



Pine Murtter

PRIME MINISTER

Agree to his
change in responsibility?
Sir R. Armstrong is contact.

JF 4/5

TRANSFER OF FUNCTIONS: CHANGE IN PLANNING PROCEDURES FOR NCB
OPENCASTING

I am writing to seek your agreement to a change in the planning procedures covering NCB opencast coal mining. At present, I am responsible under the Opencast Coal Act 1958 for authorising opencasting by the NCB and I issue deemed planning consent at the same time. There has been public pressure for some time to treat the NCB in the same way as other mineral operations and bring the procedures into line with normal minerals planning machinery. The Commission on Energy and Environment recommended such a change and I have agreed with the Secretaries of State for Scotland, Wales and the Environment that it would be desirable. I would be grateful for your agreement to the transfer of functions involved. Legislation will be needed to repeal the relevant sections of the Opencast Coal Act 1958, so that in future NCB applications to opencast will be determined by Local Authorities, and any appeals which go to public inquiry will be decided by the Secretaries of State for Scotland, Wales or the Environment as appropriate. This will bring the NCB into line with procedures covering the small, private licensed opencast sector as well as all other mineral operators, and will be widely welcomed. There will be informal procedures for consultation with me about any difficult cases to ensure that coal policy considerations are taken into account.

Background

During the late 1970s the Commission on Energy and the Environment (CENE) who were undertaking a major study of the environmental implications of UK coal production and use were asked by Ministers to evaluate the arguments for and against a change in procedure.



They considered evidence from the NCB, Government departments, local authorities and environmental bodies and concluded there was a strong case for change. Bringing the procedure into line with normal minerals planning legislation would ensure consistent treatment of public and private sector companies; would give the local authorities a positive rather than a negative role in relation to opencasting helping them to integrate mining with overall land use planning in their areas; and would better reflect the accepted role of the public in development control.

Public Announcement

The Secretary of State for the Environment and I would like to announce the change as part of the Government's overall response to the CENE Report on Coal and the Environment, which we hope to publish as a White Paper very shortly.

I am copying this minute to the Secretaries of State for Scotland, Wales and the Environment and Sir Robert Armstrong.

Approved by the Secretary of State for Energy and signed in his absence.

29 April 1983

Summary a week

GOVERNMENT RESPONSE TO CENE REPORT ON COAL AND THE ENVIRONMENT box

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INTRODUCTION

1. A very high level of investment has been made in the coal industry over the past ten years in order to provide a firm basis for the competitive supply of domestically produced coal. For despite all the uncertainty surrounding the level of future demand for energy, the Government share the widespread expectation that coal will continue to command a substantial sector of the UK energy market into the foreseeable future. Creating the right conditions for the successful exploitation, commercially and environmentally, of our indigenous coal reserves is therefore a major plank of energy policy.
2. This is the context within which the Government have assessed the thorough and constructive analysis by the Commission on Energy and the Environment of the environmental effects of coal mining and use. Their Report was published in September 1981. The Government and the National Coal Board are grateful to Lord Flowers and his colleagues for the authoritative contribution they have made in furthering understanding of the way in which energy and environmental needs interact in this important industry. Their deliberations and Report have been significant in influencing the development of attitudes and in initiating positive responses from all those concerned for the future of coal. The Government have consulted widely on the Commission's findings. There have also been wide-ranging debates in both Houses of Parliament. The depth of this consultative process is a measure of the interest generated by the Report and of the importance the Government attach to reaching the right conclusions on the Commission's recommendations.
3. The Commission concluded overall that, subject to important qualifications concerning spoil disposal, opencast extraction, and sensitive treatment of those affected by subsidence, there were no insuperable environmental obstacles to the role of coal as currently envisaged. The Government accept this broad conclusion. They believe, as did the Commission, that a modernised efficient coal industry, designed and operated to high environmental standards, can make an immense contribution to energy strategy, without imposing, at the same time, unacceptable environmental costs. The Board have made significant progress towards modernisation of the industry in recent years, and evidence is emerging of changed attitudes towards environmental matters throughout the NCB. The Government attach considerable importance to the continued development of these positive attitudes. In responding to the main recommendations in the Commission's Report, they welcome the progress that has already been made, and have agreed with the National Coal Board and others on further action in a number of areas.

4. The remainder of this White Paper contains the Government's response to all the main issues raised by the Commission's Report. It devotes particular attention to those on which the Commission expressed important qualifications - spoil disposal, opencast and subsidence - and on which the Government are determined to take firm action. They have initiated a major exercise in the Yorkshire, Nottinghamshire and Derbyshire coalfield on spoil disposal, designed to evaluate the main options and to establish a new framework within which spoil decisions can be taken. £2.5m is to be made available by the Government over three years to help finance a small number of experimental disposal schemes. And of the dual tendering procedures established to promote the use of more waste materials in highway construction projects are being reviewed. The Government propose to bring NCB opencast mining into the normal minerals planning system so that local authorities can achieve a closer integration of land use planning and mining, restoration and aftercare. Improved publicity about possible subsidence, more comprehensive information about people's rights, and an addition to the Code of Practice to provide compensation for residual loss in property value due to tilt or similar structural distortion, have been agreed and, as has already been announced, an independent review of the working of the subsidence repair and compensation system has been set up. The Government also confirm their commitment to improved environmental standards in older coalfield areas and in particular their intention to re-establish the momentum of clearance and restoration there through the identification of a specific coalfield element in the derelict land programme. And they are determined that any large scale return to coal as a fuel for domestic or industrial use should not reverse - as indeed it need not - the substantial gains in air quality achieved over the last two decades. On these and other issues the Government support the determination of the coal industry to achieve steady progress towards competitiveness and viability, and the improved environmental standards that are now generally expected of all major industries.

5. The Report on coal and the environment complements earlier reports by the Royal Commission on Environmental Pollution on nuclear power and the environment (their Sixth Report) and on oil production and the marine environment (their Eighth Report). Taken together these reports represent a major source of advice on current energy and environmental issues. They have each led to specific action to deal with the problems identified as well as initiating a lively and rewarding debate between government, the supply industries, and the public, and this will continue.

Energy Policy: the Role of Government

6. The Commission recognised that many uncertainties govern UK energy prospects. They attached particular importance to the Government's role in stimulating public debate and wider understanding of the broader framework within which particular energy policies contribute to national objectives. But they also accepted that, because of both the uncertainties and the necessary interaction of energy policy with other relevant policy objectives, any attempt to draw up a rigid energy blueprint for the future would be misconceived.

7. The Government agree with this approach. The fundamental objective of energy policy remains to ensure adequate and secure energy supplies at the lowest practicable cost to the nation. The means must be consistent with broader economic and other objectives, including those for the environment. The Government judge that the most important contribution they can make at the present time is through removing obstacles to the free operation of market forces. This is particularly important in the energy sector, where both resources and distribution networks have for several decades been substantially vested in public sector monopolies. Steps have already been taken to increase competition in the energy market, with the aim of widening consumer choice and bringing about more competitive energy pricing. The Government believe that a freer and more competitive market will regulate energy supply and demand with greater success and efficiency than central planning with its over-reliance on uncertain supply and demand forecasts. The Government have no intention of drawing up an energy blueprint.

Importance of national debate

8. The Government are firmly committed to promoting public debate on energy issues generally. All major decisions on energy policy have been brought to Parliament for discussion. The Select Committee on Energy clearly have an important part to play. Frequent meetings are also held with interested bodies such as industrialists, local authorities, trade unions, consumer and environmental groups. In these ways the Government have demonstrated their willingness both to explain the basis of current policy and to provide relevant information and analyses as contributions to informed public discussion.

Energy Investment Decisions

9. Against this background, responsibility for assessing potential future demand and drawing up plans to meet it rests with the supply industries. The Government will make assessments of the range of possible future demand, in discharge of their own responsibility for approving the capital investment programmes and development strategies of the public sector supply industries, and may from time to time make these available for general information, as in the case of the energy projections released to the Sizewell Inquiry; but they will not seek to impose their own plan for matching energy supply and demand. Particular supply investments are for the industries to plan and justify against economic and environmental criteria. The Government's role in relation to particular investments which are subject to their approval is akin in part to that of a banker. They assess the risks associated with the project and evaluate it in terms of the average expected rate of return on the investment, as well as taking account of the wider implications.

10. The Commission emphasised that one of the most controversial elements in the current debate concerns the scope for conservation, and raised the question of whether the present balance between investment in energy supply and in energy efficiency is right. Because the interaction between energy supply and demand is determined primarily by price, the Government believe that the economic pricing of fuels is vital for achieving the right balance of investment. The complexities of any trade-off are evident* - for instance some supply investments can themselves increase the efficiency of primary energy use. Certain decisions on the supply side - major decisions about investment and financing in the public sector - are for Government. But most specific decisions about supply investment are made by the industries themselves and decisions on the demand side are essentially for millions of individual consumers. The important consideration is to ensure that those who are responsible for taking investment decisions receive undistorted market signals and have access to the clearest possible information, so that they are able to make rational decisions. On the demand side, the Government supplement the message given by economic pricing by improving information flows on the considerable potential for cost-effective investment in efficient energy use, for example through the Department of Energy's energy conservation demonstration projects scheme and energy surveys.

* For an economic analysis of these see Department of Energy paper DEN/S/3(NE) "Investment in Energy Use as an alternative to investment in Energy Supply".

The Future of Coal

11. Within this context, the Government accept that coal will continue to play a major role in our energy future, provided it is produced efficiently and sold at competitive prices. The Commission examined the possible environmental consequences of UK coal consumption of the order of 110-170 million tonnes per annum (mtpa) and production of 100-150 mtpa by the end of the century. UK coal production in 1981/82 was 124 mt; the Department of Energy's latest projections span a range of UK coal demand of 100-140 mtpa by 2000, which is well within the range considered by the Commission.

