrocarbons again."
Residents told to seal homes

## in Sandton poisong gas scare Star $8 \mid 8191$ Staff Reporters

Hundreds of residents of Buccleuch and Kelvin were told to seal their houses or evacuate the area late yesterday afternoon after a highly poisonous acid gas leak, drifting in cloud form, was detected over the Sandton suburbs.
Sandton management committee chairman Bruce Stewart said a broken pipe at the National Chemical Products (NCP) factory in Chloorkop was responsible for the leak of sulphur trioxide, "a potentially dangerous
 gas in concentrated form, which is converted to sulphuric acid when converted to liquid".
After a spate of callers had alerted Sandton's crisis control centre at about 6 pm , the fire department mounted a door-to-door campaign warning residents of the danger, particularly in low-lying areas near the Jukskei River, and advising them to close doors and windows.
Asthmatics and people with babies were advised to leave the area until the danger had passed, said fire
chief Pine Pienaar.
"We did not have to evacuate anybody," said Mr Pienaar. "We told them that if they felt uncomfortable, if they had respiratory problems or small children, they should go and visit some friends for a while and call us later to see if it was safe to come back."
He said several families did this and there had been no panic.

Apparently the areas worst hit by the cloud, which Mr Pienaar said smelt "like
a gun that has just been fired," were the low-lying ; areas near the river.
Roy Pithey, chairman of NCP, said that at about 5.30 pm a gasket failed at the Chloorkop plant causing about 60 kilograms of sul. phur trioxide to escape.
Mr Pithey said the gas did not disperse over a wide. area as there was no wind last night. However, a ghostly white cloud of noxious gas drifted towards the Sandton suburb of Buccleuch.


## Anglo firm gets susipended sentence for da tar sffyll

By Clyde Johnson
Lowveld Bureau
NELSPRUIT - An Anglo American company that negligently allowed a stream and dam to become so polluted that it killed all fish and other aquatic life was yesterday sentenced to a fine of R10 000, conditionally suspended for five years.

Regional Court magistrate Mr Bertus le Roux found Anglo American Prospecting Services - represented by company director Anthony Gordon Knowles - guilty of unlawfully and negligently polluting public or private water and making it unfit for the propagation of fish and aquatic life and for other legitimate purposes.

The conviction follows an incident on November 71989 when, during a storm, waste
rock and other material from the disused Bien Venue mine flowed into Revolver Creek
In the process, water flowing through a nature reserve belonging to Luke von Johnstone became so polluted that hundreds of fish died.
Although it is nearly two years since the spillage, there is still no sign of aquatic life in the dam.
Passing sentence, Mr le Roux said South Africa was a country rich in minerals, but short of water.
"The Lowveld, in particular, has become a pollution target with developers, and there is a great need for cleanliness and decency towards nature."
Mr le Roux complimented Anglo American Prospecting Services for having budgeted R3 million for the removal of the mine dump.

## Poison gas alert in

## Sandton 949491 .

From Page 1
Mr Pithey said: "We isolated the leak within 15 minutes and alerted the Sandton Fire department. We were unable to detect any sulphur trioxide at ground level, we only saw what was a white cloud. We are not aware of any inconvenience to any people."
As the massive emergency campaign swung into action, the Sandton Commando of the South African Defence Force and local traffic department was called out, a bus service to evacuate residents was placed on standby, regular radio reports were issued and the Johannesburg Hospital was immediately alerted.
"It could have been ugly if the gas had been more concentrated, and if they hadn't stopped the leak as soon as they did," Mr Pienaar said.
The traffic department set up roadblocks on streets leading to Buccleuch to warn people of the danger of entering the area.
Jeanette Boers, a Buccleuch resident, said she had not felt it was necessary to leave the area. She said some people had panicked and were running down the suburb's main thoroghfare, Gibson Drive.
Mrs Boers said she had seen a "whitish cloud".
Mr Pienaar said that, although the gas could still be smelt at about 8.30 pm , the danger had passed by then.
Calling for more stringent checks at the nearby factories, local councillor Jo Marais stressed that this was the first leak she was aware of in the last 20 years.
"People were aware of this situation when they built and it is no good beating a drum about relocating at this stage as it is financally impossible," she said.
Ratepayer chairman Axel Joosting said residents had lived with the situation for many years and had a "good relationship" with the chemical factory proprietors.

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bombs lurking in the cupboards?

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The cleanup of the Valdez oil spill -10

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load for managers these days is very tion won't take the companys envi-

## City seeks cash

 to buy land (S)CLIVE SAWYER, Municipal Reporter ${ }^{\text {º }}$
LAND above Noordhoek will be incorp porated into the city-controlled Silvermine Nature Reserve. .,$i_{z i}$
The City Council has asked the Western Cape Regional Servicés Council and Cape Provincial Administration for money to buy the 105 hectares. The RSC approved its incorporation last month
City administrator Mr Gys Hofmeyr asked the RSC for R650 000 to help buy the land.
Incorporating the land in the ', reserve would improve fire management and nature conservation in the area, he said.
A RSC report said the land was on a mountain-top and it was unlikely any form of development would be approved in the area. The land was in the Peninsula protected natural environment area.

Mr Hofmeyr said it was not included in the reserve because the land was privately owned and outside the municipal boundary.
It was overrun with alien vegetation but there was also a "considerable variety" of flora worth conserving.
There was excellent potential for clearing alien vegetation and for natural, regeneration of indigenous vegetation.
No fire-protection measures 'existed on the land a areat hazard to the western area "the reserye:
Mrtofmes said the buncilit would also rectorate itoliciat Administration chief, di rectorate of nature and environmental conservation for financial help to buy the land.

## Greening of the City awards made <br> い事。 <br> Staff Reporter <br> innovative policies is provided by <br> and groundcover．

IT ITSt of vital importance that Capetonians maintain and im－ prove the city＇s natural and unique assets，Mayor of Cape Town Mr Gordon Oliver said at this year＇s presentation of the Greening of the City awards yes－ terday．

CT $9 / \mathrm{g} / \mathrm{al}$
His council was extremely con－ scious of its obligations in this respect，he said．

One example of the council＇s
one of the eight＂award of merit＂ winners，the Standard Bank of South Africa，for its landscaping of Merriman Square．
This square used to be a deso－ late and under－used area of coun－ cil－owned property beside the Standard Bank＇s building on the Foreshore，just across from the Civic Centre．
The bank provided seating there，and planted trees，shrubs

Another notable winner of a ＂special mention＂was the mural by the Child Accident Prevention Foundation of South Africa，in Klipfontein Road near the Red Cross Children＇s Hospital
The merit award winners were：Standard Bank for The merit award winners were：Standard Bank for Merriman Square：Warbler Court residents in Timber Company；Lantana Primary School in Mit－ chells Plein；Spoornet for landscaping Oswald Pirow bridge；Shell for Taronga Motors in Crawford；and the v\＆A Waterfront for the entire Plerhead develop． ment

## CAAL FCR THE WOStar dare we go on burning it?

T is quite a thought that South Africa - third biggest coal exporter in the world - will be exporting coal long after the Middle East's oil has dried up.

Our 55 billion tons of exploitable coal should last 300 years. Oil won't see out next century. And we have another 120 billion tons of coal which might one day become economically exploitable.
But will the public tolerate coal's continued use?
The short answer from the industry is that it would be crazy not to.
I noticed that the coal men who met at a "Coal in the Environment" conference organised by Naca last conference organsed aware of coal's deteriorating image and clearly un derstand public concern over acid rain and global warning which are partly caused by coal burning. There's also coal's role in ill health, sinkholes, water pollution...

The universal feeling among delegates was that we cannot possibly eschew such an abundant resource. Somehow we must learn to burn it in such a way it does not wreck the atmosphere. Most experts felt the acid rain problem has been "solved" and that future coal-fired power stations will not release sulphur.

The big worry now is carbon diox ide from coal. It accounts for a third of man-made carbon dioxide which in turn accounts for half the manmade greenhouse gases.


This can be curbed but the process is expensive - although I doubt it is as expensive as the industry would have us believe.
Interestingly, at two environmental conferences in Johannesburg last week - one on minerals exploration and the other on coal - the following conclusion was drawn:
When it comes to development (or the continued use of coal) the deciding factor will not be facts, but public perceptions.
In a way this puts an enormous responsibility on the public. Through ignorance it could stop a proposed development which in fact might well have been of great benefit to the country.

On the other hand the public's negative perceptions of mining's impact on the environment has been ingrained by the industry itself.

But things are changing.
Dr Roland Merrilees, a project evaluation consultant who spoke at the minerals conference said: "In the 1970 s it was the dark greens (environmentalists) versus the nongreens (industrialists).
"Now we are all light green."

## NATIONAL

## Protect St Lucia wetlands: Expert One of world's great wildlife spectacles <br> The Argus Correspondent

DURBAN. - World authority on wetlands, Australian Max Finlayson of Slimbridge waterfowl research centre in England, says the St Lucia area in South Africa should be protected from mining.

Dr Finlayson, 37, is scientific adviser to the Swiss based Ramsar Bureau for international wetland protection.

The bureau was established as a result of 75 governments - including South Africa - signing an agreement to save the world's last few unspoiled wetlands.
The South African government asked for: St Lucia to be listed under the Ramsar agreement but withdrew from the Ramsar agreement three years ago.

The huge but shallow St Lucia estuary, one of the world's great wildiife spectacles, is a vital landfali area for migratory birds many from Europe and Asia including Siberia.

Richards Bay Minerals, a subSidiary of RTZ in Britain, says South Africa can earn billions of rands by allowing the company to mine the hills on Lake St Lucia for titanium.
It has promised to replant indigenous vegetation.

Dr Finlayson said: "The mining people argue that the 20 km of dunes they want to mine is only a small part of the region. If it is such a small bit why can't they leave it alone?"

He said the mining company says it will re-establish indigenous forest where now there is pine. "But they have not proven they can do this."
He said what they have done so far at Richards Bay, where the dunes have been removed, the sand sifted for titanium and then replaced, is not replace indige"rous forest but simply to "revegetate".
"Anybody can do that," he said.
"We need to know how impor-
tant the dunes are to the ecology of St Lucia and the Natal Parks Board should demonstrate the importance of St Lucia as a conservation area."

Dr Finlayson said its "obvious value" was not only to South African resident birds but to the "migratory chain". Annually hundreds of thousands of economically important birds make landfall there.
He said the Ramsar agreement (made at Ramsar in Iran in 1972 and ratified in 1975) did not preclude human activity in wetland and advocated "the wise and sustainable use of wetlands".
"The Ransar agreement is very strong on this issue.
"South Africa should show Mozambique how to sustain and use this whole wetland system so that everybody scores.
"But put a mine in the middle of it and Mozambique might well want to do the same."

## Zululand 'one of the last' great sites to $\quad$ of developed <br> The Argus Corresponden <br> man of the Zululand Environ

DURBAN. - Zululand is set to be come one of the main tourist destina tions in South Africa with the con struction of a luxury hotel, game camp and private game lodge starting soon in the area around Lake St Lucia, Mkuze and Hluhluwe game reServes.

The Boma Hotel, the Natal Parks Board's Hilltop Camp in Hluhluwe Game Reserve, and the Phinda Resource Centre, the largest private game reserve in Natal, will provide about 600 . more beds for tourists in the area:

The new developments are expect ed to bring in millions of rands of foreign currency into the area
Conservationists believe it could be the beginning of the realisation of the Greater St Lucia. Wetland Park they have campaigned for over the past 30
years.
"We are sitting on a tourism goldmine," said Mr Oliff D'Oliviera, chair-

Alliance and the Canvironmental Lucia.
"The area is one tenth the size of the Kruger National Park but is of a far greater diversity and would offer the tourist, especially international visitors, much more.
"It is a unique area in that it ranges from a marine reserve and sanctuary through lake and terrestrial systems to a wilderness area. Over and above clared a world which has been declared a world heritage site and is one of the most unusual wetland areas in the world."
"Zululand is probably the last undeveloped tourism area in South Africa," said Mr Rob Deane, regional chairman of the Tourism Association of Natal and Kwazulu.
'Zululand's attraction is-its rruralness and the fact it has not been developed. There must be a regional plan for its future otherwise we"could

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 ment asked for St Lucia to be The South African Govern-
 governments - including South
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sar Bureau for international $\because$ Dr Finlayson is scientific adWaterfowl Research Centre
in England.
 lands, Australian Dr Max protected from mining, says The St Lucia area should be








# Report backs kaolin mining at Noordhoek <br> <br> STEFAANS BRÜMMER, Staff Reportor <br> <br> STEFAANS BRÜMMER, Staff Reportor <br> During the pre-development phase the 

PROSPECTS of controversial kaolin mining at Noordhoek came a step closer today with a long-awaited environmental impact study which says negative effects "can be largely overcome".
The study, by consulting engineer's commissioned by Serina, the company which holds the kaolin mining rights, will be used by the Department of Mineral and Energy Affairs in making à final decision whether to grant permission for the site to be worked.
'The' proposed mine has been the subject of intense controversy since 1980 .
The study, released today, suggests measures to control the environmental impact: of mining and concludes: "If the impacts are successfully controlled, potential impacts such as loss in the value of property and the nuisance factor posed by dust and noise can be largely overcome.
"There are positive aspects related to the proposed operation resulting from employment opportunities and benefits to the local and national economy."
The study found that the mine would be able to provide 85 to 90 percent of South Africa's kaolin needs for ceramics and paper and would be viable for 17 years, replacing production at the nearby Brakkeklóf mine, which hạd a remaining life span of four years.
Cashflowinto the local economy would be aboutt R5 million, y year and the mine would proyide employment for about 120 people fromithe area.
"negative perceptions about the proposed mining" could be anticipated to result in neighbouring properties changing hands at about half the normal market price.
As distance increased the negative effect would decrease. Property prices would continue to be influenced throughout the construction phase, recovering with time, "provided the mine is operated according to sound environmental management principles".
The study recommends that an "environmental control manual" be drawn up to provide day-to-day details on environmental management and that a committee comprising environmentalists, residents' representatives and authorities monitor the operation.
Mr Carl Tarrant, managing director of Serina, said his company accepted the study's impact-control recommendations "in principle" and agreed to implement them "to the best of our ability."
He said Serina was committed to "ensuring that the development is an environmentally responsible one".


