

Submission
No 22

INQUIRY INTO HEALTH IMPACTS OF AIR POLLUTION IN THE SYDNEY BASIN

Organisation:

Name: Ms Lyndall McCormack

Telephone:

Date Received: 7/08/2006

Subject:

Summary

A Submission to the NSW Government Inquiry into the Health impacts of Air pollution in the Sydney Basin

By Ms Lyndall McCormack

RECEIVED

07 AUG 2006

GPSC's

Introduction my way

I wanted to say I have been a volunteer in The Revive Program a program at the Prince of Wales Hospital. The program CEO was a Dr Giddian Caplan of the Prince of Wales Aged Car Consultants team. He has told me that the air pollution in Sydney is taking older peoples lives earlier. I also went along to a lecture at the University of Sydney last year and I found that Chris Eiser an employee in the Department of Environment and Conservation of the NSW Government has said in that lecture that Sydney was the most polluted city in Australia although air pollution has increased from cars. The pollution impact by car congestion is very bad in Liverpool Blacktown and Bankstown and the outer Western Sydney region. I live in the Bankstown area in a housing commission house and I get black soot on my white bath and basin from cars. My daughter suffered from asthma when the Department of housing placed me here to live and as I was very poor and had no where else to live and the children's father was dead I had to take this house but I don't believe the Department showed a duty of care for my sick daughter by placing her in a home where the area was known for its pollution because of car congestion, but there was nothing more I believe I could have done. It was very important to have a roof over our heads. I don't think they even asked me about the condition of my children's health when I was placed in that house. They didn't give me a health questionnaire to fill out. I was bought up in Padstow where and have seen articles that suggest that lead levels in petrol that were around when a lot of us baby boomers were growing up and in the generations that were growing up may have even given us schizophrenia and that is environmentally caused not genetically. I have a skin problem and I think it might be related to growing up in an area where lead levels came from cars. I have known some people who have bought inner city housing and they have had the soil tested in their back yard and it has been full of lead and they have had to have all the soil replaced and the outgoing soil was considered hazardous waste. I have said to Doctors that I may have been affected by being brought up with lead levels in cars and no one has ever tested me for toxins in my body or seemed to listen. My children's father was affected by agent orange and I was very worried about any other affects of toxic particulates on them and all I could do was do volunteer work for environment groups. I have ben volunteering in environment groups fro 24 yrs

<http://www.abs.gov.au/Ausstats/abs@.nsf/0/43a7d1804cf8baaaca256cae00162692?OpenDocument>

(1) They have the Green Car Congress in the US. I feel we need the same in NSW <http://www.greencarcongress.com/2005/12/index.html>

(2) We should have congestion tax for Sydney as is in Melbourne

(3) We should have a car free day <http://www.carfreeday.ca/>
http://www.ecoplan.org/carfreeday/cf_index.htm <http://www.mobilityweek-europe.org/>

(4) Maybe we need the waste and Emissions trading Bill as in the UK
<http://www.parliament.uk/commons/lib/research/rp2003/rp03-025.pdf>

(5) I think we need to decouple transport growth from economic growth
[http://www.europarl.eu.int/stoa/ta/transport/general/freight\(ipts\).pdf](http://www.europarl.eu.int/stoa/ta/transport/general/freight(ipts).pdf)

The European Union has decided a sustainable development strategy that includes as an important objective the 'decoupling' of transport growth from economic growth. This reflects

grave concerns about the problems that would inevitably be associated with ever-increasing

transport. For example, the transport sector is the fastest growing energy consumer in Europe

and a main source of greenhouse gas emissions. At the same time the objective is very ambitious - some might even say unrealistic to achieve – as the link between transport growth

and economic growth has proved to be very robust. There are hardly any signs of moving towards the desired decoupling, particularly in the case of freight transport. In recent years in

the EU the growth rate of freight has even exceeded the growth in gross domestic product (GDP).

(6) I am a Zero Waste Action Group member a group formed by the Nature Conservation council of NSW Pollution is a waste issue and I would like to see Sydney have a zero emissions goal as does the city of Stockholm
<http://www.e5.org/modules.php?op=modload&name=News&file=article&sid=2655&mode=thread&order=0&thold=0>

(7) My group are definitely not in favor of incineration which affects air quality

<http://www.no-burn.org/resources/library/wiadt.pdf>
D:\BOOKS\web version_1title pag
with **Zero Waste systems**, communities can eliminate (or "reduce"), ... **waste burners**, as well as cement kilns that burn **hazardous waste**, pyrolysis and ...
<http://www.no-burn.org/resources/library/wiadt.pdf> - Cached

(7a) You need to take note of the Guidelines For Selection of Fuels and Raw materials in the Cement Manufacturing process
<http://www.aprscp.org/>

http://www.aprscp.org/tf2_guidelines.pdf

WBCSD Presents:
Guidelines for the Selection and Use of Fuels and Raw Materials in the Cement Manufacturing Process