12. Since 1974 Governments have supported investment by the NCB in the development of modern, efficient production capacity. New high productivity mines can be designed to high environmental standards and, as the Commission recognised, modernisation affords the best prospect of striking an acceptable balance between meeting the country's need for coal and safeguarding the environment. Investment by the NCB since 1974 has been over £4½ bn and continues at the very high level of over £800 mpa.

13. Over and above this investment finance, the Government have been providing massive aid to meet NCB's financial losses. Grant support totalling £575 m, within the NCB's External Financing Limit of £1,117 m was provided to the Board in 1981/82. This level of financial support to the industry is indicative both of the industry's serious financial problems and of the Government's commitment to its future. The Government's aim is that the NCB should progress as soon as possible to financial viability, and break even without relying on deficit grant.

14. Electricity generation is a major market in which coal will continue to play an important role. As the Commission concluded, there is also substantial scope for coal to substitute for oil in the industrial sector, though there are obstacles to the transition. The Government are providing constructive help to encourage switching to coal in industry through grant assistance made under the £50 m Coal Firing Scheme, and through a scheme to provide exchange risk cover on up to £15 m ECSC loans for coal-firing projects - both recently extended until the end of 1983 - and also through the Department of Industry's Support for Innovation Scheme. There is also a long-standing arrangement whereby coal firing is chosen for new or replacement fuel boilers in the public sector when the overall life-time costs, including the capital costs of the scheme, are no more than 5% above the costs of alternative oil firing. All such schemes however can only assist conversion in industry and commerce to a limited degree. The main effort must come from the NCB

through the offer of competitive terms and dependable coal supplies. As the Commission emphasised, a vigorous marketing effort is required to convince potential users of the benefits of coal-firing and this is now taking place. Manufacturers of coal-fired plant also have an important role to play in the promotion of the latest technology for coal and ash storage and handling, which has both environmental and economic advantages. Joint initiatives by the NCB and manufacturers, such as regional conferences (para 84), are particularly welcome.

15. New technologies offer the prospect of greater efficiency and fuel flexibility. The Commission carried out an analysis of end-use efficiencies of coal derived electricity, substitute natural gas and direct coal burn. They concluded that heat pumps could offer significant increases in efficiency. The Government agree with this, and would like to see cost-effective domestic heat pumps developed. Part of the Department of Energy's current energy conservation research, development and demonstration programme is directed towards this as well as towards demonstrating the cost-effectiveness of heat pumps, including advanced fossil-fuel heat pumps in industrial and commercial premises. The Commission saw advantages in terms of ease of emission control for new coal-fired district heating schemes and identified the importance of devising a cheap and equitable method of billing customers. As recommended by the Commission, the Department of Energy's research and development programme attempts to stimulate work in this area by British companies, but it is proving to be a difficult technical problem to devise heat meters that are cheap as well as reliable and accurate.

16. The UK already has a strong position in fluidised bed technology and the Government agree with the Commission that this should be maintained. The successful joint demonstration programme of the NCB and the plant manufacturers has played an important part in the commercial launch of the technology. Government assistance to extend the use of small and medium sized fluidised bed combustion boilers in industry is available through the Department of Industry's grants under its Support for Innovation Scheme. British manufacturers are pursuing the export potential of the technology: its fuel flexibility is an important characteristic here. In large scale power generation pressurised fluidised bed combustion promises the dual benefits of improvements in efficiency and control of sulphur and nitrogen oxide emissions. Under International Energy Agency auspices, the Government (with the NCB), together with the governments of the United States of America and Federal Republic of Germany are funding a £60m experimental project at Grimethorpe. The work currently agreed started in 1976 and is due to be completed in 1984.

Substitute natural gas (SNG) production could have a significant role in helping to meet UK energy needs in the next century and would be an important market for coal. BGC have demonstrated the slagging gasifier on a "quasi-commercial" scale at Westfield and are continuing their SNG programme with the aim of establishing a capability to introduce commercial plants which are environmentally acceptable when the need arises. The timing of the full-scale introduction of SNG is uncertain, as the Commission noted. The Department of Energy's latest projections indicate that it could be somewhat later than previously envisaged, perhaps in the period 2010-2020. It is too early at present to decide to invest in a full scale demonstration plant in the UK but the Government and BGC are keeping the technological developments and possible UK site requirements and environmental implications, particularly those from solid waste residues, under active review.

Education and Training

18. As the Commission recognised, the coal industry will have to adopt a wide range of new technology in the years ahead and this has implications for training throughout the workforce. The NCB give priority to this and, as recommended by the Commission, they have procedures, in which the Unions, the Universities and Polytechnics, the relevant professions and government departments are invited to participate, for reviewing the industry's training needs and ways of meeting them. Academic courses are independently monitored by the Mining Qualifications Board, the Council for National Academic Awards (CNAA), the Technician Education Council (TEC), and the Scottish TEC as appropriate. Future training arrangements within the industry were recently reviewed by the Manpower Services Commission and the Government are satisfied that these are adequate.

19. The Commission recognised that if energy developments were to proceed in an environmentally acceptable way much would depend upon how specific projects were handled within the town and country planning system. As well as the wider public understanding and debate on national energy issues, some means should be found of translating the implications of policy into possible project requirements. This would enable consideration of the energy industries' requirements in local authorities' forward plans.

Forward Planning

20. The Government agree that it is important for local planning authorities and the public to appreciate how individual projects fit into an industry's broader development programme and thus how they can contribute to the achievement of national objectives. The main responsibility here lies with the energy supply industries. The industries have confirmed their willingness to explore ways in which their development programmes, and the status of individual exploration and development projects within them, can be explained more systematically and the issues they raise can be debated with interested parties. The Government welcome this. Such consultations should form an important part of the process of ensuring that energy needs are taken into account in local authority land use plans and that adverse environmental effects are minimised.

21. The NCB have made a useful start by publishing their Ladder of Exploration in their Annual Report: this explains the stage reached on different mining projects. They intend to up-date this each year and to expand on it in discussions with Government Departments and Local Authorities (paras 98-102). The Government warmly welcome this initiative and urge other industries to make comparable arrangements.

22. It will normally be for the individual energy industries and local authorities in an area to agree on land requirements and to ensure that adequate provision is made in development plans. But there may be circumstances in which additional efforts involving central Government are needed to resolve difficult land use issues arising from energy developments, particularly in view of the long lead-times involved. Looking to the early part of the next century, the Commission concluded that there could be a shortage of sites for some large scale energy developments, such as substitute natural gas (SNG) plants, unless specific action was taken to safeguard them, particularly in the Yorkshire and East Midlands areas. The Government agree that this proposition is worth examining further. They

Therefore welcome the agreement of the coal, gas and electricity industries, the CBI and the local authorities in this area to take part in a joint study under the chairmanship of the Department of the Environment. This is currently examining the likely land requirements for coal-based developments in the Yorkshire/East Midlands area in the light of competing land use pressures, and will consider whether specific changes in planning policies or procedures would help to ensure adequate provision, while taking full account of the needs of other land users. The need for similar studies on related topics or in other areas will be kept under review by the Government.

Planning Procedures and Public Local Inquiries

23. The Commission recommended that the form and scope of public local inquiries into individual major projects should be wide enough to allow public discussion of all the issues which are likely to affect the decision, including relevant national issues. The Government agree, and indeed this has already happened at a number of recent inquiries. Such discussion makes an important contribution to the progressive development of national policies.

24. The Government have taken determined action to speed up planning decisions generally, and the new procedures are being monitored closely. A Code of Practice which should help Inspectors to plan and organise the procedures at major inquiries in the most effective manner is now in preparation. This will provide for pre-inquiry meetings at which key issues can be identified and clarified, and arrangements made for the prior exchange of written material and for reaching agreement on technical issues which are not in dispute. Advance submission of proofs of evidence and the practice of taking them as read will be encouraged but not insisted upon, as it is important to maintain the rights of all parties to give and to hear evidence. Inspectors are already asked to discourage repetitive and irrelevant cross-examination, and the Government do not think it would be fair to impose any further restriction on the right of parties to test evidence in this way.

Environment Policy and Coal

25. The Government's approach to the environmental issues raised by the continued mining and use of coal, as highlighted by the Commission, rests on the broad premise that the same environmental standards should apply to the coal industry as to other mineral operators and developers, and that the costs of meeting these standards should generally be met by the industry itself.

26. The Commission took the view that modern mining methods, properly applied, can substantially limit the adverse environmental effects which are inherent to the industry, and which properly form the main subject of their Report. The Commission were impressed, for example, by what can be achieved at new mines through the application of current best practice, and by the environmental benefits in general that can flow from modernisation. But the Commission also recognised that improvements at new mines form only part of the total picture.

27. The Government accept that overall environmental standards are greatly improved as new capacity replaces old. They also believe that this progress must not be restricted to new mining areas. Most mining, and most investment, will continue to take place in established mining areas where the environmental legacy of the past is frequently all too pervasive. Improving the environmental image of coal will depend as much on what can be achieved in these areas as it does on what is done in new coalfields. There is too wide a gap between the environmental standards rightly expected at new mines and those commonplace in many established mining areas. Some variations are acceptable to the extent that they reflect real differences in colliery prospects and local priorities. They are much less acceptable to the extent that they perpetuate bad environmental practices from the past. They agree with the Commission that the highest standards appropriate to the circumstances should be applied to new development in the older mining areas as well as to development in new coalfields. The Government therefore welcome the NCB's endorsement of the general principle that improvements to achieve acceptable environmental standards will be broadly commensurate with the scale and life expectancy of projects undertaken throughout existing mining areas.

