

# Introduction to Environmental Justice

## ENVR E-145

James Hoyte & Timothy Weiskel

<http://courses.dce.harvard.edu/~envre145>

### The West and the Rest: Toxics, 'Recycling' and Warfare – Some Global Patterns of Environmental Injustice

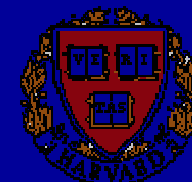


Timothy C. Weiskel

Class Session 9

3 April 2007

Harvard University Extension School  
Spring Semester 2007



# Outline of Issues

## Pesticides & POPs

Exporting Pesticides - The Boomerang Effect

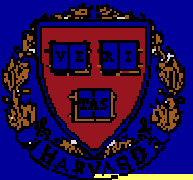
The Question of DDT

Africa

## Displaced Industry, Agriculture and 'Normal Accidents'

Ship Breaking

Bhopal and its Aftermath



# Outline of Issues

Toxic Trade - Patterns and Logic of Toxics in a Free Trade World

E-waste – “recycled” Electronics

Asia

Africa

Toxic Chemical Waste– Ivory Coast

First Peoples, Land, Rivers and Dumping

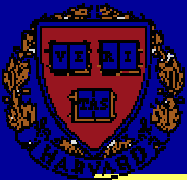
The Economic Logic of Toxic Trade

Warfare and Environmental Injustice: Preparation, Conduct and  
Aftermath of Warfare

Ecocide - Agent Orange

Oil Destruction in the Gulf War

Depleted Uranium - the DU Legacy



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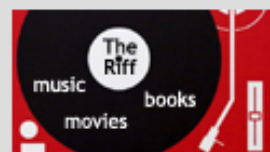
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## The Boomerang Crime

**THE DUMP  
THAT CAME  
HOME FOR  
BREAKFAST**



**NEWS:** It comes home in your coffee, your bananas...

By David Weir, with Mark Schapiro and Terry Jacobs

November/December 1979 Issue

Once or twice every working day a sealed semi-trailer winds through a grimy industrial section of the Los Angeles basin called the City of Commerce. The truck moves slowly up Pacific Street past a row of dingy warehouses to the loading dock at the rear of Amvac Chemical Corporation's pesticide plant. There, from a storage area labeled "RESTRICTED AREA/AUTHORIZED PERSONNEL ONLY BEYOND THIS POINT," pallets of light-blue, 30-gallon drums stacked three high are loaded into the

### TOOLS

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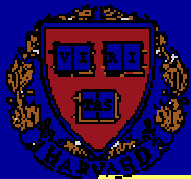
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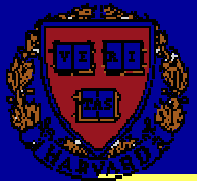
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<http://www.motherjones.com/news/feature/1997/11/velsicol.html>

## The "Circle of Poison"



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•

BBC reporter Bernadette Kehoe: "Some scientists have suggested the chemicals are linked to the fall in male sperm counts."

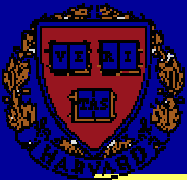
16 May, 2001, 18:05 GMT 19:05 UK Wednesday

Premature puberty link to DDT

Scientists believe the controversial pesticide DDT is responsible for premature puberty in girls in developing countries.

Researchers in Belgium, who carried out the study, found children who had emigrated from countries such as India and Colombia were 80 times more likely to start puberty unusually young.

Three-quarters of these immigrant children with "precocious" puberty had high levels of a chemical derivative of DDT in their blood.



Tuesday, July 21, 1998 Published at 10:22 GMT 11:22 UK

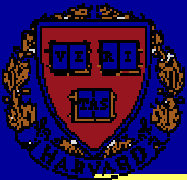
Norway's androgynous polar bears

Bear cubs: Poisoned by their mother's milk

The BBC's Richard Wilson investigates in the Norwegian Arctic

Scientists in the Arctic region of Norway have warned that polar bears are at risk because of high levels of chemical pollution from the rest of Europe and East Asia.