(8) Do we need to ask the Federal Government to change its emission standards .I would say yes but to make them stronger to reduce air pollution and relook at the MoU.All ADRs, including those related to vehicle emissions, are administered by the Department of Transport & Regional Services in Canberra. Information on vehicle emission standards can be found in the following location: www.dotars.gov.au/mve/new_adrs.aspx. The general motor vehicle and environment page is at www.dotars.gov.au/mve/index.aspx There is a joint Transport/Environment committee (Land Transport Environment Committee) that develops the environmental ADRs. The MoU can be found at the following website: www.ephc.gov.au/nepc/affils_nepc.html
This information comes from an email source
< Original Message From: Eiser Chris To: 'Ms Lyndall McCormack' Sent: Friday, July 01, 2005 9:44 AM Subject: RE: Article from Alertnet.org "Corrected -Car makers must do more to Cut CO2 pollution-EU">

(9) I would like to see the NSW Health department do a similar study to the one in the American journal Of Epidemiology titled The Interaction of Traffic-related Air Pollution with Economic Hardship in Los Angeles Neighborhoods
<http://aje.oxfordjournals.org/cgi/content/abstract/162/2/140?etoc>

American Journal of
EPIDEMIOLOGY

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American Journal of Epidemiology Advance Access originally published online on June 22, 2005

American Journal of Epidemiology 2005 162(2):140-148; doi:10.1093/aje/kwi173

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ORIGINAL CONTRIBUTIONS

Preterm Birth: The Interaction of Traffic-related Air Pollution with Economic Hardship in Los Angeles Neighborhoods

Ninez A. Ponce^{1,2}, Katherine J. Hoggatt³, Michelle Wilhelm³ and Beate Ritz^{3,4}

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Preterm birth may be affected by the interaction of residential air pollution with neighborhood economic hardship. The authors examined variations in traffic-related pollution exposure-measured by distance-weighted traffic density-using a framework reflecting the social and physical environments. An adverse social environment was conceptualized as low socioeconomic status (SES) neighborhoods-census tracts with concentrated poverty, unemployment, and dependence on public assistance. An adverse physical environment was depicted by the winter season, when thermal inversions trap motor vehicle pollutants, thereby increasing traffic-related air pollution. Los Angeles County, California, birth records from 1994 to 1996 were linked to traffic counts, census data, and ambient air pollution measures. The authors fit multivariate logistic models of preterm birth, stratified by neighborhood SES and third pregnancy trimester season. Traffic-related air pollution exposure disproportionately affected low SES neighborhoods in the winter. Further, in these poorer neighborhoods, the winter season evidenced increased susceptibility among women with known risk factors. Health insurance was most beneficial to women residing in neighborhoods exposed to economic hardship and an adverse physical environment. Reducing preterm births warrants a concerted effort of social, economic, and environmental policies, focused on not only individual risk factors but also the reduction of localized air pollution, expansion of health-care coverage, and improvement of neighborhood resources.

air pollution; premature birth; socioeconomic factors

Abbreviations: CI, confidence interval; DWTD, distance-weighted traffic density; OR, odds ratio; SES, socioeconomic status

(10) We need to set up a program to talk sustainability and clean air and cleaner production in the Work Place

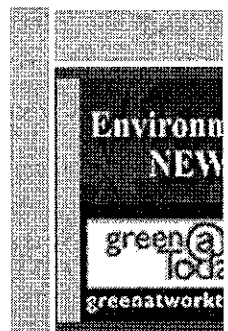
<http://www.greenatworkmag.com/gwsubaccess/05summer/fiksel.html>

Feature

Inside Out

Sustainability communication begins in the workplace.

by Joseph Fiksel, Robert A. Axelrod and Susan Russell



Sustainability reporting has gone mainstream. But in their haste to affirm a commitment to environmental and social responsibility, some corporations may be neglecting their homework. A case in point is Ford Motor Company's rocky road toward credible corporate sustainability. William Clay Ford Jr., a self-described environmentalist, became chairman of the company in 1999 and CEO in 2001, publicly proclaiming his intention to lead a green industrial revolution. After initial widespread praise, several environmental groups have criticized the company strongly for not making better progress. Ironically, recent profiles of Ford's environmentalism have identified resistance within Ford Motor Company as the greatest obstacle to the automaker's pursuit of sustainability.

This article makes a case for working "inside out," that is, engaging employees in the design, adoption and promotion of a worthwhile sustainability program before significantly communicating the commitment to the outside world. We envision this as a three-step process:

- First, define what sustainability means to the company and articulate a value proposition—how sustainability drives business value.
- Second, work with employees to interpret sustainability in terms of their job functions, and to frame a comprehensive communications strategy.
- Third, implement and continuously refine the strategy using various communication channels, including a sustainability report.

