PO-CH/NG 0521
PARTA

Begins: 20/1/89. Ends: 7/2/89.

THIS FOLDER HAS BEEN REGISTERED ON THE REGISTRY SYSTEM

PO CH NL 0521.

Chancellor's (Lawson) Papers: The Environmental Benezits of Unleaded Petrol

DD's: 25 Years

//pdl/1800 8 |3 | 96.

CH NL 10521.



FROM: D I SPARKES

DATE: 20 January 1989

B/F

MR S N WOOD

Mr Saunders
Mr Waller
Mr Tyrie

27/1

UNLEADED PETROL

The Chancellor recently asked to be reminded of the benefits of unleaded petrol.

- As far as the effects on health are concerned, I was able to tell him, on advice from DoE, that there is no doubt that in large concentrations lead is toxic. There are also fears that in lower concentrations (such as exist in air due to vehicle emissions) may have a detremental effect on the behaviour and intelligence of children. The evidence is apparently suggestive but by no means There is further consideration that conclusive. a lead accumulates in the environment and is not converted into harmless compounds naturally. As lead in petrol accounts for some 80% of the lead in the air, the use of unleaded petrol is means of reducing any health risk that it may pose.
- 3. The effect of lead on the <u>environment</u> seems less clear cut. The amount of lead in petrol apparently has no bearing on emmissions which cause the greenhouse effect. While lead from petrol does contaminate flora and fauna, this does not appear to have any deleterious effect until it enters the human food chain.



- 4. The Chancellor was puzzled by this. If this analysis is correct, there seems to be a rather stronger case on health grounds than on environmental grounds for encouraging the use of unleaded petrol. The Chancellor wondered why it is that unleaded petrol is generally seen as an environmental rather than a health measure and why it is that representations in favour of unleaded petrol are not made by DH rather than DoE Ministers? Do DH Ministers doubt whether the case against lead in petrol is sufficiently compelling to justify a fiscal incentive in favour of unleaded fuel? Are we being led up the garden path by DoE?
- 5. I would be grateful for your comments in due course.

DUNCAN SPARKES



Chy you asked to be reminded of the benefits to the environment of unleaded petrol.

There is no doubt that in large concentrations lead is toxic. There are also Jears that in lower concentrations (such as exist in air due to vehicle emissions) it can have a detrimental effect on the behaviour and intelligence of children. The evidence is suggestive but not conclusive; a Medical Research Council paper before xmas lent some support to the anti-lead lobby. There is a further consideration: lead accumulates in the environment - it does not get broken down or converted into harmless compounds naturally.

As lead in petrol accounts for

(over 80 per cent) most of the lead in the air, the use of unleaded petrol. is an obvious means of reducing lead in the environment. 1015 18/1/89 I wom configured to health configured Thank. I ham to Environment have de la

Saunders That's I'm in hymn by hand Waller who the bay Chy You asked about the envirogmetal as opposed to the health benefits of unleaded petrol. The short answer is none. The amount of lead in petrol has no bearing on emissions which cause the greenhouse effect. Lead from petrol contaminates flora and Jauna but this does not appear to have any deleterous effect until it Private 12/86

Private 1/86

Private 1/86 enters the human Jogd

UNCLASSIFIED

FROM: S N WOOD

DATE: 25 January 1989

CHANCELLOR

cc Mr Culpin
Mr Revolta
Mr Saunders
Mr Call
Mr Tyrie

UNLEADED PETROL

Mr Sparkes' minute of 20 January reported your question about the effects of lead in petrol, and why representations in favour of unleaded petrol were made by DOE rather than DH Ministers.

Summary

2. DOE is the lead Department on environmental questions, but this category embraces a number of issues relating to the presence of toxic substances in the environment. A major factor in forming concern about the environment is its effect of the environment on man. In the case of lead, as with other toxic substances (eg radioactive emissions, heavy metals etc) DOE do have advice from DH about the health risks.

Background

- 3. DOE officials have confirmed to me the account given to Duncan Sparkes earlier. Lead is a neurotoxin which is known to damage the nervous system when present in high concentrations. There is also suspicion that even at low concentrations it could be damaging to the development of children's brains (with consequences not just for their intelligence but also the other functions controlled by the brain).
- 4. The DH chair a Committee on the air, soil and water environment, on which DOE are represented. This Committee has an important part to play in forming policy advice on the levels of lead in the environment which are tolerable, and on what should be

UNLEADED PETROL The attached minute may some way to answering your queries. However, Andrew Tyrie believes unleaded petrol is bad value-for-money in terms of reducing lead in the environment. He thinks the problem could be dealt with much more cheaply and effectively by (i) replacing lead pipes used for drinking water, and (ii) cleaning up inner cities, particularly rubbish tips on which kids tend to play. He hopes to minute you in due 25/1/89 course.

done where tolerable levels are exceeded. DH also sponsor research by the Medical Research Council (MRC). A report late last year by the MRC to the DH of a study of the development of children in Edinburgh, the conclusions of which were announced in the "Lancet", suggested that the balance of evidence now appeared to be shifting to place blame for impairment of brain development in children more firmly on the presence of lead in relatively low concentrations in the environment.

