

3 August 1984

PRIME MINISTER

ACID DEPOSITION AND CAR EMISSIONS

The Secretary of State for Transport has written to the Secretary of State for the Environment expressing disquiet at the wording of the reference to reducing motor vehicle emissions in Mr Waldegrave's statement to the closing session of the Munich Air Pollution Conference at the end of June. However, the main issues which he has raised relate not directly to Mr Waldegrave's statement, but to Mr Jenkin's paper which was discussed at the meeting you chaired on 19 June to consider the Government's policy towards acid deposition.

2. Mr Ridley queries whether proposals by the European Commission, for reductions in motor vehicle emissions by 1989, should be supported by the UK as part of the Government's policy towards acid deposition. At your meeting on 19 June there was a discussion of this following Mr Jenkin's recommendation that the Commission's proposals be accepted. The meeting expressed strong support for 'lean-burn' technology as a means of reducing vehicle emissions. The consensus view was that when appropriately tuned lean-burn engines could both reduce emissions and improve fuel economy; and British motor manufacturers favoured its introduction.

3. Mr Ridley has said that, to meet the Commission's 1989 emission requirements, lean-burn engines will forgo about one third of the additional efficiency that the lean-burn technology promises. You will remember that this point was discussed at your meeting at Chequers on 27 May; attached

X | is a graph, which I showed at that meeting, illustrating the range of emissions from lean-burn and other vehicle technologies. A lean-burn engine can be tuned for minimum emissions, maximum fuel economy or a compromise between the two. It was agreed that there was justification for a modest reduction in the gain in fuel economy in the interests of reduced emissions. I believe that it is misleading to compare the cost of this to the motorist with the cost to the consumer of retrofitting flue-gas desulphurisation to power stations: the former represents a benefit partially forgone and the latter an actual expenditure. In addition the scientific evidence suggests that the benefit from the reduction of motor vehicle emissions will be felt much more widely than a reduction in power station emissions.

4. Mr Ridley has queried the magnitude of the effect on acid deposition of accepting the European Commission proposals, but has admitted that the effect on ozone production might be greater. In my view acid deposition and ozone production have to be considered together because:

i) ozone plays a role, as yet not well characterised, in the formation of 'acid precipitation' from the gases originally emitted; and

ii) there is a growing scientific consensus that much of the damage to forests, originally blamed solely on acid deposition, involves other atmospheric pollutants, in particular ozone.

Therefore when we talk about a Government policy towards acid deposition we are using this phrase as shorthand for long-range atmospheric pollution in general.

5. I do not therefore believe that Mr Ridley has produced any scientific or technical case for reopening the discussion which was concluded at your meeting of 19 June. Supporting the European Commission proposals is in line with the decisions of that meeting.

