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Part A

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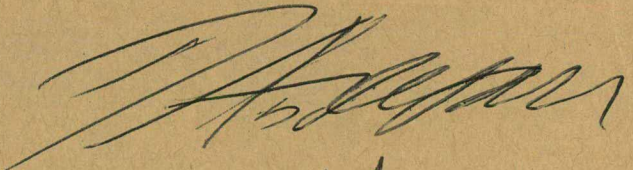

PO -CH /NL/0238

PART A

Chancellor's (Lawson) Papers:

STRATEGIC MINERALS
STOCKPILE IN SOUTH AFRICA

Disposal Directions: 25 years:



21/9/95

PO -CH /NL/0238
PART A

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	SIR P. MIDDLETON
	SIR G. WITTIER
	MR F. E. R. BUTLER MR TURNBULL

Do you agree?
C 19/

SECRETARY OF STATE FOR TRADE AND INDUSTRY

Strategic Minerals Stockpile

During its discussion of policy towards South Africa on 24 June (6th Meeting Minutes) the Defence and Oversea Policy Committee (OD) briefly considered the strategic minerals stockpile. Subsequent correspondence led to the establishment of an ad hoc group of officials, chaired by the Cabinet Office and with representation from your Department, the Foreign and Commonwealth Office, the Treasury, the Ministry of Defence and the Departments of Energy, the Environment and Employment, to consider the size of the stockpile and which materials should be included in it.

2. I enclose the Group's report. The summary and conclusions are on the first three pages. The recommendations are broadly in line with the views in your minute to the Prime Minister of 21 July, although there are adjustments to the suggested size of the Government's stockpile of certain of the more vulnerable materials. I suggest that in the absence of comments by 25 September, the recommendations in the Report should be taken as agreed. Otherwise a meeting of Ministers, probably in OD, can be arranged. I understand that Treasury officials are in touch with officials from your Department regarding the budgetary implications, which are referred to in paragraph 1.8 of the Report.

3. I am sending copies of this minute and the Report to the Private Secretaries of members of OD, of the Secretaries of State for Energy, the Environment and Employment and of the Secretary of the Cabinet.

C L G Mallaby

C L G Mallaby

Spoke to PS/Mallaby
to say we wd have
comments but not by
25/9.
AWK
24/9

CABINET OFFICE

18 September 1986

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REPORT OF THE AD HOC GROUP OF OFFICIALS ON THE STRATEGIC MINERALS STOCKPILE

SUMMARY AND CONCLUSIONS

1.1 The Ad Hoc Group was set up to give collective consideration to the size of the Government's stockpile of strategic minerals and the materials which should be included. The Group's conclusions are as follows.

1.2 Stocks of the more vulnerable materials should be maintained. Stocks of the less vulnerable materials need no longer be held. There is no case for adding other minerals to the stockpile.

1.3 In terms of current rates of consumption, the stocks of the more vulnerable materials should be:

i.	Chemical Chrome/chrome metal	3 months (hitherto 6 months)
ii.	Charge Chrome	4.5 months (as before)
iii.	HC Ferro Chrome	3.75 months (" ")
iv.	LC Ferro Chrome	6 months (" ")
v.	Manganese Metal	5 months (hitherto 3 months)
vi.	Ferro Vanadium (including vanadium pentoxide equivalent)	6 months (hitherto 10 months)
vii.	Vanadium Aluminium	6 months (hitherto 8-9 months)

This means selling - 3 months' stocks of chemical chrome £ 1.0m
excess stocks of vanadium £ 1.2m) See next
the less vulnerable materials £10.5m) page
buying - an additional 2 months' stocks of manganese metal £ 0.5m

1.4 The considerations underlying the above proposals included these:

a. Chemical chrome is a vital material. The United Kingdom obtains all its supplies from South Africa. The only other significant source is the Soviet Union. But industry has a stockpile of 18 months' supply and there is no reason to expect this to diminish. On balance, therefore, reduction of the present Government stockpile from 6 months' to 3 months' supply is recommended.

b. The British Steel Corporation has responded positively to the Government's suggestion that it should try to increase its stocks of charge chrome from within its current budget. We therefore recommend no increase in the Government's stocks.

c. The United Kingdom obtains over 50 per cent of its supplies of vanadium from South Africa. The People's Republic of China is the only alternative source at present. Limited substitution and recycling are feasible. Since South African vanadium is a by-product of steel production, a fall in the latter as a result of the EC ban on imports of South African steel could affect vanadium supplies. While a Government stockpile of 6 months' supply should be adequate on the basis of the general considerations discussed in this paper, the sale of the vanadium we presently hold in excess of this amount should wait until the effects on vanadium supplies of sanctions against South African steel can be seen.

d. The disposal of the 3 months' stock of cobalt (a less vulnerable mineral) currently held in the government stockpile should be subject to confirmation that there has been no change in the position of excess supply in the market.

1.5 The DTI should continue to ensure that it is informed of any reductions in the stocks held by industry. If there were any significant reductions, the question whether corresponding increases in government holdings are necessary should be considered.

1.6 The DTI should also continue to urge industry to increase the level of its stocks, by following up the consultations between Ministers and the Chairmen of the main user companies in July. In discussions with industry the reasons for the Government disposing of the less vulnerable materials will need to be carefully presented, so as not to appear to conflict with exhortations to industry to increase its own stocks of the more vulnerable materials.

1.7 Further consideration should be given by the DTI to policy on allocating stockpile materials to users in an emergency, so as to strike a balance between assisting industry to overcome short term problems and maintaining market incentives to develop alternative sources of supply and substitution.

FINANCIAL IMPLICATOINS

1.8 The DTI's planning assumption for its budget provides for receipts from sales of stockpile materials of £20m in 1986/7 and £13m in 1987/8. The implication of the recommendations would be to leave a shortfall of £9m in 1986/7 which might require a supplementary estimate, on the assumption that the sales and purchase indicated above are completed in 1986/7. Furthermore, there could be a shortfall in the DTI budget of £13m in 1987/8. If sales of vanadium were put off until 1987/8, the shortfall in the current year would be correspondingly greater and in 1987/8 correspondingly less. These financial aspects will be discussed, initially between the Secretary of State for Trade and Industry and the Chief Secretary, Treasury, as part of the forthcoming PES round.

2. BACKGROUND

2.1 In the late 1970s and early 1980s increasing concern was felt in industry and Government about the potential effects on United Kingdom industry and employment of a disruption in supply of certain strategic materials. The main worry was the heavy dependence on South and Southern Africa for supplies of a number of essential minerals, and that for several of these the main potential alternative source of supply was the Soviet Union.

2.2 In the light of the Government's view that the private sector should be responsible for maintaining its own stocks, there were extensive consultations with industry about its financing additional stocks. However, it was recognised that in the short term those industries which would be most affected by disruption of South African supplies, such as the public and private sectors of the steel industry and aerospace industry, could not afford the extra costs entailed. Furthermore, a suitable private sector scheme for funding the stockpile could not be devised.

2.3 Ministers therefore decided in September 1982 to set up a Government funded stockpile of various forms of cobalt, chromium, manganese and vanadium. Niobium sourced in Brazil was added in 1984. £35m was made available by the Treasury in 1982/3 and £3m and £3.5m respectively of the Department of Trade and Industry's voted provision was spent in 1983/4 and 1984/5. The DTI stockpile was intended to cover normal peace-time consumption by United Kingdom industry in the event of short term disruption and not to cater for prolonged disruption of supplies. It was also recognised that some of the materials are important in the manufacture of certain kinds of defence equipment.

2.4 The stockpile was set up under the Supply Powers Act (1975) and the legal basis for DTI acquiring and holding minerals is a formal request by the user companies. The requesting companies, on behalf of which the DTI

holds minerals, undertook to purchase the materials at, or near, the market price in the event of an emergency. The terms of their participation clearly establish that the timing of any disposal, and the conditions attached to it (to whom, at what price, for what use etc), are subject to the discretion of the Secretary of State for Trade and Industry.

2.5 The target figure for the number of months of stocks of a material to be held in the stockpile was determined by the Department in the light of advice from industry. This target was translated into actual volumes of materials at current consumption rates on the basis of formal requests by user companies. Where there was a significant discrepancy between the requests made and United Kingdom consumption figures, the British Geological Survey (as technical advisers to the Department) advised on the need to hold additional stocks to take account of usage by smaller companies.

2.6 For working purposes a guideline target of 6 months' supply of chrome, vanadium, manganese and cobalt was set. The underlying assumption was that this, taken together with the stocks held by industry, could be expected to be eked out to 12 months or more in an emergency, which would provide time for industry to seek adequate supplies from alternative sources or through recycling or substitution. The six months' target was not achieved for all the strategic minerals because of increasing constraints on the Department's budget.

2.7 Subsequently, following a review of priorities, DTI Ministers decided in Autumn 1984 that the resources devoted to the stockpile could be more effectively used in other DTI programmes. Discussions were held on schemes for possible private sector funding but no suitable proposals emerged. An announcement of the decision to dispose of the stockpile over the next few years was made in November 1984.

2.8 Following the announcement the FCO, MOD and the Department of Energy expressed concern about the decision and requested collective discussion of the policy, taking into account the developing situation in South Africa. Following Ministerial exchanges, sales of stockpile materials planned for 1985/6 proceeded but it was agreed that a decision on further disposals should await the conclusions of a review by an inter-departmental group of officials set up to examine the risks of a disruption of supplies to United Kingdom industry and the possible options for financing the stockpile.

2.9 On 24 June 1986 (before this review was complete) the future of the stockpile was discussed briefly at a meeting of OD about wider aspects of policy towards South Africa. The Secretary of State for Trade and Industry wrote to the Prime Minister on 21 July proposing to limit disposals in 1986/7 to the less vulnerable materials and to review the position of the remainder, judged to be more vulnerable to disruption, in the light of events in South Africa. As a result of the Prime Minister's response that further consideration should be given to the matter by officials, an Ad Hoc Group chaired by the Cabinet Office was set up. The present report has been produced by this Group.

2.10 Prior to 1985/6 no sales of stockpile materials were undertaken, except for marginal adjustments to reflect changes in the pattern of United Kingdom industrial consumption identified by consultations with the requesting companies. In 1985/6 the estimated value of the stockpile was £46m, of which £12m was realised from sales, mainly of manganese bearing materials which are considered to be less vulnerable. These receipts were fully accounted for in 1985/6, although in the event certain of the DTI programmes on which the money was to be used were underspent, so that some of the benefit was surrendered by DTI. The DTI budget assumes receipts of £20m in 1986/7 and £13m and 1987/8 from stockpile sales, but no disposals have been made to date in 1986/7. The

current value of the stockpile is estimated to be about £34m but this would fall if mineral prices fell or if the £ strengthened against the US \$ (minerals are priced in US \$). The maintenance costs are £0.5m pa.

3. THE IMPACT OF A DISRUPTION OF SUPPLIES ON UNITED KINGDOM INDUSTRY

3.1 The extent of United Kingdom industry's use of materials which depend on a strategic mineral input varies markedly between industrial sectors [see Annex 1]. Strategic minerals are vital to a number of industrial, defence and energy related applications. The impact of disruption of South African supplies would be felt first by the iron and steel industry and the non-ferrous metal and ferro alloy industry, with a knock-on effect over time on secondary users. Disruption would be 17eatest in the first six months, when it is hard to envisage the loss of supplies being made up; there would be significant price rises and speculative trading. Subsequently, existing sources would increase production where possible, and the process of commissioning new sources would be initiated. This, combined with the validation of lower quality material, changes in engineering specifications and the increased incentive for substitution and recycling, should alleviate the problem in the medium to long term.

4. POLICIES OF OTHER INDUSTRIALISED COUNTRIES

4.1 All major Western industrialised countries are highly dependent on South Africa for supplies of strategic minerals [see Table 1]. Certain of our competitors are better placed because of the availability of domestic resources, eg USA, or trade links with alternative suppliers, eg Japan. They would, however, all experience serious difficulties if South African supplies of the form of chromium most vulnerable to disruption, ie chemical grade, were not available. Additionally they would be more vulnerable than the United Kingdom in respect of platinum group metals since our special position as a trading and processing centre causes substantial stocks to be maintained by the market in this country.

4.2 The policy adopted by other industrialised countries in the face of dependence on South Africa has varied. France, USA and Japan have Government stockpiles, whilst West Germany has pursued a policy of diversifying sources of supply. Of those countries with stockpiles, which also include Finland, Sweden and Switzerland, the level of stocks varies from 21 days for Japan, 2-12 months for France, to up to 3 years for the US defence stockpile [see Annex 2].

5. POLICY OF THE SOUTH AFRICAN GOVERNMENT

5.1 The South African Government is well aware of the dependence of Western industrialised countries on its exports of strategic minerals. Although mineral exports as a whole (including gold) account for 70 per cent of South Africa's foreign exchange earnings, less than 6 per cent is accounted for by strategic minerals, of which more than half is from exports of platinum group metals. Those strategic minerals for which the United Kingdom's vulnerability is greatest, namely chrome (excluding ferro-chrome) and vanadium, represent less than 0.4 per cent of South Africa's foreign exchange earnings. If the South African Government wished to restrict or ban the export of strategic metals, such a measure would have to be world-wide; if applied to exports to selected countries, it would be easily by-passed.

5.2 The South African Government published a white paper on mineral policy on 19 August, which acknowledged South Africa's reputation as "an honest trader and a reliable source of minerals", and the necessity of sustained mineral exports for the continued growth of the economy. The South African Government reaffirmed its commitment to the free market principle and to the minimum involvement of the State (except where national interest was concerned); it rejected trade sanctions and stated that South African minerals would be made available to all countries able to purchase them. The business community in South Africa would support the view that the country should maintain its reputation as a reliable supplier.