Aligning the organization prior to extensive external communications provides a firm foundation for building credibility and realizing shareholder value.

From Vision to Value Proposition

There can be no "cookie cutter" approach to designing a sustainability program because the issues confronting each company can vary enormously. With few regulations governing sustainable practices, companies have great discretion—and opportunity—in choosing what issues to emphasize.

A number of leading companies are aligning their sustainability programs with their business strategies and core competencies. For example, 3M has focused on introducing life-cycle thinking into product innovation. Kimberly-Clark has focused its sustainability efforts, in part, on developing health and hygiene products that promote social well-being. BASF, a chemical company, has analyzed alternative product technologies in terms of their impacts on customers and end users.

Most companies begin with a vision statement involving the three aspects of the "triple bottom line"—social, economic and environmental. Composing vision statements is relatively easy; the details, however, become more challenging. Sustainability can seem daunting, with its long time horizon and breadth of scope ranging from social equity to biological diversity. The three aspects of the triple bottom line are intertwined and should be addressed in an integrated manner—environmental protection improves quality of life, which supports economic development, and so forth. But how does sustainability create business value?

Recently the Global Environmental Management Initiative (GEMI) developed a "Value Flow" model that supports the development of a value proposition. The model, illustrated in Figure 1, identifies three main pathways for sustainability to



(11) We need to take all of this information to the National Emissions trading taskforce <http://www.emissionstrading.nsw.gov.au/> or figure out a way to bypass it and see we have carbon tax in Sydney

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Please read these articles I have saved for you below

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http://www.acidrain.org/pages/news/news_main.asp
Tackling climate change delivers better air quality
11 May 2006

Tackling climate change will improve Europe's air quality, cut premature deaths and could save 12 billion euro annually in air pollution control costs by 2030, according to a new report from the European Environment Agency, EEA.

Reducing greenhouse gas emissions, by burning smaller amounts of fossil fuels, will mean less air pollution. As a result the cost of tackling air pollution will be cut significantly. Not only will tougher climate change policies help clean up Europe's air quality, they will also reduce the annual number of premature deaths caused by air pollution. The report acknowledges however that specific air pollution policy will still be needed.

Web link: [EEA Briefing 2/2006](#)

Reducing fine particulate air pollution cuts mortality risk
16 March 2006

Investigators who extended the Harvard Six Cities fine particulate air pollution study by eight years found that reduced levels of tiny particle pollution during this period lowered mortality risk for participants. The largest drops in adjusted mortality rates were in cities with the greatest reduction in fine particulate air pollution (PM2.5).

The results appear in the second issue for March 2006 of the American Journal of Respiratory and Critical Care Medicine, published by the American Thoracic Society.

Web links:

- [Reducing fine particulate air pollution cuts mortality risk](#)
 - [American Journal of Respiratory and Critical Care Medicine](#)
- =====

<http://www.dec.state.ny.us/website/dar/boss/afs/permits/128200043500005.pdf>

http://pubs.acs.org/subscribe/journals/esthag-w/2004/dec/science/rp_ozone.html

Science News - December 1, 2004

Quantitatively linking ozone and mortality

Even a parts-per-billion rise in ozone levels contributes to mortality and adverse health effects, according to research published in the November 17 issue of the *Journal of the American Medical Association*. Ozone is a widespread environmental pollutant that aggravates the respiratory system and has been linked with increased rates of asthma and hospital visits. A 10-ppb growth from a previous week's ozone level increases daily deaths by 0.52% and cardiovascular- and respiratory-related deaths by 0.64%. This rate equates to 3767 premature deaths annually, which the researchers believe may be an underestimation because the study did not account for long-term effects. The finding relied on data from the National Morbidity, Mortality, and Air Pollution Study, which was used to estimate the average number of deaths from short-term exposure to ozone in 95 U.S. cities from 1987 to 2000. (*JAMA* 2004, 292, 2372-2378)

<http://www.news-leader.com/today/1205-Drycleaner-242718.html>

Dry cleaner sued over air quality concerns

Neighborhood Cleaners could face fine of up to \$10,000 a day for violations.

By **Ryan Slight**
News-Leader Staff



State officials sued a Springfield dry-cleaning business last week in an effort to stop alleged air quality violations.

Neighborhood Cleaners, 3326 S. National Ave., was accused of failing to submit an annual emissions inventory questionnaire by April 2002, among other complaints.

Assistant Attorney General Zora Mulligan requested a permanent injunction against the business prohibiting it from further violations. She also sought a fine of up to \$10,000 for each day the alleged violations occurred.