## Powerlines for trees: residents a app <br> cision." "a S6

The glaunch of an en vironmental impact study in Sandringham to test the effect of replacing trees with powerlines has drawn tentative approval from residents. Announced by counci managenent committee member Paul Asherson last night; he said the independent study
cost about R25 000 .
"While I am not prepared to ride roughshes, over resialso be aware of costs. This study, àffecting some 800 trees, will go along way to wards making a fiñal de-

- The replacement of neas Huddle Park and near Huddal Johannesburg golf Royal Johannesburg gol courses - with powerOrchärds sub-station, has raised'a storm

But Mr Asherson maintains the cost of putting the lines underground will be R3,5million and the council is not prepared to fóot the additional bill.

Reacting to the ap ${ }^{2}+$ pointment of an environmental impact study team, Val Kleyn of, the ? $1 f$ Tree Society of Southern Africa welcomed the Africa welcom, move move

## Proposed Chapman's Peak mine impact study finished <br> CAPE TOWN - A compre <br> ceramic manufacture, at

hensive environmental impact study on the proposed kaolin mining project behind Chapman's Peak has been completed by consulting engineers at a cost of hundreds of thousands of rands.
The two-year study, undertaken by Steffen, Robertson \& Kirsten and presented to the authorities, details the measures which should be adopted to minimise the impact of the proposed mine at Noordhoek on the environment.
The proposed mine has

elicited a storm of protest from action groups such as the Save Chapman's Peak Action Group, which collected 50000 signatures in a petition.

Concerns of these groups ranged from the proposed mine's visual impact, noise and dust levels, heavy vehicle traffic, effluent disposal and the effect on property prices and the tourist industry.
Assistant Government Mining Engineer: Cape Town region Hilton Mulke said yesterday no mining permit had as yet been granted to kaolin mining company Serina - ultimately owned by Sanlam as the conditions attached to the permit had yet to be determined. If the permit was granted, these conditions would stipulate what environmental measures had to be adopted.
But Serina MD Carl Tarrant said he had been given an undertaking by the authorities that the mine could proceed once these conditions had been worked out. He said the environmental impact study and other preparatory work had cost Serina R800 000.
Serina presently mines kaolin, used in paper and

Brakkekloof, about 7 km from the proposed mine and supplies about $90 \%$ of South African demand. The proposal is for Noordhoek to replace Brakkekloof when this mine comes to the end of its life in a few years time. (56)


Steffen, Robertson \& Kirsten environmental scientist Mary-Jane Muller said at a presentation yesterday that the impact of the mine could be largely overcome if the environmental measures proposed were implemented Even with these measures property prices would initially drop but should recover over time. If the measures were not implemented, property prices could drop by $20-40 \%$.
The impact on surface water was unlikely to be great while the site of the proposed mine was in an ecologically degraded state and mining would not effect the fauna and flora
The study said a major drawback would be the mine's visual intrusion on the landscape and the intrusion of noise. Provided control measures were in place, dust should not be a health hazard.

## Noordhoek ${ }^{(\sqrt{3})}$ mine meeting ends on <br> STEFAANS BRÜMMER <br> Staff Reporter <br> ances, Serina managing director Mr

CONTROVERSY about the proposed kaolin mine at Noordhoek has flared again after the release of an environmental impact study - done on behalf of mining company Serina- that claims negative effects "can be largely
overcome". overcome".
After the release of the study yesinday company officials held a meetof the Noordhoek with representatives of the residents and with. property deyelopers, Simon's Town MP Mr Jan-
nie Momberg and other interested nie Momberg and other interested parties.
Battle lines were drawn at the small church hall meeting, but tempers were kept in check as the opposing sides testily waded into the thorny issues of development versus conservation. '
The study, which suggests measures to control the impact of mining in the area, concludes: "If the impacts àre successfully controlled, potential factors such as loss in property values and the nuisance factor posed by dust and noise can be largely overcome." $\therefore$ It recommends that an "environmental control manual" and a committee comprising environmentalists, residents' representatives and authorities be instituted to monitor Serina's compliance with control measures.
: Asked by Mr Momberg for assur-

Carl Tarrant said his company accepted the measures "in principle"" and that they would submit to the committee if it consisted of "reasonable" people.
After the meeting Mr Momberg said he wanted to convey the 'total objection" of his constituents to mining at the site.
But he added: "We cannot put our heads in the sand like ostriches".
He said his personal feeling was that the mining permit would be granted to Serina in spite of objections, which he wanted to be "stringent".
Save Chapmans Peak Action Group Spokesman Mr John Butterfield said: "It seems Serina is determined to go ahead with its plans, which casts a bit of doubt on its purposes with the impact study."
He said Serina had not sought a decision on whether they should mine, branding the report "not a feasibility study, but fa mining report". $^{2}$
Mr Butterfield said it seemed alternative deposits in less-sensitive areas had not been considered.
It seemed the study's data on alternative deposits were still based on the outdated 1977 government geological survey.
He was, worried that $;$ permission to mine the disputed site would set a precedent for further mining in the valley.
"There are deposits "patchworked all over the place."
 THE Fish Hoek town council decided this weeknot to support an application by Serina to mine kain on the perimeter of the company's "vehementRoad property after residents objected "vehemently" to the scheme.
The council approved the application in April" condition that it was advertised at Serina's expense and drawn to the attention of abutting residents and of the Fish Hoek resident's association. Since then at least 20 people living in the vicinity of the mine have submitted written objections and a petition to the council
The town clerk, Mr Doug Smit, told the Constantiaberg and False Bay Review that the mining compiny could apply to the relevant goverment company to extend its activities but he believed ministry to exhe council's backing, this would not that withou
Most residents opposed the idea because of the additional dust they believed would be generated by mining. Others were afraid the expansion could lead to the devaluation of their properties while some were concerned about noise, blasting and subsidence.

The conditional nod given early also stipulated that Serina should erect material which would provide $80 \%$ screening on either side of the Harrington Road fence and that suitable trees should be planted and maintained along the councilowned verge.

Serina was also to reinstate the area fully after the completion of mining and to donate R10 000 towards playground expipment in Sun Valley.

## Transport of

## ore may not

## be allowed

PLANS by kaolin mining company Serina to mine kaolin in Kommetjie and transport it to their Fish Hoek plant for processing may not be allowed after a legal finding of the Fish Hoek, town council.

The council resolved recently that according to the Town Planning Scheme Regulations, it would be illegal for ore from Kommetjie to be transported to Fish Hoek for processing.
This is because the plant is zoned for agriculture and would be used for industrial purposes if this took place.
Engineers-reported that the remaining residue would be taken back to the mine.

# Guideline <br> (5) Cr 15 |c| 41 <br> mine 

By PETER DENNEHY
THE Department of Mines is expected to lay down conditions under which kaolin, may be mined by the open-cast method at Chapman's Peak by the end of September.

This was said yesterday at a press conference by independent consulting engineers Steffen, Robertson and Kirsten, who presented their newlycompleted environmental impact study: on the proposed Noordhoek mine.
1 Environmental scientist Ms MaryJane Muller said the overall goal had been to guide rather than impede development. Among the recommendations made were:

- The hole on the surface of the 27ha, site must never be more than 4ha wide..
- Minèd areeäs must be progressively refilled, leaving a depression of no deeper than one or two metres.
- An environmental committee with local representatives on it
should be set up to ensure compliance with requirements.
Mr Fanie Geldenhuis, a partner in the consultants' firm, said mining could begin in 18 months to two years. Serina Kaolin (Pty) Ltd already has mining rights on the site, but the department may yet impose binding conditions on its mining permit.
A further presentation of the environmental report was made to representatives of interest groups in Noordhoek vesterday afternoon.
This meeting was attended by Mr Carl Tarrant, managing director of Serina; landowner Mr Mark Wiley; Mr Ian Brownlie and Mr John Butterfield of the Save Chapman's Peak Action Group, Mrs Nikki Holderness and MP Mr Jannie Momberg, among others.
Mr Tarrant said in a lettérincluded in the environmental report that his company accepted, in principle, the recommendations made in the report, and agreed to implement them to the best of its ability.

AN environmental impact study for the controversial phase two of the Myburgh park development at Langebaan ${ }^{3} h a s$ in fact been done, a spokes man for the developer said yesterday.
Mr゙wacques Verster, a spokesman for'develópér Mr Corneels Nortje, corrected aprevious statement Ke had made. In fact, the impact study had been"completed and the construction phase of the Integrated Environmental Planning Procedure was now being

He added that a report drawn up by Professor Gideon Retief on phase one had not been used to motivate phase two. The professor's plan had been resubmitted because the developer wished to underline a sound environmental principle mentioned in the report.
Mr Verster said that at Langebaan a fine example of a marriage between development and nature conservation had been achieved.

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 the trees was provided free of charge．
The project＇s Arbor Day activities focused Instruction on the proper planting and care organic fertilizer to individual households in
Khayelisha．
 In cooperation with local civic structures celebrated Arbor Day last Saturday by distrib－
uting over 1000 trees． －project working on the Cape Flats， I home＂，a food gardening and greening BALIMI BEZEKHAYA or＂planters of the
home＂，a food gardening and greening DAVE LEWIS reports： help green the Cape Flats．

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AVE LEWIS reports:


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rooford oul jo comu！pioos Nyanga Garden Centre－contact Mbude
Sithandathu，Nyanga East（Phone：34－2307． ，




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 －вәл pue p！ny ployosnoч uмо д！ч！jo junoure luepliusis e zonpord of unol odeo jo soll
 Flats．

 －！jono！u polopjond op！nord soon әчL Tree planting is an ongoing and essential
part of improving the environment．





APANTING but enthusiastic group of pupils and teachers from Ned Doman Secondary School in Athlone rests on a rock high on Steenberg Peak, Silvermine. Below them the built environment disappears into a vista of sea and distant mountains:

They are members of the fledgling Hiking and Ecological Society which aims to foster an awareness of the environment.

They are led by a core of dedicated teachers: Sedick Dawood, Moira Fahrenfort, Malcolm Pedro and Max van der Ross, who happily give up one afternoon a week and some weekends.

Ned Doman Secondary school has pupils coming from diverse areas, ranging from Silverton to Manenburg to Guguletu. What these areas have in common is a lack of green space and recreational facilities.

So instead of pouring concrete over the open space, the society has created a garden.

Dawood, explains: "We want to inculcate a sense of greenery in the urban environment. Even though the concrete jungle is a problem to us, we are still trying to show that the two are compatible.
"Hopefully, when the garden flowers, the pupils will carry this over to their homes."
Pupils are given their own seed to take home Once the seed has been planted and germinated, the seedlings are brought back to the school.

We also plan to use the garden as a re source, Dawood continued. "One of the trees we planted on Arbor Day was a loquat tree."

Besides working in the school garden, the society introduces other environmental concepis to their keen members
"We teach the kids that they must not litter and must not waste electricity or water. We also pick up papers once every three weeks after school, and sell them as a fund-raising effort."

Funds raised go towards subsidising the end-of-year camping holiday.
It is the hikes which attract the pupuls the most.
Pupils are always asking when they are going on more hikes, and are disappointed if the hikes last only a morning.
This year the society has gone on six hikes, as far afield as the Elands Pad hiking and kloofing trail in Du Toit's Kloof.

Before the hikes pupils are made aware of environmental issues such as not vandalising the environment by liuering or breaking off plants.

They are also taught the value of working together and sharing. Each pupil brings different items of food or drink which they share.
But for the pupils, the best thing about the hikes, besides resting, is getting out.
"It's good for me to get away from homé," deciares Alexander Joseph, a standard nine pupil. "It's tight out there.

## Hiking a hit in Athlone eco-project South <br> 15/8-21/8/91. <br> 

## A school in Athlone has launded aproject toincease dildren's enviroimental awareness by encouraging them to what the environment has to offer. MASHA PANSARI joined them on a hike:



IN THE FRESH AIR: From left, Shikiri de Beer, Petula Williams and Carmen Fillis

I'm always repeating life at home. I come home from school, clean up, do my school work, sleep. It's the same thing every week. It's boring!"
Thasmien Samaai, a standard six pupil, agrees. "I come on the hikes because I want to get out of the house - and away from my brother."

And I like to go out to different places and see nature," adds Carmen Fillis, standard eight. "Hikes keep me busy."
"These hikes are really a breakaway for them," confirms Dawood. "Sometimes we un derestimate them: we think that these kids don't have any stress.
"These hikes are a relief for them. I'thin the whole school should have one period: say, every Wednesday, when all the kids should be taken, compulsorily, up to the nount tains.
"It could be that our academic problems arce hecause they're just in a rut the whole time.

## Visions of Verwooralan Banuistans visled on

$\square$ JIGSAW: A horde of ocal and central government authoritles and corporate and private landowners control parts of Table Mountain. Cape Town City Council controls Newlands Forest,
Lion's Head and Signal Hill and parts of the north face of the mountain, while the Department of Water Affairs and Forestry controls Cecilia Forest. The Cape Provinctal Administration department of nature and environmental conservation controls a stretch from Devil's Peak to Constantia Corner while the Department of Public Works and Land Affairs controls Rhodes Estate. Kirstenbosch is the domain of the National Botanical Institute, while the Western Cape Regional Services Council reigns over the slopes above Hout Bay. The Defence Force possesses Llandudno Corner and the Noon Gun area on Signal Hill. Further south, Fish Hoek and Simon's Town municipalities also hold pieces of the jigsaw.


$\square$ GORDON OLIVER ... just adding another bureaucracy.

IT looks like one of the old, crazed, Verwoerdian Bantustan visions of a myriad independent countries, a map drawn by a child on LSD.
The psychedelic chunks and splotches, however, represent the administrative fragmentation of Table Mountain.