5.3 The Group considers that South Africa is reluctant to damage its commercial reputation and risk losing other exports, and that it is therefore unlikely to consider actively the possibility of interfering with exports of strategic minerals unless it is faced with major economic sanctions by the West. In these circumstances, South Africa might decide to restrict or possibly ban exports of these minerals.

6. THE STRATEGIC MINERAL STOCKPILE

6.1 Strategic materials are defined as those minerals which are critical to the needs of industry and the supplies of which are vulnerable to disruption as a result of heavy dependence on a limited range of sources of supply. In the context of the United Kingdom stockpile the criteria used for determining which materials to include have been:

- i. the degree of dependence on South or Southern Africa;
- ii. the availability of realistic alternative sources of supply (outside the Eastern bloc);
- iii. the criticality to United Kingdom industry, particularly to key industrial, energy and defence related applications;
- iv. the potential for recycling and substitution.

6.2 The materials held in the stockpile have been categorised into more vulnerable and less vulnerable, according to the availability of reliable non-communist alternative sources of supply [see Tables 2 and 3]. The more vulnerable materials are chrome and vanadium bearing materials and manganese metal, of which 3-6 months' stocks are held in the stockpile. Annex 3 contains a detailed description of these materials. Their most significant characteristics are:

i. Chemical Chrome (including Chrome Metal): the stockpile contains 6 months' supply. The United Kingdom is completely reliant on South Africa for supplies and there are no significant alternative sources, except the Soviet Union. There is also little potential for recycling or substitution. Chemical chrome is used in the form of chrome metal in a wide range of critical industrial, defence and energy related applications.

ii. Charge Chrome: the stockpile contains 4.5 months' supply, which is held on behalf of BSC. The United Kingdom is dependent on South Africa for 90 per cent of its supplies and the existing alternative sources are inadequate to replace this in the short to medium term. There is only limited potential for substitution or recycling. Charge chrome is used in the form of specialised steel and alloys in certain critical industrial and defence related applications.

iii. High Carbon (HC) Ferro Chrome: the stockpile contains 3.75 months' supply on behalf of the steel industry. Whilst South Africa remains an important supplier, providing about 15-20 per cent of United Kingdom needs, there are alternative suppliers which could at least partially replace it. In addition there is the prospect that the Soviet Union, which is a major producer, could start to export to Western industrialised countries given that it does not regard this as a strategic material. There is also some potential for recycling and substitution. HC ferro chrome is used in several materials required for critical industrial applications.

iv. Low Carbon (LC) Ferro Chrome: the stockpile contains 6 months' supply. South Africa is not a producer, but exports from the major source of supply, Zimbabwe, are heavily dependent on South African transportation, and there are insufficient alternative sources to meet world demand. There is some potential

for substitution and recycling but this is constrained by economic and technical factors. LC ferro chrome is used as an alternative to chrome metal in certain high performance alloys needed for defence and energy related applications.

v. Manganese metal: the stockpile contains 3 months' supply. The United Kingdom is reliant on South Africa for 60 per cent of supplies but there are existing and potential alternative sources which could at least partially replace it. There is some scope for substitution in certain uses but little prospect of increasing recycling. Manganese metal is used in the production of materials which are employed in critical industrial applications, and indirectly by the defence industry.

vi. Vanadium (Vanadium Pentoxide, Ferro Vanadium and Vanadium Aluminium): the stockpile contains 8-10 months' supply. The United Kingdom depends for 50 per cent of its needs on South Africa, and this will have increased with the recent cessation of Finnish production. There is only one existing (and unreliable) alternative source - China - although in the medium to long term other replacement sources could become viable. Since South African production is a by-product of steel production, a fall in the latter as a result of sanctions against steel imports from South Africa could affect vanadium supplies. Limited substitution and recycling are feasible in certain applications. Vanadium is required in the production of super alloys and special steels used in critical industrial, defence and energy related applications.

6.3 The less vulnerable materials held in the stockpile consist of manganese bearing minerals, cobalt, niobium and silico chrome. There is generally 4.5-6 months' supply (excepting high carbon ferro manganese). With the exception of silico chrome, stocks held by industry do not exceed two months. Annex 4 contains a detailed description of these materials, of which the most significant characteristics are:

i. Manganese Bearing materials (HC and LC Ferro Manganese and Silico Manganese): these are virtually irreplaceable in basic steel making. However, there are adequate realistic alternative sources with substantial underutilised capacity, including Australia, Brazil and Ghana. Demand for manganese has declined steadily over recent years.

ii. Manganese Ore Battery Grade: this is not produced by South Africa and there are adequate sources available, primarily Ghana, Gabon and Australia.

iii. Silico Chrome: the major users judge that silico chrome is no longer technically essential for the processes in which it is used and can be replaced by non-strategic materials.

iv. Cobalt: this is not produced by South Africa, but the major suppliers are Zambia and Zaire which rely heavily on South African transportation for exports. Cobalt is vital to the production of super alloys used in critical defence and industrial applications and there is little scope for substitution. However, there is currently substantial over-production and under-utilisation of capacity, causing a slump in market price. In the event of disruption to transportation cobalt could be exported by air - at a price - provided that South Africa did not take military action to prevent this.

v. Niobium (Ferro and Nickel Niobium): South Africa is not a source of niobium, which is produced almost exclusively by Brazil in the non-communist world. It is used in the production of steel and non-ferrous alloys, and in some applications is interchangeable with vanadium. Niobium was added to the stockpile in 1984 because of doubts about the financial stability of Brazil and concern that the close political relations between Brazil and Argentina could lead to United Kingdom industry being denied access to supplies during any future confrontation over the Falkland Islands. These factors are no longer judged to constitute a major risk to the continuity of supply.

6.4 Other minerals commonly regarded as strategic, for which the United Kingdom is heavily dependent on imports, are examined in Annex 5. The United Kingdom is not dependent on South Africa for supplies of these minerals except platinum group metals, antimony and andalusite. The vulnerability of these minerals to disruption of supply is not judged to be significant:

i. Andalusite: substitute materials are available from other sources;

ii. Antimony: there are alternative sources of supply;

iii. Platinum Group Metals: the United Kingdom is very heavily dependent on South Africa for supplies. However, the United Kingdom is a trading centre for platinum and has primary and secondary refining capacity which maintains substantial stocks of platinum. This, taken with the ability of industry to recycle 75 per cent of its needs, greatly reduces our vulnerability. The introduction of catalytic exhaust converters would not substantially alter this position up to 1990.

7. OTHER CONSIDERATIONS

Independent Report by Mr Fuller

7.1 In June 1986 the DTI commissioned a study by an independent consultant which concluded that a Government strategic stockpile was justified since short term risks to disruption were a growing threat, but that the only justification for increasing stocks beyond the short term requirement, ie 3-6 months, would be military or price considerations. The report considered that the effect of disruption would be dramatic over 3-6 months with shortages, panic buying, speculative hoarding and price rises, but that this would be capped by the availability of supplies from other sources. It also commented on the vulnerability of various groups of minerals; its conclusions were generally in accord with the views of the DTI's expert advisers. [There were differences in respect of the more vulnerable materials, where the report was more sanguine about the availability of alternative sources because it took insufficient account of important distinctions between the different forms of chrome and vanadium bearing materials.]

UK as a potential source of strategic minerals

7.2 The British Geological Survey is continuing to undertake a programme of geological research to identify areas in Great Britain with economic potential for mineral exploitation. However, the likelihood of discovering resources which could be developed within a timescale relevant to our current concerns over South Africa is remote.

The long term potential for substitution

7.3 The ability of industry, particularly in mass and continuous production activities, to change materials is limited in the short term. With the exception of other strategic minerals there are few ready

substitutes for strategic minerals at the present time. It would require some form of external impetus to bring on stream the results of the more fundamental research being undertaken on substitution. In view of the long lead time and substantial investment involved, substitution is more typically a medium to long term option than a short term solution to disruption of supplies.

The role of industry in ensuring the availability of adequate supplies of strategic minerals

7.4 DTI Ministers recently met the Chairmen of the major companies which are users of strategic minerals, to draw their attention to the potential dangers from any disruption of supplies from South Africa; and in the light of this to advise them to take steps to ensure access to adequate supplies through diversifying sources of supply or increasing stocks. Whilst most companies recognised that it was desirable to diversify sources, their reactions were mixed - some companies actively pursuing alternative sources and others taking the view that this was a matter for Government [see Annex 6].

7.5 The level of stocks held by industry is in general low, ie 6-8 weeks, with the exception of chemical and silico chrome. Although several companies confirmed their intention to increase the level of their stocks, in general it was judged that declining strategic mineral prices made stockpiling unattractive and rendered alternative sources even less viable. More generally, there was a fairly widespread view that sanctions against South Africa would in practice be ineffective and therefore were unlikely to cause South Africa to retaliate by stopping exports of strategic minerals [compare with our assessment in paragraph 5.3].

8. THE FUTURE OF THE STRATEGIC STOCKPILE

8.1 The Ad Hoc Group considers that, since vulnerability and other factors relating to each of the materials vary, a single target figure for the stock-pile of all is inappropriate. A level of stocks should be determined for each material, taking into account the factors outlined in this report. There are inadequate grounds for this exceeding six months in respect of any of the minerals.

8.2 The Ad Hoc Group concludes -

The more vulnerable materials

a. CHROMIUM

i. Chemical chrome/chrome metal is an essential mineral and the UK is completely reliant on South Africa. However, private sector stocks contain 18 months' supply. The stocks are held by a single British owned company which is profitable; there is no reason to expect that they will diminish. On balance it is therefore safe to reduce stocks to three months' supply;

ii. There is a case for increasing the stocks of charge chrome (4.5 months' plus 2 months held by industry) given the UK's significant dependence on South Africa and the absence of adequate alternative sources in the short-to-medium term. We should continue to press BSC, on whose behalf the material is held, to increase its stocks from within its current budget. The Chairman of BSC has undertaken to try to achieve this. Assuming that he succeeds, government stocks need not be increased;

iii. The UK is heavily dependent on South Africa for high carbon ferrochrome but, given the potential for expanding alternative sources of supply and the prospect of exports from the Soviet Union to Western countries in the event of a shortage, existing stocks of 3.75 months' supply (plus 1.5 months' held by industry) need not be increased;

iv. The importance of low carbon ferrochrome to the defence and energy industries, and the threat posed by South Africa to its transportation from Zimbabwe, confirm the need to maintain the present stock of 6 months' supply (plus 1.5 months' held by industry).

b. MANGANESE METAL

Since the UK is heavily dependent on South Africa for supplies of manganese metal, which has certain defence applications, and our stocks stand currently at only 3 months (plus 1 month held by industry), there is a case for increasing the level. However, to move to 6 months seems unnecessary because of the availability of existing and anticipated alternative sources of supply, and active attempts by the major UK consumer, Rolls Royce, to diversify sources of supply. The revised target for the stockpile should therefore be 5 months, ie an additional 2 months' supply.

c. VANADIUM

Dependence on South Africa is high and increasing. There is therefore a strong case for holding six months' stocks of vanadium. Existing stocks are greater than this, representing 10.25 months' supply of ferro vanadium (including 4.75 months in the form of vanadium pentoxide) and 8.25 months' supply of vanadium aluminium (plus 1¹/₂ months' supply of vanadium held by

industry). South Africa's production of vanadium is almost entirely recovered from the steelmaking process, so that supplies may be affected by the EC ban on imports of South African steel. Sales of our excess stocks should be delayed until the effects of this ban are seen.

The less vulnerable materials

d. For the reasons given in paragraph 6.3 there is no need to retain stocks of the less vulnerable materials. However, with regard to cobalt, disposal of the last three months' supply should be subject to confirmation that the supply position in the market is unchanged.

Other Minerals

e. For the reasons given in paragraph 6.4 and in Annex 5, no other minerals need be added to the government stockpile.

RELIANCE OF UK INDUSTRY ON STRATEGIC MINERALS

Background

1. The extent of UK industry's use of materials which depend on a strategic mineral input varies markedly between industrial sectors. A number of industrial applications are vital to the defence and energy related industries or critical to other sectors of the economy.

2. The impact of disruption of supplies of strategic minerals for which the UK is dependent on South Africa would be felt first by the iron and steel industry, and the non-ferrous metal and ferro-alloy industry, with a knock-on effect over time on secondary users.

Iron and Steel

3. Four main categories of steel production are heavily dependent on chrome and vanadium compounds:

i stainless steel: produced by BSC (2,500 employees); the main uses are process and power plant and consumer durables;

ii low alloy steels: of which -

a Engineering steels produced by United Engineering Steels (15,000 employees);

b Bearing steels produced by BSC (1,500 employees);

c steel bars produced by the private steel companies (100 employees) for the construction industry.

iii Super alloy steels: produced by the ferro alloy industry (1,000 employees) for use in eg aerospace;

iv Reinforcing steels: bulk steel production by BSC for use in the construction industry.

4. The overall effects of a disruption of supply of strategic minerals would be felt within 3-4 months in these sectors which together employ 20,000 people. The impact would be most significant in stainless steel because of the heavy dependence on chrome which constitutes 15% (by value) of the finished product and the competition from alternative materials.

Non-Ferrous Metals and Ferro-Alloys

5. UK companies convert strategic mineral compounds in ore or processed form into derivatives such as chrome metal [British Chrome+Chemicals] for use in the production of high grade metal and super alloys of ferro vanadium [Murex and London and

Scandinavian] for use in special and high grade steels. Total employment in the industry is of the order of 1,000.