The bears have been found with both male and female sexual organs. Scientists say chemicals used in heavy industry are causing the abnormalities, which could eventually lead to the bear's extinction.



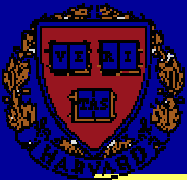
Tuesday, July 21, 1998 Published at 06:53 GMT 07:53 UK

Polar bears at risk from chemicals

Scientists in the Arctic region of Norway have warned that polar bears are at risk because of high levels of chemical pollution from the rest of Europe and the Far East.

They've found seven female polar bear cubs with both female and developing male sexual organs, and say industrial chemicals such as PCBs are almost certainly to blame.

PCBs were banned by most countries in the 1980s, but their environmental effect can last for decades.





Thursday, 4 May, 2000, 18:00 GMT 19:00 UK

Young Danes' sperm count dips

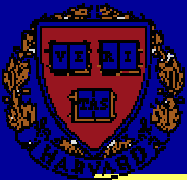
By environment correspondent Alex Kirby

Almost half of 700 Danish army recruits have been found to have sperm counts low enough to make it hard for them to father children.

The recruits, aged from 18 to 20, had significantly lower counts than men in another sample born about 10 years earlier.

While the researchers describe their findings as "difficult to explain", environmentalists believe exposure to one group of chemicals is a factor.

*Our Stolen Future*



Thursday, 19 April, 2001, 18:52 GMT 19:52 UK

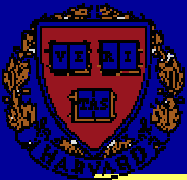
Bush to sign pollutants treaty

The BBC's Philippa Thomas in Washington The President has been dubbed by some as the 'Toxic Texan'"

US President George W Bush says his administration is ready to sign an international treaty aimed at curbing toxic chemicals called persistent organic pollutants (POPs).

Mr Bush - who has been dogged by criticism for his environmental policies in his first months in office - said the risk posed by organic pollutants was great and action needed to be taken.

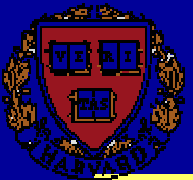
"We must work to eliminate or at least to severely restrict the release of these toxins without delay," Mr Bush said.



Tuesday, 22 May, 2001, 15:03 GMT 16:03 UK

Ban agreed on toxic chemicals

Representatives from 127 countries have backed moves to ban or minimise the use of 12 toxic chemicals, the so-called "dirty dozen". Environment ministers and senior officials agreed to support a UN treaty on persistent organic pollutants (POPs) without a vote at a conference hall in central Stockholm. See text of [The Stockholm Convention](#), (22 May 2001).



# But there are exceptions for DDT...

BBC CATEGORIES TV RADIO COMMUNICATE WHERE I LIVE INDEX SEARCH  Go

**BBC NEWS**

You are in: World: Africa  
Monday, 26 November, 2001, 17:18 GMT

Front Page  
World

**DDT and Africa's war on malaria**



Africa  
Americas  
Asia-Pacific  
Europe  
Middle East  
South Asia

From Our Own Correspondent

Letter From America  
UK  
UK Politics  
Business  
Sci/Tech  
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AudioVideo

DDT kills mosquitoes, but harms the environment

**One of the most powerful weapons in the war against malaria is the insecticide DDT - effective in curbing the disease-carrying mosquito but also lethal to the environment as a whole. The BBC's Mike Donkin examines South Africa's controversial use of the chemical and the pressures facing neighbouring Mozambique as it struggles to battle malaria without it.**

Malaria kills a million people a year in Africa - mainly in the poorest nations south of the

**See also:**

- ▶ 23 May 01 | Health Africa to get cheap malaria drug
- ▶ 16 May 01 | Health Premature puberty link to DDT
- ▶ 22 May 01 | Sci/Tech Ban agreed on toxic chemicals
- ▶ 13 Jun 01 | South Asia Deadly malaria strain in India
- ▶ 07 Jun 01 | Health Cattle used to fight malaria
- ▶ 01 Jun 01 | Health Herb offers malaria treatment hope

**Internet links:**

- ▶ The Lancet
- ▶ World Health Organization
- ▶ Unicef

The BBC is not responsible for the content of external internet sites

**Top Africa stories now:**

- ▶ Huge challenge for Africa Union

Jim Willis, Director, UN Environmental Programme  
"DDT is still an essential tool in the arsenal of weapons against malaria"  
Deal reached on deadly chemicals."

