

# N **AECC** Newsletter

**Association for Emissions Control by Catalyst**

Av. de Tervueren 100, B-1040 Brussels

Affiliated to CEFIC

---

**March – April 2002**

## **INTERNATIONAL REGULATORY DEVELOPMENTS**

### Table of Contents

<b>EUROPE</b> .....	<b>2</b>
1. Scotland is latest to get “Sulphur-free” Fuel .....	2
2. New EU Motorcycles to be as Clean as New Cars from 2006 .....	2
3. Environment Council adopts Common Position on Recreational Craft Emissions.....	2
4. Environment Council reaches Common Position on Emissions from Non-Road Mobile Machinery .....	3
5. UK says Carbon Emissions rise after falls in recent years .....	3
6. EU Motorways grow 25% in 10 Years while Rail shrinks .....	3
7. Rail no greener than Road, IRU study finds .....	3
<b>NORTH AMERICA</b> .....	<b>4</b>
8. Senate rejects increase in Vehicle Fuel Efficiency Standards .....	4
9. Another US Study indicts Particulate Air Pollution as a cause of Premature Death .....	4
10. Study indicates Highway Diesel supply to be sufficient to meet demand .....	4
11. November - January warmest in US records .....	4
12. Canada taking action on Vehicles, Engines and Fuels .....	4
13. CARB Tests compare Diesel and CNG Bus Emissions .....	5
14. EPA backs plan to eliminate Snowmobiles from some National Parks .....	6
<b>ASIA PACIFIC REGION</b> .....	<b>6</b>
15. Japan issues Tighter Emissions Standards.....	6
16. Indian Supreme Court refuses to extend deadline for Polluting Buses.....	6
17. Indonesia to tighten Vehicle Emission Standards.....	7
<b>FORTHCOMING CONFERENCES</b> .....	<b>8</b>

For further information contact:

**ASSOCIATION FOR EMISSIONS CONTROL BY CATALYST**

Avenue de Tervueren 100, B-1040 Brussels

Tel: +32 2 743.24.90, Fax: +32 2 743.24.99

Email: [info@aecc.be](mailto:info@aecc.be), Web: <http://www.aecc.be>

## **EUROPE**

### **1. Scotland is latest to get “Sulphur-free” Fuel**

During February, BP said it was selling petrol and diesel almost completely free of sulphur for the first time at a few British service stations. The company said the fuels are the cleanest in Britain - with a maximum sulphur content of 10 parts per million (ppm) - and they come six years before mandatory EU limits.

The cleaner fuels are now available at 18 BP service stations in the Edinburgh area of Scotland.

The “sulphur-free” fuels are a step beyond ultra low sulphur diesel and ultra low sulphur petrol fuels, which are less than 50 ppm sulphur and were introduced in the UK in 1999 and 2000. The new cleaner motor fuels are already marketed in Sweden and Germany. Sulphur-free diesel is just about to go on sale in California.

The European Union is in the final stages of legislation to require that sulphur-free fuels be made widely available from 2005 and the only quality of diesel and petrol sold from 2008 or 2009.

### **2. New EU Motorcycles to be as Clean as New Cars from 2006**

The EU Parliament and Council have agreed on tough new rules designed to reduce pollution from motorcycle exhaust fumes by establishing mandatory pollution limits that will apply from 2006 and will make new motorcycles as clean as new cars have been since 2000.

Parliament's negotiators have achieved their central goal of setting binding pollution limits from 2006, to follow the first set of compulsory limits to be introduced in 2003.

They also held out for realistic methods for testing emissions. As part of the package deal between the Parliament and Council delegations, two test cycles for measuring emissions will be used in parallel, during a transition period, as a basis for the new, 2006 limit values.

These will be based on the test cycle currently used for measuring emissions for cars and a new cycle, designed for motorcycles and based on the UN-ECE worldwide test cycle (WMTC) on which work has almost been completed. Once this new worldwide test cycle has been widely recognized, the old one will be phased out.

Rapporteur Bernd Lange MEP welcomed the deal on the new directive as 'a good compromise, which will improve air quality in Europe'. At present, although two and three-wheeled vehicles only make up 2 or 3% of total traffic volume in Europe they produce 15% of transport hydrocarbon emissions.

The two sides also agreed on measures to prevent tampering with emission control devices, durability criteria and standards for tricycles and quadricycles. The new directive now has to be approved by Parliament and Council at a third reading. Parliament's third reading is scheduled for the Brussels part-session in May.