Finding this map was itself an illustration of that fragmentation: Weekend Argus contacted the City Council and Western Cape Regional Services Council until, on the third try, it was provided by the Provincial Administration.
This week, Mayor Mr Gordon Oliver added his voice to calls for more sensible

## CLIVE SAWYER Municipal Reporter

and uniform control of the mountain. He disagreed with Administrator Mr Kobus Meiring's call for the running of the mountain by the National Parks Board.
"This will just add another bureaucracy. If the money is available, give it to the City Council because we have the expertise to handle the mountain."
Walk along Tafelberg Road, just below the blockhouse: rounding the corner, you will leave City Council ground, pass into Provincial Administration department of nature conservation territory and, not much further on, walk on to the turf of the

## Melting pot of our heritas ruined by toc many cooks



Department of Public Works fairs.

Mr Oliver and deputy van der Velde said part of agement problem was 色f:-: of conservation.

Just outside council : vegetation is flourishing, sion measures do not match the city.

Historical reasons lie :-... ple mountain fiefdoms.

Land bequeathed "to the mond magnate and Cape r . Cecil Rhodes is controlled by Cecil Rhodes is controlled by
ment of Public Works and $\mathbf{r}$ However, the Cecilla

## odan Banustans visted on the mountili $=$



Cecll Khodes is controlled by the Department of Public Works and Land Affairs. However, the Cecilia Forest plantation
ter expeninumis, nul ivi uit ming - milnce with past mountain fires has shown that sweeping infernos know no boundaries.

## 

SERINA "has been kicked out of Fish Hoek and there's no way we're going to allow them into Noordhoek", says Mr John Butterfield, spokesman for the Save Chapman's Peak Action Group.

The release of an environmental impact study on kaolin mining, by consulting engineers commissioned by Serina, has opened new wounds with Noordhoek residents.
"We can't accept the resignation and apathy of South Africans. Things are changing and we aim to set a precedent," says Mr Butterfield.
"Two years ago, we were told to forget about saving Noordhoek. Today, we have even more support and Serina is still seeking approval.
"There are numerous inconsistencies in the report. It doesn't ask if mining will have an negative effect - it just presumes they are going to mine." The study conclades: "If the impacts are successfully con-


BEACH MINES: Three of the four deposits of kaolin earmarked for mining in the Noordhoek valley. The fourth deposit is at Imhoff's Gift, near Kommetjie.
trolled, potential factors such as loss in property values and the nuisance posed by dust and noise can be largely overcome."

Mr Butterfield says there are several other less environmentally sensitive areas, stretching from Somerset West to Saldanha, which are geographically favourable.
"There is a massive deposit near Klipheuwel on land owned by the municipality. Serina was given conditional approval to

## mine the area.

"Several strict measures were imposed, including a levy per tonage to be used for conservation. Serina decided not to go ahead and torned their interests to Noordhoek," says Mr Butterfield.
Serina MD Mr Carl Tarant said his company would mine Noordhoek before they turned their interests to other areas.
The government proclaimed Noordhoek a mining reserve in 1982.

## Group gears to stop kaolin mining <br> THE fight to stop kaolin mining The issue of possible alterna

in Noordhoek is far from over, according to the Save Chapman's Peak Action Group.
Chairman of the group Mr Ian Brownlie said yesterday that thousands of rands had been spent by the group in drilling test boreholes. at alternative kaolin sites.

Samples from these had been sent for analysis in Germany as part of "well-advanced" preparations for legal action.
tive sites was raised at a meeting in Noordhoek on Wednesday, at tended both by representatives of the mining company Serina Kaolin (Pty) and by objectors.
The Serina MD, Mr Carl Tarrant, said his company already had mining rights to the Noordhoek (or Chapman's Peak) site and intended to mine it, even if there were other deposits to go on to afterwards.

Mr Brownlie said his group
would be seeking comment on the environmental impact study released on Wednesday.

Mr Fanie Geldenhuis, one of the engineering consultants who drew up the study, said he expected that by the end of September the Department of Mines would announce conditions under which it would grant a mining permit.
"That is not going to happen," Mr Brownlie said. "We have petitioned ministers."
belching out levels of air pollution higher ar than legal limits, say sources close to the power utility.

They said pollution levels at the older stations were often checked by simply looking at the density of smoke emerging from smokestacks.
The sources described the coal power stations of Arnot In the Witbank/Midderburg region, and Matimba in the northwestern Transvaal near the Botswana bor
der, as being "permanently" over their licence limits. He said figures indicated that Duvha, also in the Witbank/Middelburg region, generally operated about $65 \%$ over its limit.
Q. An Eskom evironmental spokesman tions frequently exceeded their limits. Because these stations were using older
diffology, the limits set for them wer diferent to the limits for newer stations. But the sources said not even the higher limits were being achieved.

The Eskom spokesman said limits varied from about 100 micrograms a cubic metre for stations such as Lethabo in the Vereeniging area, and Tutuka near Standerton, to 500 micrograms for the older stations such as Arnot and Duvha. But the

## Pollution ${ }^{\text {B1P } 19416|a|}$

sources said levels at some older stations were not scientifically verifiable.

Most of Eskom's coal-fired capacity (of 34413 Mw ) is in the eastern Transvaal highveld. Major pollutants emittod by coalfired stations are sulphur dioxide, oxides of nitrogen and particulate matter, or haze.

Despite several contraventions, Eskom has not been penalised. Air quality is controlled by a 1965 Act. Licences are granted by the National Health and Population Development Department.

A recent Eskom-sponsored survey found that Eskom accounted for about $42 \%$ of sulphur doxide emissions (of about 2,8million tons) into the atmosphere, while

other industry and commerce accounted for $54 \%$, domestic $3 \%$ and vehicles $1 \%$.

Eskom accounted for $36 \%$ of nitrogen oxide emissions, while other industry contributed $37 \%$, vehicles $26 \%$ and domestic $1 \%$. Of particulate matter Eskom contributed $20 \%$, industry $52 \%$, domestic $24 \%$ and vehicles $3 \%$.

The Eskom spokesman estimated that it would cost between R1,5bn and R2bn to install scrubbing equipment in older stations. But he said "scrubbing" the stations, while reducing sulphur dioxide and nitrogen dioxide emissions, would only replace air pollution with solid waste pollution.


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## Cut petrol consumption in Cape Town - report <br> CLIVE SAWYER Municipal Reporter ARGZR|8|91 PETROL and diesel consumption in Cape Town must be cut to prevent further economic and environmental damage to the city, a metropolitan public transport study says. <br> The report said there had been a <br> metropolitan Cape Town and lowering the rate of inflation in the area." <br> Oil was a "non-renewable resource" and there was doubt about the stability and price of imported supplies. This meant it should be conserved.

long-term growth in liquid fuel use since the early 1970s.
Benefits from cutting fuel conisumption would include reduced vehicle operating costs, foreign exchange savings and a cut in the potential for atmospheric pollution, the report said.

Petrol consumption increased by 42 percent and diesel by 18 percent between 1982 and 1989. The growth matched the growth in registered vehicles in metropolitan Cape Town.

Further benefits included decreasing the transport part of the costs of 'goods and services, the report said.
"This could have the effect of improving the competitive stance of

Measures to do sö should be focused on metropolitan areas such as Cape Town.
These would include ways of eliminating the need for long trips, improving public transport, increasing vehicle occupancies and improving traffic control measures.
"Undue reliance on private transport is not sensible in the context of attempting to reduce fuel consumption."
The report is part of a series being produced by the metropolitan public transport study team. The three-year project was initiated by Cape Town as the core city of the metropolitan transport area.


business, says Owen Wigbusiness, says Owen wig-
gins Trust (OWT) advertising manager Gideon Langart.
OWT is the developer of top-of-the-market resort village Port Owen, on the Cape west coast.
"The people who buy in our developments are buying, in addition to bricks and mortar, an interest in the ecological environment in which it is located.
Port Owen was the first resort marina in South Africa and as such has proved a phenomenal success.
OWT sold its first $800 \mathrm{~m}^{2}$ waterfront site in December 1978 for R13 000. Late last year a similar plot fetched R150 000 .
A major ingredient in the developer's recipe for success is its commitment to
changes are introduced, the objective is to enhance the natural environment while making it usable.
Port Owen features $3,4 \mathrm{~km}$ of manmade waterways capable of carrying ocean-going yachts.

## Ecosystem

These were formed using mesh-lined crushed rock a more expensive option than concrete, which lends itself to the development of a natural ecosystem.
The dredging operations carried out in the course of creating these waterways led to the creation of an island - now the location of Port Owen's new "millionaires' row"

Access to the island will be by means of a road bridge and the 48 water-

R250 000.

Growth of the village is limited by its boundaries the Berg River to one side and an ecologically sensitive salt marsh which is protected in terms of an international treaty signed a few years ago
The region houses some 120 species of bird life, including many migratory birds that come from as far afield as Siberia
The island will hold 186 plots and 300 timeshare units, a land value of R16,8m and a timeshare value of R183m at current prices.
The marina includes 750 residential sites and berths for more than 500 yachts and small craft.
Sell-out of the resort is expect to take another 20 years.


# Overseas investors are 

 optimistic about futureOVERSEAS investors of inquiries parallel to the are optimistic about South Africa's long-term future and demand for investment property is strengthening, says Syfrets group property finance GM Brian Button.
"The perspective is that property in SA is among the best investments in the world," he says.

## Confident

"Whereas local investors are hesitant, adopting a wait-and-see attitude, overseas investors are confident SA's problems are on their way to being solved and are eager to snap up good properties at bargain-basement prices."

Demand is generally strongest in the coastal areas, perceived by investors as being more stable and further away from trouble spots.
"Johannesburg is a boom or bust city. There are a lot
development opportunities there - but the property market on the Reef is cyclical.
"Even Durban is favoured over the Reef, despite the unrest of the past few years in Natal.
"In fact, it also outranks Cape Town because its proximity to the Reef enables it to offer more industrial development opportunities."

Durban and Cape Town remain the focal points' of the investor's interest in SA coastal property.

While entrepreneurs say Port Elizabeth's future as an industrial centre is assured, especially with the lifting of sanctions, investors consider it too dependent on the volatile motor industry to be a safe bet.

But wherever they put their money, Button says, investors are becoming selective of the tenants occupying their properties.
"No company dependent on tax concessions will at-

## Attractive features can be spoiled by Ioading, Mapacity sob <br> IF A development over-

loads the carrying capacity of a coastal environment it degrades rapidly.

The features which attracted people are destroyed - sometimes irrevocably - and the longterm ecological and socioeconomic consequences can be devastating.

Haphazard development has dealt a death blow to many parts of the overcrowded Natal South Coast and the Wilderness area and the pressure of population expansion coupled with the projected growth of the tourist industry could put more areas at risk if developers and government do not act to prevent it happening.

The committee for coastal and marine systems of the Council for the Environment, headed by Dr Allan Heydorn, has established
prehensive policy on coastal zone management (CZM).

Heydorn says: "We are not anti-development. Economics and conservation are mutually dependent and any policy must take into account the needs of people living in the coastal zone or wanting to use it for recreation.
"But development must be carried out in a way that is sensitive to the environment. This is in the interests of the developer and the nation.
"The aim of CZM is to ensure development in the coastal zone is regulated to benefit the greatest number of people while at the same time safeguarding the environmental features and ecological processes of the coast."

Developers ignore the


## BRIAN BUTTON

tract a second glance from an investor - and investors won't go into subsidised areas because they are perceived as lacking long-term security.
"Subsidisation has a worrying effect on the investment potential of properties.

> "No one can deny that some tax concessions are
necessary, but government's decision to link subsidisation to profitability is welcome.
"Straight subsidisation encourages inefficiency, and because it cannot be relied on in the long term its presence is a deterrent to property investment."
Today's investor looks for properties housing viable tenants with proven track records who can be expected to continue paying rent on a steady basis.

In selecting office developments, investors are sensitive to gearing.
"Space oversupply is not a major problem provided sophisticated investors recognise that, because of the cyclical nature of the property industry, it is difficult to time projects perfectly," Button says.
"Developers who are too sensitive to the risk of medium-term oversupply can risk missing the boat in the long term.
"By developing later in
an inflationary environment their projects can be less competitive than buildings completed during a glut, and because they risk being too late to take up the slack when demand for space catches up with supply.

## Gearing

"In today's investment climate, a well-located development will have little difficulty in finding a backer - provided the level of gearing is right."

Developers must balance the costs of building later, in an environment in which building costs increase at close to $20 \%$ a year, or holding onto empty space during an unfavourable letting market.
"High gearing, because of the unpredictability of interest rates, can play havoc with the mediumterm viability of a project and is a deterrent to investors," says Button.


1 Chapman's Peak Drive overlooking Hout Bay.
implications of CZM at their peril.

Developments which destabilise the natural vegetation of a coastal dune area, for instance, can leave them vulnerable to driftsand, and waves can destroy structures built too close to the high tide mark.

Sound financial planning takes environmental issues into account.

The new Time Projects development overlooking Hout Bay - 1 Chapman's Peak Drive - was nearly the scene of an environmental disaster when the original developer destabilised the cliff face to the point of collapse before abandoning the project and part of the Port Alfred Marina development - designed as an exclusive holi-
day playground - is under liquidation as a result of bad financial planning.
In its first report on CZM, which outlines its principies and objectives, the committee defines the coastal zone as the narrow strip which includes such features as coastal lakes, lagoons, estuaries, dunes, beaches, rocky shores and some offshore islands.

# Threat of bad publicity keeps developers in line <br> ENVIRONMENTAL <br> have other priorities at this 

conservation is about more than conserving South Africa's natural heritage simply because it is beautiful.

It is a bottom-line affair with direct impact on property values, yet government legislation does not enforce even the most rudimentary controls on developers.

The Environmental Conservation Act promulgated in 1989 recommends developers carry out environmental impact studies (EISs) - but this is not specifically required of any development, nor does the Act lay down any channels intended to promote public participation.

Chairman of the committee for coastal and marine systems within the Council for the Environment Allan Heydorn says: "SA politics
stage.
"Government's attention must be focused on such Third World priorities as the need for housing and food - while environmental conservation is regarded as a long-term priority.
"But far-sighted developers are learning it is in their interests to carry out EISs.

## Intrinsic

"The natural environment can add to the intrinsic value of a project and at the same time a study can help them avoid costly mistakes."

He says a coherent policy for coastal zone management must be drawn up and management of the policy must be centralised rather than devolved among individual local authorities with varying, often shortterm objectives.