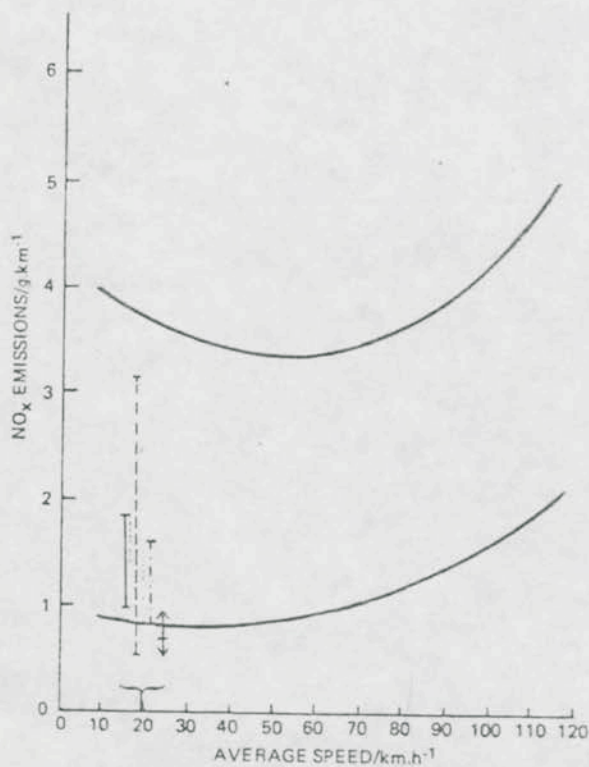
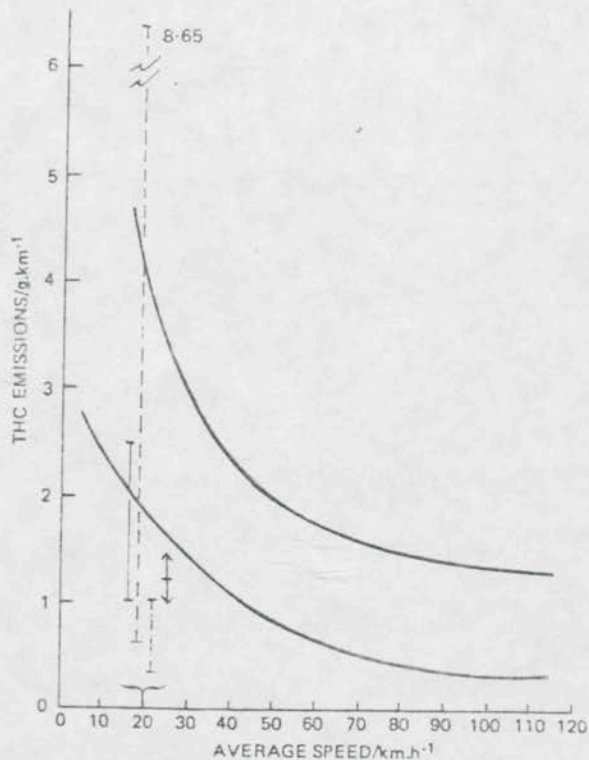
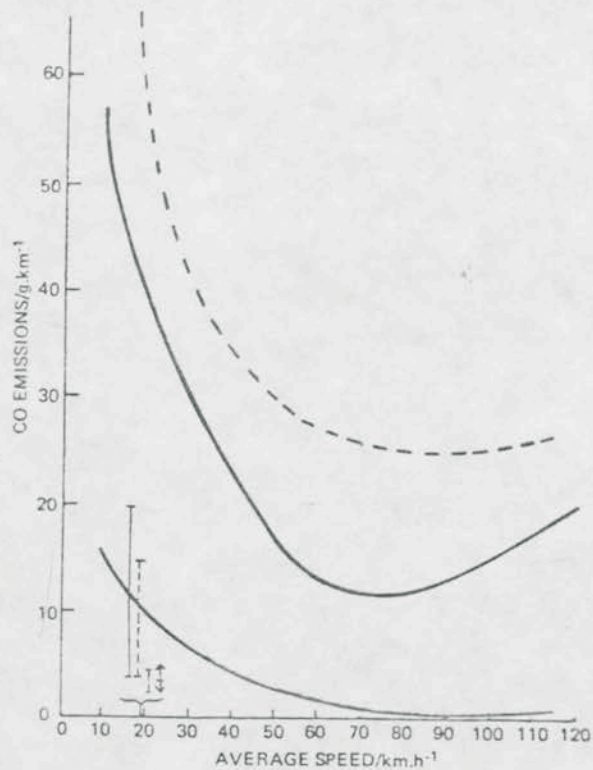


Figure 8

Emission estimates for technology systems meeting arbitrary criteria for emissions and costs. ref. (20).

	system 4p	Improved Conventional
+£100		
- Fuel	system 15/16	Lean Burn
+£200		
+ Fuel	system 23	Improved Conventional + Oxidation Catalyst
+£600		
+ Fuel	system 29	Improved Conventional + 3-way Catalyst

Env Affairs : Aud Re: R2

W.0515

3 August 1984

MR DAVID BARCLAY, NO 10

ACID DEPOSITION AND CAR EMISSIONS

In response to your minute of 30 August, I enclose a minute to the Prime Minister in which I comment on the Secretary of State for Transport's letter to the Secretary of State for the Environment.