28. This accords generally with the Government's broad commitment to the polluter pays principle. They expect the coal industry - and ultimately the coal consumer - to pay the costs of meeting the environmental standards of the day. These standards are in practice set locally, taking into account the benefits that can be achieved and the costs they impose on the industry. In this way, the costs of meeting environmental standards are built into the appraisal of each investment project. The Government believe this to be an efficient and equitable way of achieving improvements acceptable to the industry and to the community alike. At the same time Government guidance on such standards, and on the proper apportionment of costs, could play a useful role in certain areas in achieving the right balance overall between the need to produce coal cheaply and protection of the environment.

29. It is in this broad context that the Government have considered the argument for additional forms of compensation both for individuals and for the community in respect of the disadvantages they might bear in the national interest. They agree with the Commission that although it is right in certain circumstances to make provision for individuals unfairly disadvantaged by development, it would be immensely difficult in practice to devise a fair system of community compensation that would distinguish coal from any other form of development. Mining communities will continue to benefit from a range of public expenditure programmes, and their local authorities are free to reach a suitable accord with all developers in considering new planning proposals. It is also right that the NCB, like all other ratepayers, should make a fair and reasonable contribution through the rates they pay to the community. Most nationalised industries, including the NCB, are rated by means of formulae contained in statutory instruments. The Government are currently considering, in the context of their general review of the rating system, whether to hold a revaluation of all non-domestic premises, which would include those of the nationalised industries. In addition, it is likely that there will need to be in the near future a review of the particular formulae adopted for each of these industries. The Government have already announced a full revaluation in Scotland in 1985.

30. New mining and other forms of development clearly bring both employment and financial benefits to a local community. The Commission were concerned, however, that in the short term, perhaps because of deficiencies in the data from which the Rate Support Grant is calculated, a local authority may need to finance additional essential services from the rates alone. The Rate Support Grant settlement is based on the latest information about local authorities' expenditure needs at the time of the settlement in the autumn of each year. Inevitably there is some delay in bringing new information into the grant assessments. This is minimized as far as possible, and, in the case of new industrial development, is offset by the delay in bringing into the calculation new rateable value information. There is machinery through the Consultative Council on Local Government Finance for discussing these matters with local government. The Government are prepared for any specific concerns about new mining development to be discussed within this machinery should local authorities so wish.

DERELICTION

31. All extractive industries face the need to dispose of surplus land and buildings as earlier workings are abandoned and as new reserves are opened up elsewhere. Coal mining is no exception. Governments of all persuasions have long recognised that selective assistance is required where this has occurred - both to help clear environmental dereliction, and to encourage new job opportunities. Substantial progress has been made on both these fronts over the years, especially in the older mining areas of the North East, Scotland and South Wales. The Government reaffirm their commitment to this dual approach.

32. The Commission were anxious that such progress should be maintained in the coalfields and that both administrative machinery and financial resources should be equal to the task. They were also concerned that there should be no repetition of the problem of dereliction in the future as pits close and as land and buildings are declared surplus to requirements.

Prevention

33. The Government welcome the Commission's conclusion that the powers available to local authorities to prevent future dereliction are now generally adequate. These powers, sensibly exercised, should ensure that the mistakes of the past are not repeated. The NCB have undertaken to include restoration and aftercare proposals in all new planning applications for spoil tips, and local authorities are encouraged to include conditions covering these matters where appropriate when granting planning permission. In the case of new mine development, local planning authorities should also consider carefully how far it would be helpful and appropriate to impose conditions requiring preventive action to be taken to avoid water pollution following eventual closure.

Coalfield Dereliction

34. The Government, however, accept that there remains a considerable legacy of dereliction yet to be tackled, and that to this will be added land not currently subject to adequate restoration conditions. The results of the new Derelict Land and Mineral Surveys, expected later this year, will enable them to take stock of the extent of the problem and to review priorities. They are fully committed to tackling dereliction wherever it occurs and are keen to see all derelict land brought back into use as quickly as possible. The derelict land programme has been increased in England from £36.7m in 1981/2 to £45.7m in 1982/3, and to £75m for

1983/84. In addition the Government have brought in new legislation that raises the rate of grant for reclamation by the non-local authority sector (including the NCB) to 80% in the Assisted Areas and Derelict Land Clearance Areas. In Scotland and Wales responsibility for reclamation rests with the respective Development Agencies and the costs are met wholly by the Exchequer. Over the period 1981-84, expenditure on land restoration and environmental improvement in Wales will be around £34m, and in Scotland over £65m. The Government appreciate the Commission's concern that competing pressures on local government finance might result in reduced expenditure on derelict land reclamation generally. However, they have already taken steps to help secure local authority reclamation programmes by giving authorities separate (annual) allocations specifically for derelict land expenditure. The Government believe this to be the surest way of protecting derelict land programmes while restraining the overall level of public spending.

35. The Commission also recommended that the financial resources available for derelict land clearance in coalfield areas should be maintained in real terms, and the share allocated to Yorkshire should increase. The Government's first priority is to encourage joint schemes by local authorities and private developers for reclaiming land for immediate development. But they recognise that this is not always practical given the scale and nature of coalfield dereliction. From 1983/84 there will therefore be a specific element in the derelict land programme set aside for the clearance of coalfield dereliction: £3.5m has been allocated for new starts in 1983/84 in addition to the £3.2m already committed to on-going schemes.

36. The Government accept that progress in clearing coalfield dereliction in Yorkshire has not been as fast as the local authorities would have liked. They agree with the Commission that as far as possible it is desirable to secure a regular flow of funds to schemes in this and other coalfield areas. The identification of a specific element in the programme from this year will help. In the longer term they believe that the best way to achieve this is through the development of programmes of land release, reclamation, and redevelopment, jointly agreed between the NCB, local authorities and, wherever this is practicable, with private developers. Such programmes will need to take into account the likely availability of resources, the overall priorities expressed by the Government at the time, and the rate at which land can be realistically developed. This forward commitment will not be easy to achieve, in Yorkshire or elsewhere. Nonetheless the Department of the Environment's regional offices have begun discussions with selected local authorities and the NCB to establish how best such programmes can be drawn up, and any constraints overcome. The NCB already review each year their

operational property and land requirements, and the Government welcome their agreement to discuss with local authorities where and when land can be released for reclamation. This is an essential pre-requisite for positive action.

37. The Government recognise the substantial achievements of the Scottish and Welsh Development Agencies in tackling the reclamation of derelict land. The work of these bodies, however, goes far wider than reclamation and includes industrial development and other types of project throughout Scotland and Wales. It is not clear however that a new agency to concentrate exclusively on derelict land reclamation in Yorkshire would be more effective in establishing a faster momentum than would existing machinery based on the substantial expertise already available locally. Much has already been achieved by a combination of public and private sector resources and the aim will be to carry forward that work.

Abandoned Mines

38. Surface dereliction is clearly the largest and most significant problem arising from abandonment. But when mine workings have been abandoned in the past there is also, as the Commission recognised, the risk of polluted water escaping into nearby water courses. The Commission concluded that there was an urgent need to establish both the extent of pollution from abandoned mines, and the costs of remedial action. It was also necessary to settle the question of responsibility. They recommended that discharges from mines abandoned by the predecessors of the NCB, or by the NCB a long time ago, should be considered as a form of dereliction and the costs of remedial action met by central government.

39. The Government recognise that pollution from abandoned mine workings may be highly damaging, although fairly localised. They therefore accept that the locus of responsibility for all such workings needs to be settled. The Commission's approach to defining responsibility in relation to past and future abandoned workings provides, in the Government's view, a constructive basis for further discussion with the water authorities and mine owners. The Government have now taken steps, in conjunction with the water industry, the NCB and organisations reflecting other mining interests, to establish the scale and nature of the problem and to assess the kind and feasibility of remedial action required and the range of costs involved. The legislative implications are also to be examined.

40. The Government agree with the Commission that early discussion between the water authorities and mine owners as to the appropriate preventive or remedial

measures is highly desirable when workings are to be abandoned in the future and pumping discontinued. Such discussions are expected to take place as a matter of course now that discharges from working mines are to be brought under control with the implementation over a 4 year period of the outstanding provisions of Part II of the Control of Pollution Act 1974. The Commission recognised that amending legislation may be necessary to enable the water authorities to recoup the costs of any remedial work. Further amendments are also likely to be required, and the Government will therefore consult the water industry and mine owners on this and other specific proposals in due course.

SPOIL DISPOSAL

41. Current deep mining methods mean that in general large volumes of waste material are brought to the surface with the coal and require disposal. The vast majority of this waste material is tipped locally and spoil heaps are a common feature of coal mining areas. These practices, however, are subject to growing opposition. Although the NCB have made major advances through progressive restoration techniques in reducing environmental damage, the Commission concluded that over the next twenty years or so the disposal of colliery spoil will be one of the major environmental problems arising from deep mining. Difficulties will arise from tipping proposals in both existing and new mining areas.

Strategic Planning

42. The Government agree with the Commission that spoil disposal presents a major environmental challenge and that it suffers from the lack of an agreed policy framework. What has been acceptable practice in the past is unlikely to be acceptable in the future. This is widely recognised within the industry and outside. There are notable examples of improved tipping practices, particularly on new sites, and there is evidence of a greater willingness on all sides to consider a wider range of disposal options. Yet there is little agreement on the solutions and costs that are acceptable in the different circumstances. This is inimical to the satisfactory planning of spoil disposal.

