



## CONCOURS ARTS ET MÉTIERS ParisTech - ESTP - POLYTECH

### Épreuve de Langue Vivante MP - PC - PSI

Durée 3 h

Si, au cours de l'épreuve, un candidat repère ce qui lui semble être une erreur d'énoncé, d'une part il le signale au chef de salle, d'autre part il le signale sur sa copie et poursuit sa composition en indiquant les raisons des initiatives qu'il est amené à prendre.

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**Pour cette épreuve, l'usage des machines (calculatrices, traductrices,...) et de dictionnaires est interdit.**

Les différents sujets sous forme d'un fascicule sont présentés de la manière suivante :

Pages 2 à 4	Allemand
Pages 5 à 7	Anglais
Pages 8 à 10	Arabe
Pages 11 à 13	Espagnol
Pages 14 à 16	Italien
Pages 17 à 19	Portugais

**Vous rédigerez dans la langue choisie et en 400 mots une synthèse des documents proposés. Vous indiquerez avec précision à la fin de votre synthèse le nombre de mots qu'elle comporte. Un écart de 10% en plus ou en moins sera accepté. Votre synthèse comportera un titre comptabilisé dans le nombre de mots.**

**Le candidat a obligation de traiter le sujet dans la langue qu'il a choisie au moment de son inscription au concours.**

**Il est interdit aux candidats de signer leur composition ou d'y mettre un signe quelconque pouvant indiquer sa provenance.**

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## ANGLAIS

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### **DOCUMENT 1**

#### **EU court rules UK government must clean up dangerous air pollution**

The government will be forced to urgently clean up illegal air pollution in British cities following a ruling on Wednesday in the European court of justice. It is likely to see many diesel cars and heavy goods vehicles restricted from city centres within a few years.

The landmark case, brought by a small environmental group through the UK courts, will allow people to sue the government for breaching EU pollution laws and will force ministers to prepare plans for many cities to improve air quality. Europe's highest court firmly rejected Britain's long-standing approach to complying with EU air pollution laws which has been to appeal to Europe for time extensions.

The government has admitted that under its current plans, London, Leeds and Birmingham will not meet legal limits for the toxic nitrogen dioxide gas (NO<sub>2</sub>) until after 2030. This is 20 years after the original deadline set by Europe. Other cities, including Manchester and Glasgow, have target dates of 2025.

"Thousands of people die because of air pollution in Britain every year. This ruling will save lives by forcing the government to finally take this issue seriously. They will now have to come up with an urgent plan to rid our towns and cities of cancer-causing diesel fumes," said Alan Andrews, lawyer with Client Earth which brought the case. "This sets a groundbreaking legal precedent in EU law and paves the way for a series of legal challenges across Europe," he said.

Cities across Europe may have little choice now but to introduce "ultra low emission zones" such as the one planned for London in 2020, said Simon Birkett, director of Clean Air London. "Diesel exhaust must be banned from the most polluted places just as coal was 60 years ago."

Joan Walley, chair of the Environmental audit committee of MPs which quizzed London mayor Boris Johnson on air pollution in September, said: "Today's ruling from the European court is a welcome intervention, because it will force the government to prioritise the issue of air quality in all decisions on transport policy and infrastructure."

Liberal Democrat MEP Catherine Bearder said: "Today's ruling shows we need a radical new approach to tackling air pollution in Europe. On their own, local authorities will always find it difficult to comply with these limits as air pollution moves around Europe and does not respect national or regional boundaries."

Friends of the Earth called on government to roll out low-emission and congestion charging zones, scrap road-building plans, and make it easier for people to cycle and walk. "UK air quality is a national disgrace – tough measures are long overdue. This ruling should force the government to take the urgent steps needed to clean up Britain's filthy air, and help prevent many of the tens of thousands of premature deaths every year caused by air pollution," said a spokeswoman.

The case was referred to European courts after the UK Supreme court ruled earlier this year that the government was failing in its legal duty to protect people from the harmful effects of air pollution. It followed evidence that showed that NO<sub>2</sub> pollution legal limits were exceeded in 40 of the UK's 43 urban zones in 2010. Separately, the European environment agency said on Wednesday that almost all European city dwellers are exposed to pollutants at levels deemed unsafe by the World Health Organization (WHO).

Adapted from John Vidal, *The Guardian*, November 2014

## **DOCUMENT 2**

### **Environmental Protection Agency expected to propose stricter ozone limits**

After years of inaction, the Obama administration is expected to propose tougher limits on smog Wednesday, according to people with knowledge of the rule-making effort. The new rule would be a major victory for public health groups, but it is sure to further stoke the partisan clashes between the president and Republicans poised to take control of Congress.

The current limit for ground-level ozone, the lung-damaging gas in smog, is 75 parts per billion. Concluding that the limit is too weak to protect people's health, Environmental Protection Agency staff and its science advisors had recommended strengthening the federal standard to 60 to 70 parts per billion. [...]

A tighter limit on ground-level ozone could save lives and bring cleaner air to millions of people, including in Los Angeles and other parts of California. Proponents say that states will have ample time to meet the new benchmark and that technology could help close the gap. [...]