The background to Mr Ridley's letter is a point of view held in one part of the Department of Transport which takes the line that no concession to environmental improvement is worth the cost. They fought and lost a rearguard action on lead in petrol but now want to start one on 'lean-burn'. It is unfortunate that Mr Ridley has been persuaded to lend his name to this since I believe that a clear-cut decision was reached at the Prime Minister's meeting on 19 June that part of the economic benefit of lean-burn should be forgone in favour of reduced emissions from cars.

You are right in pointing out that forgoing part of a cost reduction to improve the environment as is proposed for 'lean-burn' is a very different matter from taking a substantial cost increase to reduce power station emissions as is proposed for fuel gas desulphurisation.

Mr Ridley is right that cars contribute very little to SO₂ emissions but as you know the NOX and hydrocarbon emissions from cars are now thought to be the major source of forest damage rather than SO₂. The statement by Mr Ridley that cars contribute 20 per cent of NOX emissions is consistent with the figure of 34 per cent for vehicles which I previously gave the Prime Minister. The difference is diesel-engined vehicles.

RBN
ROBIN B NICHOLSON
Chief Scientific Adviser



10 DOWNING STREET

From the Private Secretary

DR. NICHOLSON
CABINET OFFICE

Acid Deposition and Car Emissions

The Prime Minister was grateful for your minute of 3 August commenting on the letter which the Secretary of State for Transport sent to the Secretary of State for the Environment on 27 July.

The Prime Minister has taken note of the distinction made in your minute between imposing costs on consumers, on the one hand, and earmarking part of the economic gain from new technology on the other. She does not, however, propose to intervene in the correspondence at this stage. No doubt the Secretary of State for the Environment will make similar points to those in your minute in his reply to Mr. Ridley.

(David Barclay)

6 August 1984



10 DOWNING STREET

ms

Prime Minister⁽²⁾

The key point is X on page 2.

There is a difference between imposing costs on consumers, and earmarking some of the economic gain from new technology in order to improve the environment.

But there is no need for you to join in this rather bad-tempered correspondence, unless you so wish.

DWB
3/8

CCDP CONFIDENTIAL

DB 575



DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

01-212 3434

The Rt Hon Patrick Jenkin MP
Secretary of State for the Environment
2 Marsham Street
LONDON SW1P 3EB

27 July 1984

Dear Patrick

ACID DEPOSITION AND CAR EMISSIONS

Your Private Secretary's letter of 11 July to the Prime Minister's Office enclosed William Waldegrave's report of the Munich Air Pollution Conference at the end of June. We had, of course, discussed our approach to these matters at the Prime Minister's meeting on 19 June.

As I said at the meeting, we should not overlook the fact that the lower emission standards for cars recommended in your minute will impose a cost directly on the motorist, as well as make a contribution to the lessening of air pollution.

Lean-burn engines are now being developed by European manufacturers because of their greater fuel economy, and we can expect their appearance in new models of cars progressively over the next few years. These developments could produce an improvement in fuel consumption of about 15% - an important reduction in costs of what is the major form of transport, a useful benefit to the consumer and to the balance of payments. The new cars would meet the current emission standards, agreed only last year, and their emissions would be about half those

CONFIDENTIAL

CONFIDENTIAL

from cars of 10 years ago. I hope I am right in assuming that we are all agreed that this development must be encouraged.

If we intervene to demand that cars meet the Commission's "first stage" proposals for 1989, as recommended in your minute, the manufacturers will have to modify these new engines reducing their efficiency by about 5%. So about one third of the 15% improvement that we would otherwise expect, will be sacrificed. In cost terms, our intervention - assuming current petrol prices - would reduce the benefits from the new technology by some £400m per year - that is £26 per year to the average motorist. This cost will be reflected in the oil import bill.

The effect of all this on acid deposition, based on the figures in your minute, would be miniscule. Cars at present contribute virtually no sulphur dioxide and only about 20% of nitrogen oxides. The Commission's proposals require a 27% reduction in the total of nitrogen oxides and hydrocarbons, and it is probable that most of this will come through in reduced hydrocarbons rather than reduced nitrogen oxides. The effect on total acid deposition must therefore be very small. The effect on ozone production, which I accept is also a cause of concern, might be greater. But my point is that in national terms your paper asks the motorist to bear a cost greater than the consumer would if we retro-fitted flue gas desulphurisation to two large power stations - something we ruled out on economic grounds.