43. The Government are determined to establish as quickly as possible a clear policy framework for spoil disposal. They accept that the most urgent problem is in the main Yorkshire, Nottinghamshire, Derbyshire coalfield. The NCB and local authorities have joined the Government in carrying out a major study in relation to this coalfield: it is seeking to establish the scale of future spoil production and the feasibility, including the costs, of alternative means of disposal, and will aim to agree as quickly as possible a policy for disposal which will accommodate the expressed concerns of all the parties. It will build upon a rigorous examination of the wide range of disposal options currently in use and help to finance a small number of additional schemes jointly agreed between the main parties.

44. The Government have also made clear that before any further planning applications are submitted by the NCB in the North East Leicestershire coalfield there should be an agreed long-term strategy for spoil disposal there. The reports of the two Working Parties considering the technical and economic feasibility of

the options are expected to make a substantial contribution towards the development of such a strategy. And although the planning [permission] at Asfordby envisages a mainly local tipping solution, the Government expect the Board, both at Asfordby and at other proposed sites in the coalfield, to take into account any changes in the technology or economics of spoil disposal (whether arising from the studies of the Working Parties or otherwise) over future years which might help to modify the environmental impact of mining in the area. In other coal mining areas, the spoil problem, while significant, is less urgent, and a closer degree of liaison between the NCB Areas and individual or groups of local authorities should help to secure the improvements to spoil planning that are needed.

45. The Commission recognised that any policy framework for colliery spoil would need to address two key issues: who should pay for spoil disposal, and how should the claims of colliery spoil be balanced against those of other forms of waste in competition for scarce sites. They recommended that the Government should establish guidelines on each of these issues. The Government accept that both are central to any planning exercise. The major study they have initiated in the Yorkshire, Nottinghamshire and Derbyshire coalfield will therefore address directly the question of whether the present distribution of costs and benefits to the different parties is equitable, and whether some redistribution between the consumer, and the national and local community, would provide a more acceptable all-round solution. It will also consider how far the need to dispose of other forms of waste in the region will present or foreclose options for colliery spoil. The Government will then consider, in the light of the study's findings, the feasibility of establishing guidelines on finance and on sites. It would be premature to take up a position on these issues now.

Alternatives to Local Tipping

46. The Commission concluded that, although large scale local tipping would continue, the alternatives can be very important in solving the problem of spoil disposal in particular cases, and considered the scope for increasing their use. Specifically the Commission recommended more research by the NCB into backstowing underground as one means of reducing the amount of spoil requiring surface disposal. The Government recognise that with existing technology there are important operational and safety obstacles to substantial stowage underground. The planning and lay-out of new mines, together with improved accuracy in coal-cutting, does, however, provide an opportunity to reduce the amount of spoil to be brought to the surface. These issues are currently being examined in detail by one of the Working Parties set up following the Secretary of State for the Environment's decision last year to reject the NCB's initial planning application to mine in the

North East Leicestershire coalfield. The Working Party, chaired by the Department of the Environment, are carrying out a thorough study of experience in other countries, and the NCB have already strengthened their research effort. In the longer term, the NCB's work on the development of mining technology will, in the Government's view, need to take closer account of the environmental difficulties arising from the disposal of spoil on the surface.

47. Coal is frequently mined in close proximity to other mineral workings, and the use of spoil in the reclamation of quarries and other excavations, including opencast coal sites, is an attractive disposal option of which both the NCB and local authorities are increasingly aware. This form of disposal can often be achieved locally by the careful phasing of mineral workings, and by the imposition of relevant restoration conditions. The Government wish to encourage steps in this direction, and look to an improvement in local liaison arrangements (para 100) to achieve a significant increase in the amount of spoil used locally in restoration schemes. Local authorities should consider carefully how their policies for mineral working and waste disposal can best achieve this.

48. The Government agree with the Commission that there are more limited opportunities for remote disposal of colliery spoil in old mineral workings, and in land reclamation schemes. But these opportunities need to be identified and examined thoroughly. Some valuable initiatives are already underway. The Yorkshire and Humberside local authorities are shortly to complete a detailed study into the feasibility of reclamation at Pyewipe on the Humber estuary using spoil from West and South Yorkshire. And the Working Party in the North East Leicestershire coalfield, chaired by the County Council, is currently looking in detail at the costs and benefits of several off-site options for the disposal of spoil. Their report is expected in July. The Government will consider carefully how far the results of both these cooperative exercises might assist in formulating guidelines for spoil finance and sites (para 45).

49. It is also sensible to exploit fully the potential for using spoil commercially in the construction industry. This potential includes its use as a source of fill or in cement stabilisation, for example. Spoil is suitable for a wide range of construction purposes, and the Government believe that there is scope for further joint research and product development by both the NCB and the construction industry. The Government are also determined to do what they can in their own programmes. The dual tendering system designed to encourage the use of waste materials in major highway schemes has been in existence in England and Wales for more than a decade now, and the Government have already announced that they

believe that the time has come to look again at the way in which it has operated, and to consider what arrangements would be more effective in achieving, for example, an expansion of the amount of spoil and other waste materials used. The review is being carried out by an interdepartmental group of officials and its findings will be published. The terms of reference are:

"to review the effectiveness of the dual tendering procedures aimed at increasing the use of waste material for road fill in accordance with DOE Circular 47/72 and, taking into account the consequential costs and benefits these produce for the different public expenditure programmes, to recommend whether the procedures should be continued, and if so whether in their present form, or with modifications; and if not, to recommend an alternative means whereby such costs and benefits can be properly balanced; and to report within 12 months."

The Government will then consider whether there are lessons that can be applied to encourage the use of waste materials in non-highway schemes. There are limits, however, to what can be done by Government, and much will depend upon the efficiency and effectiveness of the NCB in marketing its waste products and on the willingness of the construction industry to utilise such materials. The Government welcome the steps taken by the NCB to improve the marketing and research capability of the Minestone Executive, and are considering what further action might be taken. They also look to the construction industry to expand wherever possible the amount of spoil and other waste materials used in particular projects.

50. The Commission also considered the case for marine tipping from barges and recommended that the NCB should not use this method unless and until suitable techniques for safeguarding habitats and amenity are found. Dumping by barge at sea is confined to four collieries on the North East coast. The NCB have confirmed that they have no plans to extend this method, and the Government agree with the Commission that this is no longer an option to pursue for the future.

51. Beach tipping is mainly from mines along a six mile stretch of the North East Coast, where it has been the subject of intense local concern for many years. The NCB have no plans to tip spoil on any new beaches, and ideally would like to bring such tipping to an end. The costs of doing so in the immediate future are however prohibitive. The NCB, local authorities, and the Government are nonetheless determined to continue the search for a cost-effective and environmentally acceptable solution. They have now each agreed to contribute towards the cost of an experimental pipeline at Horden Colliery, which will take spoil some way out to

sea, and enable a full assessment to be made of the distance at which dispersals are adequate, and the extent to which there are any adverse impacts on the local marine environment.

Tipping Practices

52. The Government are clear that all the alternatives to local tipping need to be explored vigorously and imaginatively, and that it would be wrong to assume that present methods of disposal will necessarily be equally appropriate to the future. But the Government recognise, as did the Commission, that for the time being large amounts of spoil will continue to be tipped locally. They therefore agree with the Commission that priority needs to be given to minimising its local impact through a continuation of recent improvements in tip design and tipping practices, including progressive restoration. The Government welcome the considerable efforts made by the NCB in recent years to this end.

53. Where new tips require planning permission, and take land from agricultural use, they are normally subject to conditions requiring restoration to agriculture, and the Board attempt to minimise the loss of output by careful planning and supervision of restoration and after-care in consultation with ADAS (DAFS) and others. The Government are satisfied that the Board will continue to give these aspects of their work a high priority. They also welcome the NCB's proposed competition designed to encourage imaginative solutions to the spoil problem, and expect this, together with the steps that will flow from the Board's annual tip census, to produce positive results. The Board are also increasingly aware of the possible impact of their operations on wildlife and on the landscape and have ensured that local management consults the Nature Conservancy Council on all new tipping proposals. They have also agreed to explore ways in which more creative proposals for restoration and after-care can be obtained and evaluated.

54. Where this more enlightened approach is fully put into effect the environmental impact of new tipping schemes should be considerably improved. The Government look to the Board to ensure that this occurs. But as the Commission pointed out, there is insufficient experience so far to enable firm conclusions to be drawn. The Government will therefore continue to monitor closely the effectiveness of the new methods and consultation procedures and will encourage the Board to explore alternative options. They will look equally to the local authorities to exercise imaginatively the powers they have in relation to new tips, and in relation to the reworking of old tips once Section 1 (Section 19 in Scotland) of the Town and Country Planning (Minerals) Act 1981 is in force.

55. The Government recognise, however, that many tipping operations are carried out under the provisions of the General Development Order where it is more difficult to secure improvements in tipping practices. The Commission took the view that the NCB's rights under the GDO were too permissive: this made it difficult for local authorities to control the environmental impact of a substantial amount of current tipping. This was thought to apply particularly to the reworking of old tips, and to the retention of sites for use at a later date, as well as to day-to-day operations on 'live' tips. The Government agree that these are all areas where there might be cause for genuine concern, and they are currently consulting the industry and local authorities on their proposals to amend the GDO as it applies to the NCB and to other mineral operators. In the meantime, they believe that significant improvements can be obtained by strengthening existing links between NCB and local authority officials at Area and pit level. The steps agreed by the Board (paras 99, 100), whereby they will discuss regularly environmental questions with individual local authorities, including possible environmental improvements, should assist this process of securing voluntary agreement wherever practicable.