But the oil industry, power companies and other industries, along with their mostly Republican allies in Congress, contend that a tighter ozone standard would damage the economy and send manufacturing jobs overseas. Even some nonpartisan experts such as former regulators worry that a deep cut to ozone implemented too fast could hammer local economies.

Because so many sources emit [...] ozone components, the effect of an ozone standard is far-reaching, which has made politicians leery of regulating it. The Bush administration rejected EPA science advisors' recommendation six years ago for a tougher limit. The Obama administration vowed to implement a tighter standard, but the president shelved it and let the Bush-era limit remain at the start of his reelection bid. Pollution advisories classify the air in many regions as healthy when it is not, backers of a new standard say. [...]

In urban California, where vehicle emissions dominate, achieving the deep pollution cuts needed to meet a stricter smog standard will require a full-scale transformation of the transportation sector, regulators say, including significant advances in alternative-fuel cars and trucks and cleaner ships, trains and construction equipment.

"We are trying to come up with advanced technologies, get dirty vehicles out of the fleet and get new, near-zero vehicles into the fleet," said Sylvia Vanderspek, chief of the California Air Resources Board's air quality planning branch.

Of the 715 counties nationwide with EPA-certified air quality monitoring equipment, 185 do not meet the existing ozone standard, agency records show. That total would more than double if a stricter limit of 70 parts per billion were in effect today, a Times review of the agency's most recent air quality data found. [...]

In Colorado, for instance, a tighter ozone standard probably would put Colorado Springs, the state's second-largest city, out of compliance. That would force regulators to come up with a plan to reduce smog-generating pollution, either through additional controls on industrial sources or more stringent vehicle emissions testing. [...]

Once finalized, the ozone standard would not go into effect for years. States are given three years to collect air quality data before their status is determined. They then have years to devise a plan to cut pollution and force industry and communities to comply.

The worst-polluted regions in the U.S., including Los Angeles, would have until 2037 to meet a new standard.

Adapted from Neela Banerjee & Tony Barboza, *LA Times*, November 2014

## **DOCUMENT 3**

### **Air pollution in cities killing 1600 a year**

Air pollution is claiming the lives of nearly 1600 people a year in Australia's major capital cities, a new report says.

Long-time residents in Sydney, Melbourne, Perth and south-east Queensland, including Brisbane, the Gold Coast and Ipswich, will continue to have a shorter life expectancy, a health risk assessment released by the National Environment Protection Council shows, because of their ongoing exposure to man-made air pollution.

The council released the report as part of its work developing mandatory national standards for fine particle emissions.

The authors of the health study found that long-time Sydney residents would have their lives reduced by an estimated 72 days for men and 65 days for women by ongoing inhalation of fine particle pollution. Residents in Melbourne, Perth and south-east Queensland faced the same risks as well as a higher rate of asthma and cardiovascular-related hospitalisations.

Based on 2008 levels, fine particle pollution led to an estimated 570 annual deaths in Melbourne, 520 in Sydney, 247 in south-east Queensland and 247 in Perth.

The composition of air pollution in each of the cities is unique. However, emissions from motor vehicles, particularly diesel, coal-fired power, solid fuel heaters and heavy industry have been identified as main contributors. Bushfires contributed to the pollution but only episodically.

The concentration of the particles varies during the seasons but, as a whole, fine particle pollution has serious health implications. A study published in the *Environmental Research Letters* journal found that 2.1 million people worldwide died prematurely each year because of fine particle pollution, which are particles smaller than 2.5 micrometres in diameter. Most deaths were from cardiopulmonary disease and a smaller percentage from lung cancer.

One of the Australian report's authors, Geoff Morgan, said the concept of "attributable cases" due to air pollution exposure was central to estimating its health impact and health burden. [...] "Unlike deaths due to traffic accidents, the impacts of air pollution on health cannot be directly counted, but must be evaluated from estimates of health risk based on scientific research," Associate Professor Morgan said. "Man-made urban air pollution is associated with a whole range of health risks. [...]"

The health risk assessment report, a collaboration between the University of Sydney, Southern Cross University, the University of Western Sydney and University of Wollongong, found if the amount of fine particle pollution was reduced by up to 17 per cent the impacts would be immediate. The researchers estimated that in the first year of reduced exposure, there would be 140 fewer deaths in Sydney.

Associate Professor Morgan said pollutants in the air could be solid or liquid particles in suspension, or gases. He said the airborne particles of primary concern were 10  $\mu\text{m}$  or less in size, referred to as PM10, and a subgroup of finer particles referred to as PM2.5, which are less than 2.5  $\mu\text{m}$  in size. Gaseous pollutants include ozone, nitrogen dioxide and sulfur dioxide.

He said there was no evidence of a threshold concentration below which adverse health effects of particulates were not observed.

The health effects associated with exposure to these pollutants range from small, temporary changes in the respiratory tract and impaired lung function, to symptoms so serious they can lead to death. The consequences for people's health include restricted activity or reduced performance, hospital emergency department visits, or hospital admissions.

Adapted from Heath Gilmore, *Sydney Morning Herald*, August 2014