*BBC World Service*, (10 December 2002).

So Africa is still exposed to "obsolete pesticides..."

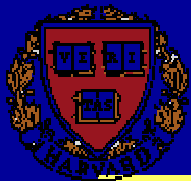


## Displaced Industrial Processes....



"Dirty Business - Part 1: Shipbreaking in India,"  
*BBC Documentary Series*, (8 December 2006, 11:11 GMT Friday).

The Blue Lady, once one of the world's most glamorous cruise ships, is currently beached at the huge ship-breaking yard of Alang in India. Environmental groups argue that the asbestos-riddled ship is toxic waste and say the ship was dumped on India as a cheap place to scrap it.



# Beyond pesticides and migrating industry: The Toxic Waste Trade:

## The Case of Electronic “E-Waste” Asia

The screenshot shows the BBC News website interface. The main headline is "Growing concern over India's e-waste". The article text reads: "Mountains of e-waste - discarded parts of computers, mobile phones and other consumer electronics equipment - are quietly creating a new environmental problem in India. Thirty million computers are broken out every year in the US alone, and many are dumped in India and China. Some 70% of the heavy metals in landfills come from electrical equipment waste. Now concerns are being raised on the impact the dumping - particularly evident in India's computer heartland, Delhi - is having on both the country's environment, and its people. 'The problem is that these computers, which are quite old, have a lot of toxic material in them,' says Anwar, leader of".

## Exporting Harm

### The High-Tech Trashing of Asia



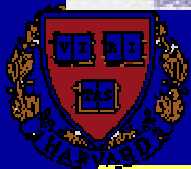
February 25, 2002

Prepared by

The Basel Action Network (BAN)  
Silicon Valley Toxics Coalition (SVTC)

With contributions by

Toxics Link India  
SCOPE (Pakistan)  
Greenspace China

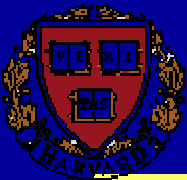


# Beyond pesticides and migrating industry: The Toxic Waste Trade:

## The Case of Electronic “E-Waste”

### Africa

"Dirty Business - Part 2: E-waste in Nigeria," *BBC Documentary Series*, (15 December 2006, 12:54 GMT Friday).



## The Digital Dump

Exporting Re-use and Abuse to Africa



media release version

24 October 2006

The Base | Action Network

A Project of Earth Economics

# Organizations Monitoring Cases of Environmental Injustice.

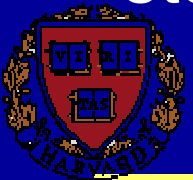
One organization is trying to track illegal activities.

But most activities are not illegal.

One of their greatest achievements is to document case studies.



Lead batteries are another big concern



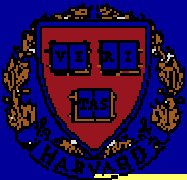


# But other problems persist: Toxic chemicals are dumped, often illegally

The Case of the Ivory Coast:

## Thousands Sickened by Toxic Waste in Ivory Coast

All Things Considered, **September 17, 2006** - Seven people in the Ivory Coast have died and thousands have become sick because of toxic chemical waste dumped around the capital city of Abidjan. The victims began vomiting and suffering breathing difficulties and migraines after breathing fumes from the waste. Host Debbie Elliott talks to the BBC's James Copnall, who is in Abidjan.



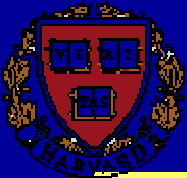
# Who is to blame?

## Who Is Behind Ivory Coast Dumping?

News & Notes, **October 10, 2006** ·  
Hundreds of tons of toxic sludge were recently dumped on Ivory Coast neighborhoods. Who will be held responsible? New York Times Africa correspondent Lydia Polgreen tells Tony Cox more about the situation.