"Injunctive relief is necessary to protect the health, safety and welfare of Missouri's citizens," Mulligan wrote in her petition filed in Greene County.

Darren Selvidge, who owns the cleaners, declined to comment on the lawsuit. Plaintiffs included the Missouri Department of Natural Resources and the Missouri Air Conservation Commission.

Jim Gardner, attorney general's office spokesman, said the office rarely files suit against dry cleaners, but felt it was important to pursue violators.

"It's something we look at very aggressively and are always conscious of," he said.

State law requires dry cleaners to submit a one-page emissions inventory form each year that determines fee payments. It has businesses calculate the amount of solvents they used and have left over.

Dry cleaners pay a registration surcharge ranging from \$500 to \$1,500 based on gallons of solvent used annually, and some pay an air emissions fee of \$34 per ton, according to DNR.

Terry Stock, research analyst with DNR's air-pollution program, said yearly questionnaires allow the agency to keep track of any hazardous air pollutants.

Officials devised the form realizing most dry cleaners are small businesses, he said.

"We try to simplify it as much as possible, but sometimes they forget or get confused doing the paperwork," Stock said.

According to Mulligan's petition, Neighborhood Cleaners had not complied with the questionnaire until September 2002 — five months after it was due.

Springfield-Greene County Health Department gave the business a violation notice in January 2003 for allegedly failing to submit an operating permit application, the petition said.

Neighborhood Cleaners was also accused of failing to log recordkeeping or monitoring requirements, allowing open waste drums containing PERC solvent to remain on site, and having a spill on the floor possibly containing PERC.

PERC is short for perchloroethylene, a colorless, nonflammable liquid largely used by the dry cleaning industry, according to the Environmental Protection Agency.

Breathing the substance over a long period of time can cause liver and kidney damage, an EPA report said. However, PERC by itself is not likely to cause environmental harm, the agency said.

Open waste drums create a potential danger because they could spill and contaminate groundwater, said Ken Koon, unit chief with the state's Drycleaning Environmental Response Trust (DERT) fund. Individuals could face possible harm from vapors, he said.

Mulligan's case was assigned to Greene County Circuit Judge Henry Westbrooke. If an injunction is ordered and Neighborhood Cleaners violates it, Gardner said the business could be found in contempt of court in addition to other penalties.

Surcharges paid by dry cleaners contribute to the state's DERT fund, Koon said. If a cleaners finds contamination on its property, he said the business will pay the first \$25,000 in cleanup costs before the DERT fund reimburses it up to \$1 million in extra expenses.

DNR gives businesses that fail to submit paperwork several months to comply, Koon said.

About 70 to 80 percent comply with the first notice, and very few are referred to the attorney general's office, he said.

"It's only the last step," Koon said. "... We don't want to shut facilities down. That affects everyone from the economy to jobs."

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<http://www.abc.net.au/stateline/nsw/default.htm>

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NSW Department of Health Response

Read the New South Wales Department of Health's response to Stateline's story on the M5 stack (9 July, 2004). [View](#) (PDF format).

http://www.abc.net.au/stateline/nsw/content/2004/nsw_health_m5_response.pdf

NSW HEALTH

NSW DEPARTMENT OF HEALTH

01 December 2004

 [Print media release](#)

Air pollution health warning - high ozone day

Following the recent hot weather air pollution levels are likely to be high today due to ozone. Ozone pollution is caused by car exhaust and industrial fumes, and gets worse on hot, still days.

NSW Health warns that children with asthma are most susceptible to the effects of ozone pollution.

"Ozone levels are higher outdoors than indoors, so parents should limit the time their children with asthma play outside today," said Dr Vicky Sheppeard, environmental health policy analyst for NSW Health.

"Asthma sufferers need to follow their Asthma Action Plan and take their relieving medication where necessary. If symptoms get worse, asthma sufferers need to seek medical advice.

Ozone can also irritate the lungs of healthy adults, so its best to avoid any prolonged outdoor exercise tomorrow.

Related links:

For more information about air pollution and health, visit the NSW Health air pollution health alerts web page at <http://www.health.nsw.gov.au/living/airpollution.html>

NSW Health Media Contact
02 9391 9121 or **02 9214 9972**
For a range of health
information, go online to
www.health.nsw.gov.au

http://www.health.nsw.gov.au/pubs/2004/pdf/airpollution_healthpr.pdf

http://www.health.nsw.gov.au/pubs/2004/airpollution_prof.html

Air Pollution Health Alerts - Information for Health Professionals

Summary

This brochure is for health professionals and describes the common air pollutants in the Sydney region and their related health effects. It also describes a new system of health alerts that aims to assist people in avoiding the adverse health effects of air pollution.

Another brochure has been produced for the community and provides similar information, but with an emphasis on how to use the health alerts to reduce exposure to air pollutants.