Lagoons

56. One controversial aspect of local tipping is often the disposal to lagoons of liquid tailings from coal preparation plants. The Commission recommended that wherever possible the use of lagoons should be avoided, and that new mines should be designed to prevent the discharge of such liquid effluents. The Government recognise that lagoons currently provide a cheap and effective way of separating the solid and liquid residues from preparation plants. Nonetheless, although the land is ultimately capable of being reclaimed and restored, lagooning is unattractive, takes up large areas of land, reduces tipping capacity, and, unless suitably fenced off, creates a safety risk. It can be avoided by the installation of filter presses and by the introduction of other new methods as they are developed although these could be substantially more costly. A specific programme to phase out existing lagoons would therefore be difficult to justify. The Board have nonetheless agreed that in designing new mines they will aim to avoid the production of liquid tailings. As part of their overall modernisation programme, they will also exploit all reasonable opportunities to phase out lagoons, taking into account the cost and environmental benefits likely to result from early reclamation. By this means they would expect to see a continuing reduction in the use of lagoons. The Government welcome the Board's commitment to improve the visual appearance of existing active lagoons by grassing the retaining banks.

SUBSIDENCE

57. Some degree of subsidence and consequent damage to buildings, services and drainage systems is an unavoidable effect of modern deep coal mining operations. The Commission concluded that if mining proposals are to be acceptable, local opinion needs to be satisfied that the effects will not be unduly damaging. It is thus in the nation's interest, as well as in the NCB's own interest, to ensure that, where appropriate, preventive and precautionary measures, repairs and compensation are planned and undertaken as effectively and flexibly as possible in order to reduce stress and inconvenience for those directly affected. The Government fully endorse these general conclusions.

Repair and compensation

58. The Government agree with the Commission that when subsidence damage to land or property occurs it is essential that people are aware of their rights, that claims are dealt with quickly and effectively, that good quality repairs are carried out quickly and that the legislation and the NCB's Code of Practice are interpreted sympathetically in order to minimise hardship, inconvenience and stress. In many cases the NCB will be able to carry out repairs to the property to make it reasonably fit for occupation within weeks of the damage occurring and a claim being submitted. Where further ground movement is expected, final repairs may have to be delayed. The Government endorse the Commission's view that in these circumstances there is an increased need for rapid and unobtrusive interim repairs.

59. The NCB's Code of Practice on mining subsidence was introduced in 1976. It provides for compensation to be paid for all physical damage to household goods, furniture and fittings, stock-in-trade and plant and machinery, and farmers' crop and stock losses. It also provides for independent arbitration on any difference between the Board and a claimant regarding entitlement to compensation under the Code. The Board are also prepared in special circumstances to make arrangements to alleviate hardship. In 1978 the NCB reached an agreement with the Royal Institution of Chartered Surveyors (RICS) on the payment of a substantial proportion of the surveyors fees incurred by claimants where compensation or repairs exceed £250. The discretion to deal flexibly with individual cases is an important feature of the current arrangements.

60. The Commission made only one recommendation for an extension to the existing rights to compensation. They recommended that there should be a new right, in legislation, to compensation for residual loss in property value, taking into

account but not superseding the duties already placed on the Board to make reasonable repair. The NCB recognise that there may be cases where, after completion of repairs, a property continues to exhibit residual evidence of subsidence by way of tilt or similar structural distortion (such as windows out of alignment) which reduces its market value. In these circumstances, the Board accept that compensation should be paid equal to the loss in market value at the time repair work is completed. The NCB propose that the Code of Practice should be extended to provide for this by adding a further paragraph to it as follows:

"Residual tilt and other structural distortion

Where on completion of permanent remedial works undertaken by or on behalf of the Board to a building or structure to which Section 1(1)(a) of the 1957 Act applies pursuant to their obligation under Section 1(2) of that Act, and notwithstanding the fulfilment of those obligations residual effects of subsidence consisting of tilt or similar structural distortion remain, the Board will make a payment equal to the diminution in the market value of the building or structure caused by such residual effects as at the date of completion of the remedial works."

The NCB have also drawn particular attention to the provision in the Code for arbitration in the event of any question arising between the Board and anyone claiming to be entitled to such a payment.

61. The Government welcome this initiative by the NCB as a sensible approach to meeting the need identified by the Commission. They have at present no reason to believe that a need exists for a wider right to compensation in this area but, as has already been announced, the operation of the repair and compensation system for subsidence damage as a whole is under review, now that the Code of Practice has been in operation for seven years. This is one of the issues the Government have, therefore, asked the Review Committee to consider further.

Review of the operation of the subsidence compensation system

62. The review of the operation of the subsidence compensation system is being carried out by an independent committee served by a secretariat drawn from the Departments of Energy and Environment and has now started work. Its terms of reference are: "To examine the practical problems of the operation of the repair and compensation system for coal mining subsidence damage; to consider possible improvements; and to report". The Review Committee will take evidence from any

interested parties and individuals who wish to present their views, as well as commissioning independent research of its own. Both the NCB and the local authorities will have key roles in assisting the Committee, which should complete its work by the end of the year.

Notification and Publicity

63. The Government recognise the importance of making information readily available and ensuring that people likely to be affected by subsidence damage are aware of their rights. There are two main ways in which the NCB give information about deep mining to the public at present - through publication of formal notices in newspapers under Section 2 of the Coal Industry Act 1975 and through answers to individual inquiries of the Board (over 120,000 in 1982). The Government welcome the NCB's agreement to supplement these arrangements by publishing in local papers annually, usually on a parish (or equivalent) basis, a less formal type of notice. These notices will contain information on the areas recently mined by the Board and those where it is intended to mine in the near future. They will also remind people that in the event of subsidence damage they have rights under both legislation and the NCB's Code of Practice, and will tell them where they can turn for more detailed information. This will be provided in an updated explanatory leaflet issued by the Department of Energy and made widely available in libraries, local authority offices, Citizens Advice Bureaux, as well as in NCB offices in both established and new mining areas.

64. The NCB are willing to cooperate with local subsidence liaison committees should residents wish to establish them. They can play a positive role in responding in a more coordinated way to local requests for information and in encouraging discussion of particular problems. Where new mines are to be developed, the NCB have confirmed that they will adopt an approach to publicity about possible subsidence damage which is as comprehensive as that taken at the Selby and North East Leicestershire projects, and which was welcomed by the Commission. The NCB are discussing with the Law Society publication of a register of mining areas and a standard form of mining search which could be used by solicitors in England and Wales on behalf of prospective purchasers of property in mining areas. The Government welcome all these measures which will contribute considerably to the information available to the public, and they will keep their effectiveness under review.

Prediction, prevention and precautionary measures

65. The NCB are able to predict the surface movements caused by underground mining in different geological circumstances with a high degree of sophistication. It is

more difficult for them to predict the extent of damage to individual structures because a wide range of factors is involved. In some cases, it is necessary to make reservations in predictions where areas are liable to faulting, and, as recommended by the Commission, the NCB have recently agreed to cooperate with University College, Cardiff in the investigation and study of such areas. The Board also operate a continuous surface movement monitoring programme in the coalfields, and they collaborate with the University of Nottingham on joint research on the mass between the coal seams and the surface, which is aimed at improving understanding of subsidence. Statistics submitted to the Commission by the NCB show that approximately one-third of properties in areas subject to subsidence effects suffer some damage; of these only some 0.5% are severely damaged and two-thirds fall in the "very slight or negligible" category.

66. Subsidence effects can be reduced through mining techniques, adaptations to existing buildings, and the incorporation of particular features into the design of new buildings. The NCB have confirmed that they are prepared to discuss the general scope for preventive measures to minimise subsidence damage to existing buildings if local residents would find such discussion helpful. Where such works are practicable and economic, the decision to do the work should be reached after discussion between the individual property or land owner and the Board. Special provisions are made in the case of buildings of historic importance.

67. Where new building is to take place in areas liable to mining subsidence, the NCB sometimes advise precautionary measures. The Commission recommended that after consultation with the local planning authority and the developer, these should be included as a planning condition of development. At present local planning authorities in mining areas consult the NCB when they receive an application, and their advice is generally passed on to the developer who takes suitable preventive measures as a matter of course. Conditions are not normally imposed. But neither are such measures always taken. The Government have therefore set up an internal review of the responsibilities of all the parties involved in relation to precautionary measures, with the aim of updating MHLG Circular 44/61 which deals with planning conditions in areas of mining subsidence in England and Wales. During this review the Government will be consulting all interested parties. The Government have not ruled out the possibility of placing some responsibility on the local planning authority, but they will wish to consider carefully the implications for liability and how these would fit in with the existing responsibilities of the NCB and the developer. This review will also cover other forms of mining activity such as old limestone workings and disused mineshafts. Revised guidance will be issued to local authorities and to others in England and Wales in due course, and consideration will be given to the issuing of similar guidance in Scotland.

Use of wetlands

68. The NCB recognise that land flooded through subsidence can sometimes form important wildlife habitats and accept the Commission's recommendation that they should discuss with local interests and environmental bodies whether positive use might be made of a site 'sterilised' by subsidence. They have now carried out a survey of flooded and marshy land in their ownership and are discussing a way forward with the Nature Conservancy Council, local authorities and other interests. The Government welcome this positive and cooperative approach.

OPENCAST MINING

69. Private sector operators, working under contract from the NCB, produced about 14m tonnes of coal by opencasting in the UK in 1981/82, and those working under licence a further 1m tonnes. The Commission concluded that even when the greatest possible care was taken, opencasting had a severe impact on the environment in both the short and long term. Public concern over opencast is much greater than that over a similar output of deep mining and, in recent years opencasting has taken place increasingly on urban fringes and on new greenfield sites, and has provided fewer opportunities for coordinated clearance and restoration of derelict areas. The Commission looked carefully at the procedures for authorising opencasting and at the level of output, and recommended changes to maintain the balance between environment, amenity and private rights, and the nation's need to exploit coal by opencast methods.