## Ivory Coast toxic waste removed



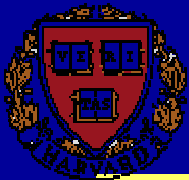
## Who is liable? What is the pattern here?



### Ivory Coast Tragedy Exposes Toxic Flow to Poor by Ofeibea Quist-Arcton

All Things Considered, **October 20, 2006** - Two months after hundreds of tons of toxic waste were dumped in and around the West African city of Abidjan, in Ivory Coast, the putrid stench and poisonous fumes have faded. An international scandal has not.

<http://www.npr.org/templates/story/story.php?storyId=6354149>



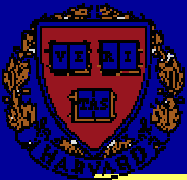


# Lawrence Summers

## The Bank Memo



On December 12, 1991,  
the chief economist for  
the World Bank,  
Lawrence Summers,  
wrote an internal memo  
that was leaked to the  
environmental community ...



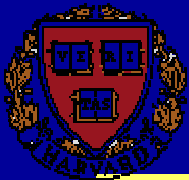
# The Revealing Memo...

## The Memo

DATE: December 12, 1991  
TO: Distribution  
FR: Lawrence H. Summers  
Subject: GEP

'Dirty' Industries: Just between you and me, shouldn't the World Bank be encouraging MORE migration of the dirty industries to the LDCs [Less Developed Countries]? I can think of three reasons:

1) The measurements of the costs of health impairing pollution depends on the foregone earnings from increased morbidity and mortality. From this point of view a given amount of health impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages. I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that.



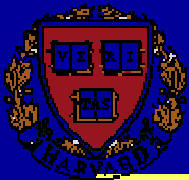
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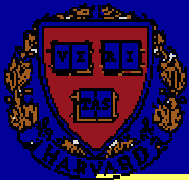
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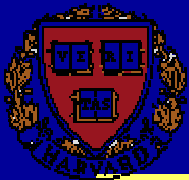
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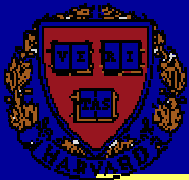
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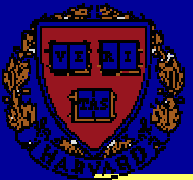
Consider the 'impeccable' economic logic of this outrageous environmental injustice, and ask yourself: What accounts for the apparent pattern in the global toxics trade?



# The Revealing Memo...

2) The costs of pollution are likely to be non-linear as the initial increments of pollution probably have very low cost. I've always thought that under-populated countries in Africa are vastly UNDER-polluted, their air quality is probably vastly inefficiently low compared to Los Angeles or Mexico City. Only the lamentable facts that so much pollution is generated by non-tradable industries (transport, electrical generation) and that the unit transport costs of solid waste are so high prevent world welfare enhancing trade in air pollution and waste.

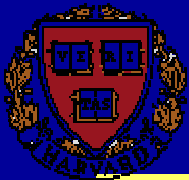
3) The demand for a clean environment for aesthetic and health reasons is likely to have very high income elasticity. The concern over an agent that causes a one in a million change in the odds of prostrate cancer is obviously going to be much higher in a country where people survive to get prostrate cancer than in a country where under 5 mortality is 200 per thousand. Also, much of the concern over industrial atmosphere discharge is about visibility impairing particulates. These discharges may have very little direct health impact. Clearly trade in goods that embody aesthetic pollution concerns could be welfare enhancing. While production is mobile the consumption of pretty air is a non-tradable.



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# The Revealing Memo...

The problem with the arguments against all of these proposals for more pollution in LDCs (intrinsic rights to certain goods, moral reasons, social concerns, lack of adequate markets, etc.) could be turned around and used more or less effectively against every Bank proposal for liberalization.