File link : [Air Pollution Health Alerts - Information for Health Professionals](http://www.health.nsw.gov.au/pubs/2004/pdf/airpollution_healthpr.pdf)

File size: 75Kb

Type : Brochure

Date of Publication: 01 November 2004
SHPN: 040236

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http://www.health.nsw.gov.au/pubs/2004/airpollution_public.html

Air Pollution Health Alerts - What They Mean To You

Summary

This brochure advises you on how to use air pollution alerts to reduce the effects of air pollutants on your health.

A similar brochure has been produced for health professionals, advising them on how to use air pollution alerts to help patients improve management of chronic conditions such as asthma and angina.



File link : [Air Pollution Health Alerts - What They Mean To You](#)

File size: 57Kb

Type : Brochure

Date of Publication: 01 November 2004

SHPN: 040235

Related links

- Air pollution health alerts
<http://www.health.nsw.gov.au/living/airpollution.html>
- NSW Department of Environment & Conservation Air Pollution Reports
<http://www.epa.nsw.gov.au/airqual/aqupd.asp>

**Multilingual Resources :: Chief Health Officer Alerts
:: Health Calendar**

http://europa.eu.int/comm/environment/dioxin/stage2/volume_3.pdf

The European Dioxin Emission Inventory Stage II - Volume 3 ...

... Taking further into account that the **plumes** probably affected even more distant ... from hospital **waste** incineration were set to virtually **zero** for the ...

http://europa.eu.int/comm/environment/dioxin/stage2/volume_3.pdf - Cached

A new study of the effects of combustion-related air pollutants in New York City reveals that babies in the womb are more susceptible than their mothers to DNA damage from such pollution. [P][E][H]

http://www.eurekalert.org/pub_releases/2004-06/nioe-nyc062304.php

<http://news.bbc.co.uk/1/hi/health/3832183.stm>

Around the world, polluted air and water and other environment-related hazards kill more than three million children under the age of five every year, according to the WHO, and children are also exposed to an enormous number of synthetic chemicals that have been invented in the last 30 to 50 years with unknown effects on their future health. European Health Ministers have called for decisive action to overcome the gaps in knowledge about the effects of chemicals on human health and to achieve sustainable development in the chemical industry. However, the problem is very complex. [E][H][X]

<http://news.bbc.co.uk/1/hi/sci/tech/3832329.stm>

<http://www.biomedcentral.com/news/20040701/02/>

<http://www.e4engineering.com/story.aspx?uid=3007a2ec-f4bf-4889-b305-4add27d5b853> <http://www.who.int/mediacentre/releases/2004/pr43/en/>

Most fossil fuel power stations use pressurised steam heated to around 650 degrees C to drive the generators. Unfortunately, below 450 degrees C the steam pressure drops too low for efficient generation and this means that hot flue gases are wasted to the atmosphere. A US company has now developed a way to convert most of this heat into electricity. Instead of steam, it uses propane, which can be boiled and pressurised at much lower temperatures. This enables the flue gas to be cooled to around 55 degrees C, potentially increasing the efficiency of power stations from their current 35 percent to as much as 60 percent. The method can also be used to scavenge heat from other industrial

flues, and the low flue gas temperature means that many pollutants that are currently emitted to the atmosphere, such as mercury oxide and cadmium oxide, will instead condense inside the stack and can be disposed of safely. [P][E]

<http://www.newscientist.com/news/news.jsp?id=ns99995039>

<http://org.eea.eu.int/news/Ann1096279343>

Wednesday, 01 December 2004

Pan-European air pollution treaty celebrated

Celebrations were held on 1 Dec 2004 in Geneva to mark the 25th anniversary of the convention on long-range transboundary air pollution (CLRTAP). Coordinated by the UN economic commission for Europe (Unece), the treaty is credited with significantly cutting acidifying pollutants such as sulphur dioxide and nitrogen oxides. It now extends to ozone, heavy metals and persistent organic pollutants (POPs).

See CLRTAP:

<http://www.unece.org/env/lrtap/welcome.html>

and see the speech of the EEA Director:


<http://org.eea.eu.int/documents/speeches/1-12-2004>

<http://www.gainesville.com/apps/pbcs.dll/article?AID=/20050216/LOCAL/202160330>

Prenatal pollutant exposure related to genetic changes

February 16, 2005
6:01AM

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NEW YORK - A study of New York City newborns suggests that prenatal exposure to air pollution may be linked to genetic changes associated with an increased risk of cancer, researchers said Tuesday.

The study by Columbia University followed 60 newborns and their non-smoking mothers in low-income neighborhoods, primarily in Harlem and the Bronx. Their exposure to combustion-related pollutants caused primarily by vehicles was measured by backpack air monitors worn by the women during the third trimester of their pregnancies. When the babies were born, genetic alterations were measured. Researchers found about a 50 percent increase in the level of persistent genetic abnormalities in the infants who had the higher levels of exposure, said Dr.