- DOE tell me, been the policy of successive Governments over the past 15 years to reduce the exposure of the population to lead in the environment. This was reinforced by the report of a Royal Commission in 1983. Lead-free petrol is only one limb of this policy. Lead also enters the environment from paint, factory waste and old water pipes made of lead. There are policies in place to reduce the increase of lead in the environment from these other sources too. For example, the Department of the Environment has a voluntary agreement with paint manufacturers that they will not add lead to paint to enhance its speed of drying. In some industrial paints, lead is still added to achieve whiteness. But, when an EC Directive now in draft takes effect, that too will be stopped. The water supply is monitored for lead, and where the average lead in a supply system exceeds a certain level laid down by the European Community, the DOE require the supply authority to counter this by dosing the water with lime or phosphate to increase its pH, making it less acid and therefore less likely to dissolve lead out of the pipes.
- 6. The campaign for lead-free petrol is relatively high profile, because this comes home to the consumer. It is strongly supported not only by the DOE and Department of Health but also by the Department of Transport, I am told. The European Community has laid down a timetable for Member States to cut back the use of leaded petrol.

7. DOE therefore are speaking, I gather, for a number of other Departments in the Budget representations they have made. The concern about the environment is essentially one about human health. But DOE, with their wider responsibilities for policy towards toxic substances in the environment, and supplying as they do the UK's representative on the EC Environment Committee, naturally take the lead.

Oin

S N WOOD

chex.ps/ds.55

UNCLASSIFIED



FROM: D I SPARKES

DATE: 26 January 1989

MR S N WOOD

bmb

cc PS/Economic Secretary

Mr Culpin
Mr Revolta
Mr Saunders
Mr Call
Mr Tyrie

UNLEADED PETROL

The Chancellor has seen and was grateful for your minute of 25 January discussing the merits of encouraging the use of unleaded petrol. He found this useful.

DUNCAN SPARKES

Ch/At last! An environmental
benefit of unleaded FROM: D P GRIFFITHS
DATE: 26 January 1989

APS/CHANCELLOR

cc Mr Culpin
Mr S N Wood
Mr Waller
Mr Saunders
Mr Tyrie
Mr Call

UNLEADED PETROL

I have seen a copy of your minute of 20 January to Mr Wood. There is one significant indirect environmental benefit of unleaded petrol worth noting.

- 2. While the presence of lead in petrol does not contribute to the gaseous emissions from vehicles considered to be major causes of acid rain and smog, it is incompatible with the means of achieving the biggest reduction in these pollutants the use of catalytic convertors. These convertors turn much of the gaseous pollutants produced by the combustion process into water or harmless gases. This is done by passing the vehicle's exhaust through a cannister coated with a precious metal which oxidises or reduces the gases as appropriate. However, if leaded petrol is used, the catalyst is 'poisoned' and the vehicle may, if anything, be more polluting than if no catalytic convertor had been fitted. Cars with catalysts should therefore use unleaded petrol.
- 3. The UK is intending to require new cars from the early 1990's to meet the new EC vehicle emission standards which in the main will mean fitting catalytic convertors. Hence it is desirable to encourage the supply and uptake of unleaded petrol to minimise the incidence of misfuelling.

D P GRIFFITHS

Amount property south of the so

UNCLASSIFIED



FROM: D I SPARKES

DATE: 27 January 1989

MR D P GRIFFITHS

pap

cc Mr Culpin
Mr S N Wood
Mr Waller
Mr Saunders

Mr Tyrie
Mr Call

UNLEADED PETROL

The Chancellor was most grateful for your minute of 26 January explaining how leaded petrol is incompatible with the use of catalytic convertors. He was relieved to learn that unleaded petrol has an environmental benefit, after all.

DUNCAN SPARKES



DEPARTMENT OF THE ENVIRONMENT 2 MARSHAM STREET LONDON SWIP 3EB

01-276 3000

My ref:

Your ref:

3|January 1989

Chi we have indicated to the Chape's you that To thinists world welcome early conversion of

Dear Colleague

to inform you of two changes affecting writing Government Car Service (GCS).