Sapoa executive director

Brian Kirschmann says current legal requirements are adequate.
"Sapoa recognises the importance of conservation. Its environmental committee is represented on the Council for the Environment.
"But in view of the trend away from regulation it would be counterproductive to enforce tighter controls over developers.
"If restrictions became too tight, developers would simply sidestep them, as has happened in the Retirement Villages Act. This is now so stringent nobody is developing retirement villages any more," he says.

Kirschmann says Sapoa - backed by the Council for the Environment - can bring enough pressure to bear on offenders that even those who are not members can be brought into line.
"Our members carry a
lot of clout and no developer who wants to deal with them would be wise to buck them," he says.
"If a member abused the environment the Sapoa council would censure him."

## Censure

He says on their own these measures are inadequate, but an ongoing process of education, reinforced by censure and bad publicity when a developer behaves irresponsibly, will do more to bring about a change of heart in the long term.

The real issue, says Heydorn, is in the planning of regional development programmes.
"In terms of government policy, necessary and desirable development is encouraged - but in keeping
with environmental principles," he says.
"Along these lines, ecologically harmful developments need to be restricted and development should, as far as possible, be concentrated at focal growth points with undamaged areas left to flourish in between."

At the same time, developers must learn the lesson they consistently resist ab sorbing - to plan for extreme conditions rather than trusting to luck.
"Too many developers build according to the mean and when a flood or sandstorm hits them their asset is damaged - sometimes beyond repar.
"Scientific EISs can enable them to prepare for the worst, and while this may involve greater initial capital outlay, in the long term it is more cost-effective," he says.

# Motor vehicles are citys ${ }^{6}$ chief pollutens <br> has slumped during the recent reces- 

 sion, but the use of motor vehicles on the peninsula's roads is escalating," Dr Popkiss warned.He said that pollution levels from industrial plants were constantly monitored to ensure they are kept within the legal requirements.

Funds to promote research into photo-chemical pollution were badly photo-chemical pollution were badiy
needed, but had not been forthcoming from the government.

Health Minister Dr Rina Venter earlier this:year turned down a call for more funds and research to tackle photo-chemical smog.


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 image of the Stellenbosch professor unhappily danc－ ＂iss standing by the cloorway，and forcefully pulled
himinto the melee．There was much sniggering at the




















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 fore soil removals，as people have struggled by the establishment of bantustans and

 ing and sanitation in the townships and
squatter camps．




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By NELSON MANDELA Nelson Mandela committed the
ANC to far－reaching green policies
at the launch this week of a book on
environmental struggles．This is an
extract of his speech

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## Air-pollution(58)

 levels in city up tions in Cape Town yesterday ${ }^{\prime \prime}$ together with a low-level temperature inversion, drove up one of the air-pollution indices for the first time in over two weeks
The highest hourly average reading at 8 am for the nitrogen oxides was 1562 micrograms
per cubic metre - 58 above the national guideline level of 1504 .



THE Delta Motor Corporation, which produced Opel passenger cars in South Africa would like to see the local introduction of leadfree fuel as soon as possible.

The company says it is ready to produce environment-friendly cars equipped with catalytic converters and run on lead-free fuel.
"Opel engines used here have been designed to run on lead-free fuel. And by adding a catalytic converter, we could easily produce cars compatible with lead-free fuel," said Rolf Mentzel, engineering and quality assurance manager at Delta.
He said Delta would like to see locai availability of lead-free fuel as soon as possible "Pollution on the Reef is a huge problem, and cleaner exhaust emissions can improve the situation drastically."

In Europe, environment-friendly models are becoming increasingly popular as car buyers become more aware of the impact of pollution on the environment.

## Increased

Motor manufacturer Opel has seen German sales soar after its decision to adapt and develop vehicles that are environment-friendly. Market share has already increased by almost two percent in only three years.

The company has addressed six aspects necessary for cars to have as littie.effect as possible on the environment.

Engines have to be as fuel efficient as possible, while the toxins in exhaust gases need to be cleaned up by using catalytic converters. Water-based paints, asbestos-free spare parts, a high level of recyclable components and a reduction of noise also need to be addressed.
According to Mentzel, Opel in Germany is completely committed to producing "green" cars. "Already, lead-free fuel is used widely in Europe, in conjunction with cars fitted with catalytic converters. Opel was the first manufacturer to fit these converters to all its cars sold in Germany."

Thanks to advanced engine design and aerodynamic body shapes, Opel cars.also boast a high level of fuel efficiency; while waterbased paints are already in use. Brake pads and clutches for Opels no longer contain asbestos. Mentzel claims.
He pointed out that while lead-free fuel was not yet available in South Africa, all locally produced Opels could be adapted accordingly.


## Richards Bay oil spill contained (56) <br> DURBAN - Clean-up teams la- <br> boured throughout last night to <br> head off oil pollution of the Richards Bay harbour following a minor spill there. <br> The cleaning-up operation should be completed by noon. <br> The emergency began when about 70 tons of heavy marine oil spilled into the harbour area <br> after a bulk carrier crashed into a quay wall while being 0 berthed during the morning. 0 The tank contained about 700 tons of oil. The crew managed $N$ to seal the hole sow managed accident when soon after the went over the side of the men plugs into the side to hammer plugs into the gash. - Own Correspondent

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# ${ }^{'}$ Mining at Milnerton' alleged 

By PETER DENNEHY

CONSERVATIONISTS
claim gravel is being "mined" in a fynbos area within the Milnerton Racecourse.
This was denied yesterday by Mr Mike Louw, deputy manager of the racecourse, who said all the work done there was solely to improve drainage.

Mr Barrie Low, director of education at Kirstenbosch, said he felt that mining was taking place in a threatened habitat containıng rare plant species, as the extracted gravel was being used to offset course development costs.
Mr Hennie Smith, chief inspector of mineral affairs, said he did not consider this a mining operation.
"We are trying to work out a programme to satisfy both parties," Mr Louw said.


FYNBOS . . . UCT botanist Dr Clive McDowell with some of the fynbos that is threatened by drainage work at Milnerton Racecourse. SO CT $28 / 8191$

## Creating a balanced <br> approach tor ${ }^{28460}$

Campaigns led by fanatic con servationists will not save the world from ecological disaster.

This was said by Dr Pat Pul linger, president of the Agricul tural and Veterinary Chemicals Association of SA (AVCASA) when he delivered the opening address at the association's conference on the agvet chemical industry and the environment.

Dr Pullinger said: "There has to be a balance, a bio-diversity
'Bio-diversity today has a much wider meaning. We must manage our food production with all factors in mind."

Dr Pullinger said industry and conservationists have a joint responsibility for the environment and should work together to ensure its future
He said the consumer "finds himself between two warring which tells him if he industry which tells him if he wants food
tomorrow, chemicals have to be used to grow and protect crops.
The conservationists wh blame chemicals for the, decline of the environnment, calling the chemical industry "the poison kitchen" of the world.
"I believe the answer lies in responsible co-operation. We must stop confusing the consumer with wild and often scientifically unfounded pronouncements.
"Paracelsus, a physician and naturalist, said some 400 years ago: 'All things are poisonous it is the dose that makes a thing poisonous'.
"In this lies the answer to our problem. Safety must be achieved by determining a riskfree residue level not just in what we eat but also in the environment
"Let's work out solutions' to balance adequate food production and care for the environment."

TRENDS REPORTER



R30 000
donated for trails

South African Breweries (SAB) recently handed over R30 000 to the National Parks Board to finance educational trails in unspoiled natural areas for 500 children of all races.
It is the fifth such cheque from SAB in five years. Three more will follow
Adrian Botha, SAB spokesman, said the brewing industry depended on clean water and good soil for its products hence its concern for encouraging an awareness of environmental matters. TRENDS REPORTER

## Oil spill fouls <br> protected birds

## The Argus Correspondent

DURBAN. - Natal Parks Board officials have launched a rescue operation at Richards Bay after oil spilled from the bulk carrier CSK Everest entered the sanctuary.
Dozens of birds, including pelicans and flamingos have been affected and mangrove trees have been hit;', said board spokesman Mr Mike Milton. Fishermen said dead birds hiad been. washed out to sea:

More than 70 tons of oil spilled into the !harbour on Sunday when the Everest hit the quay
Mr Milton said the oil, which had escaped over the floating booms being used to contain it, was driven by a north-east wind and went over the sluice gates in the sanctuary area on the high spring tide.
The board had reinforced staff with men from Durban in an attempt to save the birds and clean the area.
Pelicans had been seen covered in oil. Efforts were being made to reach them, Mr Milton said :

Flamingoes with oil on their legs
had been spotted. About 10 ha of mant grove trees had been hit.
Harbour officials had been able to prevent more oil crossing into the sanctuary on the high tides and were standing by to hold it off again.


## Developers in 8 ecological row <br> 

THE developers of the controversial Myburgh Park housing develömentat the Langebaan Lágoon said yesterday that plans to extend the vilage into a nature area at the lagoon would be ecologically beneficial.

Owners of plots in phase 1 of Myburgh Park, at Meeuklip along the northern shore of the lagoon, have objected to the developers, Leisureland, buildingsome 30 houses along the lagoon about 2 km away.

- Ihey claim they were promised the area would not be developed.
: Mr' Theo Crous, a town planner commissioned by Leisureland, said yesterday that the sensitive area earmarked for phase 2 of the devélopment was ecologically unsound because of pollution and ábuse bỳ man.
Leisureland planned to restore it environmentally, he said:
Howéver objectors'disputed Leisurèland's declàration of environmental awareness, saying the company was money-motiyated,
The objectors were preparing court action to challenge the development of the second phase, he said.



## SA poised <br> Staff Reporter

SOUTH AFRICA is poised to join a global monitoring programme to combat illegal trade in wild animals - a major threat to wildlife in Southern Africa.

## cot 30189

SouthernAfrican Nature Foundation campaigns officer Miss Kim MacDonald said yesterday that recent seizures of contraband ivory and rhino horn were "but the tip of the iceberg", and major rackets were dealing in

## to fight wildlife trade

birds, reptiles and invertebrates. The SANF and the Endangered Wildlife Trust will fund a Traffic (Trade Records Analysis of Flora and Fauna in Commerce) office in Johannesburg from January 1992.

It will collect, analyse and publicise data on wildlife trade, and monitor the implementation of the UN-sponsored Convention of International Trade in Endangered Species
It will aid many conservation
authorities, and the SAP Endan gered Species Protection Unit.

Traffic International, located at the World Conservation Moni toring Centre in England, will coordinate the SA office as well as the Southern African head office in Malawi and another in Tanzania, Both will open soon.

The SANF will be embarking on a major programme in an effort to stimulate public awareness and generate funds.


## Hay fever threatens Reef health <br> By Brian Sokutu <br> laeontology department, who is <br> areas where many-of these im-

Witwatersrand hospitals are bracing for a hay fever epidemic as the level of airborne pollen yesterday soared to six times more than the safe level set by the World Health Organisation (WHO).

The University of the Witwatersrand's pollen laboratory yesterday recorded a count of 362 pollen grains in a cubic metre of air. According to the WHO, counts higher than 50 are hazardous to health.

Dr Ann Cadman of the pa-
a researcher at a pollen laboratory, said the spread of hay fever could be traced to trees, mainly those imported from the northern hemisphere, which relied on wind-blown pollen for fertilisation.

Few indigenous trees relied on wind pollination.

Hay fever spread rapidly when dry winds spread windborne pollen.

Dr Cadman said a pollen count was taken daily.
"In spring, the spread of pollen, particularly in the urban
ported trees are planted, is worse.
"The only way out for us is to avoid planting imported trees such as ash, plane and cypress, which are wind-pollinated."

There were ways of minimising pollen-related allergies.
"People should take antihistamime medication or have desensitisation treatment if they prefer not to move to Namibia or the Karoo."

In summer and autumn, grass pollen caused itching eyes, she said.

## WOHANSCHRONEN <br> Weekend Argus Reporter

CONSERVATION CONSCIOUS West Coast property owners are out to halt a R20-million housing development, Myburgh Park, on the ecologically serisitive banks of Langebaan Lagoon.
The vast development could be stopped dead if an urgent Supreme Court application for an interdict againse the developeris succeeds.
Mr Micky Schuurnain-Sicekhoven, who heads the movement against the "rape of Langebaan", said that while the bulldozers "drone on the virgin "land", opponents of the scheme will fight the development.
Wh. "It looks like we will see them in court. We have enough monetary pledges, including one from a very high profile businessman who has stuck his neek out tremendously before in support of nature," said Mr Stekhoven.
Former Constitutional Affairs and Plauning Minister Mr Chris Heunis's firm of attorneys, Heunis and Heunis in Somerset West handled a rezoning application for developer Mr Corneels Nortje, shifting: the zoning from agricultural land to township development in three months.
Mr Heunis also owns' a plot in Myburgh Park.
The rezoning follows an earlier rezoning application by previous owner Retco - which took three years - to, have a smaller and carefully considered portion of the farm developed for housing.
Retco's development was limited to an area behind a rocky hill on Stompneusrots farm and would not have been visible from the nature area.

The Retco development proposal also was strictly moulded to an inyiromental impact study by Profesor John Grindley of the University of Cape Town and Professor Deon Retief of Stellenbosch which strongly advised against development below a gravel road which runs parallel to the waterline and creates an even more sensitive margin of dune, area on the banks of the lagoon.
*m $\because \cdot \gamma$
This was strongly supported by the Provincial Administration and Langebaan municipality:

However, in 1989; new owner' Mr Nortje sold prime plots! New owners allege they were told they were buying on the border of a nature area.
In the meantime, Mrid Nortje applied for re vised rezoning based on 'an impact study by his own town planner.
The new scheme included some erven on the lagoon side of the gravel road near Langebaan yacht basin.

Mr Nortje's argument in support of the new development is that he would spread only 800 units in "sprinkled clusters" over the whole farm in ai parklike development with many green open spaces and boardwalks to the lagoon.

The previous proposal accommodated 1200 closely packed erven in an area hidden behind a hill out of sight of the sensitive nature area and stayed well clear of the greater lagoon-side dune "areea," leaving those areas totally untouched.