I am not opposed to tighter control of emission standards, provided they are based on a realistic judgment of the costs and the advantages of particular courses. We have firmly rejected catalysts on these grounds.

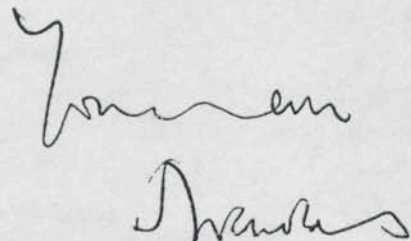
CONFIDENTIAL

CONFIDENTIAL

I thought that I should set out the facts about learn-burn as I am advised of them, by our officials. It follows that we should take a cautious approach to the Commission's first stage proposals which, though far less costly than the German proposals for catalysts, are nonetheless quite expensive and would not necessarily contribute significantly to reducing acid deposition.

That, I think, is in line with the general conclusions of all our recent discussions on environmental policy. I was therefore concerned to see that in his closing statement at the Munich Conference William Waldegrave supported "a European-wide onslaught on pollutants from motor car exhausts". That seems to me quite a variance with the deliberate approach to all these problems on which I thought we had agreed. As the Minister responsible for setting pollution standards for vehicles I could not endorse an approach in those terms, which is likely to arouse expectations far beyond what it would be reasonable to fulfil. I had no opportunity to consider the line to be taken at that conference, but for the future I must ask that pronouncements on this subject should be agreed with Lynda Chalker or me, or my officials.

Copies of this letter go to the Prime Minister, Geoffrey Howe, Nigel Lawson, Norman Tebbit, Willie Whitelaw, Tom King, Michael Jopling, George Younger, Nicholas Edwards, Peter Walker, Sir Robert Armstrong and Dr Nicholson.



NICHOLAS RIDLEY

CONFIDENTIAL

ENV AFFAIRS: Acid Rain Pt 2



10 DOWNING STREET

From the Private Secretary

DR. NICHOLSON
CABINET OFFICE

Acid Deposition and Car Emissions

You will have received direct a copy of the enclosed letter from the Secretary of State for Transport to the Secretary of State for the Environment about acid deposition and car emissions.

bf | I have not yet shown this letter to the Prime Minister, and before doing so I should be grateful for any comments you may care to make on the technical and financial analysis it contains. It seems to me, for example, that it is rather misleading to compare the additional cost of flue gas desulphurisation with the slightly reduced saving from lean-burn when modified to meet the Conference's "first stage" proposals. I was also surprised, given what has been said earlier, about the **assertion** that "cars at present contribute virtually no sulphur dioxide".

David Barclay

David Barclay
30 July 1984

CONFIDENTIAL



SECRETARY OF STATE FOR ENERGY
THAMES HOUSE SOUTH
MILLBANK LONDON SW1P 4QJ
01 211 6402

The Rt Hon Patrick Jenkin MP
Secretary of State for the Environment
2 Marsham Street
LONDON SW1

7/8

August 1984

N. Edwards

I have sympathy with the points concerning the EEC proposals on car emissions made by Nicholas Ridley in his letter of 27 July to you.

At our meetings earlier this year chaired by the Prime Minister, to discuss environmental pollution, we agreed to support the introduction of tighter emission standards for vehicle emissions provided that these were achieved through lean burn technology, rather than by using three way catalysts. In the light of technical advice I find it difficult to see how our earlier decisions can be reconciled with the Commission's quite unjustifiable "second-stage" proposals. Even its milder first stage proposals could rule out lean burn technology for larger cars - as well as for all cars with automatic transmission with consequential penalties for disabled drivers - unless we were prepared to forego the energy savings promised by this new technology. When we come to decide the line HMG should take on the Commission's proposals, we shall need to pay careful attention to their implication for lean burn technology and fuel consumption.

I appreciate the delicate balancing act which William Waldegrave had to perform at Munich. It remains important to deploy in as positive a way as possible the points we agreed at the Prime Minister's meeting of 19 June. But in view of our forthcoming negotiations in the Community we should take care not to give too many hostages to fortune.