First, I am offering all colleagues who do not already have such a vehicle, the option of a replacement car capable of running on lead free petrol. Montegos, Sierras and Cavaliers are available and I would be grateful if colleagues who are eligible and wish to take up this offer would arrange for their offices to contact the GCS Superintendent, Mr T McCarthy, direct to let him know their preference. GCS will aim to provide replacement vehicles no later than 1 July 1989, and the additional costs of early replacement will be absorbed through efficiency savings. Cabinet Ministers' cars will be converted to unleaded running, where necessary, to the same timescale.

Secondly, you will wish to be aware of a proposed change in GCS organisation arising from the planned privatisation of The Crown Suppliers (TCS), of which GCS is currently part. GCS is not part of the package for sale, so a new home needs to be found for it. I therefore propose, unless I receive any strong views to the contrary, that the operational responsibility for the Edinburgh, London and Bristol GCS service should transfer by 1 April 1989 from TCS to the PSA's Directorate of Home Regional Services, PSA Scotland and PSA South West Region respectively. It has been agreed at official level that the Cardiff operation should transfer to the Welsh Office, and that the Belfast service should be taken over by NIO.

. A copy of this letter goes to Sir Robin Butler.

your fathfully larid Mottershead

CHRISTOPHER CHOPE

Approved by the ihmster and somed in his absence







Ch.

GCS plan to do the conversion

to shickly 20 possible. However,

Faguer need first to provide a

Conversion kit. They are apparently

working on this haw.

2. Mentine, you can certainly stry
(If roked) that your 665 car will
be converted as soon as is
prontrable.

Mr. 41/2



FROM: A C S ALLAN

DATE: 1 February 1989

BF 13/2

NOTE FOR THE RECORD

cc PS/Economic Secretary Sir P Middleton Mr Scholar

Mr Jefferson Smith - C&E

UNLEADED PETROL: SIR JEFFREY STERLING

Sir Jeffrey Sterling called briefly on the Chancellor this afternoon. He said that he and Sir Arnold Goodman were, partly at DTp's behest, launching a major campaign in mid-February under the auspices of Motability to promote the use of lead-free petrol. He thought the market was ripe for a campaign of this sort, which could see a significant rise in the share of the market taken by unleaded petrol.

- 2. The differential between the price of leaded and unleaded petrol was clearly crucial. He would like to see a differential of not less than 10p per gallon and perhaps more. Ideally, this should be done by an actual cut in the duty on unleaded petrol, perhaps coupled with an increase in the duty on leaded petrol.
- 3. The Chancellor took note.
- 4. Sir Jeffrey Sterling also said there was a particular problem over converting Austin Rover cars particularly Minis and Metros to unleaded petrol. The Chancellor wonders whether Customs know anything about this?

A C S ALLAN

UNCLASSIFIED

H.M. CUSTOMS AND EXCISE

NEW KING'S BEAM HOUSE, 22 UPPER GROUND

LONDON SE1 9PJ

01-620 1313

Mr Allan

PPS/Chancellor

FROM: D A GAW

DATE: 7 FEBRUARY 1989

UNLEADED PETROL: SIR JEFFREY STERLING

1. In your note of 1 February you asked whether Customs knew anything about the problem of converting Austin Rover cars - particularly Minis and Metros - to unleaded petrol.

- 2. Virtually all Rover Group cars must use only <u>leaded petrol</u>. They were designed to run on leaded petrol and cannot be adjusted, even by retuning, to use unleaded; doing so will damage the engine. Metro GS and Montego 1.6 and 2.0 L/SL models manufactured from October 1988 can use <u>either</u> unleaded or leaded petrol or both. From October 1990 all new petrol engined cars will have to be capable of running on unleaded. This information has been given wide publicity eg in Which magazine and by the CLEAR pressure group.
- 3. The number of cars that cannot use unleaded petrol is currently about 27 per cent of existing stock (over 5 million cars) but projected to decline gradually. However nearly all cars capable of using two star leaded petrol could be converted to unleaded relatively easily.
- 4. These facts were taken into consideration in our projections of the switch from leaded to unleaded petrol.

D A GAW

REVENUE DUTIES DIVISION A

Distribution:

PS/Economic Secretary Sir P Middleton

Mr Scholar Mr Michie CPS

Mr Jefferson Smith

Mr Wilmott

Mr Allen

Mr Vernon

Ms French

Mr Spackman



Your greation behind.

- 1) GCS me offering new Monteges (as part of normal Aplacement poolss) so these will run on unleaded;
- 2) Rovers can already men an
- Dagnars will be converted;
- 4) Other GLS CAIS (Chillies etc.) can be converted.

Jan Cm 2/2