The owners of the properties sold on the basis of the original development layout formed the Meerklip Association of Myburgh Park, chaired by Mrt Schuurman-Stekhoven.

He said they would carry on fighting, "no matter how long it takes".


 Mr Low said measures to con－
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## Staff riteporter

CONCEZNAED officials gathered at Boulders Beach yesterday to discuss the plight of the threatened penguin breeding, colony there following' another' savage attack on the birds this week.

Conservation experts provincial authorities and Simon's Town city council officials met to thrash out a solution to the problem of growing conflict between people and penguins at the beach near Simon's Town.(5b) CT3:/8|91

New. measures to protect penguins
The officials decided guins to book. to introduce foot patrols to protect the breeding colony from human predators. First offenders will be fined R1 500 and second offenders R3 000.

The city council and Armscor have offered a reward of R500 to bring the people responsible for mutilating the pen-
'Six penguins have been maimed and killed within the past five months and the authorities are taking all possible steps to prevent this sort of thing happening again," said Mr Nigel Farquharson, municipal environmental officer for Simon's Town. "We have had cases of pen-
guins being killed by being hit over the head with iron bars, being slaughtered and skinned, and walled into their nests by some sick individuals.'

From next week, he said, foot patrols consisting of volunteers as well a paid guard would patrol the breeding area after the Institute for Maritime Technology offered to install a shelter to house the guards.

The city council is investigating the possibility of fencing in the central breeding area.


## St Lucia(sb)

 - OROM PAGE 1.Bay Minerals (RBM) might well be unhappy, as the reports did not say mining could $g \infty$ ahead without irreparaw ble harm to the environment.
Other environmentalists who had seen the initial reports had ${ }^{5}$ agreed with him that they appeared to lack the kind of data which came from thorough fieldwork, he said.
He stressed, however, that he was not a scientist and said the society had lined up a number of experts to study the reports.
Wack Goedhals, senior
general manager at RBM, denied that the company had appointed the CSIR because the reports failed to come out in RBM's favour.
He said the reports. were being distributed to interested and affected parties, and the type of comment being made by Mr Ridl would become part of the exchange between the consultants, Coastal Environmental Services (CES), and the interested parties.

This would tend to widen the scope of the investigation and was one of the reasons why the CSIR had been appointed: , 列

- See Groenpiece - Page 13:


## Big bucks are softening

 views on St Lucia miningRM IS pouring millions of rands public opinion regarding titanium mining at St Lucia - and succeeding.

More and more conservationists are being taken on "the crayfish trail" by RBM and told how an opencast mine could help finance the Greater St Lucia Park.

RBM says Lake St Lucia is doomed unless it gets some cash and mining could provide it.

The theory originally came from John Ledger of the Endangered Wildlife Trust, who favours mining. I see that his journal gets very generous colour advertisements from RBM. Barry Clements, former Natal ranger, agrees. He is RBM's PRO.

The mine has been flying dozens of wildlife lobbyists down to St Lucia. This week it announced it would double its annual donation to the SA Nature Foundation to R10 000.

The tragedy is that wildlife conservation cannot compete with industry's wealth and its public relations machine. On just one day this month, RBM held four simultaneous pro-mining presentations.

Fair enough. RBM is fighting for its shareholders. But who's fighting for St Lucia's shareholders?

This week two conservation lobbyists told me the fight against RBM was lost. They really believed St Lucia was doomed without RBM.

They argued that if RBM were allowed to mine, in 20 or 30 years'
time we would all be able to enjoy a peaceful St Lucia again.
"The area they want to mine is not indigenous anyway; it's planted with pines," said one.
The fact remains that pines can be felled tomorrow and the natural cover would quickly move back. As for saying St Lucia is doomed with-: out cash from RBM - it's rubbish.
The Government, which is entirely responsible for the ecological deteri-1 oration of St Lucia, owes it to South Africa to restore the place. It also: owes it to the world, because St Lucia is a sanctuary for migratory birds from Siberia, Europe and Afri- $\frac{1}{4}$ ca.
The two conservation lobbyists were worried that if conservationists ignored the findings of the environ-mental-impact assessment - assuming the EIA indicates mining won't hurt - it would discredit the conservationist lobby which has been calling for mandatory EIAs.
ElAs are an important tool. I would like to see them become obligatory. But there are places where mining should be unthinkable and EIAs irrelevant.

## Going green at the grassroōts

$2119-3 \times 10191$ a South Africa's environmental cfallenges
are beginning to appear on the agenda of political groupings. In this excerpt from a new book, JACKIYN COCK explains why the mix of First World and Third World problems is attracting interest

UNiman- (supplementi) derstanding of environmental issues in South Africa was an author issues conservation perspective This focused exclusively on the preservation of wilderness areas and particular species of plants and animals. Within species of plants and animals. Within this perspective main environmental problem It idens people who wain envireived problem. ble for destroying trees and creating wast. Only very recently has creating waste
sive perspective begun to emerge. This persive perspective begun to emerge. This perspective views environmental issues as deeply political in the sense that they are embedded in access to power and resources in society. It is critical of the victim-blaming approach of the overpopulation perspective and insists on the need for devclopment to overcome poverty. It draws on the ideology of "green politics" to emphasise the importance of linking the struggle against social injustice and the exploitation of pcople with the struggle against the abuse of the environment.

The legacy of the authoritarian conservation perspective is that many South Africans view environmental issues with suspicion. Farieda Khan has pointed to "the negative environmenal perceptions and attitudes of many black people, ranging from apathy to hostility" (Khan, 1990:37). In the past, conservation projects often disregarded human rights and dignity. The establishment of many game reserves meant social dislocation and distress for local people. As a rural worker has stated, "If conservation means losing water rights, losing grazing and arca without even the most rudimentary infrastructure and services as was the case Tembe Flephant Park as was case when the Tembe Elephant Park (near Kosi Bay) was declared in 1983, this can only promore a vigorous anti-conservation idcology among the rural communities of South Africa" (Richard Clasey, rural field worker quoted in The Weekly Mail, 6 October 1989).


First World, Third World ... Women in Khayelitsha near Cape Town collect firewood

## THE STATE ANB THE ENVIRONHENT

The "progressive developmental perspective" rooted in the ideology of "green politics" (Capra and Spretnak, 1984; Bahro, 1984; Porritt, 1984; Tobias, 1989) links the struggle against such poverty and social injustice with the strugsuch poverty and social injustice with the strug-
gle against the abuse of the environment. In gle against the abuse of the environment. In
South Africa this comection means that enviSouth Africa this comection means that envi-
ronmental issues are deeply and fundamentally ronmental
political. Treurnicht, believes ecological issues are "not so important that they will be basic to our policy" (Idasa Newsletter, October 1990). Recently the Ecology Party was formed with the aim of operating outside "politics" to promote environmental awareness. The Democratic Party spokesman on the environment, Rupert Lorimer, has commented that this is not really feasible becausc "ecology is not the only issue" (The Star, 28 October 1989). In fact ecology is the issue, but it is deeply embedded in a mass of other issues concerning the distribution of pow er and resources in South Africa Green politics here has to be firmly anchored in the needs of the majority of our people. For the majority of our people environmental issues mean no clean
water, no electricity and no proper sanitation These are the issues which need to be addressed as a matter of urgency. This can be done only by a democratic government which is accountable to the people and which prioritises their interests.

## PROTECTING THE ENVIRONMENT

In South Africa, although the new Environmental Conservation Aci has been hailed as an improvement, we desperately need more effective state regulation, control and protection of the environment. Our natural resources are exceptionally diverse, with over 240 species of mammals, 887 different species of birds and over 20000 species of flowering plants. These diverse resources are not adequately protected.
Clearly we need something like the American Environmental Protection Agency. This was founded on two principles
-People and nature have rights to exist unendangered by pollution and should be enabled to o so by regulatory protection.
work which is set up to conly means of a framework which is set up to control polluting indusries whose imperatives have been to compete or markets and to increase profits
perienced by the EPA perienced by the EPA-are well known. Environmental laws are effective as safeguards only if they are creatively and vigorously enforced. This requires environmentally committed and ethical persons who are not bribable and cannot be intimidated.

## CAPITAL AND THE ENVIRONMENT

The recent book by Brian Huntley, Roy Siegfried and Clem Sunter, South African Environments into the Twenty-First Century, is structured around the notion of choice - clarifying certain choices the reader has to make between different scenarios. However, there are two highly controversial assumptions in the book which are not opened up to choice; instead they are ireated as givens. The first is that nuclear energy is necessary and desirable. The second is that the free enterprise system is the only viable one. These are both assumptions which need to be exposed and subjected to critical scrutiny and debate.
There are many serious people who believe that nuclear cnergy is too expensive and unsafe to be a viable altemative energy source for the future. They say that the human factor involved in all stages of nuclear techrology, military and non-military, makes accidents unavoidable. A debate about nuclear power in South Africa is an urgent mecessity given the secrecy surrounding the nuclear industry and the missionary zeal with which Eskom discusses its plans for the expansion of its nuclear programme (Semark,
1990 ).
Another major problem of nuclear power is the disposal of nuclear waste. Each reactor annually produces tons of radioactive waste that remains toxic for thousands of ycars. Nuclear waste from Koeberg includes at least 200 kilograms of plutonium a year. Plutonium is so toxic that five kilograms is enough to kill every man, woman and child on this earth (Henk Coetzee of Earthlife Africa, quoted in The Weckt

Mail, 4 May 1990). Putonium remains poicon ous for at least 500000 years: no human technology can create safe containers for such an enormous time span.
Huntley, Siegfried and Sunter's other unexamined assumption relates to the free enterprise system. They assert that "the greens have gone wrong. The greens contradict themselves by demanding socialism and a clean environment at the same time. Socialism leads inevitably to the malfunctioning of the economy, which the malfunctioning of the economy, which
means that no money is available for conservation ... Man is a bom opportunist. By denying that self-interest is a valid principle, socialists are suppressing people's innate ability to think in an efficient manner ... communism is an unnatural philosophy inflicted on mankind" (Huntley et al, 1989:14-15).
This is a contentious argument. There are many people who argue that one simply cannot cure today's problems with the means that have produced them. Many believe that it is capitalism, an economic system obsessed with growth and expansion, that has created many of our environmental problems. Jonathan Pomit, the director of the Friends of the Earth, has argued that capitalism means ecological disaster. "Capitalism can indeed survive only through permanent expansion - which in turn means the accelerating contraction of our life-support systems" (Porrit, 1984:225). "Capitalism as we know it simply cannot provide the preconditions for an ecologically sane, humane economy" (Pomit, 1984:48).
In South Africa it is capitalists who are climbing on "the green bandwagon" to promote consumption. It is capitalists who, in the name of "growth" and "development", are destroying our coastline and restricting its use to those who can afford to buy property in their costly marina developments. However, in the global context it is not only capitalists who are destroying the finite resources of our finite planet in their quest for profit. The environments of Eastern Europe and the Soviet Union have suffered greatly from the intensive industrialisation of the postwar period. The drive to meet production quotas has proved as environmentally disastrous as the profit drive.

## GREEN RIEHTS

There is growing debate around the idea that environmental considerations should be incorporated in the new South African constitution ANC constitutional committee member Albie Sachs has received much support for his idea hat the constitution should include "third genration" or "green" rights. Ironically, these rights were contained in the draft of the 1989 Environmental Conservation Act in the provision that "cvery inhabitant of the Republic of South Africa is entitled to live, work and relax in a safe, productive, healthy and aesthetically and culturally acceptable environment". As Glazeweki writes, "It is unfortunate that this bold approach was not adopted in the final document" (Glazewski, 1989:873).
F\%Going Green: People, pollitics and the enviand Eddie Koch (Oxiord University Press)


The idde of the leopard ... A farmer kills a leopard because it is eating his sheep. Eut what if it were the last leopand left in Sotth Ahtica?

0
NEnight lost ycar in a hut in Lebowa's faraway blue nye told a tate about the vilifing of a leopard: With intense pleasure he of the great beast, and his pride at snaring the last of the area's leopards. For years they had been killing is sheep, and now they were gone. Feeling aggrieved on behalf of the leoper and other supporters of biodiine of questioning pursue a stric you feel, I I asked. the very last leopard left on earth? Monnye's grin only whened. Hfs eply was aloog the lines that the one who finally eliminated this vermin Would be a true king among men the context of the current discussion around sustainable developerent. The concept of sustainable devel opment, in use since the 1970s, has bera definm in United Natoms literanure as "raking care of the needs of comising zeneratun, wilhout com erations to meet their own needs". It centres around the idea that conser vation and developmentare essential parts of one process.
The debate around sustainable development has been given new life by the coming Unitod Nations envinext June. Here the twin chatlenge

The government and the ANC have drawn up documents tackling environmental and developmental issues that face South Africa. Both are flawed
world's rich contal abuse by the mental degn countries and environy will be adtressed.
Heads addressed. commit of state will be asked to chedules for solves to targets and romental problerus. First Worl eaders will also be asked to approve esolutions on enviromental aid to hird World countries-especially logical capacity.

## The Earih Sum.

 lated the debate around also stimu onmental policy in South Africa Several groups are attermping to de fine the compoments of sustainable The CSIR isTepartment is under contract to the Department of the Environment to sustainable development in South Africa for the Rio conference. Op position groups like the African Naonal Congress, the Pan Africandst Congress and we Westem Cape's Environmental Monitoring Group ronmental policy statement envi
present all groups have working documents in draft form. The Presironment, which contains detalfed policy recommendations, is also in draft form.
So far the approaches have fallen into two types - those that describe the state of the nation and those ina tatuable soclety.
The CSIP
The CSIR-zoventiment report rep ing tog a detailed data base - draw ing together nationwide research to ay, biodiverstity, dilr, waste, enerpolution versity, soil loss, marine eport is escentianty treatu. The about the current state of our omment When it comes to future policy gutdelimes it peters out. Although the report acknowledges tee human-centred approach of the hitrature, its own approach re falls 0 forenc. Because of this it enge - bow to orour central chal evelopment needed to met peo ples' basic needs without further destroying our environment
The documents from the opposition have reverse wcakncsses. They are buman-centred and focus on recomsandans for sustainable develop They bre lack a sound data base bout are essendally document exploration of how weals - whthou
here to there. For example the EMG document talks of the need for our economy to shift away from gold and coa to a renewable resource is implications.
The ANC document is periaps the most realustic in its insistence on research around future options. Some of these are "economically viable al$\mathrm{g}^{\prime \prime}$, alternatives to agricultural chemicals and comumity management of conservation areas.
What is lacking in our environmenal policy thining is clear and realistic strategles for moving from where we are now to a more sustainable soas part of an cngoing debare betweert scientists, environmentalists, economists and politicians.
Another cruclal plank in internatonal sustainable development thinking is the need for publice involvement in policy decisions and Buif Monnye had
But in Monnye had a say in national would be done for. fi the leoparts hils ability to meet his hasic needs.
Before environmentalists talk of sustaingble development policy for South Africa, they noed to undertand the needs of codinary people.