Manufacturing Industry

6. Materials incorporating vulnerable strategic minerals (chrome and vanadium) are used in a wide range of industrial sectors:

- i Heavy Electrical Goods - transformers, motors and generators require high grade steel components;
- ii Process plant - corrosion resistant alloys and specialised steels are used in boilers, furnaces, heat exchangers, pressure vessels, pumps, tank valves and pipes;
- iii Tools and Bearings - bar, bearing and sheet steel are used in the production of bearings and tools eg drills;
- iv Vehicles - special steel alloys and engineering steels are used to produce components required for manufacturing gears, crankshafts, suspension, engine castings, pistons etc;
- v Chemicals - strategic minerals are used mainly as raw materials or catalytic additives in the production of chromic acid (for chrome plating), sulphuric acid, pigments, wood preservatives, fertilisers, animal feedstuffs, pharmaceuticals, insecticides, petro-chemicals, enamels, paints and leather tanning;
- vi Aerospace - high strength-to-weight, corrosion-resistant high temperature alloys are used in aero engines eg blades and compressors, castings and forgings, and body work panels.

Defence and Energy

7. Certain of the products and compounds identified have application in the defence and energy sectors:

- i Defence: bearings, castings and forgings (gun forgings and shell cases), jet and gas turbine engines etc for use in tanks, fighter aircraft, warships and helicopters;
- ii Energy: pipes, pressure vessels, construction materials, heat exchangers, tanks etc for use in offshore oil and gas, petroleum refining, electricity generation, nuclear energy and fuel processing.

POLICY ADOPTED BY OTHER COUNTRIES TOWARDS THE STOCKPILING OF STRATEGIC MINERALS

1. Of the major industrialised countries France, Japan and the US maintain strategic mineral stockpiles:

i FRANCE: the stockpile is jointly financed by Government and industry, and consists of between 2-12 months supply of a wider range of minerals than the UK stockpile, eg tungsten, zirconium, nickel, titanium, aluminium. France has been selling off stockpiled materials recently, including cobalt and charge chrome.

ii JAPAN: the stockpile consists of three elements ie Government, joint and private sector which collectively represent supplies of 21.5 days (Government and joint stockpiles 9 days each, private 3.5). The Government intend to increase stocks to 26 days in the course of 1986 and its ultimate goal is 60 days. The stockpile includes, in addition to the materials in the UK stockpile, nickel tungsten and molybdenum.

iii USA: the US maintains a large Government stockpile of numerous materials considered to be essential to maintaining the defence capability; the stocks currently held include between 1-3 years supply of the materials in the UK stockpile. Stockpile targets are expected to be reduced to 2 years' supply of materials such as chromium and cobalt, and one year's supply of other materials.

2. The FRG has considered establishing a stockpile but concluded that it is the responsibility of industry to maintain stocks. Private sector stocks representing about 2 months supply of the most important minerals have been increased slightly, and industry has pursued a policy of diversifying sources of supply. The FRG considers that the likelihood of retaliatory action by South Africa is dependent on the imposition of wider international measures.

3. The FRG's view is shared by the Netherlands which does not consider that special measures such as stockpiling are required. The issue of stockpiling and diversification of sources of supply is not known to be under active consideration in other EC Member States, which remain relatively relaxed about the likelihood of a cessation of South African supplies.

4. Finland, Sweden and Switzerland maintain small strategic stockpiles but these do not include all the materials regarded as strategic by the UK.

UK'S STRATEGIC STOCKPILE: MORE VULNERABLE STRATEGIC MINERALS**1. Chemical Chrome**

The stockpile contains 30,247 mt of Chemical Chrome Ore which represents 4½ months supply with Industry holding an additional 18 months' supply [Total about 2 years]. In addition it holds 105 tonnes of Chrome metal processed from 500mt chemical chrome ore which represents 1½ months supply.

- a. **Uses** : Chemical Chrome is used in the chemical industry in paints, leather tanning, drilling muds, chromium plating and in the production of Chrome metal. Camouflage paint is used by the MoD and chromium plating by the aerospace and vehicles industries. Chrome metal is essential in the production of high duty super alloys for aerospace, nuclear and energy applications and in jet and gas turbine engines used in military aircraft.
- b. **Dependence on South Africa** : High. The UK obtains all its supplies of Chemical Chrome from South Africa, which is the largest producer of this material.
- c. **Alternative sources of supply** : The USSR is the only other major producer of Chemical Chrome. Other sources such as India and Finland are too small to be able to meet world demand. Chrome Metal can however be obtained from China but this is a new and untried source.
- d. **Potential for substitution, recycling and alternative processes** : There is little possibility of recycling or substituting chemical chrome or chrome metal in the majority of their applications. Chinese chrome metal is not currently acceptable for aerospace applications because of its lower quality but in times of shortage it is likely that specifications would be reduced. Chrome metal can also be replaced by LC ferro chrome in certain high performance alloys and in some nuclear applications.

2. Charge Chrome

The stockpile contains 19,959 mt of Charge Chrome which represents 4½ months supply with industry holding an additional 2 months of stocks [Total 6½ months].

- a. **Uses** : Charge Chrome is a critical raw material in the production of bulk stainless steel. It is also vital to the production of super alloys for rigorous applications and other alloy steels, certain cast iron products and tools. Many of these products have defence-related applications as well as being important in many other downstream industries such as vehicles and engineering.

b. Dependence on South Africa : The UK is about 80% dependent on South Africa which meets 60% of world demand for Charge Chrome.

c. Alternative Sources of Supply : Other sources include Brazil, Philippines, India, Turkey and Finland, but these are not adequate to replace supplies from South Africa in the short to medium term. It is believed that the USSR produces no charge chrome, but uses other forms of chrome in its place.

d. Potential for Substitution, Recycling and alternative processes : There is only marginal possibility for substitution for charge chrome and very little recycling in the production of super alloys. Charge Chrome is principally recycled from stainless steel (in the production of stainless and alloy steels 42% of the chromium used is recycled scrap), but this is vulnerable to substitution by plastic and surface coatings, in certain applications. There is some possibility of upgrading other forms of chrome ore, obtainable from outside South Africa, to charge chrome standards. HC Ferro Chrome can also be used as a substitute, but is less satisfactory.

3. High Carbon (HC) Ferro Chrome

The stockpile contains 4,805 mt of HC Ferro Chrome, representing 3½ months supply with industry holding an additional 1½ months stocks [Total 5½].

a. Uses : HC Ferro Chrome is used in certain steels where carbon content is less limiting and is an important constituent in cast iron. It therefore has only indirect defence applications, its primary uses being in down stream industry.

b. Dependence on South Africa : South Africa is a major producer of HC Ferro Chrome, supplying the UK with 40% of its needs.

c. Alternative Sources : There are alternative sources of supply of the ore in Finland, Turkey and Albania, but if South African sources of ore were denied, there might be some difficulty in maintaining production of HC Ferro Chrome in Europe. The USSR, although a major producer, exports its material almost entirely to Eastern Bloc Countries. There is a prospect however that in the event of an emergency it might export to the West.

d. Potential for Substitution, Recycling and Alternative processes : There is some scope for substitution in all steels by manganese, molybdenum and nickel but this

approach is more expensive. In the production of steel alloys a significant proportion of the chromium used is contained in recycled scrap. HC Ferro Chrome is also less dependent on the quality of chrome ore used in its production than is the case with other form of chrome..

4. Low Carbon (LC) Ferro Chrome

The stockpile contains 5,000mt of LC Ferro Chrome, representing 6 month's supply, with industry holding an additional 1½ months stocks [Total 7½ months].

a. Uses : LC ferro chrome is used (for final chromium adjustments) in stainless steel, for certain grades of LC special alloy steels and as an alternative to chromium metal in certain high-performance alloys and in nuclear equipment components. It has certain defence applications as super alloys are used in jet engines in military aircraft as well as in various down-stream industries.

b. Dependence on South Africa : There are no major exports of LC Ferro Chrome from South Africa. The major source is Zimbabwe, but it is heavily dependent on South African transport to export supplies.

c. Alternative Sources : There are currently insufficient alternative sources to meet world demand. The Eastern Bloc does not export LC ferro chrome, producing it for its own consumption.

d. Potential for Substitution, Recycling and Alternative Processes : There is some scope for substitution in alloy steels by manganese, molybdenum and nickel but this approach is more expensive. In the production of and alloy steels a significant amount of the chromium used is contained in recycled scrap. Both chrome metal and HC ferro chrome can be used as substitutes in some areas. The former is more expensive, the latter much less satisfactory.

5. Manganese Metal

The Stockpile contains 515 mt of manganese metal, representing 3 months' supply, with industry holding only about a month's stocks [Total 4 months].

a. Uses : Manganese metal has certain defence related applications being used in the production of stainless steels, as a hardening constituent in copper and aluminium alloys and welding electrode coatings. It is also used in the chemical industry and in the production of ceramics.

b. Dependence on South Africa : South Africa is the world's largest producer of manganese metal (50% of world output) and provides the UK with nearly all supplies from two companies : Delta and EMCOR. There are no exports of manganese metal from the USSR.

c. Alternative Sources : Several other companies also produce Manganese Metal, three in the USA producing 25% of world output, two in Japan and one in France. Brazil also plans to bring on stream production representing up to 10% initially of existing world production and could increase supplies quickly given the financial incentive. China also exports manganese metal, although of a lower quality than South African.

d. Potential for Substitution, Recycling and Alternative Processes : Possible substitutes for manganese metal as used as an alloying agent are chromium, molybdenum and nickel. There is no recycling of manganese in this form.

6. Vanadium - (Vanadium Pentoxide, Ferro Vanadium, Vanadium Aluminium)

The stockpile contains 5½ (10½, including material which could be converted from Vanadium Pentoxide) of Ferro Vanadium, and 8½ months of Vanadium Aluminium with industry holding an additional 1½ months each. [Total 12 and 10 months respectively taking account of the potential to convert Vanadium Pentoxide to Ferro Vanadium.] The stockpile contains 373 mt of vanadium pentoxide, representing 3½ months supply, with industry holding an additional ½ months stocks [Total 4 months]. As well as in the production of ferro Vanadium and Vanadium Aluminium, Vanadium Pentoxide can be used in various chemical applications.

a. Uses: Ferro vanadium is an important constituent in super alloys, high speed and rod steels. Vanadium aluminium is used in the production of titanium alloy, for the aerospace industry. Both have defense applications mainly in jet engines for military aircraft. Ferro Vanadium is also used in the downstream industries, mainly engineering.

b. Dependence on South Africa : South Africa produces 60-70% of world output. This figure is due to increase as a result of the cessation at the start of 1986 of Finnish production (12% of world output). South Africa currently supplies the UK with 50% of its needs. 90% of South African production derives from the steel making process. A reduction in South African steel production as a result of an import ban by Western countries would therefore reduce production of vanadium.

c. **Alternative Sources** : Currently the only alternative significant primary source of vanadium is China (10-12% of world output) but this source is still unpredictable and unreliable. The USSR, although the second largest producer, exports only a small amount to the West. In 1984 9% of the UK imports came from the USSR.

Vanadium can also be produced as a by-product of uranium phosphate rock and oil and in this context the USA is viewed as a potential medium to long term source of supply of vanadium. Viability, however, would require a six-fold increase in price to justify production from these sources on the basis of solely vanadium content.

d. **Potential for Substitution, Recycling and Alternative Processes** : Vanadium in alloy steels and super alloys can to a certain extent be replaced by niobium, titanium or chromium. However, it cannot be replaced in the critical titanium alloy used in aero-engines. Vanadium is recycled from steel scrap and spent catalysts, amounting to some 16% of total use.

UK STRATEGIC STOCKPILE: LESS VULNERABLE STRATEGIC MINERALS**1. Silico Chrome**

Silico Chrome is used in the manufacture of special stainless steel. There is no technical necessity for its use; the reasons are commercial there are non-strategic alternatives.

2. HC Ferro Manganese, LC Ferro Manganese, Silico Manganese

Manganese is the form of the metallurgical ore or ferro alloy is an essential element in steel production. UK imports of metallurgical ore are for this the production of ferro alloys.

South Africa, although accounting for 40% of UK imports of manganese ore, only accounts for 13% of world production. Alternative sources include Brazil, Gabon, China and Australia; many are currently below capacity and in current circumstances the loss of South African production could probably be adequately replaced within a year from other producers outside the Eastern Bloc. There would be sufficient material in transit, on in stocks held by agents and alternative suppliers to meet immediate needs before additional production comes on stream. No substitution is possible in steel making, but in the production of ferro alloys some substitution is possible with more expensive materials. There is some degree of recycling of manganese recovered from steel scrap.

3. Manganese Ore (Battery Grade)

Battery Grade ore is a form of non-metallurgical Manganese Ore used in the manufacture of dry-cell batteries. It is not produced by South Africa but from a number of other sources, notably Gabon. The UK imports all its material from Ghana.

4. Cobalt Metal

Cobalt metal is used in the manufacture of special high temperature and abrasion resistant alloys, superalloys for use in gas turbine engines and petro-chemical rock drilling, chemicals and ceramics/special steels and permanent magnets. The scope for substitution varies but for most applications it would be feasible only in the long term. There is some recycling principally as an alloying constituent from alloy steels.

There is no South African production, Zaire and Zambia are the largest producers, accounting for well over 50% of world production (excluding USSR and Cuba). Both countries rely heavily on South Africa for transport of the material to sea ports. However as the tonnages are small much of the material could be airlifted out if transport routes were disrupted (as has happened

previously), at a higher cost. Alternative sources of supply include Canada and Finland.

Ferro Niobium, Nickel Niobium

Both forms of niobium are essential to the production of some super alloys used in the defence industry in jet engines; in the energy industry in high pressure pipe lines, generating plants, nuclear reactors and offshore drilling platforms; and in the vehicle industry.

There is no South African production. Brazil has 80% of non-communist world reserves and accounts for 90% of world production. Other producers include Canada, Australia, Thailand, Nigeria and Malaysia.