Framework for decision - making on opencasting

70. At present, a decision to authorise opencasting by the NCB is taken by the Secretary of State for Energy, who grants deemed planning permission, subject to conditions as appropriate, at the same time. Private sector contractors working under licence from the NCB require permission from the minerals planning authority in the normal way. The Government were aware of substantial public concern about the procedure for authorising NCB opencasting and asked the Commission to evaluate and comment on the representations they had received. The Commission concluded that there was a strong case for a change in procedure, both to give local authorities a positive role and to reflect the accepted role of the public in land-use planning. One of the most important reasons, cited by the Commission, for such a change would be to provide local authorities with an increased opportunity to influence the choice of sites in the forward programme of the Opencast Executive both for environmental and amenity purposes, and to ensure account can be taken of other planning considerations relevant to their area.

71. The Commission therefore recommended that applications for NCB opencast coal working should be dealt with under normal minerals planning machinery as for all other new minerals developments and not directly by the Secretary of State for Energy as at present. The Government accept this recommendation. The relevant provisions of the Opencast Coal Act 1958 will therefore be repealed so that local authorities will determine NCB opencast planning applications, and appeals will be decided by the Secretary of State for the Environment in England, and by the Secretaries of State for Scotland or Wales as appropriate. The Government consider

that this will provide an improved framework for decision-making on opencasting, as well as bringing the procedures into line with those covering all other mineral operators.

Level of opencast output

72. The Commission also considered the case for a rundown in opencast production but concluded that it would not be right to do this arbitrarily in view of the severe implications for the financial viability of the NCB's overall activities. They were concerned however that a target in excess of 15 mtpa could not be accommodated without unwarrantable damage to the British countryside. The Commission therefore recommended ^{that} as older, more unprofitable and less environmentally acceptable deep mines are closed and more efficient and profitable operations take their place, the volume of opencasting should be allowed to decline. In the meantime there should be no increase in the target of 15 million tonnes per annum.

73. Opencast coal is an important national resource which can be produced cheaply and profitably. Opencasting can also provide special coals such as anthracite and coking coal to meet particular needs, and the generally high quality of such opencast coal enables it to be used to upgrade coal from deep mines. Opencast mining is also an important element in the work of the civil engineering industry. These advantages must be set against important environmental considerations: the Government remain committed to maintaining and strengthening the framework of environmental control within which a balance can be struck.

74. The target of 15m tonnes of opencast coal output per year was originally established in 1974, at a time when there was a clear national need, following the oil crisis of the early 1970s, to increase opencast output by 50% over a period of a few years. The target was reached, and indeed slightly exceeded, in 1980/81, though opencast output has since fallen back somewhat. The Government have reviewed their approach to opencast output levels in the light of the Commission's recommendation, and other factors, and have concluded that they should move away from the idea of a Government endorsed target or ceiling on opencast output. In the longer term, the appropriate level of opencast output should be determined by the market subject to the acceptability of individual projects as determined through the planning system. It would therefore be for the NCB to decide the level of opencast output which they wished to aim for and to justify that, on a case by case basis, through the planning system.

Opencast Executive as a separate accounting unit

75. This move away from a specific Government-endorsed target for production should be seen in the light of the Government's determination to achieve a more competitive energy market. The Commission themselves concluded that opencast profits should not continue indefinitely to mask and cushion deep mine losses. They recommended that the Opencast Executive should be treated in the NCB's Annual Report and Accounts as a separate accounting unit, to permit a more informed assessment of the appropriate balance between the economic benefits of opencast production and its environmental costs. The Government accept this recommendation and are discussing its implementation with the Board.

Opencast Code of Practice and Guidelines for Development

76. At present, discussions between individual local authorities and the Opencast Executive on the programming of sites in their areas over a 5 year period are provided for in the Code of Practice agreed between the Executive and the Local Authority Associations in 1980. The Commission endorsed this approach, and, in view of the flexibility now available to the Executive in their forward planning, recommended that the Code should be extended to incorporate guidelines which would define more strictly the sites where opencast coal might be mined. Implementation of these guidelines would, in the Commission's view, need to take account of the economic benefit to the nation of opencast production.

77. The Government have considered this recommendation in the light of their intention to transfer responsibility for granting planning permission to local authorities, and to move away from a national target for opencast production. They believe it would be helpful to issue guidance along the lines proposed by the Commission which would make clear the sort of considerations which would be taken into account by the Secretaries of State for Environment, Scotland and Wales when deciding opencast appeals and approving development plans. The Government are holding discussions with both the Opencast Executive and the local authorities about the detailed form of such guidelines, which will also need to take account of experience gained so far in the operation of the Code of Practice.

Minimising environmental effects of opencasting

78. The Commission concluded that the visual intrusion of a site, the effects of dust, noise, and vibration from blasting and heavy traffic movements can, taken together, add up to a very severe diminution in the quality of life for those worst

affected. These effects can be ameliorated to some extent by sensitive planning of operations, including the siting of boundaries and baffle banks and by moving work away from residential areas quickly. The Government endorse the Commission's view of the importance of minimising these adverse effects through careful attention to both planning aspects and operating practices by both the Opencast Executive and the civil engineering contractors.

79. The proximity of a site to residential properties is an important factor in determining the number of people badly affected by the operations. Following an assurance to Parliament during the passage of the 1958 Opencast Coal Act, the NCB have been authorised to work coal within 50 yds of residential property only in wholly exceptional circumstances. The Commission recommended that the feasibility of extending this limit should be reviewed, and the Government welcome the agreement of the NCB and the Local Authority Associations to do so in the light of the new planning arrangements set out in para 71. The NCB have also confirmed their willingness to purchase individual properties adversely affected by opencast operations if a householder is obliged to sell for specific reasons such as a change of job or illness.

80. The Government welcome the NCB's commitment of additional funds for noise research. The NCB already have a programme of noise monitoring at several sites. In addition they are currently discussing with the British Standards Institute a revision of BS 5228 (Code of Practice for Noise Control on Construction and Demolition Sites), which will for the first time include guidance on the control of noise from opencast sites. The NCB's new programme, which will be discussed with interested parties, will look at the effectiveness of 'leq' measurements in reflecting noise levels, methods of representative sampling, the effectiveness of various techniques of noise reduction and the accuracy of predictive models.

Restoration

81. The Commission pointed to the Executive's well-deserved reputation for the quality of much of its restoration work on derelict sites, which can often be successfully transformed after coal extraction to provide worthwhile local facilities. However the Commission also cited criticism made by a number of bodies about possible adverse long-term effects, such as loss of ecological variety, landscape quality, reduction in soil fertility, and loss of agricultural productivity. These bodies were concerned that land reclaimed after opencasting was often bland and featureless, and that a more imaginative approach could be taken. The Commission endorsed these views, and recommended that legislative changes

should be made to incorporate details of the restoration programme - such as a survey of the agricultural, landscape, and ecological features of the site and a detailed forecast of its condition after mining and restoration - into the initial application to work the site.

82. Considerable progress has been made in improving the quality of restored landscape, and the Executive's standards in recent years have been generally regarded as exemplary. Their practice is to encourage the planting of trees and hedges to bring variety to the restored landscape, and the Government welcome this. Restoration normally takes place over a period of 5 years, and each scheme is a collaborative effort between the Opencast Executive, MAFF (or equivalent in Scotland and Wales), the county planning authority (district or general planning authority in Scotland) and the various owners and occupiers concerned. This will continue under the new arrangements provided by the various Planning Acts. Because it is not possible to give outline planning permission for mineral working, the principles of restoration must be decided at the time planning permission is granted, although the details can be modified later by agreement if this seems sensible. The intended after-use will also need to be decided when permission is granted, but the detailed aftercare programme can be settled in a scheme agreed subsequently. This emphasises the need to consider both restoration and after-care aspects thoroughly at the outset. The Opencast Executive have confirmed that they now consult the Countryside Commission and the Nature Conservancy Council in respect of all opencast applications and this should help to ensure that the landscape and wildlife aspects are incorporated in all agreed schemes. They also have a detailed soil report prepared during the consultation stages for each site to assist in drawing up suitable restoration schemes. In addition reports are obtained on the restored sites at the end of the period of agricultural aftercare. The NCB are also discussing with MAFF and the NFU ways of assessing the agricultural impact of opencasting. The Government welcome these steps and look to the Opencast Executive and the local authorities to build on these achievements. The new arrangements for dealing with opencast planning applications will ensure that the Board continue to carry out and develop further their high standards of restoration and after-care work.

83. The Commission considered in detail the likely environmental consequences of a revival in coal use, particularly in industrial markets and in urban areas. They assumed, correctly in the Government's view, that there would be widespread opposition to increased coal-burn should this result in practice in higher levels of air pollution and give rise to serious handling and transport problems.

84. The Government therefore welcome the general thrust of the Commission's recommendations. The Commission were right to warn against complacency amongst potential users and control authorities about the possible environmental consequences of greater coal-use. Uncertainty about the pace at which coal will succeed in penetrating industrial and other markets produces understandable caution in considering the need for change in practices and procedures. This should not be an excuse, however, for inaction. The Government are encouraged by the efforts being made by the NCB and manufacturers to emphasise the need for high standards of maintenance and control over new coal-fired equipment. They commend these efforts, and wish to see the full participation of the control authorities in them. As a further step, the NCB have convened a series of regional conferences designed to bring together local authorities, transport operators, manufacturers, and potential individual consumers, to discuss the scope for, and likely impact of, greater coal-burn. This initiative is warmly welcomed.