- Levery Linwton Forthe Group for Environmente Worhoring (Gwn)




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The signs are growing that the massive Lesotho Highlands Water Project could turn out to be another Mcssgas. The capital cost of Phase 1A of the project is now pegged at RS, 9 bn by the Department of Water Affairs, more than twice the $\mathrm{R} 2,5 \mathrm{bn}$ estimate made just two-and-a-half years ago by then Water Affairs Minister Gert Kotze.
Customers using water out of the Vaal River, including those served by the Rand Water Board and as far afield as Kimberley, will face sharp escalations in water charges in the years ahead. In fact, the project is already forcing up water rates.
Both the Lesotho and Mossgas projects were conceived during the sanctions years and destined to become white elephants once these were lifted. But that doesn't explain why the Department of Water Affairs pushed ahead with the expensive Lesotho project when there were far cheaper options.
Depending on the terms of the bilateral agreements between Lesotho and SA, it may not be too late to reconsider the project's later stages and choose an alternative, such as getting water from the Caledon or Tugela rivers.
It is, however, too late to turn back on Phase 1A, which is under construction and planned for completion in 1997. "SA is liable for the full costs, as well as for the annual royalties on water used," says Water Affairs Deputy Director-General Tiny Krige.
He says the following contracts have been awarded or estimated: - The R1,526bn Kate Dam, which will hold 1,95 bn $^{3}$ (Vaal dam holds 2,6 $\mathrm{n} \mathrm{m}^{3}$ ) and be completed in 1996; $\square$ Roads, accommodation and infrastructure contracts to the value of R577m;
The R1,13bn delivery tunnel to the As River in SA; and
$\square$ R566m for engineering costs.
In addition, the R $5,9 \mathrm{bn}$ in capital costs for Phase 1A also include the first R 80 m water royalty payable on the delivery of water, administration costs of R 790 m for the phase's 10 -year duration, and R197m for environmenta costs.
"This R5,9bn projection includes provision for escalations and containgenies during the duration of Phase 1A until its completion in March 1997," Krige says. The 1989 cost astimate did not provide for normal price escalation, contingencies and design refinements, says the project's managing engineer, Willie Croucamp.

Krige says a major plus for the project is that operational costs will be low - gravity will carry the water to

SA so there will be no pumping costs. "This is a major benefit against the alternative Orange-Vaal transfer scheme, which we also considered and which would have involved pumping water from the Orange River at Aliwal North to the Vaal system."

## Pumping up the alternatives

However, proponents of the cheaper-tobuild Caledon-Vaal and Tugela-Vaal pump projects say their schemes would be even cheaper to operate than the Lesotho project.

Consulting engineer Basil Lind says that even if the interest cost on Phase 1A was a very low $10 \%$ a year, this would add more than $\mathrm{R} 1 / \mathrm{m}^{3}$ to the cost of water supplied to the Vaal system. In comparison, he says, the cost of pumping the same volume from the Orange River via the Caledon River would be a mere $12 \mathrm{c}-15 \mathrm{c} / \mathrm{m}^{3}$.

Pretoria-based engineering geologist Dave George adds that additional water from the Tugela system could be cheaply diverted across the Drakensberg because Water Affairs has an arrangement with Eskom to provide inexpensive off-peak power for pumping the water into the Sterkfontein dam.

Other factors add to the growing concern over the Lesotho project's cost. For one, the R5,9bn estimate for Phase 1A, Krige says, does not include the interest payable on local and foreign loan financing over the next few

decades.
Krige adds that SA is committed to finishing Phase 1B by 2005, which will include the Mohale dam and a 30 km tunnel linking the dam to the Kate dam, and this will cost billions of rand more.

All cost estimates are certain to rise. With the enormous cost escalations that normally occur with any megaproject, SA's high inflaion and interest rates, and a low rand that will add to imported costs, as well as the rugged terrain in which construction will take place, some observers say that Phase 1A alone may cost water users R9bn or more by 1997.

The Rand Water Board has already started levying the costs of the project, as passed on by Water Affairs, to consumers in the PWV area. Following Water Affairs' $3 \mathrm{c} / \mathrm{ki}-$ lolitre Lesotho-project levy increase to the board, local water users will now pay $10 \mathrm{c} / \mathrm{ki}-$ lolitre towards the cost of the megaproject. These levies are bound to rise as costs filter down to users.
"I estimate that project levies charged to the board will be in the region of $24 \mathrm{c}-30 \mathrm{c} / \mathrm{ki}-$ lolitre by 1997," Krige says. Water Affairs hopes to generate about R1,5 bn from this source by 1997, Croucamp adds.

Another uncertainty about the cost of the project is that, while SA is liable for most of the cost on the Lesotho side (with the excepton of the hydropower project), and is committed to paying royalties for as long as it takes the project's water from Lesotho, it has only an overseeing role as far as the expenditure of funds on the Lesotho side is concerned.

Croucamp says export credit loans to the value of $\mathrm{R} 2,7 \mathrm{bn}$ should shortly be raised by the Lesotho Highlands Development Authority, with SA responsible for repayment.

He adds: "We will attempt proper financial control over expenditure through the offices of the Joint Permamont Technical Committee, with equal representation by the $S A$ and Lesotho governments," Krige says.
The Lesotho project was not the only proposal to channel water to the parched PWV. Before money began pouring into this project, at least two other projects, delivering the same volump of water as Phase 1A but at a fraction of the cost, were submitted to Water Affairs but rejected in favour of the Lesotho project.
Croucamp says it is unfair to compare the thoroughly investigated Le sotho project with preliminary, recon-aissance-type estimates on other schemes.

One scheme provides for a series of 20 weirs in the Caledon River and the eventual pumping of water from the Orange to the Vaal system. It could be completed for a mere R1bn, says consulting engineer Lind, who developed and pushed this scheme in conjunction with a consulting engineering firm.
"The Orange-Caledon-Vaal scheme is initially envisaged to deliver $18 \mathrm{~m}^{3}$ a second, which is the same capacity as Phase 1A of the Lesotho project (a topographic model is with Water Affairs).
"The attraction of this scheme is that it could be done in stages, as the need for water in the PWV area grew, by adding pumping capacity at a cost of only about R 250 m for each additional $18 \mathrm{~m}^{3}$ a second capacity requires."

## Cost-effective phases

He adds that the total pumping cost for a 400 m lift is about $15 \mathrm{c} / \mathrm{m}^{3}$ compared with the more than $\mathrm{R} 1 / \mathrm{m}^{3}$ unit cost of water from the Lesotho project.
Another advantage, he says, is that the Caledon River weir project could also satisfy substantially the water needs of the Free State and Lesotho.
In a second option, engineering geologist George says the Tugela-Vaal scheme can be extended in cost-effective phases. "For a capital cost of less than R1bn, the Tugela and its tributaries in the Ladysmith-Co-lenso-Winterton area could deliver about $10 \mathrm{~m}^{3}$ a second to the PWV, or more than half of the Lesotho project's Phase 1A. Pumping costs per cubic metre are less than the royalties to be paid to the Lesotho project authorities."

However, Croucamp says, the projected increase in water demand in the PWV area over the next 30 years is about $70 \mathrm{~m}^{3}$ a second. The Lesotho project, therefore, is designed, with all four phases, to deliver this volume.

Arnold van Huyssieen

## Alex is dump site, health

 chief is told $\frac{\text { By Carina le Grange }}{8 \text { for } 4191 r}$Health education was the answer to environmental problems threatening health care services, the director-general of the Department Health and Populationer, said in ment, Dr Condra yesterday.

Dr Slabber wanted to acquaint himself with health care services and the environment in the township. : *
He said health care workers in the area were coping with tremendous problems but were doing very good work. He said he was specifically concerned about "environmentack of clean such as refuse, the la

He said health education was he answer to these problems and that the work of health edu and was becoming more and more important.

Dr Slabber was shown a voiced-over tape by members of his department which of limed the township was being claimed the towide agents for the dumping of refuse and rubble.
dumping of refuse and rubole. people in the Border area are getting their drinking water from a river that has been called a sewage ditch.

The Buffalo River is the major source of water for urban concentrations and villages from East London to King William's Town. However, it also carries so much industrial waste, agricultural runoff and raw sewage that some experts have said it is little better than a sewage ditch.
? Attempts to solve the problem are complicäted because the river runs through both the Ciskei and South Africa.

The East London municipality is unhappy about spending millions of rands in purifying water which goes'to the Ciskei:

However, the Ciskei government "and East London municipality are now co-operating with a Rhodes Uniyersity project researching the quality of the water
The study; commissioned by the Department of Water Affairs, is being carried out by Rhodes's newly-established Institute for Water Research.
According to project leader Mr Jay O'Keeffe, the study aims to quantify the pollution flowing into the river.
The Buffalo was no worse than many other rivers in South Africa, said Mr O'Keeffe. Other rivers. with a similar pollution problem included the Umsinduzi at Maritzburg, the Black River in Cape Town and the Crocodile River in the PWV area.

Such pollutions problems arose wherever there was a dense urban population.

He said the study into the Buffalo was "aimed at seeing exactly where the pellution is coming from and what's causing it. We then will recommend possible solutions to the Department of Water Affairs".

The project is being undertaken in conjunction with the Council for Scientific and Industrial Research (CSIR) and is expected to take until the end of next year.

While sewage from King William's town was treated, it was not clear whether effluent from Zwelitsha was, and sewage works in the area did not seem to work well.

Consequently, it was a heavily polluted Buffalo River which flowed into Laing Dam, just downstream from Zwelitsha.

The dam is a major water source for King William's Town, Bisho and Zwelitsha, and its water is extensively treated and purified before being pumped into the water supply system.

Mr' O'Keeffe said the process", which used chlorine and aluminium sulphate to purify the water, was expensive and there were often taste and odour problems which remained after treatment.

He said the dam functioned as a "settling pond" - allowing the effluent to settle to the bot
Mr O'Keeffe said if Laing Dam was not there, the effluent would go further down the Buffalo River to the Bridle Drift Dam, which supplied East London and Ciskei's Mdantsane township. Be-
fore getting to the dam, however, the river was polluted further by industrial wastes,
wastes and polluted strea is controlled by the East
The Bride Drality who - according to an offiLondon municiparty, wher R 2 million a year on purifying the water.

However, the dam supplies two-thirds of the wat er needs of Mdantsane's 600000 residents. The rest of the township's water comes from Nahoon solutions to the pollution problem are beWhile solutions to the pority's Institute for Social ing sought, Rhodes Universiser) is doing a socioand Economic Research (iser) in project. logical survey as parting at the sanitation systems The institute is looking at the sanitation's percepbeing used in the area, as Albany News Agency. tions of the problem. -


Pictures: ROY WIGLEY, The' Argus
FLORAL GROWTH: Dr Allan Heydorn with a photograph taken two years ago showing when there were no plants to be seen at the side of the road.

# Praise for Armscor over fynbos project 

## By GRAHAM LIZAMORE

 Environment ReporterA LEADING environmentalist has praised an Armscor missile and research development company near Grabouw for the way it has contributed to the preservation of fynbos on its 666 ha site.

Dr Allan Heydorn, a specialist environmental consultant, said he had been very cynical when asked to help plan the new Houwteq missile research and development site in the Lebanon state forest four years ago.

But after inspecting the site this week Dr Heydorn said the enthusiasm and commitment shown by Houwteq had to be lauded.

He said, as far as he knew, it was the first time a company had met environmentalists to thrash out an environmental management plan before taking decisions.
"I think we've seen a pioneering concept take root here. I have been involved in environmental management projects for a long time but this sort of commitment convinced me these people were genuine and really cared for the environment," he said.

Profestsor Manie van der Schijff, who is the environmental management consultant for all Armscor subsidiaries, said an im-


ECOLOGY WINS: Mr Barry Kruger, managing director of Houwteq proudly shows off the environmental management trophy his company won for their programme on the 666 ha site near Grabouw.
portant result of the Houwteq Imapct Control Plan was that it had proved careful pre-planning had saved the company money by avoiding the costly mistakes made in many projects.
"I don't think anything like this has happened before where you have a discussion with two groups with different interests to create a marriage between technology and ecology - I think this
is quite unique," he said.
Managing director of Houwteq Mr Barry Kruger said the company contributed R 88 million to the Cape in the past year.

Houwteq, which is involved with missile research and development, does not manufacture nor test its products at the site.

This year it won the Armscor Environmental Management Trophy.

## It's not $\begin{gathered}\text { Shanty crèche } \\ \text { is all there is }\end{gathered}$

## HANS-PETER BAKKER

## Education Reporter

LACK of pre-school care in squatter communities results in school drop-outs and gang. sters and, to address the problem, the Eerste River Residents' Association has started a project to establish crèches in shanty towns in the area.
The first success story is the corrugated-iron shack in the Spandau squatter camp where about 42 children - aged from 11 months to 5 - are cared for by as yet untrained daymothers.

Mr Basil Nefdt of the association said the creche was established in an old structure which "still needs a lot of upgrading".
"When it rains it gets flooded and we have to close. There are no toilet facilities so the children have to use a nearby lean-to which is very unhygienic," he said.