I am sending copies of this letter to the Prime Minister, Geoffrey Howe, Willie Whitelaw, Tom King, Michael Jopling, George Younger, Nicholas Edwards, Nicholas Ridley, Sir Robert Armstrong and Dr Nicholson.

Peter Walker

CONFIDENTIAL

PETER WALKER

ENV. AFFAIRS : Acid Rain

Pr 2

CONFIDENTIAL

CC NP



DEPARTMENT OF TRADE AND INDUSTRY
1-19 VICTORIA STREET
LONDON SW1H 0ET 5422
TELEPHONE DIRECT LINE 01-215
SWITCHBOARD 01-215 7877

Secretary of State for Trade and Industry

14 August 1984

The Rt Hon Patrick Jenkin MP
Secretary of State for the Environment
Department of the Environment
2 Marsham Street
London SW1P 3EB

*not seen
JMB
10/8*

Dear Secretary of State,

ACID DEPOSITION AND CAR EMISSIONS

I have seen Nicholas Ridley's letter to you of 27 July.

2 It is implicit in his discussion of our attitude to non-lead vehicle emission standards that the balance of arguments may have changed since the outcome of the 28 June Environment Council. Our Departments had been working closely together, with the Department of Energy, to develop our thinking on the inter-relationship of lead in petrol and other vehicle emissions, in the expectation that the two subjects might be strongly linked in discussions in the Community. In the event, we have made very satisfactory progress on our objective of achieving Europe-wide agreement on removing lead from petrol, without yet having to take a particularly firm position on other vehicle emission standards, where the Commission's proposals were not discussed in any detail. It must therefore be right to reflect on the approach we should be taking to Community discussion of the Narjes/Davignon two-stage proposals, now that the linkage seems to have broken. Against that background, you will understand that I have much sympathy for Nicholas Ridley's reminder that even the Commission's 'first stage' proposals impose costs on consumers - even if in the form of foregone additional savings - which should not be accepted without good reason.

3 Nonetheless, the political pressure in Germany for substantially tighter standards has not eased. In particular, I am concerned about the reports that the Germans are forging ahead with instituting substantial fiscal incentives for the use of lead-free petrol and catalytic convertors, independently of any Community accord. This is a first and probably inexorable step towards a mandatory requirement for catalysts in the German market. I should be most reluctant to see this sort of fragmentation and distortion of the internal market in motor vehicles. We may

JH2AWY



CONFIDENTIAL

therefore be obliged to accept rather tighter standards than we would otherwise choose, if by doing so we can keep the Germans on side. It follows that, while in general I believe strongly that we should balance the costs and environmental benefits that can be assessed on economic grounds, there may be an additional price worth paying to maintain a unified market.

4 Much will obviously depend on the attitude of other Member States as discussions on the Commission draft proceed. While we must certainly maintain our fundamental opposition to standards which virtually mandate catalyst technology, and must protect the interests of consumers and of our industry, I believe that our officials will need to avoid adopting too rigid a stance too soon on the details of Stage One of the Commission's draft.

5 I am sending copies of this letter to Nicholas Ridley and to the Prime Minister, Geoffrey Howe, Nigel Lawson, Willie Whitelaw, Tom King, Michael Jopling, George Younger, Nicholas Edwards, Peter Walker, Sir Robert Armstrong and Robin Nicholson.

Yours sincerely,

Norman Tebbit

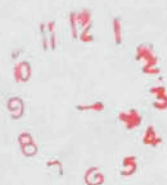
pp. NORMAN TEBBIT

(Approved by the Secretary of State and signed in his absence)

JH2AWY

And Hair
M 2

15 AUG 1984



CCNO

NBP

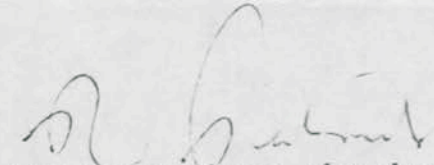
AF

579

01 211 6402

The Rt Hon Patrick Jenkin MP
 Secretary of State for the
 Environment
 2 Marsham Street
 London
 SW1P 3EB

4 September 1984


 I can appreciate the desire expressed by Norman Tebbit, in his letter of 14 August to you, to avoid the possible fragmentation of the internal market in motor vehicles.