Frederica Perera, director of the center, and senior author of the study.

"We already knew that air pollutants significantly reduced fetal growth, but this is the first time we've seen evidence that they can change chromosomes in utero," Perera said.

She said the kind of genetic changes that occurred have been linked in other studies to increased risk of cancer.

"While we can't estimate the precise increase in cancer risk," Perera said, the findings underscore the need for government to take steps to protect children.

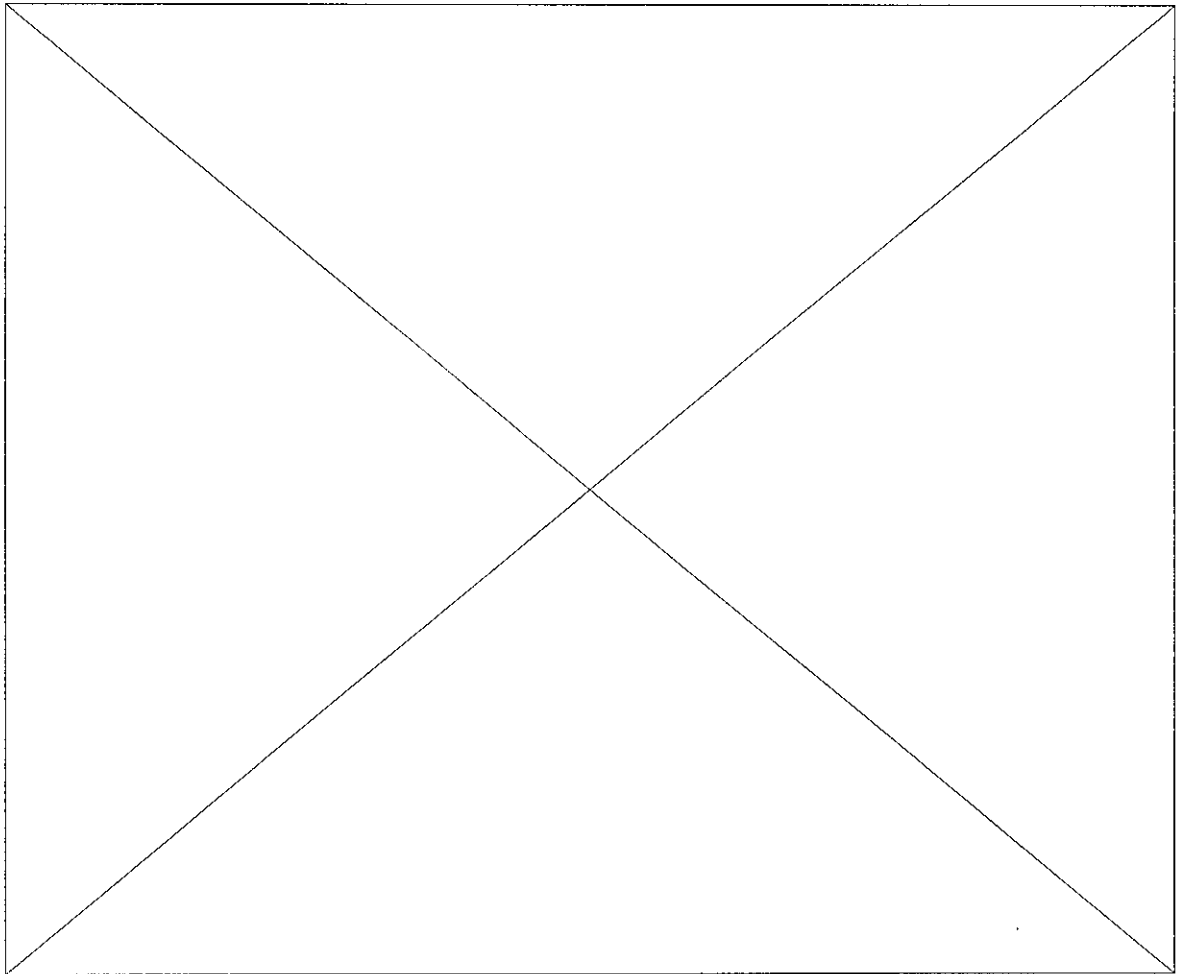
The study, published in the journal *Cancer Epidemiology Biomarkers and Prevention*, is part of a broader multi-year research project started in 1998 that examines the health effects of exposure of pregnant women and babies to air pollutants, pesticides and tobacco smoking. The study examined the effects of pregnant women and babies' exposure to air pollutants, pesticides and tobacco smoking.

James Quinn, a biologist at McMaster University in Ontario, Canada, who was one of the authors of an earlier study that examined pollution-related mutations in mice, said the Columbia study merits attention.