### **3. Environment Council adopts Common Position on Recreational Craft Emissions**

The EU Council of Ministers adopted a common position on a proposal for a Directive on recreational craft on 22 April, following the political agreement at the October Council. The European Parliament now has to give the proposal a second reading under the co-decision procedure. The amendments to Directive 94/25/EC

include harmonised provisions for limiting exhaust (and noise) emissions from engines in recreational craft. Limits for the exhaust emissions of carbon monoxide, hydrocarbons, nitrogen oxides and particulates have been agreed depending on power rating, type of engine and installation.

#### **4. Environment Council reaches Common Position on Emissions from Non-Road Mobile Machinery**

EU Ministers adopted a common position on a Directive dealing with gaseous and particulate emissions from internal combustion engines in non-road mobile machinery on 25 March in Brussels. The proposal would extend the scope of the legislation to cover small spark-ignition engines as well and is intended to contribute to achieving ambient-air quality targets especially ozone formation.

The common position provides a practical solution for those machines that cannot at present meet the requirements and provides a degree of certainty for the industry in meeting its environmental obligations. The Commission has accepted the common position agreed by the Council.

#### **5. UK says Carbon Emissions rise after falls in recent years**

The UK government has announced that carbon pollution was rising despite recent schemes and incentives. Government figures now show there was a slight increase in 2000 and 2001 of carbon emissions after a fall of 6% since 1990.

Britain's target under the Kyoto Protocol is to reduce greenhouse gas emissions by 12.5% by 2010 from 1990 levels. The UK has also set a domestic goal to reduce emissions by 20% from 1990 levels.

The government attributed the rise in carbon

emissions to an increased use of coal in electricity generation and colder weather in the winter months.

#### **6. EU Motorways grow 25% in 10 Years while Rail shrinks**

The motorway network in the European Union grew by one quarter over the last decade while the railways shrank, Eurostat has announced. In 1999 the EU had almost 50 000 km of motorways, with the biggest increases in Spain and France. The rail network shrank by 4% to around 154 000 km.

#### **7. Rail no greener than Road, IRU study finds**

Transferring freight from road to rail is only slightly better for the environment according to a new study commissioned by the International Road Transport Union (IRU). The report found that factors such as road distances to rail terminals, partial train loads and wasted space meant energy savings compared to road were often marginal. The IRU hopes the evidence will help combat the moves to "combined transport" where road freight is transferred to rail or waterways for a large part of its journey in an effort to reduce congestion and emissions.

The study compared the energy consumption of 14 European long-distance combined transport routes with the equivalent journeys by road alone. One reason for the marginal energy savings is that carrying trucks or trailers on trains requires much more energy per tonne of freight carried than carrying bulk items such as coal.

The European Commission wants to increase rail transport's share of freight transport to 15% from 8% by 2020 and says it will boost combined road-rail-water

transport.

The IRU is campaigning against restrictions on truck traffic particularly on routes across or through the Alps and wants more public money to be spent on roads.

## **NORTH AMERICA**

### **8. Senate rejects increase in Vehicle Fuel Efficiency Standards**

The US Senate has rejected a proposal for a 50% boost in fuel efficiency for cars and sport utility vehicles. Instead, lawmakers gave the federal government two years to develop its own targets. They also agreed to exempt pickup trucks - which account for 19% of automakers' sales - from any future increases in vehicle fuel requirements.

However, it remained uncertain whether the Senate's fuel economy provision would become law because it is part of an underlying energy bill that still faces a tough fight.

### **9. Another US Study indicts Particulate Air Pollution as a cause of Premature Death**

Long-term exposure to levels of air pollution common in many US cities increases the risk of death from lung cancer and other heart-lung diseases, according to a new study published in the Journal of the American Medical Association.<sup>1</sup>

This study demonstrated associations between ambient fine particulate air pollution and elevated risks of both cardiopulmonary and lung cancer mortality. Each 10  $\mu\text{g}/\text{m}^3$  elevation in long-term average  $\text{PM}_{2.5}$  ambient concentrations was

<sup>1</sup> "Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution", C. Arden Pope et al, Journal of the American Medical Association, Vol. 287 No. 9, 6 March 2002

associated with approximately a 4%, 6%, and 8% increased risk of all-cause, cardiopulmonary, and lung cancer mortality, respectively, although the magnitude of the effect somewhat depended on the time frame of pollution monitoring.