Nevertheless, I can see little opportunity to concede points to the FRG. As I stated in my letter to you of 6 August, we are agreed to support the introduction of tighter vehicle emission levels, provided that they can be met by technology not involving use of catalysts. This is the key aspect of our future vehicle emission policy. I also believe that we would have the support of other vehicle manufacturing Member States (except the FRG) in this stance, although the precise position should be somewhat clearer after the meeting of officials in Brussels on 6 September.

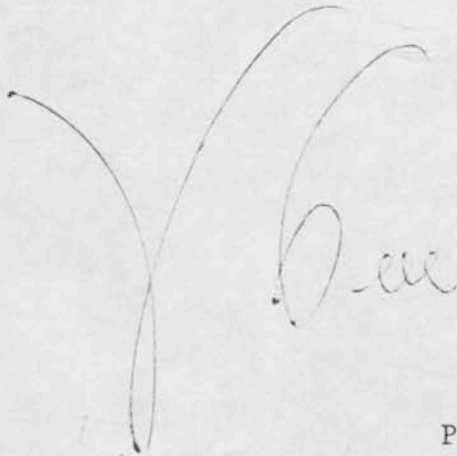
The FRG approach requires the marketing of two grades of unleaded petrol (at 97 and 92 RON), coupled with the imposition of emission control standards which can only be met by catalysts. In the German situation the impact of this on oil industry investment may not be very serious, in that nearly half the petrol sold there is regular grade. So far as motorists are concerned, this policy requires them to accept the substantial capital costs of fitting 3 way catalysts, and also to incur a major running cost penalty (of around 20 per cent) as compared with the situation which would result from the introduction of lean burn technology.

It seems to us doubtful whether these very heavy costs would yield any significant benefit in reversing damage to the German environment. If the German forests problem is eventually shown to result from ozone rather than merely summer draught conditions, No_x emissions are almost certainly better tackled by lean burn technology than 3 way catalysts, leaving those HC emissions which are not the result of evaporation to be tackled by the more robust single stage oxidation catalysts. At any rate there is surely no UK environmental case for our accepting the heavy costs of 3 way catalysts. Meanwhile the requirement for unleaded petrol at 96 RON would impose absolutely disproportionate oil industry investment costs in the UK and most other EC countries where 90 per cent of petrol sold is premium grade.

For the Community as a whole, recent studies have put this cost at more than \$2 billion, as against perhaps \$300 million the motor industry might save by not having to invest in the development of engines capable of running on petrol at 94½ - 95 RON rather than 96 RON.

For all these reasons, I think we should be very careful to avoid giving the Germans any reason to think we might move flexibly towards their position in the cause of maintaining a unified motor market in the EC.

I am sending copies of this letter to the Prime Minister, Willie Whitelaw, Geoffrey Howe, Nigel Lawson, George Younger, Nicholas Edwards, Norman Tebbit, Tom King, Michael Jopling, Nicholas Ridley, Sir Robert Armstrong and Robin Nicholson.

A handwritten signature in dark ink, appearing to read 'Peter Walker', with a large, sweeping flourish that extends upwards and to the left.

PETER WALKER

CONFIDENTIAL

Env. Affairs - Acid Rain/Pollution #2



2 MARSHAM STREET
LONDON SW1P 3EB

01-212 3434

My ref:

Your ref:

11 September 1984

*nbpm
DNB
12/9*

Dear Secretary of State

ACID DEPOSITION AND CAR EMISSIONS

Thank you for your letter of 27 July. I have also seen Peter Walker's and Norman Tebbit's letters to me of 6 and 14 August. The Environment Committee's report on Acid Rain, published on 6 September, is also relevant.