85. Training and education can also contribute to increased awareness of the benefits of coal use, and the NCB are increasing their efforts in this area through presentations to both technical students and potential users. They are also running advisory and after-sales services to help users to choose the best combination of equipment in order to ensure efficient and flexible operation, with the cheapest available fuel.

Coal Transport

86. The Commission came out strongly in favour of rail as the preferred method of transporting coal. They recognised, however, that there were circumstances when both road and water transport could be environmentally and economically preferable, and that all the options should be examined closely whenever a new coal project is being planned. Containers and pipelines were two other transport options considered by the Commission. They recommended that further research should be carried out on containers, but concluded that the use of pipelines for carrying coal was generally not feasible in the UK.

87. On balance the Commission's conclusions and recommendations on the transport and handling of coal are sensible and constructive. It is generally advantageous both environmentally and economically for the bulk movement of coal to be by means other than road. The NCB, British Rail and electricity utilities need to keep in close touch about this and have a mutual interest in ensuring that plans for coal movement and power station siting run broadly in step. The Government welcome the Commission's endorsement of the grants paid under section 8 of the Railways Act 1974 to encourage more environmentally acceptable ways of transporting coal. They have already extended the scheme to cover waterway users and have recently raised the rate of grant to 60% in circumstances where the environmental benefits justify a higher rate. The Government believe that further research on containers is desirable, and welcome the efforts of the NCB and others to develop commercially viable systems. The Transport and Road Research Laboratory has carried out research on hydraulic and pneumatic capsule pipelines to carry both coal and colliery spoil, and there are now a number of industrial applications of this work such as the Horden colliery pipeline (para 51). The Government would welcome further development work by the industry on the use of pipelines to carry colliery spoil, but they accept the Commission's conclusion that the scope for moving coal in this way is severely limited.

Coal Handling

88. The Commission concluded that, since adequate storage and convenient coal and ash handling facilities would be important to the environmental acceptability of increased coal use, the NCB should give this area priority in its R&D budget. They were also concerned about the lack of awareness amongst potential coal users of the range of modern coal-handling technology, and recommended a vigorous marketing drive. This should in their view be accompanied by greater efforts to extend current best practice in controlling dust and dirt from lorries transporting coal.

89. Action here is largely for the NCB and for equipment manufacturers. The Board are aware that their success in marketing coal to industry depends in part on the availability of reliable equipment to handle both coal and ash. The Government are satisfied that the level of research and development is adequate at present and agree with the Board that efforts should be concentrated on publicising to industry the improved methods now available. The Government are also encouraged by the progress made in developing automatic sheeting devices for lorry loads, and welcome the Board's decision to introduce a Code of Practice to control dirt and dust arising from all lorries leaving NCB sites. These and other related measures are expected to reduce the local environmental impact of coal handling and movement, and contribute in due course to a cleaner image for coal.

Air Pollution

90. Great strides have been taken in reducing atmospheric pollution in the last twenty years. The Government agree with the Commission that there is no longer a major cause for concern on health grounds over ambient levels of smoke and SO₂ from coal combustion. They will however continue to take positive measures to reduce smoke concentrations in the small number of urban areas currently exceeding or close to the limits laid down in the EC Directive on sulphur dioxide and suspended particulates. The question of the possible effect of increased coal-burn in the future on pollution levels is clearly important, and the Government share the Commission's view that any such effects are likely to be most marked in urban areas.

91. Although the market for domestic coal-burn in the foreseeable future is not expected to be large, the Government agree with the Commission about the need to keep smoke pollution to the lowest practicable level. The Government note that the Commission did not regard the further development of solid smokeless fuel as a viable option and concluded that if coal is to continue to be used for domestic heating in urban areas this will require more effort to develop reliable smoke-reducing appliances. The Government do not regard the issue as entirely clear-cut: technically the production of solid smokeless fuel need not cause severe pollution problems although there might be severe cost penalties in avoiding doing so. The Government also agree with the Commission that the environmental acceptability of direct coal-burn in the domestic sector must depend on the availability of suitable smoke-reducing equipment. A new generation of such appliances is now coming onto the market and the Government agree with the Commission about the need to monitor their performance carefully. The Warren Spring Laboratory is currently developing equipment to improve the monitoring of particulate emissions from them and the Government expect the NCB and manufacturers to maintain their efforts to produce more reliable equipment. An increase in the domestic use of coal or solid smokeless fuel, where these replace the use of gas, electricity or gas oil (from which smoke and sulphur dioxide emissions are very small or non-existent) rather than high sulphur oil, would need to be carefully watched in relation to the limits set by the EC Air Quality Directive, particularly in densely populated urban areas. The Government therefore recognise the need to keep the position under close review.

92. The Government welcome the Commission's view that industrial coal-burn can be positively encouraged in most circumstances. The Government nevertheless wish to ensure that such encouragement is accompanied by moves to ensure high standards of maintenance and control, in view of the need to maintain air quality standards.

They welcome the fact that the NCB's marketing strategy is directed towards this same objective. It is also an important consideration in approving grant under the Coal Firing Scheme (para 14).

93. The Government note the Commission's conclusion that existing control powers seem sufficient at present, but that there are doubts about whether these powers will be adequate should there be a substantial increase in coal use. The Commission recommended that consideration should be given to providing local authorities with prior consent powers over the choice of fuel or means of controlling emissions and, in certain cases, with a power of direction over the use of particular fuels in some buildings: they also proposed that the 'best practicable means' approach should be extended to processes controlled by local authorities. These issues will be fully considered in the context of a comprehensive review of air pollution control legislation which is to be undertaken. The Government accepted the need for such a review in their response* to the Fifth Report of the Royal Commission on Environmental Pollution. The Government intend their proposals to be issued in due course as a consultation paper. These will take into account the likely impact of increased coal-burn, and the Government expect them to go most of the way to meet the concerns expressed by the Commission.

94. The Government note the Commission's view that if the levels of air pollution are kept low enough to protect human health, there is no cause for concern about the effects on crops or vegetation, or on materials. Without dissenting from this view, the Government consider that further evidence would be valuable. More research is therefore needed, and is being undertaken.

95. Since the Commission published their report there has been growing international concern about emissions of sulphur dioxide and of nitrogen oxides, because of their contribution, through the as yet imperfectly understood working of atmospheric processes over long distances, to the formation of 'acid rain'. The Commission rightly recognised the uncertainties that existed at the time of their enquiry - and which to a certain extent still exist - about the causes, mechanisms and environmental effects of acid deposition: and they endorsed the approach adopted under the ECE Convention on Long-Range Transboundary Air Pollution (which, together with other Member States of the European Community, the UK ratified in July 1982) of a cooperative programme of research into all aspects of the problem.

* Pollution Paper No 18 (1982) Air Pollution Control.

96. The Stockholm Conference in 1982 showed clearly the extent to which 'acid rain' has become a significant political, as well as an environmental, issue. The ECE Convention, brought into force in March 1983, will further focus attention on the subject. Since the signing of the Convention in 1979, and indeed for some years before that time, the United Kingdom has cooperated actively with other concerned countries in studying the problem, which is essentially international in character. All countries in a continent contribute to the emissions that may cause acid deposition in other countries, and all must participate in the search for effective and equitable solutions. The Government's policy is to continue to work positively to that end, within the framework provided by the Convention.

97. The Commission concluded, and the Government agree, that most of the potential environmental problems from any increased coal production and use can be overcome by the more widespread application of current best practice. This is reassuring. Some problems will require changes in the framework of policy, legislation and controls, and the Government have made clear their intention to take the necessary action. But where higher standards are obtainable within the existing framework, the Government recognise that this requires the continued commitment of many organisations and individuals. They have therefore considered carefully how best such commitment can be secured and maintained.

The National Coal Board

98. The prime onus rests with the NCB. The Commission concluded that there is a need for a sustained and coherent lead from NCB HQ on environmental policy, and on the means whereby such policies can be effected locally. The Government welcome the progress that the NCB have already made in defining responsibility for environmental matters at Board level, and in establishing a committee structure at HQ and in the Areas to consider environmental issues. The Board have explained that their approach is to encourage environmental awareness at all levels of the organisation rather than to separate environmental concerns from line management through a separate environment department. It is too early to say whether the Board's approach is the right one. It will therefore need to be kept under review. The best test of the value of the current approach is whether tangible improvements are made to existing practices within a measurable period. The Government will look to the Board to provide evidence to this effect in an expanded statement in their Annual Reports and this will form the basis of the continuing and constructive dialogue between the Government, NCB and local authorities on environmental issues, and on priorities and their implementation.

Relations with Local Authorities

99. A key element in effective environmental cooperation is improved liaison between the industry and local authorities. The Government are encouraged by the consistently good relationships established between the Board and local authorities in some areas and by the progress that has been made elsewhere since the Commission embarked upon its study. The benefits of good working relationships are frequently to be seen on the ground. The Government nevertheless recognise that this is easier to achieve where the prospects for the industry are good and where the legacy of

the past is not too pressing. But the need for good relationships is just as great in areas where this is not the case. The Government look to the Board to make special efforts in the older mining areas when restructuring takes place.

100. The Government note the close and constructive relationship established between the Opencast Executive and local authorities on forward planning for opencast mining. The Board have now agreed to extend this approach to new investment in deep mines. They will discuss at regular intervals with individual local authorities the Board's development intentions in their areas, including environmental measures, and will take into account authorities' own priorities where possible. These discussions will embrace, where necessary, ways of drawing up programmes of derelict land release and clearance. The Government also acknowledge the willingness of the Board, and of the local authorities, to participate in the specific studies of spoil disposal (paras 43 and 44) and land availability (para 22), and believe that this will establish a helpful precedent for wider cooperation on strategic issues in the future.

Local Authority Associations.