### **10. Study indicates Highway Diesel supply to be sufficient to meet demand**

US supplies of diesel fuel, under a recently adopted regulation to cap sulphur content at 15 ppm, are expected to meet passenger and commercial transportation needs in 2006, according to a study released by the Alliance of Automobile Manufacturers and the Engine Manufacturers Association. The study, conducted by MathPro Inc., addresses petroleum industry claims that diesel fuel might be in short supply in 2006, when the fuel must meet ultra low sulphur diesel (ULSD) standards required by the US EPA as part of its emissions reduction programmes.

The study concluded that domestic and offshore market forces would make widespread abandonment of the highway diesel fuel market unattractive to refiners.

### **11. November - January warmest in US records**

The three months November-January were the warmest on US record books, and January was the warmest since the 123 years temperatures for the month have been recorded globally, government scientists have reported.

Globally, the November-January period was the second warmest on record - 0.57°C above average.

### **12. Canada taking action on Vehicles, Engines and Fuels**

On 19 February 2001, the Canadian

Environment Minister made public the details of a 10 year Plan of Action for cleaner vehicles, engines and fuels, as an integral part of the Canada's Clean Air Strategy. The plan includes measures and actions on clean air that will produce health and environmental benefits for Canadians.

Transportation is the largest source of air pollution in Canada and studies show that more than 5000 premature deaths a year across Canada can be attributed to air pollution.

The plan develops new Canadian emission standards for vehicles and engines, aligned with those of the United States. Regulations will be developed to reduce emissions from:

- Cars, vans, pick-up trucks and sports utility vehicles to be phased-in beginning with the 2004 model year
- Large trucks and buses to be phased-in beginning with the 2004 model year
- Off-road diesel vehicles and engines such as those used in the agricultural sector and by the construction industry
- Petrol utility engines such as those used in snow blowers, lawn mowers, chain saws
- Outboard marine engines and personal watercraft.

The plan contains several measures improving the quality of diesel fuel by:

- Reducing the level of sulphur by 2006 in on-road diesel fuel used by trucks and buses, by aligning Canadian requirements with those in the US
- Establishing a new limit for sulphur in off-road diesel fuel used in construction and agricultural equipment.

The plan also details several measures for cleaner petrol.

Environment Canada will investigate economic instruments, to promote the early introduction of cleaner fuels into Canada.

### **13. CARB Tests compare Diesel and CNG Bus Emissions**

The California Air Resources Board (CARB) has results from a study that compares emissions from current in-use diesel and compressed natural gas (CNG) fuelled buses to emissions from a similar diesel fuelled bus equipped with advanced pollution controls.

CARB Chairman Dr. Alan Lloyd said, "The data suggest that both CNG and diesel engines need additional emission controls, and with those controls both can achieve substantial and beneficial emission reductions."

Although it is known that CNG total particulate matter and nitrogen oxide emissions are lower than diesel emissions without exhaust aftertreatment, the data suggest that the levels of some toxic pollutants in CNG exhaust require further study and may warrant additional control. The CNG bus tested was not equipped with a particulate filter or other proven emission control equipment, such as an oxidation catalyst.

Additional tests are now being conducted that will use the same CNG bus refitted with an original equipment manufacturer's oxidation catalyst and a new, state-of-the-art CNG bus equipped with a manufacturer installed oxidation catalyst. Results of these tests should be available in mid-2002. CARB also hopes to test a particle trap on a CNG fuelled bus, and will do so when a suitable trap becomes available.

A diesel bus equipped with a new particulate filter produced promising test results for several pollutants. This bus, running on low

sulphur fuel, produced lower emissions than either the diesel or CNG “baseline” buses in terms of the total mass of particulate matter (PM) and the amount of toxic organic compounds.

#### **14. EPA backs plan to eliminate Snowmobiles from some National Parks**

The US Environmental Protection Agency, recommends that snowmobiles be banned from Yellowstone and Grand Teton national parks, stating that wintertime exhaust from the popular snow machines violates air quality laws and jeopardises human health.

The report says that the agency is concerned that as a result of the Bush administration's decision to postpone a phased elimination of snowmobiles, "air quality, human health and visibility continued to be impaired" last winter.

Among the options being considered by the Park Service, besides imposition of a ban, are limits on the number of snowmobiles, cleaner machines and better supervision. But EPA disputes whether those controls could be enforced or would produce significant results.

### **ASIA PACIFIC REGION**

#### **15. Japan issues Tighter Emissions Standards**

On 7 March Japan's Central Environmental Council released for public comment new, more stringent requirements on tailpipe emissions for new motor vehicles to be sold from 2005, including foreign-manufactured vehicles. The regulation issued for comment applies both to petrol and diesel powered passenger cars, trucks, and buses and sets different requirements for different classes of vehicles.