The points you make in the first part of your letter were, of course, discussed at the Prime Minister's meeting on 19 June. I am sure that we all agree that the lean burn engine development is to be encouraged (and I am pleased to note the Select Committee concur); and that in principle this development can give either a maximum energy saving or a combination of energy saving and emission reduction. I have no reason to dissent from the figures you quote on this latter point. But the Prime Minister's meeting on 19 June also agreed (and the record of the meeting is clear about this) that we would be right to go for a combination of energy saving and emission reduction from lean burn engines rather than energy saving alone. This is both in the interests of air pollution control, with particular reference to the importance of ozone, and also as a counter to the EC pressures in favour of three-way converters which we are now facing. I take it that you are not now seeking to re-open this issue of principle.

As for your reference to the costs of installing FGD at two large power stations, I hardly think that you are comparing like with like. The effect of tuning lean burn engines for emission reduction is to make the energy saving rather less than it would otherwise have been - an "energy benefit foregone" - whereas the installation of FGD represents an outright addition to the costs of electricity production.

William Waldegrave's speech at Munich was firmly based on the conclusions of the Prime Minister's meeting in the previous week. The word "onslaught" reflected our vigorous EC initiative on lead in petrol in addition to our attitude to lean burn developments, and I do not think that it was inappropriate. It certainly did not, and does not, imply any concession on three-way catalysts. Nor does it imply that our approach to the relevant draft Directive should not be deliberate. As you know, Lynda Chalker and Ian Gow have agreed on an Explanatory Memorandum and briefing for Members of the European Parliament which makes these points clear. Like the No.10 conclusions, however, it does imply that we should not be unnecessarily negative.

Copies of this letter go to the Prime Minister, Geoffrey Howe, Nigel Lawson, Norman Tebbit, Willie Whitelaw, Tom King, Michael Jopling, George Younger, Nicholas Edwards, Peter Walker, Sir Robert Armstrong and Dr Nicholson.

Atkins
for

PATRICK JENKIN

Approved by the Secretary of State
and signed in his absence

En. Affairs - En. Bluthon 172.

CONFIDENTIAL

CC 100



DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

01-212 3434

The Rt Hon Patrick Jenkin MP
Secretary of State for the Environment
Department of the Environment
2 Marsham Street
LONDON SW1P 3EB

5 October 1984

Dear Patrick

NAM

ACID DEPOSITION AND CAR EMISSIONS

Thank you for your letter of 11 September.

I accept that our attitude to Stage I of the EC draft emissions directive is in effect a compromise between the advantages of energy saving and the requirement for some further reduction in vehicle emissions, and I am not seeking to reopen that. But I must say that to regard the reduction in energy saving as a "benefit foregone" is not to address the point. If the benefits of lean burn are diminished by tuning for emission reduction, the private motorist will bear the cost of that reduction in precisely the same way as the CEGB, and ultimately the electricity user, would bear the cost of flue gas desulphurisation. The fact that it may be less apparent than a rise in electricity prices does not affect the issue of principle. Given the relative emissions of power stations and vehicles I fear that this approach, when it becomes apparent, will lead to accusations of cynicism. I think colleagues should be alert to that.

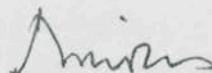
The immediate question now is how to deal with the German threat to impose domestically much tighter emission standards requiring the use of catalysts. I have no doubt

CONFIDENTIAL

CONFIDENTIAL

that we should consider every means, both diplomatic and legal, to prevent this happening. The first opportunity for this since the German Cabinet's recent discussion will come at the Internal Market Council on 9 October, and I understand that officials are meeting later this week to consider what the UK's line should be then. I agree with Norman Tebbit and Peter Walker that our general tactics should include willingness to agree Stage I (amended to cope with the problems of large cars and other specialised vehicles) - but only as part of an overall compromise accepted by the Germans. We would get the worst of both worlds if we agreed Stage I - at a cost to the motorist in fuel economy - while allowing Germany to impose much tighter standards - which would create great difficulties for our manufacturers.

Copies of this letter go to the Prime Minister, Geoffrey Howe, Nigel Lawson, Norman Tebbit, Willie Whitelaw, Tom King, Michael Jopling, George Younger, Nicholas Edwards, Peter Walker, Sir Robert Armstrong and Dr Nicholson.



NICHOLAS RIDLEY

CONFIDENTIAL

Env. Affairs PT2

Acid Rain

28 OCT 1994