Niobium can be partially substituted by vanadium, titanium, tantalum and molybdenum but in general these substitutes are less effective and more expensive. There is some recycling.

UK'S DEPENDENCE ON OTHER STRATEGIC MINERALS

1. PLATINUM GROUP METALS

The UK is dependent on South Africa for 70% of its imports of platinum group metals (South Africa produces 40% of world production). The only realistic alternative source (excluding the USSR which accounts for 56% of world production) is Canada with 3% of world production. However, only 25% of UK imports are used directly for industrial applications, the remainder supporting the UK's role as a major world centre for marketing and processing of platinum group metals.

The effect of an import ban on South African supplies of platinum group metals would be therefore primarily on UK trading, refining and fabricating firms, ie Johnson Matthey and INCO. However their refining plants use a considerable amount of recycled material and Johnson Matthey is reported to have 6-9 months stocks available independent of South African sources.

In 1989 Johnson Matthey is transferring its primary refining plant at Royston to a new refinery in Bophuthutswana in South Africa. This would mean that all its primary refining of platinum mined in South Africa would be conducted in that country. Secondary refining would still remain, but this move would significantly reduce the role of the UK as a refiner and exporter of the metal in processed form and could also reduce the level of stocks held in the UK.

In industry platinum group metals are used in nitric acid manufacture, petroleum refining, thermocoupling, electronic components and chemical manufacture. The effect of an interruption of South African supplies would not be very great, 75% of needs can be met from recycled materials (excluding toll refining of catalysts). In the event of a cut off of supplies there would probably be a sharp rise in price concomitant with the appearance in the market of extra "recycled" material and possibly some substitutes. If supply was to be restricted in the long term the USA could start production from the Stillwater complex in Montana, which, it is claimed, could supply all essential US demand.

It is probable that the use of platinum group metals in catalytic converters will increase substantially in 1988 when the EC passes legislation on reducing atmospheric pollution. The UK supplies at least 50% of European demand for platinum group metals and is likely to meet increased demand pro rata. This would mean that by 1988 the UK would have to supply only an additional 4% of 1984 European demand (0.6 tonnes) and by 1990 an additional 10% (1.5 tonnes).

2. **ANTIMONY**

Antimony oxide is produced in the UK from imported concentrates and metal. Its main use was in batteries but this has been in decline because of substitution. It is, however, now used increasingly as a flame retardant particularly in plastics and as a catalyst in polyester products.

Although the UK's main source of supply is South Africa there are reliable alternative sources, including China, Bolivia, Mexico, and numerous other countries outside the Eastern Bloc which could step up production.

3. **Other Key Minerals produced by South Africa**

Other key minerals produced by South Africa include Andalusite, Asbestos, Sillimanite, Chamotte Earth, Iron Ore, Mica, Titanium, Tin Concentrates, Vermiculite and Zirconium. There are some strategic applications including use in military aircrafts and in nuclear applications, as well as in downstream industry. However these materials have a low degree of vulnerability to disruption of supply because there are sufficient alternative sources outside the Eastern Bloc.

4. **Other Key Minerals not produced by South Africa**

Key minerals, important to the UK economy, but which are not produced by South Africa, include Germanium, Tantalum, Gallium and Molybdenum. These minerals have important uses in certain areas such as the steel and electronics industries. There are a number of sources for these minerals outside the Eastern Bloc including the USA, Australia and Canada which are sufficient to meet demand. In DTI's continuing consultations with industry about the strategic stockpile, these materials have not been identified as a priority for addition to the stockpile. The British Geological Survey, has advised that the vulnerability of these minerals to disruption of supply is not significant.

REPORT ON USER COMPANIES' MEETINGS WITH DTI MINISTERS

DTI Ministers met Senior Representatives of the main user companies' of strategic minerals recently. The purpose of the meetings was:-

1. To draw the attention at top level in user companies to the potential danger from disruption to supplies of strategic minerals from or dependent on South Africa.
2. To seek the views of companies on their ability to secure adequate supplies of strategic minerals in the event of disruption to Southern African supplies.
3. For ministers to advise companies that industry should make arrangements to ensure that it had access to adequate supplies of strategic minerals either through alternative sources or through building up stock levels in order to guard against the effect of possible disruption to supplies from Southern Africa.

Securing of Supplies

The reaction of companies was mixed. Most recognised that it was in their interest to diversify sources where possible and a number of them are investigating new sources eg The British Steel Corporation are investigating the possibility of obtaining chrome ore from Turkey for processing into ferro chrome in Scandinavia. Other companies' are considering increasing their levels of stocks or could use alternative processing methods to reduce dependence on South African minerals. Some companies, however, took the view that it was for Government to ensure that adequate supplies of strategic minerals were available.

Alternative Sources of Supply

The greatest concern was expressed in relation to the availability of alternative sources of the various forms of chrome. There was considerably less concern about the availability of alternative sources of vanadium and little in respect of either manganese or manganese metal.

Views were again mixed, although all were agreed that in the event of a cut off of South African supplies prices would rise, but most felt that material would be available and a view expressed by more than one company was that the USSR would take the opportunity to sell chrome at an enhanced price. Some companies however, took the view that in the event of a cut off of South African supplies, alternative supplies would not necessarily be available in sufficient quantity to satisfy demand.

Companies also referred to the possibility of increased use of scrap; substitution eg niobium for vanadium in some uses or simply producing lower grade steels; and the upgrading of material from elsewhere to South African standards.

Increasing Company Stock

Although as mentioned above several companies reported that they are increasing their stocks or were considering doing so, a number pointed out that the price of several important South African strategic minerals was still falling. This made it financially unattractive to stockpile, and also made it more difficult for other countries to develop alternative sources for these minerals on an economic basis.

Evasion of Sanctions

There was also a fairly widespread view that even were sanctions imposed either by the South Africans or by the importing countries, they would be evaded by some means or other. This point was often mentioned in tandem with the thought that increased supplies would be likely to arise from the eastern block.

TABLE 1

DEPENDENCE OF THE MAJOR WESTERN INDUSTRIALISED COUNTRIES ON STRATEGIC MINERALS FROM SOUTH AFRICA

Direct and Indirect Dependence on South Africa in 1980 (1983 in brackets where known)

MATERIAL	UK	FRANCE	W GERMANY	USA	JAPAN
Chromium	73 (33)	33	52	63 (55)	59
Manganese	43 (56)	40	40	51 (35)	40
Vanadium	31 (15)	58	51	66 (44)	90
Platinum Group metals	63 (77)	59	53	76 (49)	61

Source: British Geological Survey "World Mineral Statistics".

STRATEGIC MATERIALS	MAJOR SUPPLIERS TO UK (1983 FIGURES) ‡		WORLD EXPORTERS (1984 FIGURES) ‡			
			PRIMARY PRODUCERS		SECONDARY PRODUCERS*	
More Vulnerable						
Chemical Chrome	South Africa	100	South Africa	96		
			Finland	2		
			USSR	<1		
			Philippines	<1		
			Turkey	<1		
			India	<1		
Chrome Metal	EEC	50*	China	13	United Kingdom	54
	Others not known				France	23
					FRG	4
					USA	4
					Belgium	2
					Netherlands	2
					Italy	<1
Charge Chrome	South Africa	90	South Africa	81	Sweden	12
	Sweden	10*	Brazil	4		
			Greece	3		
HC Ferro Chrome	Turkey, India, Yugoslavia, Czechoslovakia, Zimbabwe and South Africa in approximately equal proportions averaged over a number of years		Zimbabwe	44	FRG	33
			Yugoslavia	17		
			USSR	<1		
			R of World	5		
LC Ferro Chrome	Sweden	50*	Zimbabwe	60	Sweden	30
	Zimbabwe	3	Yugoslavia	5		
	Italy	15*	Brazil	5		
Ferro Vanadium	Austria	28*	South Africa	12	Belgium	28
	Belgium	27*	USA	5	FRG	17
	FRG	24*	Canada	3	France	15
	Netherlands	18*	R of World	2	Austria	15
					Japan	2
					UK	1
Vanadium Pentoxide	Finland 70 (hitherto; mines now closed)		Finland 31 (hitherto; mines now closed)		Belgium	5
	Netherlands	25*	USA	27	UK	4
	South Africa	3	China	18	France	<1
	Others	2	South Africa	14		
Vanadium Aluminium	No figures available (FRG, USA)		No figures available (FRG, USA)		France	16
					USA	9
Manganese Metal	South Africa	60	South Africa	65	Belgium	4
	Netherlands	13*	R of World	1	Netherlands	3
	Belgium	3*			UK	2
	Others	20				
Less Vulnerable						
Silico Chrome	FRG, Norway, Sweden		No figures available			
HC Ferro Manganese	Norway	45*	South Africa	39	Norway	37
	South Africa	40	Brazil	6	France	10
	France	15*			USA	8
MC Ferro Manganese	Norway	80*	South Africa	23	Norway	46
	South Africa	20			FRG	31
Silico Manganese	Norway	75*	South Africa	14	Norway	75
	Czechoslovakia	7*	Brazil	11		
	Others	18				
Manganese Ore (Battery Grade)	Brazil	80	Ghana	20		
	Gabon and Ghana	20	Brazil	10		
Cobalt Metal	Netherlands	31*	Zaire	55	Norway (Canada Origin)	8
	Belgium	21*	Zambia	21		
	Canada	18	Canada	9		
	Finland	9	Finland	7		
	Zaire	4	Belgium reprocesses significant amounts cobalt metal.			
	USA	4*				
	Zambia	4				
Ferro Niobium	Brazil	75	Brazil	90	France	5
	Belgium	25*			Belgium/Lux	3
					FRG	2
Nickel Niobium	No figures available.		No figures available.			

* SECONDARY PRODUCERS HAVE NO DOMESTIC SUPPLIES OF THE RAW MATERIAL.

STRATEGIC MINERALS HELD IN THE STOCK PILE: AUGUST 1986

STRATEGIC MATERIALS	QUANTITY HELD [TONNES]	ESTIMATED NO OF MONTHS SUPPLY		VALUE OF STOCKPILE (£/\$1.554) (£'000)	IMPORT DEPENDENCE ON SOUTH AFRICA	POTENTIAL FOR SUBSTITUTION: [Key A]	PROPORTION STRATEGIC MINERALS IN DEFENCE ENERGY RELATED APPLICATIONS: [Key B]	PROPORTION OF STRATEGIC MINERALS IN CRITICAL INDUSTRY-BASED APPLICATIONS: [Key B]
More vulnerable		Stockpile	Industry	Total				
Chemical chrome	30,247	4½	18	22½	1.301	100	1	3
Chrome metal	105	1¾	2	3¾	.423	100	2	1
Charge Chrome	19,959	4½	2	6½	6.524	80	1	2
LC Ferro Chrome * 1	5,000	6	1½	7½	4.053	5	2	2
HC Ferro Chrome	4,805	3¾	1½	5½	2.059	40	2	3
Ferro Vanadium	285	5½(10¼)* ³	1½	7	1.913	50	2	2
Vanadium Aluminium	45	8¾	1½	10¼	.379	50	1	1
Vanadium Pentoxide	373	3½	½	4	1.078	45	1	4
Manganese Metal	515	3	1	4	.644	50	2	2
Less Vulnerable								
SilicoChrome	120	4½	8	12½	.052	50	2	4
HC Ferro Manganese	3,077	8¾	¾	9½	.589	40	1	3
MC Ferro Manganese	5,013	3¾	¾	4½	2.105	40	1	3
Silco Manganese	9,500	4	¾	4¾	2.755	40	1	3
Manganese Ore	2,479	5	1	6	.355	NA	1	3
Cobalt Metal	260	5½	1	6½	1.550	NA	2	1
Nickel Niobium	19	5½	2	7½	1.832	NA	2	3
Ferro Niobium	306	5½	2	7½)	NA	2	3

* 1 main source, Zimbabwe, relies on South Africa transportation

* 2 value of stockpile at \$1.48 is £33.34K

* 3 () total includes material which could be converted from vanadium pentoxide

VAT 27.612
4.141
31.753 * 2

Key A

- 1 no substitution
2 some substitution but with strategic minerals

Key B

- 1 highly significant
2 significant
3 of some significance
4 not significant



MO 6/1L

MINISTRY OF DEFENCE

MAIN BUILDING WHITEHALL LONDON SW1

CH/EXCHEQUER	
REC.	23 SEP 1986 Telephone 01-930 7022
ACTION	Mr MOUNTFIELD 24/9
COPIES TO	CST, PST Sir P. MIDDLETON Sir G. LITTLE Mr F. BOND

24th September 1986

Mr TURNBULL

Dear Mallaby,

STRATEGIC MINERALS STOCKPILE

Thank you for the copy of the report from the ad hoc Group on the size and type of materials that should be included in the Government's stockpile of strategic minerals. I am happy to record my Department's general endorsement of the Group's recommendations.

As the Group noted, particular attention will need to be paid to the manner in which any disposals are presented to industry, particularly of chemical chrome, for which we have the heaviest dependency on South Africa. Since any disposal can be countenanced only by virtue of the large stock now held by the private sector, we regard it as essential, both in this particular case and in general, that the Government should be able to react to any significant decrease in industry's holdings of strategic materials; as the Report notes, this means that there could be circumstances in which an increase in the Government stockpile should be made.

We also endorse the caution expressed by the Report on the disposal of vanadium and cobalt. Officials of my Department would wish to be kept informed of developments in the case of vanadium, and to receive confirmation of the situation for cobalt, before giving our final approval of the sales proposed.

I note that there is the need for some fine tuning of the information set out in the Tables at the rear of the Report; I understand that officials in this Department and in the Department of Trade and Industry have been in touch to set this in hand.

I am sending copies of this minute to the Private Secretaries of members of OD, of the Secretaries of State for Energy, the Environment and of Sir Robert Armstrong.