The new regulation calls for reducing PM

emissions from trucks and buses by up to 85% and NOx emissions by 50% from the levels set in the short-term diesel automobile emission regulation scheduled to be enforced between April 2002 and March 2004.

Japan is also preparing to enforce a tougher regulation on hydrocarbons, NOx, and SOx emitted from petrol-fuelled Ultra-Low Emission Vehicles (ULEV).

#### **16. Indian Supreme Court refuses to extend deadline for Polluting Buses**

On 5 April India's Supreme Court refused to extend its deadline for switching diesel-powered public transport buses to compressed natural gas (CNG) fuel in the Indian capital by 31 January 2002. The court in its 5 April order criticised the federal government and the Delhi state administration for showing no concern toward the health of the people.

The court said the pollution in the Indian capital was worse than the Bhopal gas tragedy.

The court ruling came after the New Delhi government sought another extension to the original 31 March 2001, deadline to convert all commercial vehicles to CNG. The court had ordered the fuel switch two years ago and extended the deadline several times to allow the authorities and owners of diesel-powered buses to comply.

As a result, more than 7000 buses of New Delhi's state-owned as well as private bus fleet have been taken off the roads.

The court directed the Delhi state administration to convert 800 diesel buses to CNG mode each month.

**17. Indonesia to tighten Vehicle  
Emission Standards**

The Indonesian government is planning to issue a new decree on tighter vehicle exhaust emission limits that will require new vehicles to have a catalytic converter beginning in 2004, said the Ministry of Environment, according to the Jakarta Post.

Under the new decree, the government plans to tighten vehicle emission standards in three phases: pre-2004, 2004 to 2007 and post-2007. Indonesia is seeking to implement the EU emission standards.

State oil and gas firm Pertamina said it should be able to provide unleaded petrol throughout the country starting in 2004.

## **FORTHCOMING CONFERENCES**

### **SAE Spring Fuels and Lubricants Meeting**

6-9 May 2002, Reno, Nevada, USA

Details from: [www.sae.org/sfl](http://www.sae.org/sfl)

### **Hart's World Fuels Conference 2002**

21-23 May 2002, Brussels

Details from: +1-800-872-3835

### **“FISITA 2002” – World Automotive Congress**

2-7 June 2002, Helsinki

Details from FISITA on:

[www.fisita2002.com](http://www.fisita2002.com)

*Congress themes include The Environment, New Generation of Vehicles and Policy & Regulation.*

### **Future Car Congress 2002 - "On the Road to Energy Efficient Vehicles"**

3-5 June 2002, Arlington, Virginia

Details from

<http://www.futurecarcongress.org/>

*Includes sessions on Diesel Exhaust Emission Control*

### **11th International Conference “Verkehr und Umwelt”**

19-21 June 2002, Graz, Austria

Details on: <http://fkma.tu-graz.ac.at>

### **Emission Control 2002**

10-11 June 2002, Dresden

Details from: <http://ivk.tu-dresden.de/EC20021>

*Technologies for ultra-low emissions*

### **Automotive & Transportation Technology Congress**

9-11 July 2002, Paris

Details from <http://www.attce.com/>

### **6th International ETH Conference on Nanoparticle Measurement**

19-21 August 2002, Zurich

Details from: [ttm.a.mayer@bluewin.ch](mailto:ttm.a.mayer@bluewin.ch)

*Abstracts of papers by 31 May 2002.*

*Conference covers characterisation of combustion-emitted Nanoparticles with special focus on the speciation of solid particles and volatiles, including technologies to reduce Nanoparticle emissions.*

### **Fuel Cells: Science and Technology 2002**

25-26 September 2002, London

Details from: [www.fuelcelladvances.com](http://www.fuelcelladvances.com)

*From the organisers of the Grove Fuel Cell Symposium*

### **11th Aachen Colloquium, Automobile and Engine Technology**

7-9 October 2002, Aachen, Germany

Details on: [www.rwth-aachen.de/ac-Kolloquium](http://www.rwth-aachen.de/ac-Kolloquium)

### **SIAT 2003**

15-18 January 2003, Pune, India

Details from ARAI website:

<http://www.araiindia.com>

*Call for papers. Programme includes exhaust emission control techniques including durability aspect for Euro III and beyond.*

### **Joint JSAE/SAE International Fuels and Lubricants Symposium**

19-22 May 2003, Yokohama

*With the participation of European industry. Programme includes Combustion, Emissions, Lubricants and Fuels. Abstracts for papers required by 30 September 2002*