"This study adds to a growing list of studies suggesting that anthropogenic air pollution carries health risks and genetic consequences that may affect the next generation," Quinn said in an e-mail.

Although the research isn't conclusive and leaves open other possible causes for the genetic changes, Quinn said, the pollutants were "a likely explanation for the elevated anomalies. Presumably there will be follow-up experimental work."

Christopher Somers, a research associate at the University of Regina who was another author of the mouse study, said, "The fact that the simple act of an expectant mother breathing might cause chromosome abnormalities in her unborn child is cause for concern."



Pollution prevention

... a commitment to the goal of achieving **zero** discharge of ... them from wastewater to solid **waste, air** or other ... In most cases, **pollution** prevention is less expensive ...

http://www.wlssd.duluth.mn.us/ENVPROG_files/p2.htm - Cached

air pollution | GREENPEACE UK

... This **air pollution** is incredibly dangerous to human health ... Incinerators could be replaced by a **zero waste** strategy, involving the reduction of **waste, reuse** and ...

http://www.greenpeace.org.uk/gp_pollution/air_pollution.cfm - Cached

Zero Waste New Zealand Trust | Facts & Figures

... 13,300 kWh of electricity is saved; 95% less **air pollution** is produced; 4 ... from various sources and have not been independently verified by **Zero Waste** New Zealand ...

<http://www.zerowaste.co.nz/default,72.sm> - Cached

EEDNZ - Browsing Database - air

... for businesses about recycling, as part of the **Zero Waste** Initiative ... Web pages with information, diagrams, photos and cartoons to explain **air pollution** - how it ...

<http://www.eednz.org.nz/cgi-bin/browse.pl?issue=air> - Cached

<http://www.newscientist.com/news/news.jsp?id=ns99996526>

The World's No.1 Science & Technology News Service

New trees cancel out air pollution cuts

10:00 17 October 04

Exclusive from New Scientist Print Edition. [Subscribe](#) and get 4 free issues.

Industry has dramatically cut its emissions of pollutants, called volatile organic compounds. But those cuts have been more than offset by the amount of VOCs churned out by trees.

The revelation challenges the notion that planting trees is a good way to clean up the atmosphere.

When fossil fuels used in industry and automobiles fail to combust completely, they generate VOCs, which react with nitrogen oxides and sunlight to form poisonous ozone in the lower atmosphere. In the past few decades, the introduction of more efficient engines and catalytic converters has dramatically reduced these emissions.

But trees also produce VOCs, which tend to be ignored by scientists modelling the effects of ozone on pollution. So a team led by Drew Purves at Princeton University investigated the impact of newly planted forests on VOC levels in the US.

The researchers used the US Forest Service Industry Analysis, a database of 250,000 randomly sampled forest plots around the country, and the known VOC emission rate for each tree species for the study.

They calculated that vegetal sources of monoterpenes and isoprene rose by up to 17% from the 1980s to the 1990s – equivalent to three times the industrial reductions. Farmland reverting to scrub, pine plantations and the invasive sweetgum tree were behind most of the increases in the US.

Journal reference: *Global Change Biology* (vol 10,)

[Exploring Methods to Promote Cleaner Technologies in the Automobile Supply Chain](#)

<http://eerc.ra.utk.edu/ccpct/projects.html>

AUTOMOBILES & TRANSPORTATION

- [Life-Cycle Design for the Automobile](#)
- [Life-Cycle Environmental Evaluation of Aluminum and Composite Intensive Vehicles](#)
- [Vehicle Recycling and Disposal Policies in Industrialized Countries: Implications for the Recycling Infrastructure](#)
- [Automotive Recycling in the United States and Japan: Benchmarks and Future Directions](#)
- [Vehicle Recycling and Environmental Improvement in Western Europe](#)
- [Original Equipment Manufacturer/Supplier Relationship:](#)

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PDF] [INSIGHTS FROM EXISTING GREENHOUSE GAS EMISSIONS TRADING PROGRAMS](#)

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opened for business – the European Union's **Emissions Trading Scheme** ... and **design criteria** of the EU-ETS and other environmental **trading** programs. ...

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Cleaner diesel standard seen cutting asthma attacks

Fri Mar 10, 2006 11:45 AM ET

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By Janet McGurty

NEW YORK (Reuters) - Maligned as the fuel behind surging rates of asthma and other diseases in the United States, diesel will get an overhaul this year that could save thousands of lives, experts say.

New federal regulations, which take effect in June, will reduce the amount of sulfur in diesel to less than 15 parts per million (ppm) from 500 ppm, cutting tailpipe emissions from trucks, buses and cars that use the distillate fuel.

The reduction in sulfur content, which is classified as a "fine particle," has energy experts fearing a spike in diesel prices as pipelines and refineries face increased spending and logistic issues in producing and transporting the new fuel.