John's secretary
D C J BALL

(D C J BALL)
Private Secretary

C L G Mallaby Esq CMG
Cabinet Office



JU410

PRIME MINISTER

STRATEGIC MINERAL STOCKPILE

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blf with advise

CH/EXCHEQUER	
REC.	25SEP1986
ACTION	MR MOUNTFIELD
COPIES TO	CST, FST
	SIR P. MIDDLETON
	SIR G. WITLER
	MR F.E.R. BUTLER
	MR TURNBULL

car 30/9/86

✓ 25/9

25/9/86

I have received a copy of the report of the Ad Hoc Group of officials set up by Sir Robert Armstrong at your request to consider the future size and composition of the strategic mineral stockpile.

2 I am in broad agreement with their overall assessment of the present position which, as Mr Mallaby points out in his covering minute of 18 September, is broadly consistent with the views in my minute to you of 21 July. The financial implications of selling this year the less vulnerable materials and retaining the more vulnerable, as recommended in the Group's report, is a shortfall of £9m in expected receipts by my Department in 1986/87, and I would need the Chief Secretary's agreement to a Supplementary Estimate to deal with this shortfall.

3 Sale of the less vulnerable materials will leave a stockpile valued at about £23 million on present prices. As you know, I am actively encouraging industry to build up its own stocks of these strategic materials and to develop alternative sources of supply to South Africa. The positive responses I have had from a number



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of industrialists means that a significant increase in industry's own stocks is likely to take place in the coming months. Such an increase will reduce the need for a Government stockpile.

4 I propose therefore that there should be a further review of the position by April 1987, to take into account developments in South Africa as well as the extent to which industry stocks of vulnerable materials have increased. I expect the outcome of such a further review will enable further sales from the Government stockpile to be made, and hence in discussions with the Chief Secretary during the current PES round I will continue to budget for receipts from stockpile sales of £13 million in 1987/88.

5 If colleagues then attach a high priority to retention of the stockpile then it should either be for them to put up the necessary funds or I should be allowed a call on the Reserve.

6 I agree with the other recommendations in the report on the need for continuing discussion with industry and the formulation of a contingency policy to govern the allocation of stockpile materials in an emergency.



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7 I am copying this minute to members of OD, the Secretaries of State for Energy, Environment and Employment, and to Sir Robert Armstrong.

PC

PAUL CHANNON

25 September 1986

Department of Trade & Industry

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*Wf with
advice (or
30/9) P*

10 DOWNING STREET
LONDON SW1A 2AA

From the Private Secretary

26 September 1986

Dear Tim,

STRATEGIC MINERAL STOCKPILE

The Prime Minister has seen the Trade and Industry Secretary's minute of 25 September about the report of the Ad Hoc Group of officials to consider the future size and composition of the strategic mineral stockpile. She is content with the conclusions of that report and notes that the financial implications will be discussed with the Chief Secretary.

I am copying this letter to the Private Secretaries to members of OD, to the Secretaries of State for Energy, Environment and Employment, and to Sir Robert Armstrong.

*yours sincerely,
Chris Powell*

(C. D. POWELL)

Timothy Walker, Esq.
Department of Trade and Industry.

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*✓ 60
2/9*

CH/	
REC.	26 SEP 1986
ACTING	MR MOUNTFIELD
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	SIR P. MIDDLETON
	SIR G. LITTLE
	MR F. E. R. BUTLER
	MR TURNBULL

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

CH/EXCHEQUER	
REC.	29 SEP 1986
ACTION	MR. WALLER
COPIES	CST, FST
	SIR P. MIDDLETON
	SIR G. LITTLE
	MR F. E. P. BUTLER
	MR TURNBULL

b/f with advice
30/9
(over 6/10)
A

The Rt Hon Paul Channon MP
Secretary of State
Department of Trade & Industry
1 Victoria Street
LONDON
SW1H 0ET

29 September 1986

STRATEGIC MINERALS STOCKPILE

I am generally content with the conclusions and recommendations in the report of the Ad Hoc Group of officials circulated by the Cabinet Office on 18 September.

My particular concern is the continued availability of chemical chrome for civil nuclear power requirements although, as the report notes, others of the more vulnerable materials also have applications in the energy sphere. I therefore attach particular importance to your Department keeping a close eye on reductions in industrial stocks of these materials with a view to increases in Government stocks being considered in the event of significant stock reductions by industry (para 1.5 of the report). In regard to chemical chrome, it may well be true that there is presently no reason to suppose that the high (18 months) level of stocks held by the one British-owned company in the business will diminish.

Apart of course from saving £1 million, this is the only reason advanced for reducing the Government stock of this material from 6 to 3 months. But I suggest it would be a brave man who could say for sure that the present level of industrial stocks will be maintained in the absence of Government controls and irrespective of changes in the South African situation.

I also welcome the proposals that your officials should continue to urge industry to increase its own stocks and should develop a policy for allocating the stockpiled materials to users in an emergency.

I am copying this letter to members of OD, to Nicholas Ridley, David Young and to Sir Robert Armstrong.

PETER WALKER

CONFIDENTIAL



Ch

You will recall that, in July, you described this exercise as "a complete nonsense".

You may still feel the HMT line has not been tough enough.

Subject to that, letter to issue?

While I am ^{sure}
content with ^{7/10}
the conclusion, I
but believe a letter to
contains a ~~strong~~ statement
or two Express
scepticism as to
the realism
I think
me.

CONFIDENTIAL

FROM: J W STEVENS

DATE: 7 October 1986

- The group's report invites a look at
 1/2 in 1987 sales receipts this year and some
 about to Mr Chairman's ability to deliver his present
 report next year. But the 1986 R's settlement envisages
 that he will be under
 pressure to relinquish
 to state in 1987/88 or to
 find spots for his own V&S
 or those of other spending
 departments.
1. MR WALLIS
 2. CHANCELLOR

cc Chief Secretary
 Financial Secretary
 Sir P Middleton
 Sir G Littler
 Mr F E R Butler
 Mr Mountfield
 Mr Burgner
 Mr Turnbull

STRATEGIC MINERAL STOCKPILE

Christopher Malaby's minute of 18 September to the Secretary of State for Trade and Industry covers the report of the Ad Hoc Cabinet Office Group which has been considering the need to retain a stockpile of strategic minerals.

2. The Group was set up in July following a brief discussion of the issue at OD in the context of a wider review of the situation in South Africa. The recommendations of the Group are set out in the first 3 pages of the report. Subject to some minor disposals and one addition, the conclusion of the Group is that the stocks of those minerals on which we are most dependent on South Africa for supplies ie Chrome, Manganese ^{and} Vanadium should be retained; where supplies are less vulnerable to disruption the report recommends disposal.

3. This is broadly in line with the view set out in the minute of 21 July from the Secretary of State for Trade and Industry. The vulnerable stocks which it is proposed should be retained represent about 2/3 by value of the stockpile, which in total is worth £34 m.

4. The basis of the Group's recommendations is an assessment of the main factors which would contribute to the disruption of UK industry in the event of an interruption of supplies from South Africa. These include the level of stocks held by industry, the current level of dependency on South Africa for supplies,

alternative sources of supplies and finally the scope for substitution of strategic minerals in key industrial processes. The Group also considered the level of stock held by the other countries.

5. This assessment is intended to cover the situation in which supplies are interrupted either deliberately by the South African Government or because the internal situation make transport impracticable. The Group recognised, as you commented back in July, ^(Flag ②) that the South African Government would be very reluctant to take action to withhold supplies. South African have consistently promoted their role as a honest trader in these minerals and have recently restated their policy of not withholding supplies unless it was in their public interest to do so. But faced with wide ranging sanctions the ability to withhold supplies would be a potent weapon, and one which the South African Government could exercise at relatively little expense. Their exports of minerals held in the UK stockpile accounts for less than 3% of their total foreign earnings and Chrome and Vanadium, where we are most vulnerable, account for less than 0.5%.

6. In terms of world supply South Africa produces 80% and 96% respectively of chemical and charge chrome and 65% of manganese metal. In addition South Africa provides the sole form of transport for Zimbabwe supplies of Ferro Chrome which account for about half of total world output. Together these minerals represent more than 70% (by value) of minerals which the Report proposes should be retained.

7. The question of alternative sources of supply was addressed in detail by the group and, with the exception of chrome, it was recognised that alternative sources of supply would be developed in response to the sharp rise in price which would follow an interruption of supplies from South Africa. But the general conclusion was that for technical reasons this response could not be immediate and that it would be some 6 months before alternatives supplies started to go any way to make up the loss of supplies from South Africa.

8. The Chief Secretary has been discussing the implications of the report with the Secretary of State in the PES bilaterals and we have delayed submitting advice on this until we had a clear indication of what his line would be. The DTI budget already assumes revenue of £20 million in the current year and £8 million in 1987/88 from stockpile sales and the Secretary of State has offered the Chief Secretary £5.2 million additional savings in 1987/88 from the disposal of all the remaining stocks not yet earmarked for sale. The Chief Secretary has been pressing the Secretary of State on the realism of his being able to achieve the savings he has offered in the light of the Group's report.

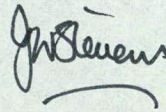
9. The Secretary of State has endorsed the Group's report which is broadly in line with his own judgement in July. But he is encouraging industry to build their own stocks and is confident that there will be a significant increase in these in the next few months which will reduce the need for a government stockpile. He, therefore, proposes that there should be a further review of the situation in April and his presumption is that this should enable further disposals to be made in 1987/88 to achieve the £13 million receipts he needs. He adds a rider that if colleagues attach a high priority to retention of the stockpile they should be prepared to pay or he should be given access to the Reserve. The Chief Secretary has already effectively dealt with this latter point by including in the package he has offered the Secretary of State for the 1986 Survey a condition that he should not have access to the Reserve for this item and that should he be forced to retain the stockpile and colleagues are unwilling - as is likely - to contribute towards the cost, then he should find savings from within his own programme.

Conclusion

10. A high degree of judgement is involved on the question of whether or not the UK should retain a stockpile of strategic minerals, and if so what the level of stock should be. The assessment of the Ad Hoc Group reflects a broad spectrum of view ranging from our own, which was to press for the minimum level of stockpile possible with pressure on industry to build up their own stocks, to the FCO/MOD who were keen to retain the whole of the existing stockpile.

11. The Secretary of State's proposal to review the situation again in April is useful and you are recommended to support it. His firm view that he will be able to realise the savings he has offered for 1987/88 and the Chief Secretary's link between settlement of 1986 PES and no access to the Reserve for this item, will maximise pressure on him to persuade colleagues that further disposals from the stockpile should be made if he is to avoid the need for finding alternative savings from within his own programme.

12. I attach a draft letter for you to send.



J W STEVENS

CONFIDENTIAL

19 + 1/2
for ch's sig

FROM: CHANCELLOR OF THE EXCHEQUER
TO: THE PRIME MINISTER

STRATEGIC MINERALS STOCKPILE

I have seen a copy of ~~Christopher~~^{Mr.} Malaby's minute of 18 September covering the report of the Ad Hoc Cabinet Office Group which has been considering the need to retain a stockpile of strategic minerals. I have also seen a copy Paul Channon's minute of 25 September.

~~2. I agree with Paul that the position should reviewed again in April and I share his view that this is likely to enable further sales from the stockpile to be made to cover the £13 million receipts assumed within his budget for 1987/88.~~ Substitute (X)

3. John MacGregor has already discussed this with Paul during the public expenditure bilaterals and has pressed him hard on the realism of achieving these receipts. Paul's judgement is that this will be possible, and ~~we~~^I would not wish to dispute that view. But John has also made it clear that in the event of these savings not being available he would not be prepared to accept accept the shortfall as a call on the Reserve. The stockpile was acquired largely with funds provided from the Reserve in 1982-83 and the decision to dispose of it reflected changes in priorities within the Trade and Industry portfolio which were put in effect without consulting other departments. The Reserve cannot be expected to pay for this twice. Any loss of receipts resulting from the decision not to dispose of stocks must, therefore, be covered by alternative savings from within the Trade and Industry programme.

I am sending copies of this minute to Members of OD, the Secretary's of State for Energy, Environment and Employment and Sir Robert Armstrong.

NIGEL LAWSON



*1. TAG 01E
b/f with
response
(at 16/10)*

FROM: A W KUCZYS
DATE: 10 OCTOBER 1986

MR J W STEVENS

cc PS/Chief Secretary
PS/Financial Secretary
Sir P Middleton
Sir G Littler
Mr F E R Butler
Mr Mountfield
Mr Burgner
Mr Turnbull
Mr Waller

STRATEGIC MINERAL STOCKPILE

The Chancellor has seen your minute of 7 October, with a draft minute to the Prime Minister.

2. While he is content with your conclusion, he would like the minute to contain a sentence or two expressing scepticism as to the realism of the threat. Please could you suggest an addition to the draft?

A W KUCZYS

Ch

You asked for this minute to contain a sentence or two expressing scepticism as to the realism of the threat. This is in the 1st two-thirds of the 2nd para. Otherwise the minute is as earlier approved by you.

AWK
15/10

CONFIDENTIAL

FROM: M A WALLER

DATE: 14 October 1986

PS/CHANCELLOR

cc. PS/Chief Secretary
PS/Financial Secretary
Sir P Middleton
Sir G Littler
Mr F E R Butler
Mr Monck (*with minute*)
Mr Mountfield
Mr Burgner
Mr Turnbull
Mr Stevens

STRATEGIC MINERAL STOCKPILE

Your minute of 10 October. I would suggest that the following paragraph to replace the current paragraph 2 in the draft minute from the Chancellor to the Prime Minister:

X

"I am skeptical about the arguments of substance for retaining the stock pile. As the paper points out, the South African Government has a stated policy of maintaining free trade minerals. And, though strategic minerals are a small element in South Africa's total exports, an export ban would damage its commercial reputation and, equally important, strengthen the hand of those countries pressing for comprehensive trade sanctions. I therefore agree with Paul that the position should be reviewed again in April and share his view that this is likely to enable further sales from the stockpile to be made to cover the £13m receipts assumed within his budget for 1987-88."