In spite of the hardships the small building does provide a welcome haven for the children. Until recently were left to amuse themselves.
Mr Nefdt said the lack of pre-school care, especially in the squatter communities, led to children being left behind later in their schooling. He said they often ended up as gangsters.
Chairman of the Spandau Village Committee Mr Paul Stefanus said the children used to swear a lot and were very dirty.
$1:$



Plcture: WILLIE de KLERK, The Argus.,
PROJECT TOTS: Spandau squatter children have a creche at last. With them are their daymothers, Mrs Martha Amsterdam, left, and Mrs Doreen Fourie.
"In the short time since the crèche has been open mothers have started taking better care of their children and they (the children) don't curse so much anymore."

The residents' association also tries to provide at least some food for the children every day.

Mr Nefdt said the project's
greatest needs were building materials, training for the daymothers and food.

Mr Hannes Rooi, chairman of the residents' association, said it was "very important for the community to be made aware of the value of preschool education".

He said the association was finishing a shack in the nearby

Antonie's Bush squatter camp where another 40 children would be cared for.
"When that is finished we will start working on preschool facilities for the two remaining squatter communities in our area," he said.

Anyone who can offer assistance should Mr Deon Brits; I 9042094 or Mr Hannes 'Rôoi; 9041326 .

# Call to put mountain under city control 

: ${ }^{\circ}$ ". Municipal Reporter (56) ARCT ALl of Table Mountain should be placed under City Council control, some councillors feel. 281919 The council has voted to approach the Ministers of Environment Affairs and of Forestry and Water Affairs to get a single authority of local expertise to manage, control and finance the protection and maintenance of Table Mountain.
This body should be empowered by an Act of Parliament, the resolution said.

Mr Louis Kreiner said the council was competent to manage Table Mountain, but lacked funds. Mrs Joan Kantey said development near mountain ranges should be less dense than elsewhere.
This was highlighted by various controversial residential housing areas, including Rontree Estate in Camps Bay, and the recent flood damage following fires. The "plethora" of owners and controllers of land made it difficult to devise an overall and coherent management plan.

## Historical Victorian hotel pulled down: Companies to stand trial <br> Supreme Court Reporter <br> Pepkor Group.

TWO companies in the Pepkor Group and a director are to stand trial in the Supreme Court for allegedly illegally demolishing the Victorian wing of a Muizenberg hotel without permission from the National Monuments Council.
No charges were put to Mr Eugene Dreyer, a director of Pepkor Property Holdings (Pty) Ltd and Muizenprop Shareblock yesterday, and the hearing was postponed to December 9 .
Pepkor Property Holdings are developers who act on behalf of other companies in the - Pepkor Group, while Muizenprop Shareblock are part of the

The two companies and Mr Dreyer in his capacity as director, are alleged to have destroyed an historical site without being issued a permit by the National Monuments Council in July and August last year.
The companies and Mr Dreyer also allegedly began dernolition work at the Marine Hotel without giving the Cape Town City Council the necessary notice.
In a summary of facts, the State claims Muizenprop (then known as Pepprop Nege (Pty) Ltd) purchased the Marine Hotel situated at the corner of Main and Atlantic Roads during May, ${ }^{1989}$ (5b) $17{ }^{4}$ alal

The Marine Hotel included a Victorian wing constructed before 1886.

The Pepkor Group intended to develop the property as a business complex.
Representatives of Pepkor Property Holdings, Muizenprop and the Cape Town Department of Town Planning attended various informal meetings during 1989.
The Town Planner emphasized the hotel's Victorian wing had to be preserved.
The Pepkor Property Holdings and Muizenprop representatives created the impression they agreed with this and that the Victorian section would be maintained, the State alleges.

















## CITY/NATIONAL

## Table 'needs <br> (56) <br> CLIVE SAWYER Municipal Reporter $A R G$ b|a|ai

A SINGLE authority, established by Act of Parliament, with powers to manage, control and finance the protection of Table Mountain and the south peninsula Mountain Chain is needed, a City Council report says.
The report, by city administrator Mr Gys Hofmeyr, was to be tabled at an amenities and health committee today.

The "plethora" of owners and controllers of land made it difficult to devise an overall and coherent management plan for the mountain.
Cutbacks and phasing out of

## Mountain tight hand

subsidies meant financial resources were dwindling.
The Table Mountain Nature Reserve Advisory Board, a council body, was "gravely concerned" about the encroaching threat of urban development into natural areas and up the mountain slopes.

There had been drastic cuts in labour forces available for maintenance.

These factors meant efforts to fight alien vegetation and soil erosion, and to maintain footpaths, could decline.

An overall single management plan had to be produced and implemented for the whole of Table Mountain and the south peninsula mountain chain.

The report called for a single
authority made up of people with "local expertise" aware of problems surrounding management of the mountain, empowered to save it from "the forces of degradation".

The city engineer's department said R200 000 was needed for additional gabion work on the Tin Mine Stream near Oak Tree Village.
Severe scouring of the steeplygraded section of the stream had followed the boulder-laden stormwater run-off during heavy winter rains.

Another R250 000 was needed for reconstruction and improvements to stormwater pipe intakes in Chelmsford Road and Pine Avenue, a report said.
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 area between the prome-
nade and Sunrise Beach "The idea is to make the the area, especially Sunrise
 The development, which

Mr Abe Katz, city counsaid Mr Arthur Dilley of
Marina Da Gama.
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rt's famous sea view is The dune, which will be
grassed, is being piled up






Heated debate . . . "emissions are low compared to those caused by cars and planes".

## R50-m to cut Kelvin pollution <br> in would close saying it was

By Louise Burgers
Municipal Reporter
In the next four years, Johannesburg City Council will spend about R50 million to cut down air pollution from Kelvin power station.
Work has already started on replacing two of the precipitafilters - at a cost of R10,2 million.

- To carry out this work, two boilers will be off line for nine months. Officials expect the filters to almost eliminate emissions from the boilers.
$\stackrel{\text { Transport and utilities com }}{ }$ mittee chairman Paul Asherson called a press conference to put "Kelvin's side of the story" in the controversy over coal dust pollution from the station

He said he was tired of all the attacks from residents in municipalities surrounding the station. $\qquad$ about emissions into the atmosphere. Kelvin sulphur dioxide emissions are low compared to the rest of the air pollution caused by an increase in traffic and aircraft, coal fires and other heavy industry.

He denied rumours that Kel
economical, and provided Johannesburg with half its power. Pressure groups should ork with the councl, rather han be disruptive and destruc tive.
The precipitators in Kelvin B" power station, which catch the dust from the boilers, were installed when the boilers wer built in 1961. More than a mil ion tons of coal from Witbank are now burnt every year.
In 1979 a programme was started to upgrade the precipi tators, which were not perform ing as well as they should.
Although effort was put into completely overhauling the precipitators and modernising their control systems, it me varied success. The council then decided that a major rebuild was necessary.
To cut down on pollution, in recent years the council has: Grassed the sides of the ash dumps and installed sprinkler systems to reduce dust.
Monitored dust fallout in surrounding suburbs.
Upgraded the ash handling plant to prevent emissions.
Installed silencers and conducted regular investigations into ways to reduce pollution at the station


Seeing for themselves . . . Kelvin manager Jlmmy Adamson points out features of the plant to councillors, officials and journalists during a tour on Friday. Pictures: Joao da Silva

It would cost R2 billion to clean up pollution from a power station. Rather spend the money elsewhere, says
Eskom.


A new Eskom power station . . . the cost of scrubbing out lts acid rain gases would be R2 billion.

## Expense dulls the <br> star 189997

 cleanC
AN South Africa afford to clean up its sulphur air pollution which causes acid rain? No, says Eskom, whose coal-fired power stations create most of it

Eskom believes the, billions of rands that will be needed to remove sulphur dioxide gas coming from the Highveld's high smoke stacks will be better spent bringing electricity to the two thirds who are still without electricity.
Eighteen months ago Eskom said it would cost R500 million to "retrofit" each power station with equipment to remove sulphur which causes acid rain.

Six months later, the fig ure of R1 billion was used at a Megawatt Park conference. Later, Ian McRae, chief executive of Eskom, said it would be more like R1,2 billion for each station.

Last month, Eskom said the cost would be R 2 billion.
An Eskom scientist explained the discrepancies at a recent National Association for Clean Air seminar. A spokesman said that the R 500 million scheme would allow Eskom to clean sulphur emissions from the end two boilers in a six-turbine power station. In other words, it would cost

R500 million to remove only one third of the power plant's sulphur. There was not enough room around the ther four boilers to install clean air aparatus.
He said the R1,2 billion figure was to take sulphur out of the flue gases from all six boilers at stations where there was sufficient room. The latest figure R2 billion - would be to install gas cleaning equipment in new stations.
Dr G Heyman of Napac _ an advisory body on air pollution - talked of the irony of South Africa spending R150 million a year on clean air equipment when people were buying coalburning domestic stoves which created gross pollution across the Highveld. Eskom plans to reduce township smoke by electrifying the townships but one delegate to the seminar admitted that coal stoves the biggest cause of township smoke - would continue to pose a problem.
He agreed people were not going to throw away perfectly good coal stoves which not only cook meals but warm their homes and household water.
"Nevertheless, electrifying the townships will still help reduce air pollution," he said.



## Centre will control plundering of sea

A SOPHISTICATED Marine Operations Control Centre was opened in Cape Town yesterday to help control'the plundering of South Africa's endangered marine resources.
The centre, at the City Hospital Complex in Green Point, was officially opened by: Dr Johan Neethling the chief director of Nature and Environmental Conservation of the CPA. CT 7lalal
"The aim of the centre is to exercise effective control over the use of the marine resources on South Africa and to provide readily available and updated accounts of all fishing activities along our coastline and within SA's 200 nautical mile fishing zone," said Dr Neethling
The "nerve centre" will check on illegal fishing by overseas and local trawlers, illegal use of gill nets and on vessels illegally pollutiong the coastline.

All information will be analysed, assessed and used to plan and execute special patrols and followup operations by trained officers assisted by seven patrol vessils stationed along our coastline and the SADF, SAP fisheries research vessels and Kuswag

"The success of the centre depends on a constant flow of information from different sources and the communications equipment is vital for the centre to fulfil its "function," Dr Neethling said.

## SA may <br> have to ${ }^{6}$

## recycle $\begin{aligned} \text { crindpur }\end{aligned}$ water'

Staff Reporter
SOUTH AFRICA, par-
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Cape, may have to!turn to
recycled water, as its
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dry up withe expected to years. Within the next 30
"Indications
South Africa's are, that water resourcs ayailable be enough to cowill not the demand to cope with 2020," the by the year 2020," the Water year search Commitsinement. said in a state-
Recycling wóni
cost effective would be more expensive as, it was and develop other find sownces, other water sonnces, the WhC's Pexecutive director, Mr Sovendaal, said.
worldshefafrica:was worlduleader in technology for the recycling of water, he said.
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NP slated for
'party interests' THE National party had put its own part of the ests above ostponing the state by postpote, in the important's Councir. environmext manaq9i
$\rightarrow$ ment. Democratic Parti Two, of the coun Mr members Gant and Mr Mr David Gelfe, said yester James that the date allow been changent's Counci NP Presidents attend NP

- members to congresses.

> Mountain: Call for one body (50
> A SINGLE a ifhory With powers to manage control and finance the protection of Table Mountain ought torbe es tablished by Act of Par liament, the amenities and health comenities resolved yesterday.

> This decision was an endorsement of an earli er decision taken by the Table Mountain Nature Reserve Advisory. Board last month

> The board, which is chaired by Dr Douglas Hey, was concerned about the plethora of owners and controllers of land on the mountain



A second environmental impact assessment is being done on the St Lucia region in Natal this time to see how the region stands up to intensified tourism.
"The EIA hast" bêen ordered by the Natal Parks Board.
The area is already the subject of the most intensive environmental impact analysis carried out in Africa. The mining company RBM, a subsidiary of RTZ, wants to see how St Lucia would stand up to open-cast mining.
.George Hughes, chief director of the Natal Parks Board, said apart from sport fishing the St Lucia area has hardly been used by tourists. But a new plan provides for more hiking trails, bird and game watching, rest camps, bush camps and houseboats on the biggest dual freshwater/saltwater estuary in Africa.
'The development plan is open to public inspection in Maritzburg - the first time the parks board has bounced a plan off the public. The plan is
vironmehtal impacts are still to be assessed.

Dr Hughes said the tourist potential of the Greater St Lucia Wetiand Park was enormous and varied.

The area includes crocodileinfested flood plains, one of the world's richest bird areas, wide grassland with plenty of antelope and other wildifie. It has the potential to be joined to KwaZulu's northern wetlands, which extend to Mozambique.

## Status

The fact that it is now being called a "park" instead of a game reserve suggests that St Lucia might be getting national park status although it is likely to continue to be run by Natal and KwaZulu.
"The Eastern Shores section of the park, the area between St Lucia Village and Cape Vidal, has been the subject of an intensive development study by our planning, research and field staff," said Dr Hughes.
"Care was taken to locate potential development in accordance with the relative environmental sensibilities of the areas concerned.
is "The" Eastern Shores' study is part of the board's overall development plan for the entire Greater St Lucia Wetland Park.
"It received priority treatment because information was required by the consultants undertaking assessments of the environmental impacts of dune mining as proposed at:St Lucia."
The Eastern Shores form a natural gateway to the park, he said.
Within the Eastern Shores area several development nodes have been identified for a wide spectrum of visitor facilities.

These range from a relatively intensive node in the immediate vicinity of St Lucia", Estuary Township to a number of nodes where low-key fa; cilities such as bush camps
will be provided.

JAMES CLÅRKE

| Own Correspondent TOHANAESBURG. Because of the pollution in the area, Vaal Triangle residents suffer ${ }_{2}$ evels of bronchitis and respiratory diseasies markedly higher than the national average, a new study has found. The Vaal Triangle Air Pollution Study, being conducted by scientists from the infdependent Pretoriabased Research Institute for Environmentad Diseases'y shows that people living in the Väal Trian- <br> Vaal p <br> report <br> gle run a greater risk of contracting bronchitis and upper-respiratory tract diseases. <br> Allergies were also more common than the national average. <br> A source close to the project said yes" terday that the illnesses were directly linked to the high levels of particle pol- |  |
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was much higher than average. The offending pollution consisted mainly of carbon and iron compounds, which came from the Iscor, Uskor, Samancor, Eskom and Sasol plants.