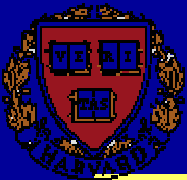


# Aftermath of the Memo.....

## Postscript

After the memo became public in February 1992, Brazil's then-Secretary of the Environment Jose Lutzenburger wrote back to Summers: "Your reasoning is perfectly logical but totally insane... Your thoughts [provide] a concrete example of the unbelievable alienation, reductionist thinking, social ruthlessness and the arrogant ignorance of many conventional 'economists' concerning the nature of the world we live in... If the World Bank keeps you as vice president it will lose all credibility. To me it would confirm what I often said... the best thing that could happen would be for the Bank to disappear." Sadly, Mr. Lutzenburger was fired shortly after writing this letter.

Mr. Summers, on the other hand, was appointed the U.S. Treasury Secretary on July 2nd, 1999, and served through the remainder of the Clinton Administration. Afterwards, he was named president of [Harvard University](#).



# Post Postscript

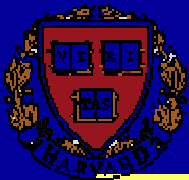
Lawrence Summers is no longer President of Harvard University. He resigned after extended controversies with the Harvard Faculty which passed a vote of “no confidence” in his administration, in part because some of them felt that he demonstrated a history of being insufficiently sensitive to the needs and perspectives of others.



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Perhaps this kind of insensitivity can explain government indifference to native American concerns....

Consider Penobscot Indian concerns about water in Maine....



Or the question of land, water and waste in Montana.



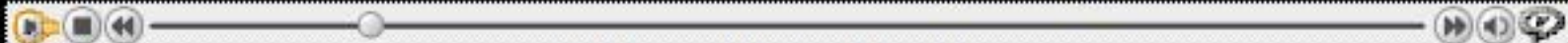
BBC

Governor BRIAN SCHWEITZER

Democrat, Montana

350.1 Kbps

00:34.4/03:23.8



Click Controls to Pause, Start, or Stop

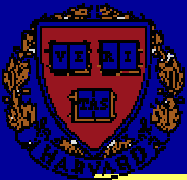


# There are also legacies of warfare...

"Cancer legacy of Vietnam war," *BBC News Online*, (16 April, 2003, 23:25 GMT 00:25 UK Wednesday).

A tactic of ecocide has consequences in an ecosystem.

The screenshot shows a web browser displaying a BBC News article. The browser's address bar shows the URL: <http://news.bbc.co.uk/2/hi/health/2952407.stm>. The page features the BBC News logo and navigation tabs for Home, News, Sport, Radio, TV, Weather, and Languages. The article title is "Cancer legacy of Vietnam war" and the sub-headline reads: "Millions of Vietnamese may have been exposed to poisonous chemicals like Agent Orange during the Vietnam War, a study suggests." A photograph shows a person in a wheelchair being assisted by others. The article text states: "Researchers in the United States have found evidence to suggest that much more cancer-causing chemicals were used during the conflict than was previously thought. The chemicals or herbicides were used to defoliate forests around military bases and to destroy enemy crops. But they have also been linked to cancer, spontaneous abortions, miscarriages, birth defects and brain disorders in people. The US military stopped using Agent Orange in 1971 after it was found to contain the most dangerous form of dioxin." The page also includes a sidebar with regional links (Africa, Americas, Asia-Pacific, Europe, Middle East, South Asia, UK, Business, Health) and a "SEE ALSO" section with related links.





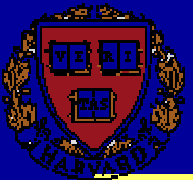
## Desert Storm legacy and current practice...

The U.S. is going to face a further legacy of its two major interventions in Middle East war:

- 1) Desert Storm and the ensuing sanctions.
- 2) The Invasion of Iraq (March 2003 onwards)

DU will likely be seen to be a major environmental injustice legacy issue

Consider the *Hidden Wars of Desert Storm*



# Introduction to Environmental Justice

## ENVR E-145

James Hoyte & Timothy Weiskel

<http://courses.dce.harvard.edu/~envre145>

### The West and the Rest: Toxics, 'Recycling' and Warfare – Some Global Patterns of Environmental Injustice



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3 April 2007

Harvard University Extension School  
Spring Semester 2007