M A WALLER



cc

CST

FST

Sir P Middleton

Sir G Littler

Mr F E R Butler

Mr Mountfield

Mr Burgner

Mr Turnbull

Mr Waller

Mr Stevens

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

PRIME MINISTER

15/10/86.

STRATEGIC MINERALS STOCKPILE

I have seen a copy of Mr Mallaby's minute of 18 September covering the report of the Ad Hoc Cabinet Office Group which has been considering the need to retain a stockpile of strategic minerals. I have also seen a copy of Paul Channon's minute of 25 September.

I am sceptical about the arguments of substance for retaining the stockpile. As the paper points out, the South African Government has a stated policy of maintaining free trade in minerals. And, though strategic minerals are a small element in South Africa's total exports, an export ban would damage its commercial reputation and, equally important, strengthen the hand of those countries pressing for comprehensive trade sanctions. I therefore agree with Paul that the position should be reviewed again in April and share his view that this is likely to enable further sales from the stockpile to be made to cover the £13m receipts assumed within his budget for 1987-88.

John MacGregor has already discussed this with Paul during the public expenditure bilaterals and has pressed him hard on the realism of achieving these receipts. Paul's judgement is that this will be possible, and I would not wish to dispute that view. But John has also made it clear that in the event of these savings not being available he would not be prepared to accept the shortfall as a call on the Reserve. The stockpile was acquired largely with funds provided from the Reserve in 1982-83 and the decision to dispose of it reflected changes in priorities within the Trade and Industry portfolio which were



put into effect without consulting other departments. The Reserve cannot be expected to pay for this twice. Any loss of receipts resulting from the decision not to dispose of stocks must, therefore, be covered by alternative savings from within the Trade and Industry programme.

I am sending copies of this minute to Members of OD, the Secretaries of State for Energy, Environment and Employment, and to Sir Robert Armstrong.

A handwritten signature in dark ink, appearing to be 'N.L.' with a flourish.

N.L.

15 October 1986



MO 6/1L

CH/EXCHEQUER	
REC.	20 OCT 1986
ACTION	MR J. W. STEVENS <i>20/10</i>
COPIES TO	CST, FST
	SIR P. MIDDLETON
	SIR G. LITTLE
	MR F. E. R. BUTLER
	MR MOUNTFIELD

MINISTRY OF DEFENCE

MAIN BUILDING WHITEHALL LONDON SW1

Telephone 01-930 7022

17th October 1986*See Charles,*

MR BURLINER
MR THANSULL
MR WALLER

STRATEGIC MINERALS STOCKPILE

I wrote to Mr Mallaby in the Cabinet Office on 24th September recording my Department's general contentment with the conclusions of the ad hoc Group's report on the strategic minerals stockpile. We have since received copies of the Trade and Industry Secretary's minute to the Prime Minister of 25th September on the subject, your reply of 26th September, and the Chancellor of the Exchequer's minute of 15th October.

The Defence Secretary agrees that a further review of the position by April 1987 would be useful, and it is his intention that officials of this Department should be involved. But the Trade and Industry Secretary's minute also suggests that colleagues or the Reserve should bear the cost of any stockpile retained after the 1987 review. If the review does conclude that industry's stocks should still be supplemented by the retention of Government holdings, the Defence Secretary would not expect the Department of Trade and Industry to ask other Departments to meet the budgetary consequences. Indeed, it was because of the implications for industry as a whole that custody of the stockpile, and specific Treasury funding to set it up, was originally vested in that Department as the sponsor for industry; and he sees no basis for changing this position.

I am sending copies of this letter to the Private Secretaries of members of OD, of the Secretaries of State for Energy, Environment and Employment, and of Sir Robert Armstrong.

John
Sanban

(D C J BALL)

Private Secretary

Charles Powell Esq
No 10 Downing Street



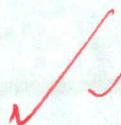
10 DOWNING STREET
LONDON SW1A 2AA

CH/EXCHÉQUER	
REC.	20 OCT 1986 ✓ 201w
ACTION	MR J W STEVENS
COPIES TO:	CST FST
	SIR P MIDDLETON
	SIR G LITTLE
	MR FER BUTLER
	MR MOUNTFIELD
MR BURTON	
MR TURNBULL	
MR WARE	

From the Private Secretary

20 October 1986

Dear Tim,



[Handwritten signature]

STRATEGIC MINERALS STOCKPILE

The Prime Minister has now seen the comments of colleagues on the report of the ad hoc group of officials set up to consider the future size and composition of the strategic mineral stockpile. She has commented that the further review at the end of the current financial year should be undertaken by the same ad hoc group of officials under Cabinet Office chairmanship; that sales from the stockpile in 1987/88 should be undertaken only insofar as industry has meanwhile increased its stocks of each of the more vulnerable minerals; and that any sales from the stockpile in that year and thereafter should be subject to agreement by Ministers collectively in consultation with her. The Prime Minister continues to take the view that we must retain stocks of vulnerable minerals.

I am sending copies of this letter to the Private Secretaries to members of OD, the Secretaries of State for Energy, the Environment and Employment and to Sir Robert Armstrong.

Yours sincerely,
[Handwritten signature]

(C.D. POWELL)

Timothy Walker, Esq.,
Department of Trade and Industry.

PUP 17/11 PPE in.



CH/EXCHEQUER	
REC.	24 OCT 1986 ✓ 20/10
ACTION	MR J W STEVENS
COPIES TO	CST FST
	SIR P MIDDLETON
	SIR G LITTLE
	MR FER BUTLER
	MR MOUNTFIELD
	MR BURMEE
	MR TURNBULL
	MR WALLER

Foreign and Commonwealth Office

London SW1A 2AH

24 October 1986

Papered please
~~BIF with advice~~

Dear Charles,

Stockpile of strategic minerals

The Foreign Secretary has seen Mr Mallaby's minute of 18 September on the report of the ad hoc Cabinet Office group, and also subsequent correspondence including minutes by the Secretary of State for Trade and Industry (of 25 September) and the Chancellor (of 15 October), ending with your letter to Timothy Walker of 20 October.

Sir Geoffrey would like to comment on the Chancellor's suggestion that the attitude of the South African government is such as to enable further sales from the stockpile to be contemplated in 1987/88 without damage to our interests. Sir Geoffrey does not believe that the industrial and political arguments for retaining the stockpile are affected by the South African government's recent paper on mineral policy. The South African government would not scruple to use some sort of ban on strategic minerals supplies to counter any measures imposed on them, if it thought there would be advantage in so doing. Indeed, the South African paper concedes that 'mineral strategies cannot be viewed in isolation', and that national interests may conflict with demands of the mineral industry. The South Africans have also recently made public threats (how seriously, we do not know; but they have made them) to limit shipments of imported grain through South African ports. This hardly demonstrates a commitment to free trade in all

/circumstances



circumstances. Given all the uncertainties in southern Africa, we should await the review next spring before deciding how seriously to take the South African Government's public commitment to free trade in minerals.

I am copying this letter to the Private Secretaries of members of OD, the Secretaries of State for Energy, Environment and Employment, and to Trevor Woolley.

Your own

Robert (unclear)

(R N Culshaw)
Private Secretary

C D Powell Esq
No 10 Downing St

CH/EXCHEQUER	
REC.	18 MAY 1987 ✓ 285
ACTION	MR J STEVENS
COPIES TO	CST FST SIR P MIDDLETON SIR G LITTLE MR FER BUTLER MR MOUNTFIELD MR BURNER MR TURNBULL MR WALLER

CONFIDENTIAL

18/8/87

B.0178

SECRETARY OF STATE FOR TRADE AND INDUSTRY

STRATEGIC MINERALS STOCKPILE

In your minute of 25 September 1986 to the Prime Minister, commenting on the report of the Ad Hoc Group of officials submitted under cover of my minute of 18 September, you proposed a further review by April this year, to take into account developments in South Africa as well as the extent to which industry's stocks of vulnerable materials had increased. You said that you expected the outcome to make possible further sales from the stockpile, and that you would budget for receipts from stockpile sales of £13 million in 1987/88. Mr Powell, in his letter of 20 October to your Private Secretary, recorded the Prime Minister's agreement to a further review and her comment that sales from the stockpile in 1987/88 should be undertaken only in so far as industry had meanwhile increased its stocks of each of the more vulnerable materials and that any sales should be subject to agreement by Ministers collectively in consultation with her.

2. The Ad Hoc Group has completed its further review. I attach its report. The conclusions are summarised on the first two pages. The Group recommends only two changes in the stock levels agreed last autumn for the more vulnerable materials. In each case, this is because of a significant increase in the stocks held by industry. Sales of our stocks of vulnerable materials that

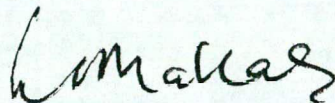
CONFIDENTIAL

exceed the levels that the Group recommends; and of stocks of less vulnerable materials which still remain in the stockpile, should realise approximately the £13.2 million allowed for in the DTI's Supply Estimate for 1987/88.

3. I have discussed with your officials whether the report need be submitted to Ministers before the Election. There are commercial advantages to be gained from an early decision. It would enable materials to be offered to potential purchasers in time for inclusion in the decisions which they will be taking early in the third quarter of 1987. If the programme of sales is delayed, the chances of completing it in the current financial year will be reduced, and there could be difficulties of the kind experienced in 1986/87 (paragraph 2.2 of the report).

4. I accordingly recommend that the sales proposed in the attached report should be agreed in correspondence.

5. I am sending copies of this minute and the report to the other members of OD, to the Secretaries of State for Energy, the Environment and Employment and to Sir Robert Armstrong.



C L G Mallaby

Cabinet Office
18 May 1987

CONFIDENTIAL

SECOND REPORT OF THE AD HOC GROUP OF OFFICIALS ON THE STRATEGIC MINERAL STOCKPILE

1. Summary and Conclusions

1.1 The Ad Hoc Group was established in 1986 to give collective consideration to the size and composition of the Government's strategic mineral stockpile. It reported in September 1986 and its recommendations concerning the less vulnerable materials were accepted by Ministers, on the basis that a further review of the future of the more vulnerable materials would take place in March 1987. The Group's conclusions following this further review are as follows.

1.2 In terms of current rates of consumption the stocks of the more vulnerable materials which the Group recommends should be maintained are set out below, with the levels agreed in September 1986 in brackets:

i. Chromium metal	3 months (unchanged)
ii. Charge chrome	3 months (4.5 months)
iii. HC ferro chrome	3 months (3.75 months)
iv. LC ferro chrome	6 months (unchanged)
v. Manganese metal	5 months (unchanged)
vi. Ferro vanadium	6 months (unchanged)
vii. Vanadium aluminium	6 months (unchanged)

This means selling the following materials which, at February 1987 market prices and £/US\$ exchange rate, were valued as shown.

1.5 months' supply of charge chrome	£2.4m	
0.75 months' supply of HC ferro chrome	£0.4m	
excess stocks of HC ferro chrome	£0.4m	
excess stocks of LC ferro chrome	£1.2m	
excess stocks of ferro vanadium	£0.7m}	see para
excess stocks of vanadium aluminium	£0.1m}	1.4
	£5.2m	

1.3 The recommendations take account of any increases that have taken place in the level of stocks maintained by industry (see Table 1), together with any changes in the assessment of the UK's dependence on South Africa and vulnerability to the disruption of supply of materials. The proposals reflect significant increases in industry's stocks of charge chrome [+4 months] and high carbon ferro chrome [+2.5 months]. For the remainder of the more vulnerable materials it is recommended that the target for stocks should remain unchanged. A further factor is that consumption of both high and low carbon ferro chrome has declined, resulting in stocks in excess of the levels set in September 1986.

1.4 Excess stocks of materials above the recommended target may be disposed of, subject to a final assessment during 1987 of the

effect on vanadium supplies of any fall in South African steel production following the imposition of EC sanctions, and any other relevant developments. Officials recommend that the Secretary of State for Trade and Industry should write to colleagues informing them of the outcome.

1.5 DTI should continue to monitor changes in the level of private sector stocks and to encourage industry to build up stock levels of the more vulnerable materials.

1.6 DTI should aim to complete during 1987/8 the work in progress on policy on the allocation of stockpile materials to users in an emergency.

Financial implications

1.7 The Group's principal concern in reaching its recommendations on the size of the stockpile has been with the strategic considerations. The Group recognises, however, the expenditure implications of maintaining the stockpile, and the need in its management to take account of current public expenditure plans.

1.8 At February 1987 prices and £/US\$ exchange rate £1 = \$1.51, the value of the stockpile materials was £28.6m, comprising less vulnerable materials valued at £8.2m and more vulnerable materials valued at £20.3m. On the assumption that the less vulnerable materials (£8.2m) together with the more vulnerable materials shown above (£5.2m) are disposed of in 1987/8, total receipts would be close to the £13.2m receipts provided for in DTI's Supply Estimate.

1.9 Movements in prices or exchange rates, the effect of EC sanctions affecting vanadium or other circumstances may result in receipts of less than £13.2m from these disposals. We have concluded that, in view of the importance attached to achieving this level of receipts, it would be appropriate for DTI to pursue with the British Steel Corporation (BSC) an arrangement under which the Corporation would purchase stocks of charge chrome and/or ferro vanadium, as explained in paras 6.3 and 6.7. In principle the Treasury see no objection to such sales on the understanding that they could be met within the BSC's external financing limit, but expect to be consulted bilaterally if such disposals need to be undertaken. If this course proves impracticable, DTI should review the circumstances of the remaining materials to establish whether other disposals consistent with existing policy could be made to achieve the total receipts required. Other Departments should be consulted if this step is found to be necessary.