- The rosy sunsets over South Africa are thanks to volcanic ash primarily from Mount Pinatubo in the Philippines which will cause world temperatures to drop by about half a degree for a few years, the South African Astronomical Observatory in Cape Town said yesterday.
lution in the area
Smoke from township fires and from the heavy industry in the area was reponsible for the air pollution, the scource said.
The source said sulphur dioxide levels had been found to be within safety limits.

But particulate, as distinct from gaseous. pollution in the area

## Team in all-out effort to rid harbour equipped with an oil skimmer. Oil can be skimmed at a rate of 8 t /hour. It's pumped directly into the Red Devil's hold. <br> Settlers <br> Mr Geldenhuys did some research on pollution and said more than 50000 ships sailed the high seas with crews numbering $1,5 \mathrm{mil}$ lion. <br> It had been estimated that 7 bn kilograms of garbage was dumped annually at sea, and a total of 639000 plastic containers discharged on a daily basis. <br> Mr Geldenhuys said: "More than half of South Africa's population lives and works near the coast and the resources that first attracted settlers, now draw businessmen, industrialists and tourists. <br> "A growing percentage of our population relies on coastal areas for food drinking water, jobs and recreation and a national effort is essential to pro- <br>  <br> TOUGH TASK . . . Keeping the 'harbour clean is not a job for the squeamish as these oil-soaked workers show as they battle to clear a blocked pipeline. <br> picture: STEVEN GELDENHUYS. <br> large amount of debris is forced under the surface. <br> "The University of Stel lenbosch has been approached in this regard and is busy with the design and development of a dragnet." <br> and attached to these outlets to prevent the harbour from being polluted excessively. <br> "The southeeast wind does not make the cleanup task any easier. As the wind churns up the water a

 tect these valuable resources."
## Special nets

Cape Town's Port. Cap tain, Mr Bill Shewell, said the harbour departments were well aware of the: need to keep the area clean.
He added: "The pollution reaction vehicle is available for use by the city council should it have problems."

Mr Leon van Deventer pointed out that the city of Cape' Town's : water drain outlets, were situated in the Duncan Dock area and special nets were designed

Polliution culprits to POLIUUTION in the Vaal an advanced being "fingerprinted trace pollutant new sack to their sources Results from the "source app cartionment" study, which iv bity physics research unit, research anit, are expected $\beta / D^{2} / 9$ The study, the identify whether polluwill be able to come from township tants in the anr industrial activity, car coal burning, engines or other able to trace emisIt win a 10 individual factories by
comparing results with wfinger prints of emissions processes. ${ }^{4}$ ferent industrial protration of heavy Due to its concentration density industries, high pop, ation, the yaal and geographical the most pplluted Triangle is
areas in SA. A recent study found more thanis $50 \%$ search Counch residents were exposed of the arels of ratmospheric pollution which were above US air pollition which weandards.


## R123m Cape pipeline contract awarded <br> CAPE TOWN - A R123,6m, pipeline <br> LINDA ENSOR <br> R500m water - part of the city council's <br> $\therefore$ 'has been awarded to ation schem <br> consisting of Basil to a consortium new water treatment plant in Faure consisting of Basil Starke, and divi- and from there to Phillipi. <br>  expenditure apt is subject to capital demand exceeds this at peak periods expenditure approvals. It involves y first stage of the this amount." The conveying water along a pipelines first stage of the project, due to be rom the Theewaterskloof Dam to a completed this year, will augment

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# Game park units go on sale overseas <br> LONDON - British and continental investors are expected to snap up <br> Varty is SACC executive <br> emerges from the Londolozi model. 

 the chance to invest in SA's private game parks, starting with Phindi Izilwane reserve in northern Natal.The South African Conservation Corporation (SACC) is seeking to raise an initial R80m through UK merchant bank Hambros, which is offering units of £21 600 each to selected venture capital funds and individuals.

Conservationist David
chairman, businessman Atan Bernstein is MD and Hambros deputy chairman Christopher Sporborg will be non-executive director.

The offer of Phindi units is the first privately initiated South African attempt to raise venture capital in Britain and Europe looped through offshore companies to minimise tax and currency exposure.
Phindi - Zulu for "return of the wildife" - will use the new capital to expand to 178 beds and increase present revenue of R5,3m to a projected R60mplus by 1995.

The use at Phindi of "conservation through utilisation" - returning the land to the wildlife and utilising the resources they create for the good of all -

The present figure of about 500000 long-haul tourists, worth just $1 \%$ of GNP, should rocket to at least 2 -million by the turn of the century, generating $8 \%$ to $12 \%$ of GNP, SA ambassador to London Kent Durr says.

British Airways Holidays marketing director Roger Heape says that with reform, South Africa - in cooperation with neighbouring countries - has "everything going for it.
"With political peace coming to the area, selling South Africa is proving very pleasant. Since reform, the place has started selling itself and the game parks are a bigger attraction than ever in the present climate of conservation consciousness," a BA executive said.

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## 'Turmoil' in conservation

CAPE TOWN - Conservation in SA was in a state of confused transition, Wildlife Society of Southern Africa president Naas Steenkamp said at the weekend. At the society's AGM on Saturday, Steenkamp said conservation was increasingly expected to pay its own way, but many communities that desperately needed the benefits of conservation could not afford them.

He identified encouraging trends, including the emergence of a broader concept to include participation of all groups in SA.

While government had made "purposeful statements" on pollution control, waste management and the conservation of the wetlands, it had in practice only increased penalties for dealing in elephant and rhino products. - Sapa.

## UÇT threat to

CAPE TOWN - University of Cape Town vice-chancellor Stuart Saunders has adopted a hard line towards students who took part in last week's campus chaos - and has threated to expel anyone taking part in disruptions this week.

And he called for an assembly of stu dents and staff today for the university to express its commitment to the national peace accord.

Last week students supporting striking workers disrupted lectures and erected barricades on the campus.

Saunders said the university was determined that lectures would proceed this week, saying he was sure that this decision had the support of more than 14000 of the 14400 students and most of the university's staff.
"Those who have intimidated others, disrupted campus or damaged property will have to face the consequences of their actions.
"We will take disciplinary action against students whe built barricades or disrupted lectures last week. Anybody who builds

## expel-rioters <br> ETIDA ENSOR

further barricades, or disrupts lectures must know he or she faces the prospect of expulsion," Saunders said.
He said that barricades, intimidation and disruption had no place in the peace accord and that the university had to heed the call by SA's leaders to move away from violence just as everyone else had to.
Saunders also appealed to striking workers to return to work today, saying the wage increases proposed were reasonable and would result in salaries about double those paid by many other universities.
The university is offering a $19,7 \%$ increase in the minimum monthly salary for unskilled workers to R1 202, a salary of R842 per month for part-time chars which with benefits could reach R1 092 per month and a $16.5 \%$ increase in the cash component of other salaries.
Talk floundered on Friday with 500 strikers, represented by the Transport and General Workers' Union, rejecting the revised pay offer.

By Charles Schulz

## PEANUTS

## Worry $_{56}$ <br> over <br> oweleur <br> SA's <br> water <br> supply

Sowetan Reporter
SOUTH A Africa's water resources might not be enough to cope with the demand by
the year 2020 , according to executive director of the Water Research Commission Mr Piet Odéndảal.
Odendaal has been invited to address the International dAssociation on Water Pollution Research and Control on the country's research to take full advantage of water, sources.
The WRC's research will be one of the topics to be discussed at the international symposium to be held in Spain:;

Odendaal said it was vital to continue developing technology, to maximise water resources.
"South Africa is not the only country with a shortage of water. Many countries are continually looking for ways to optimise the use of water."
The WRC's latestí project is the construction of and management 'of a waterrecycling plant and the testing of the quality of recycled water.

Odendaal said the aim of the project was to determine if a local authoritý could operate a water recycling plant without any specialised input and if drinking water could be recycled from treated sewage.
"Recycling of water in the country has been,done on a large scale for:years. But there is still room for new, and better technology," he said.

ANC aims for eco-friendly industry

AN ANC government would subsidise DARIUS SANAI
Airms which made their operations envi- $\qquad$ onmentily friendly and penalise those $\sigma$ in line with modern economic theory on damaging the environment, according to a controlling pollution in a free mankensburg recent policy document. -nomy, sacob economist ben
said yesterday.
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recent policy document. of harmful enis- said yesterday.
Noting the high levels of document said $\geqslant$ "The market is incapable of preking up
sions by SA industry, the docund to
"various incentives will be explored to re-
ward industrialists who develop environward industrian technologies".
Conversely, "commensurate penalties
Cod to be "instituted" against industries which damaged the environment, according to the document drawnup by the ANC's department of economic planning
The proposals, if implemented, would be
the costs or benefits of externaities The
firms in line with government must therefore tax or reward firms in line with their actions on pollution," he said.
0 The document also proposed a zoning system for industries that damage the environment and pose risks to human health.

## Relief measures for fire-ravaged areas <br> PRESIDENT F W de Klerk yesterday de-

 clared emergency areas in those parts of Natal and the Free State that aged by fires last weekend.Opening the Natal Agricultural Union's annual congress last night, De Klerk said people who had suffered personal losses in the fires would receive assistance from the Disaster Relief Fund.
About R19m in damage had been caused by the fires, which burnt 128000 ha of land spread across 10 magisterial districts in the two provinces. $B 10 \times m$ De Klerk said details of the relief would
be announced today by Deputy National Health Minister Fanus Schoeman. In his speech, De Klerk said he wanted to recommit government to the sensitive handling of agricultuiral problems.

De Klerk quoted figures produced by Stellenbosch University's Futures Research Institute which showed that SA's population would grow from 37,3-million in 1990 to 47 -million by the end of the decade. If this prediction was correct, agriculture would face an enormous challenge, he said.






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ions across the political spectrum．



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 tion．By this，he says，he means that
 Patzer says some environmental
agencies in SA still have a＂First

 ＂People must have homes and
food to eat．Until that time there are opment Agency．

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By ISAAC MOLEDI
CHILDREN born in Soweto risk developing respiratory illness because of high levels of sulphur dioxide and particles from burnt coal, wood and oil.
A new study of air pollution levels in Soweto reveals that the area is three times more polluted with sulphur dioxide and other particles than suburbs and areas near big power stations.
The study, believed

Sowetc 56 at the Wits Research air puts


to be the first of its kind, was conducted by the Soweto branch of the National Association for Clean Air and the University of the Witwatersrand's Research Centre during August and September 1990.
The associate professor
trend.
"Fuel burning and dust are the major source of air pollution in Soweto.
"Although more than 90 percent of Soweto houses are electrified, people still use coal."


## Deqth mine's By SOPHIE TEMA

HUNDREDS of pcople in the Northern Trans vaal are dying from asbes tosis while the owners of an asbestos mine, which is allegedly responsible for the disease, cannot be traced.

Operation Hunger this week appealed to the media to help track down the owners of the Bewaarskloof Mine, which closed in

1978, leaving the affected workers destitute.

Operation Hunger executive director Ina Perlman said this week: "There are men, women and children left with no compensation.
"They are destitute and totally dependant on the minimal rations Operation Hunger can provide
"In the two years I have visited the area eight of these people have
already died. There-are another two, at least, who will not see out this year."

Mute wumblinda med were affected, she said, although they were not miners.
"I could not understand why women were so often the worst affected, until I realised that asbestos was mined in slabs and that women were em ployed to chip at these slabs and reduce them to

56 a fine powder form in the process," said Perlman.
"They and the children who played around them while they worked were therefore maximally exposed to the fatal dust they inhaled.
"It is imperative that we track down the owners of the mine, because at present we cannot get any information about the people's employment records," she said.

## ANC 'yes' to private ${ }^{-}$ <br> 

 programmesB/Dan $1 \frac{1}{2} 4 /_{\text {DARIUS SANAJ }}^{C}$
ronment Awareness Trust (Neat) spokesman Marek Patzer.
Patzer says some of SA's environmient agencies still have a "First World attituide" towards conservation, an attitude $\cdot \mathrm{de}$ scribed by SA Nature Foundation director John Hanks as "promoting preservation'
in total isolation from Africa's social and environmental problems".

He says First World attitudes towards conservation and "saving each and every elephant" cannot apply to a country like SA with a massive, poor, rural underclass.

These people cannot be expected to worry about conserving nature when their first priority is their own survival, according to Patzer. But rural populations are increasingly realising that the only way to social upliftment is through involvement in game resorts.

Londolozi's Dave Varty, one of the pioneers of progressive conservation philosohy, says the benefits of the tourism industry for rural populations extend far beyond the wages earned by employment.
"Each wage-earner employed by the lodges supports between five and eight people," he says. "But there is an entire local industry that is spawned, together with the multiplier effect from the incomes generated." so it even seen many of SA's wild animals abo is unrealistic to expect them to care about conservation," says National Envi-

Business ppportunities

## CAREER IN REAL ESTATE

* Offshore/Local
* Project Finance
* Application Packaging


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[^3]:    Business, environment 'go together' cies, poised to play a major part in financing development in SA in the future, will not become involved in projects without assessing environmental factors.

    This is the view of economists Frank Vorhies and Mike 't Sas-Rolfes, who believe the local business community is not paying enough attention to the relationship between environmental and economic issues.
    While many $4 \times 50$ nesses have started environmental impact programmes, others still perceive the green revolution as a threat.

    Vorhies and 't Sas Rolfes are behind Eco-Plus, an iniare behind Eco-Plus, an ini-
    tiative aimed at informing businesses about the link between economic development and the environment.
    Sanctions had shielded SA from the effects of growing environmental awareness in Europe where instituitons and businesses were now concerned about their role in the environment, 't Sas-Rolfes said.
    "Once SA is accepted back into the international community, the country will be exposed to various pressures, possibly in the form of environmental
    sanctions' as First World consumers force companies to change their attitudes," he said.

    One of Eco-Plus's first projects is a course on economics, polities and the environment which will be presented under the auspresented under the aussity's environmental evaluation unit in December.
    The course will expose SA businesses to various environmental and economic philsophies and trends, and show how various approaches can used to further economic development while at the same time improving the environment.