But health experts say it will lower health costs for Americans, who since the 1980s have suffered through a surge in asthma, a respiratory disease that often targets the young and the elderly.

"We know that fine particle pollution is the most lethal air pollutant, tied to a whole range of health problems," said Frank O'Donnell, president of Clean Air Watch, a non-profit environmental watchdog.

The law, which was passed in 1997 during the Clinton presidency and affirmed by the current Bush administration, is expected to prevent the premature deaths of 8,300 people per year, along with about 5,500 cases of chronic bronchitis and more than 360,000 asthma attacks, according to Environmental Protection Agency estimates.

Plus, the new standard will help prevent 1.5 million lost work days, 7,100 hospital visits and 2,400 emergency room visits for asthma each year, the EPA said.

"In other words, the ultra-low-sulfur diesel fuel is one of the most positive and significant public health protection moves from the EPA in years," said O'Donnell.

KEEPING YOUNG LUNGS HEALTHY

While the new regulation will reduce sulfur emissions directly related to the fuel, it will also enable pollution controls which can remove 90 percent of diesel soot.

"The real benefits come when additional pollution control technologies are added to engines, either during manufacture through retrofitting of existing vehicles and off-road equipment," said Robert Laumbach, assistant professor of environmental and occupational medicine at Rutgers University in New Brunswick, New Jersey. Continued

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Not only is asthma the nation's most common chronic disorder, it targets children and elderly. While children make up only 25 percent of the population, they represent 40 percent of all asthma cases. And the disease has far outpaced the population, growing 70 percent from the mid-1980s to the mid-1990s.

School buses are major sources of pollution, and children who ride them face 5 to 15 times as much particulates inside the buses compared with outside, studies show.

Laumbach said New Jersey recently passed a law that requires retrofitting of school buses and municipal vehicles is scheduled to go into effect over the next few years.

"This should result in more rapid health benefits, especially for children who ride school buses, who are among the most heavily exposed population," he said.

OLD VULNERABLE AS WELL

Hospital admissions among the over-65 population due to heart failure increased every time particulate pollution increased, studies show.

"Most of these admissions occurred the same day as the rise in fine particle concentration, which suggests a short lag time between the change in pollution and the subjects' response," said Francesca Dominici of Johns Hopkins University in Baltimore, Maryland, and lead author of a four-year study of Medicare enrollees.

The study was presented, along with other testimony, on Wednesday in Philadelphia, Chicago and San Francisco by an advisory panel asking the EPA to follow their recommendations for setting a new more stringent annual limit on soot pollution.

But the EPA decided against implementing the recommended levels of 13 or 14 micrograms of particulates per cubic meter of air, keeping the current level of 15 micrograms per cubic feet to the dismay of the advisory panel.

According to information from the American Lung Association, the EPA proposal would cut premature deaths to about 3,600. But this number would be cut by almost half using the expert panel recommendations.

"There is still time for the EPA to do the right thing," said O'Donnell.

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<http://dailytelegraph.news.com.au/story/0,20281,18420390-5001021,00.html>

Sydney's air pollution the worst

By SIMON BENSON

March 11, 2006

SYDNEY'S air pollution is almost 10 times worse than any other city in the country, according to a Federal Government report obtained by *The Saturday Daily Telegraph*.

It was the only city to have been found in breach of the National Environment Protection Council's air pollution goals.

The NEPC 2005 annual report tabled in Federal Parliament this week showed no other capital city recorded any breaches of the Government's goals for ozone pollution – a summer smog that can trigger asthma and respiratory diseases.

It follows a *The Saturday Daily Telegraph* investigation which found Sydney's air pollution this summer was the worst for years.

The report said Sydney and Wollongong broke the four-hour goal for ozone – set at 0.8 parts per million – 40 times last year.

The worst area was Sydney's southwest – Bringelly (seven breaches) and Liverpool (five).

Melbourne and Geelong, with a similar population to Sydney, recorded only five infringements across all suburbs – not enough to be in breach of the NEPC. "Sydney is now the smog capital of Australia" Opposition spokesman for the environment Michael Richardson said.

All states have agreed to the establishment of a National Environment Pollution Measure based on the number of people being exposed to polluted air.

Last year an Auditor-General's report found NSW had failed to meet national goals for exposure to ozone and fine particle pollution.

A 2004 EPA report warned an estimated one million more people would live in southwestern Sydney by 2026, creating an air pollution hot spot.

Total Environment Centre director Jeff Angel said Sydney was "in trouble".

"It is likely to lose competitive edge in attracting businesses . . . and hundreds of thousands are being exposed," he said.

The Bureau of Transport and Regional Economics estimated the health cost of air pollution at \$8.9 billion a year.

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