101. In drawing up their response to the Commission's report, the Government have had frequent discussions with individual local authorities and with their Associations. They acknowledge the assistance they have received. In particular the Government welcome the formation of the Joint Minerals and Reclamation Group and believe this to be a valuable forum in which coal and other mineral issues can be aired. The Associations are ready to use this forum to discuss issues with the NCB and others where this would be helpful and the Government fully support their initiative. They also invite the Associations to consider the formation of a similar group to discuss the environmental consequences of energy use, particularly of increased coal burn.

Central Government

102. The Government have made clear that they accept the need for a closer dialogue between central departments and the NCB on environmental matters wherever it would appear useful. The basis for this will be the expanded statements in the Board's Annual Reports (paras 21 and 98). A start has already been made. The NCB gave a helpful presentation earlier this year to Environment and other Ministers: this included a broad indication of the Board's mining intentions and the environmental problems they foresee arising from them. They have also provided a positive statement of their environmental priorities and the means of implementing them.

The Government warmly welcome these initiatives by the Board and aim to build upon them. The Board have agreed to give a similar presentation to the Local Authority Associations shortly. The Government believe that, taken together, these steps will make a substantial contribution to the debate on coal and environment matters, and provide real evidence of the continuing importance both they and the public attach to them.

GENE REPORT

CHAPTER 22

<u>PARAGRAPH NO</u>	<u>RECOMMENDATION</u>	<u>WHITE PAPER PARAGRAPH NO</u>
13	Examine technical training and education requirements for the coal industry.	18, 85
	ENVIRONMENTAL EFFECTS OF DEEP MINING	
25	Amend General Development Order to require planning permission for surface development related to new underground access.	55
27	Examine distribution of Rate Support Grant in relation to new development.	30
29	Bring into force outstanding provisions of Part II of the Control of Pollution Act 1974 dealing with discharges from working mines.	40
30	Water discharges from abandoned mines to be regarded as dereliction comparable to abandoned pit heaps.	39
30	Cost of essential work to deal with discharges to be met by central Government.	39
31	Assess and plan for the effects of cessation of pumping. NCB to carry costs of work. Conditions covering measures on abandonment to be imposed in new planning permissions.	33, 40
31	Amend Section 46(6)(b) of the Control of Pollution Act 1974 so that water authorities recoup costs of remedial work in respect of mines closed by the NCB.	40
32	Amend General Development Order to clarify that permitted ancillary development relates only to that particular colliery.	55
	SUBSIDENCE	
34	Further research by NCB into the effect of subsidence on the mass between coal seam and surface, especially in geological fault conditions.	65
35	NCB should discuss alternative use of land sterilised by subsidence with local interests and environment bodies.	68
36	NCB should ensure that individual owners and business interests are aware of likely subsidence.	63, 64

PARAGRAPH NORECOMMENDATIONWHITE PAPER
PARAGRAPH NO

36	Notices to be posted in streets where mining is about to take place.	63
36	Degree of publicity at Selby and Belvoir to be standard practice for new mining projects.	64
37	Public discussion of preventive measures available to reduce subsidence in existing buildings.	66
38	Precautionary measures to be included as planning conditions.	67
40	All repair work to be carried out speedily, efficiently and sensitively.	58, 62
41	Additional provision for compensation for residual loss in property value.	60, 61
	SPOIL DISPOSAL	
44	Landscape design proposals to be included in tip reclamation schemes from the outset. Supervisory period for restoration to be kept under review.	53, 54
44	Restoration of land supervisors to be chosen from wider group than ADAS and DAFS, and advice on wildlife to be sought from NCC.	53
48	Amend General Development Order to prevent continuation of waste deposition at sites where a prohibition order under the Town and Country Planning (Minerals) Act 1981 is in force, and to allow for restoration working.	55
49	Use of lagoons for the treatment of tailings to be avoided whenever possible.	56
50	New deep mines to be designed to avoid discharge of liquid effluent.	56
51	Strengthen research into backstowing.	46
52	Spoil disposal to be taken into account when considering both individual opencast programmes, and the phasing of a regional opencast programme.	47, 71, 82
54	No spoil tipping on further beaches and phase out marine tipping. Ecological consequences of pipeline deposition to the seabed to be fully examined.	50, 51
55	Government to consider NCB's suggestions to make greater use of colliery spoil by the introduction of an improved dual tendering system covering all appropriate building and civil engineering projects.	49

PARAGRAPH NORECOMMENDATIONWHITE PAPER
PARAGRAPH NO

56	Adopt alternatives to local tipping whenever possible.	52
56	Continue to investigate further improvements in local tipping practice.	52, 54
57	Where spoil disposal problem is most serious, improve coordination by ad hoc working parties. Priority to be given to working group in the Yorkshire and East Midlands coalfield.	42, 43
58	Establish guidelines on use of different types of site for remote reclamation; on availability of financial assistance; on priorities for different types of waste and priorities between regions in the use of remote disposal sites.	45
	DERELICTION	
60	NCB to continue to dispose of land and property not required for operational use to facilitate alternative industrial and commercial occupation.	36
61	Exempt local authority expenditure on derelict land clearance from counting against capital expenditure allocations.	34
62	Maintain DLG spending in coal fields with increased share of DLG to Yorkshire. Examine feasibility of establishing Development Agency.	34-37
	OPENCAST MINING	
65	NCB to make funds available for promoting further research into noise standards for opencast operation.	80
66	Discuss feasibility of extending minimum 50 yards limit for opencast sites near to residential properties.	79
67	Opencast Executive to make full use of the power to make discretionary purchases, to reduce hardship	79
69	Detailed restoration programme to be a condition of opencast applications: to include an analysis of loss of agricultural land, and a survey of the existing agricultural landscape and ecological characteristics. Appropriate legislation changes to be made as soon as possible.	82
70	Countryside Commission and Nature Conservancy Council to be consulted on opencast applications as a matter of course.	82

71	Planning applications for opencast to be dealt with under normal minerals planning machinery, rather than by the Secretary of State for Energy.	71
73	Volume of opencast mining to decrease as new, more efficient deep mines are developed. Present target of 15 million tonnes per year should not be increased in the meantime.	74
74	Guidelines defining suitable opencast sites to be adopted and rigorously applied within the Code of Practice adopted by the Opencast Executive and Local Authority Associations.	77
75	Opencast Executive to be treated as a separate accounting unit in the NCB's Annual Report and Accounts.	75
76	Review existing provisions to ensure that rates paid by NCB are appropriate to the environmental stress their operations can cause, as well as the benefits they can provide.	29
77	Responsibility for ensuring the introduction of practices available to be assigned at senior level in the Board.	98
	COAL MARKETS	
79	Stimulate dialogue with industrialists and local authorities on the scale of re-entry of coal into the industrial market.	84
80	Government to give a lead in the switch from fuel oil to coal in the public administration sector.	14
81	Government to stimulate commercialisation of fluidised bed technology. Formulate agreed programme for commercialisation and examine export potential.	16
	COAL HANDLING AND TRANSPORT	
82	Rail to be the chosen method of coal transport. Power station siting to take account of this.	87
83	Rail investment should be compatible with the plans of NCB and CEGB for mass transport of coal.	87
84	Current best practice to control lorry dust and dirt to be formalised and applied consistently. Code of practice to be drawn up for all NCB vehicles leaving sites.	89
85	NCB to associate themselves with, and support research into, automated load sheeting devices.	89

PARAGRAPH NORECOMMENDATIONWHITE PAPER
PARAGRAPH NO

87	Further research to be carried out into the use of containers for coal transport.	87
88	New coal projects to be examined in case there is the possibility of supply by waterway.	87
92	Vigorous marketing drive to persuade coal users to adopt up-to-date technology and to convince potential users that coal and ash handling can be done cheaply.	84, 89
94	NCB to ensure priority for research and development of handling and storage within overall R & D budget.	89
96	Government to take all necessary steps to ensure development of domestic scale heat pumps.	15
	COAL CONVERSION	
97	Long-term contingency planning for SNG to proceed on the basis of forecast need for up to 10 sites by 2010.	17, 22
99	BGC and NCB to undertake necessary research into characteristics and means of disposal of solid residue created by SNG plant.	17
101	Government to make clear to potential developers of SNG plant that satisfactory experience of demonstration plant is needed before commercial development.	17
102	Plans to be drawn up for an early demonstration plant in the UK, if experience abroad is insufficient to assess adequacy with which UK health and safety and environmental standards will be met.	17
	AIR POLLUTION	
110	Level of smoke pollution to be kept at lowest practicable level.	91
119	Performance of smoke reducing appliances and their effect on ambient smoke levels to be carefully monitored.	91
120	Government to co-ordinate research and development on heat meters, particularly for domestic use, as high priority.	15
124	Consider empowering local authorities to require prior consent to industrialists' choice of fuel or means of controlling emissions, and extending the best practicable means approach to processes controlled by local authorities.	93

PARAGRAPH NO

RECOMMENDATION

WHITE PAPER
PARAGRAPH NO

124	In exceptional circumstances powers might be granted to specified local authorities to direct the use of particular fuels in particular buildings.	93
	PLANNING AND ENERGY POLICY	
126	Systematic explanation of progressive evolution of national energy policy, and options for implementation, with regularly updated forecasts of project requirements.	7-10, 20
128	Undertake urgently a joint review of availability of sites for industrial and energy developments, initially in Yorkshire and the East Midlands.	22
130	NCB to publish widely their "Ladder of Exploration and Project Development".	21
131	Consultations between the NCB and Local Authority Associations before commitment of investment in projects advances too far.	100
134	Consider greater use of written evidence at public local inquiries.	24
134	Cross examination should only be used when its particular advantages in probing evidence can be fully used.	24