2. Background

2.1 A review of the future size and composition of the strategic stockpile was undertaken in 1986 at the request of the Prime Minister. The recommendation that the less vulnerable materials should be sold in 1986/7 was accepted. It was agreed that a further review was to be undertaken of the more vulnerable materials and

effect on vanadium supplies of any fall in South African steel production following the imposition of EC sanctions, and any other relevant developments. Officials recommend that the Secretary of State for Trade and Industry should write to colleagues informing them of the outcome.

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2. Background

2.1 A review of the future size and composition of the strategic stockpile was undertaken in 1986 at the request of the Prime Minister. The recommendation that the less vulnerable materials should be sold in 1986/7 was accepted. It was agreed that a further review was to be undertaken of the more vulnerable materials and

that sales in 1987/8 were to be subject to agreement by Ministers collectively in consultation with the Prime Minister and were to be undertaken only in so far as industry had meanwhile increased its stocks. The Prime Minister continued to take the view that we must retain stocks of the more vulnerable materials. As a result of this review the DTI's planned disposal of £20m from the stockpile in 1986/7 was reduced to £11m.

2.2 Of these planned disposals of £11m in 1986/7, only £4m was realised. This was a consequence of a number of factors, including the timing of the invitation to tender which took place after industry had completed its purchases for the first half of 1987.

2.3 The shortfall in DTI receipts from disposals resulting from the Ministerial decisions and the progress of sales in 1986/7 was made up by Supplementary Estimates, and was therefore part of the DTI's net claim on the Reserve. The Chief Secretary has made it clear that, when the stocks are eventually sold the proceeds should return to the Reserve, and not be available to DTI to fund increases in its programme. The timing of the return of such funds to the Reserve will be for discussion between the DTI and the Treasury.

2.4 During 1986/7 additional stocks of manganese metal were purchased as agreed by Ministers.

3. Political situation in South Africa

3.1 Under the state of emergency, the South African Government has introduced harsh measures of repression to reduce the level of unrest. But the underlying causes of discontent remain. Black frustration is likely to continue to fuel domestic instability and international concern, and pressure for economic sanctions is likely to persist with varying intensity. The political risks which led to the establishment of the strategic stockpile remain high and are unlikely to abate in the foreseeable future.

4. Stockpile policy in other countries

4.1 All major Western industrialised countries are highly dependent on South Africa for supplies of strategic minerals. Amongst those countries which maintain a Government stockpile, including the USA, France and Japan, there has been no evidence of a change in policy since 1986 which has resulted in any significant adjustment to the level of stocks of the strategic minerals dealt with in this paper.

5. General assessment

5.1 South Africa remains the primary source of supply of most of the more vulnerable materials because of the size of its reserves, and the price and quality of the materials. The mineral exports of other Southern African producers, notably Zimbabwe, go through South Africa. This situation is unlikely to change in the foreseeable

future, barring a disruption of supplies from or through South Africa.

5.2 There has been little or no discernible effect on the price and availability of the more vulnerable materials (chromium, vanadium, manganese metal) from developments in South Africa over the last two years. There is evidence of a general oversupply of materials resulting from aggressive sales promotion by South African producers.

5.3 No significant change has taken place since the 1986 review in the assessment of our dependence on Southern Africa for the more vulnerable materials, and our vulnerability to disruption of supplies. There has been some increase in reliance on South Africa for low carbon ferro chrome and vanadium, and some lessening in the case of charge chrome and high carbon ferro chrome.

5.4 The Government has a strategic interest in retaining a limited stockpile, given the continuing threat posed by instability in South Africa, which needs to be balanced against public expenditure considerations. A Government stockpile enables some influence to be exercised over the maintenance of production of goods of strategic significance which is dependent on the continuing availability of more vulnerable materials. As envisaged in our previous report, the DTI is carrying forward work on allocation policy in the event of disruption of supplies, and hopes to complete this during 1987/8.

5.5 DTI has continued to encourage industry to increase its stocks. There has been a significant response since August 1986. This appears to be a recognition of industry's direct interest in ensuring access to adequate supplies, given the risks to the continuity of South African exports. It has taken place notwithstanding industry's view that the level of UK interest rates renders it more costly to finance stocks here than elsewhere. The durability of the increase in the face of commercial financial pressures remains to be seen.

6. Individual minerals

6.1 Changes in the level of Government-held and industry stocks since August 1986 are summarised in Table 1. On the basis of this information, together with any change in our assessment of the UK's dependence on South Africa and vulnerability to disruption of supply since the 1986 review, the Ad Hoc Group's detailed conclusions are as follows.

6.2 Chromium metal There is no change in the 1986 assessment. Private sector stocks at 15 months' supply (held mostly in the primary form of chemical chrome) are slightly smaller than at the time of the 1986 review when it was recommended that the stockpile should be reduced from 6 to 3 months' supply. A compensating increase of 0.5 months' supply in the stockpile would offset this at

a cost of £0.1m, but is not considered necessary given the substantial stocks held by industry. Although these provide for exports and other uses, eg chemical processing, it may reasonably be assumed that all available stocks could be used for conversion into chromium metal for UK requirements in an emergency, thereby extending the life of the UK's stocks over several years. The Government's stocks should therefore remain unchanged at 3 months' supply.

6.3 Charge chrome There has been a slight lessening of the UK's dependence on South Africa which, taken together with an increase in industry's stocks of 4 months' supply which it is anticipated will be sustained, enables stocks to be reduced to 3 months' supply. There is also the possibility that some or all of the remaining stocks could be purchased by the BSC, for whose direct needs the stocks are held, as a permanent addition to its strategic stocks. The disposal would not, therefore, adversely affect the overall strategic position. The BSC has indicated that any such action would have to be consistent with its external financing limit for 1987/8.

6.4 High carbon ferro chrome South Africa has ceased to be a supplier to the UK but this has increased our dependence on Zimbabwe which is reliant on South African transportation for its exports. In addition there has been an increase in industry's stocks of 2.5 months' supply which is expected to be maintained. There is also a long term decline taking place in the UK's rate of consumption which has resulted in a surplus of 0.75 months' supply which can also be disposed of.

6.5 Low carbon ferro chrome South Africa has emerged as a significant direct supplier to the UK, in addition to the reliance of our major supplier, Zimbabwe, on South African transportation for its exports. It is not therefore appropriate to reduce stocks below the 6 months' level established by the 1986 review. Given the longer term decline in UK consumption which has increased the coverage of the stockpile from 6 to 7.75 months' supply since 1986, together with the increase in industry's stocks equivalent to 2.5 months' supply, the surplus of 1.75 months' supply can be sold.

6.6 Manganese metal 2 months' additional stocks were purchased in 1986/7 on the recommendation of the 1986 review. The position remains essentially as in 1986 and stocks should therefore be maintained unchanged at 5 months' supply.

6.7 Ferro vanadium The UK's dependence on South African supplies has increased, as has industry's consumption. It is not considered advisable to reduce the stockpile below the planned level of 6 months' supply established by the 1986 review. Moreover, the surplus of 2 months' supply currently held above the 6 months' level should not be disposed of until the DTI is able to ascertain the effect of EC sanctions on the import of South African steel on vanadium supplies, given that vanadium is mainly produced as a by-product of steel production. There is also the possibility that

this material could be purchased by the BSC on the basis indicated for charge chrome (para 6.3 above).

6.8 Vanadium aluminium The position remains as in 1986 and stocks should be maintained at the level of the 6 months' target established by the 1986 review. Disposal of the surplus 2-3 months' supply should be subject to the same proviso as that governing ferro vanadium.

May 1987

TABLE 1

STOCKS OF THE MORE VULNERABLE STRATEGIC MINERALS

MORE VULNERABLE MATERIALS	GOVERNMENT STOCKPILE				INDUSTRY'S STOCKS	
	(1) Aug 1986 Months' use	(2) Recommended by 1986 Review Months' use	(3) Current Position (Feb 1987) Months' use	(4) Revised Targets (April 1987 review) (Months' use)	(1) Current Position (Feb 1987) Months' use	(2) Change Since August 1986 Months' use
1 Chrome Metal (equivalent)	6.0	3.0	3.0	3.0	15	-
2 Charge Chrome	4.5	4.5	4.5	3.0	6	+4
3 HC Ferro Chrome	3.75	3.75	4.5	3.0	4	+2.5
4 LC Ferro Chrome	6.0	6.0	7.75	6.0	4	+2.5
5 Manganese Metal	3.0	5.0	5.0	5.0	3	+2.0
6 Ferro Vanadium	10.0	6.0	8.0	6.0	2	+0.5
7 Vanadium Aluminium	8-9	6.0	8-9	6.0	3	+1.5

CONFIDENTIAL



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

b/f with advise

CH/EXCHEQUER	
REC.	20 MAY 1987 <i>20/5</i>
ACTION	MR J STEVENS
COPIES TO	CST FST
	SIR P MIDDLETON
	SIR G LITTLE
	MR F ER BUTLER
	MR MOUNTFIELD
MR BURGNER	
MR TURNBULL	
MR WALLER	

The Rt Hon Paul Channon
Secretary of State for Trade & Industry
1 Victoria Street
LONDON
SW1H 0ET

20 May 1987

STRATEGIC MINERALS STOCKPILE

I am writing in response to Mr Mallaby's minute to you of 18 May covering a report by the Ad Hoc Group of officials.

As you know, my principal concern is with chromium metal, which has important applications in the nuclear power industry. I therefore welcome the statement in paragraph 6.2 of the report that, in an emergency, the life of industrial stocks of this material to meet this and other UK strategic requirements could be extended over several years. I understand that this could be brought about by invoking the powers of direction available to you under the Supply Powers Act 1975.

On this basis, I would not wish to press for the option of increasing the Government stock of chromium metal by one sixth to compensate for the (3 months') reduction in industrial stocks since last year. I am content with the arguments in the report for the further disposals of other materials it proposes, and welcome your Department's aim to complete in 1987-88 work on stock allocation policy in an emergency.

I am copying this letter to members of OD, to Nicholas Ridley, David Young, Sir Robert Armstrong and to Mr Mallaby.

PETER WALKER

CONFIDENTIAL

CONFIDENTIAL

FROM: J W STEVENS

DATE: 27 May 1987

1. MR. WALLER *28/5 ch*
 2. CHANCELLOR

cc Chief Secretary
 Financial Secretary
 Sir P Middleton
 Sir G Littler
 Mr F E R Butler
 Mr Burgner
 Mr Mountfield
 Mr Turnbull
 Mr Moore
 Mr Colman

Letter to issue?

*DK
28/5*

OK

STRATEGIC MINERALS STOCKPILE

below
 Christopher Mallaby's minute of 18 May covers the second report of the Cabinet Office Ad Hoc Group on the strategic minerals stockpile. This further review was commissioned last October when Ministers decided to suspend plan sales from the stockpile of certain minerals on which the UK is heavily dependant on South Africa for supplies. The latest report concludes that some further (small) disposals can now be made.

Background

The stockpile was set up in 1982-83 in response to the deteriorating political situation in South Africa. In 1985 DTI Ministers decided unilaterally that it should be sold in order to fund additional spending on areas to which they attach high priority. Receipts from the disposal of the stockpile were included in the DTI programme for the 3 years 1985-86 to 1987-88. The increasing value of the stockpile enabled Mr Channon to offer further savings in 1987-88 partly to offset his additional bids in the 1986 Survey.

Following a discussion on South Africa in OD last July, sales from the stockpile were suspended and an Inter-departmental Group was set up under Cabinet Office Chairmanship to review the disposals programme. The Group's report in September 1986 recommended that where UK supplies of particular minerals were vulnerable to disruption, planned disposal should remain suspended, but that the planned disposal of those minerals which were less vulnerable to disruption should proceed. Ministers endorsed the Group's recommendations and agreed that a further review should be undertaken in April. In recording the Prime Minister's endorsement of the Group's recommendations her Private Secretary made clear in his letter of 20 October 1986 her view that further disposal should only be made

if the level of stocks held by industry increased.

Disposals Programme

Prior to Ministers considering the Ad Hoc Group's report in October 1986, receipts from disposals of mineral stocks were expected to be £20 million in 1986-87 and £13 million in 1987-88. The decision to suspend sales of vulnerable materials meant that it was not possible to achieve the target for 1986-87 and it was scaled down from £20 million to £11 million. However, market conditions prevented the completion of this scaled down programme and in the event only £4 million was realised ie a shortfall of about £17 million. This was made good by a claim on the Reserve. The value of the mineral stockpile is about £28 million comprising £20 million vulnerable materials and £8 million less vulnerable materials.

The Group's Report

The full recommendations of the Group's report are summarised on pages one and two. The Group concluded - mainly on advice from the Foreign Office - that there has been no underlying change in the political situation in South Africa. Against this background the Group has reviewed the strategic factors which have a bearing on our attitude towards the stockpile and identified changes which have taken place in recent months. There are two main changes: first in the case of Charge Chrome and HC Ferro Chrome, the level of industry stocks had increased, enabling further sales to be made from the stockpile; second, for some minerals reduced industrial consumption make possible small disposals from the stockpile, while maintaining the same level of protection.

The Group proposes that disposal of the less vulnerable materials left over from last year worth some £8 million should now proceed and that the further sales of vulnerable materials valued in total at £5.2 million set out in paragraph 1.2 of the report should also go ahead. This would produce total receipts of approximately £13 million in 1987-88, in line with this year's DTI Estimate.

The report also recommends that DTI should follow up the possible sale of the stock of Charge Chrome worth some £5 million to the BSC on whose behalf it is held. DTI's objective in pressing this route is to ensure that they have the means of generating sufficient receipts to achieve their £13 million target if other factors, eg market conditions, exchange rates etc. prevent them from doing this through the disposals recommended by the Group. This arrangement would not add to public expenditure, except to the extent that we might otherwise be

able to press DTI to cover any shortfall by savings on their cash limited Vote - see below. We have indicated that we have no objection to the sale in principle, but that any arrangement must be accommodated within the BSC's EFL and that we would need to be consulted before the disposal took place.

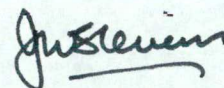
Treasury Issues

There are two issues here. Firstly the Chief Secretary made it clear when he approved the Supplementary Estimates last year that when the minerals were eventually sold the proceeds should return to the Reserve. We had argued in the Group that, since the Reserve made good the loss of £17 million receipts in 1986-87, it should have first claim on any receipts in 1987-88. DTI argue that the issue should have been raised in the context of the 1987-88 estimates discussion and that the loss of receipts would seriously disrupt their programme. There is something in the DTI argument, though we did not know about the increased 1986-87 shortfall until late in this year's Estimates negotiations. Moreover tactics on this also have to be considered against the outlook for DTI expenditure. DTI programmes are likely to be overspent because of increases on regional assistance (including the cost of reducing the waiting period on RDG2 from 4 to 2 months). On balance, therefore, we suggest you do not press the issue.

The other issue is the need to maintain the pressure for stockpile disposals. Other departments in the Group eg. MOD, FCO etc. have no wish to see the stockpile go and as DTI will not secure the benefit of further disposals they have no interest in pressing this. One possible approach is to present this as a Treasury option in the 1987 Survey. For ^{the} a moment, however, we suggest you simply raise a marker with colleagues.

Conclusion

We recommend that you should accept the recommendations of the Ad Hoc Group subject to the points mentioned above. A draft minute reflecting this is attached.



J W STEVENS

LETTER

~~DRAFT MINUTE~~ FROM THE CHANCELLOR

TO: The Secretary of Trade and Industry

cc Members of OD
 Secretary of State for Energy,
 Environment and Employment
 Sir R Armstrong

P1 type for
 Ch's sig

I have seen a copy of Mr Mallaby's minute to you of 18 May covering the report of the further review of the strategic minerals stockpile which has been carried out by the Ad Hoc Group.

2. I agree that we should press ahead with the disposals proposed in the report, including the £8 million of less vulnerable materials originally planned for disposal in 1986-87. As you know planned disposals intended to raise £20 million in 1986-87 were not achieved, partly because of decisions following the first report of the Ad Hoc Group and partly because of market conditions. In all, receipts of less than £4 million were achieved and the resulting shortfall was made good as part of your net claim on the Reserve. In approving the Winter Supplementaries John MacGregor made it clear (in this letter of 3 November 1986) that when these minerals were eventually sold the proceeds should return to the Reserve and not be available to fund increases on your programme. Certainly any proceeds from disposals over and above the £13 million included in your Estimates for 1987-88 must, therefore return to the Reserve.

As I made ^{clear} in my minute of 15 October 1986 to the Prime Minister, I am sceptical about the arguments for retaining the stockpile. The people who will be affected by any disruption of supplies of strategic minerals are the users, and since the stockpile is held for industrial rather than defence purposes it is for industry to decide on the right level of stocks and to bear the cost accordingly. It is, therefore important to keep the question of future disposals under regular review and I therefore suggest that the Inter-departmental Group be asked to report again in time for the 1988-89 Estimate discussions.

I am copying this letter to members of OD, Peter Walker, Nicholas Ridley and David Young, and to Sir Robert Armstrong.

N — L



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DEPARTMENT OF TRADE AND INDUSTRY
1-19 VICTORIA STREET
LONDON SW1H 0ET
Telephone (Direct dialling) 01-215 5422
GTN 215)
(Switchboard) 01-215 7877

Secretary of State for Trade and Industry

PS/

CONFIDENTIAL

28 May 1987

David Norgrove Esq
Private Secretary to the
Prime Minister
10 Downing Street
LONDON
SW1A 2AA

CH/EXCHEQUER	
REC.	17 JUN 1987
ACTION	Mr J Stevens
COPIES TO	EST FST Sir P Middleton Sir G Huttler Mr FER Butler Mr Mansfield Mr Budgee Mr Turnbull Mr Waller

Dear David

STRATEGIC MINERAL STOCKPILE

My Secretary of State has seen the recommendations of the Ad Hoc Group in the report on the stockpile forwarded under cover of Mr Mallaby's minute of 19 May.

He is content with the proposals for selective partial disposals from the stocks of the more vulnerable materials. The proposals are in keeping with the views expressed by the Prime Minister last October. He is also content with the contingency arrangements identified in the event of sales not yielding the receipts provided for in the Estimates.

He has considered whether, in view of the dissolution of Parliament, it would be right to authorize the proposed disposals. There are operational implications for DTI of leaving the matter over, as explained in paragraph 3 of Mr Mallaby's minute. It also seems unlikely that a future Administration, looking at both the strategic issues and financial implications, would reach different conclusions. He has concluded that officials should be authorized to put in hand the disposals envisaged in the report for 1987/88 and to follow up stockpile matters in the manner outlined in the report. Any subsequent disposals which may become appropriate should be agreed inter-departmentally outside the Ad Hoc Group.

In view of the continuing political risks affecting South Africa and the modest level (3-6 months' supply) at which the stocks of the more vulnerable materials are being maintained, it is

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unnecessary to plan for any further review of the size and composition of the stockpile.

This letter seeks agreement to proceed on this basis.

I am copying this letter to the Private Secretaries to members of OD, the Secretaries of State for Energy, Environment and Employment and Sir Robert Armstrong and to Mr Mallaby.

*Yours
Paul*

PAUL STEEPLES
Private Secretary



FST
 Sir P Middleton
 Sir G Littler
 Mr F E R Butler
 Mr Burgner
 Mr Mountfield
 Mr Turnbull
 Mr Moore
 Mr Colman
 Mr Waller
 Mr Stevens

Treasury Chambers, Parliament Street, SW1P 3AG
 01-270 3000

29 May 1987

The Rt. Hon. Paul Channon MP
 Secretary of State for Trade and Industry

Dear Secretary of State

I have seen a copy of Mr Mallaby's minute to you of 18 May covering the report of the further review of the strategic minerals stockpile which has been carried out by the Ad Hoc Group.

I agree that we should press ahead with the disposals proposed in the report, including the £8 million of less vulnerable materials originally planned for disposal in 1986-87. As you know planned disposals intended to raise £20 million in 1986-87 were not achieved, partly because of decisions following the first report of the Ad Hoc Group and partly because of market conditions. In all, receipts of less than £4 million were achieved and the resulting shortfall was made good as part of your net claim on the Reserve. In approving the Winter Supplementaries John MacGregor made it clear (in his letter of 3 November 1986) that when these minerals were eventually sold the proceeds should return to the Reserve and not be available to fund increases on your programme. Certainly any proceeds from disposals over and above the £13 million included in your Estimates for 1987-88 must, therefore, return to the Reserve.

As I made clear in my minute of 15 October 1986 to the Prime Minister, I am sceptical about the arguments for retaining the stockpile. The people who will be affected by any disruption of supplies of strategic minerals are the users, and since the stockpile is held for industrial rather than defence purposes it is for industry to decide on the right level of stocks and to bear the cost accordingly. It is therefore important to keep the question of future disposals under regular review and I suggest therefore that the Inter-departmental Group be asked to report again in time for the 1988-89 Estimate discussions.

I am copying this letter to members of OD, Peter Walker, Nicholas Ridley and David Young, and to Sir Robert Armstrong.

Yours sincerely

pp NIGEL LAWSON

(approved by the Chancellor
 and signed in his absence)

CONFIDENTIAL



10 DOWNING STREET
LONDON SW1A 2AA

From the Private Secretary

2 June 1987

with pps for ...

✓ ✓

18

EQUER	
2 - JUN 1987	
✓	J STEVENS
	CST FST
	Sir P Middleton
	Sir G. Butler Mr KER Butler
	Mr Mansfield
	Mr Burgess Mr Turnbull Mr Waller

Dear Paul

STRATEGIC MINERAL STOCKPILE

The Prime Minister has seen your letter of 28 May to David Norgrove, and Mr. Mallaby's submission of 18 May on the subject of the strategic mineral stockpile.

She has commented that she would prefer to wait until after the election before officials are authorised to put in hand the disposals envisaged in the report.

I am copying this letter to the Private Secretaries to members of OD, Geoff Dart (Department of Energy), Robin Young (Department of the Environment), John Turner (Department of Employment), Trevor Woolley (Cabinet Office) and Mr. Mallaby.

Zee
Andy

P A BEARPARK

Paul Steeples, Esq.,
Department of Trade and Industry



DEPARTMENT OF TRADE AND INDUSTRY

1-19 VICTORIA STREET

LONDON SW1H 0ET

Telephone (Direct dialling) 01-215 5422

GTN 215

(Switchboard) 01-215 7877

Secretary of State for Trade and Industry

RS

3 June 1987

Geoffrey Dart, Esq
Private Secretary to the
Secretary of State for Energy
Department of Energy
Thames House South
Millbank
LONDON
SW1P 4QJ

CH/EXCHEQUER	
REC.	03 JUN 1987
ACTION	Mr Stevens
	CST FST
	Sir P Middleton
	Sir G Kitter
	Mr FER Butler
	Mr Mowfield
	Mr Bugner
	Mr Turnbull
	Mr Waller

Dear Geoff

STRATEGIC MINERAL STOCKPILE

My Secretary of State has asked me to write to you about Mr Walker's letter of 20 May concerning the report of the review by the Ad Hoc Group of officials on the future of the strategic stockpile forwarded under cover of Mr Mallaby's minute of 18 May.

You will have seen a copy of my letter of 28 May to David Norgrove endorsing the report's recommendations and seeking urgent agreement to their implementation. My Secretary of State notes that in general Mr Walker is content with the report's recommendations.

My Secretary of State also notes the importance which Mr Walker attaches this Department completing the work that it initiated last year on the recommendation of the Ad Hoc Group on formulating policy on the allocation of stockpile materials in the event of a disruption of supply. The work is being carried forward urgently and encompasses detailed consideration on the possible measures that could be required, and on the legal basis for implementing such measures including the Supply Powers Act 1975. It is intended that this work will cover options such as possible restraints on the export of strategic minerals, and controls on their

JF3BCE



distribution within the United Kingdom. He expects to report the outcome of these considerations to colleagues during 1987/88.

I am copying this letter to the Private Secretaries to the members of OD, Nicholas Ridley, David Young, Sir Robert Armstrong and to Mr Mallaby.

Yours

Paul Steeples

PAUL STEEPLES
Private Secretary

JF3BCE

RD



MINISTRY OF DEFENCE
 MAIN BUILDING WHITEHALL LONDON SW1
 Telephone 01-930 7022

MO 6/1L

3rd June 1987

CH/EXCHEQUER	
REC.	04 JUN 1987 ✓ 4/6
ACTION	MR STEVENS
COPIES TO	CST FST
	SIR P MIDDLETON
	SIR G LITTLE
	MR FER BUTLER
	MR MOUNTFIELD
	MR BURNER
	MR TURNBULL
	MR WALLER

Dear Michael,

STRATEGIC MINERALS STOCKPILE

I believe that the Defence Secretary would be content to endorse the recommendations of the report forwarded to your Secretary of State by Mr Mallaby on 18th May. He would wish to be consulted over proposals to dispose of any further stocks of strategic minerals.

I am sending copies of this letter to the Private Secretaries to other members of OD, Geoff Dart (Department of Energy), Robin Young (Department of the Environment) John Turner (Department of Employment), and to Mr Mallaby and Trevor Woolley in the Cabinet Office.

[Handwritten signature]
[Handwritten signature]
 (I/C F ANDREWS)
 Private Secretary

Michael Gilbertson Esq
 Department of Trade and Industry

received here on 9/7



CH/EXCHEQUER 4/7	
REC.	07 JUL 1987
TO	MR STEVENS
	CST FST
	SIR P MIDDLETON
	SIR G. LITTLE
	MR FER BUTLER
	MR MOUNTFIELD
	MR BURGINER
	MR TURNBULL
	MR WALLER

TO:

PRIME MINISTER

FROM:

KENNETH CLARKE

7 July 1987

STRATEGIC MINERAL STOCKPILE

1 I have seen the report of the Group of officials circulated by Mr Mallaby (Cabinet Office) on 18 May, and the ensuing correspondence.

2 There was general agreement to the proposals in the report for selective partial disposals in 1987/88 of stocks of some of the "more vulnerable" materials. These disposals are based on significant increases in the stocks held by industry and are consistent with your views recorded in your Private Secretary's letter of 20 October 1986. Following on from your Private Secretary's letter of 2 June, I now seek your agreement for officials to proceed with these disposals and confirm that my Department will be following up other stockpile matters in the manner outlined in the report.



3 Looking beyond 1987/88 we see no reason to expect the South African situation or industry's stocks to improve rapidly. A further review later this year in connection with the current PES round, as proposed by Nigel Lawson, seems difficult to justify on present indications, but I would have no objection to such a review if there were any signs of significant change in the situation. Any further review would need to be undertaken on an inter-departmental basis, without necessarily reconvening the Ad Hoc Group.

4 I am copying this minute to members of OD, the Secretaries of State for Energy, the Environment and Employment, and to Sir Robert Armstrong and Mr Mallaby.

A handwritten signature in black ink, appearing to be 'K. Clarke', written in a cursive style.

KENNETH CLARKE



EXCHANGED 8/7	
DATE	03 JUL 1987
TO	MR STEVENS CST FST SIR P. MIDDLETON SIR G. LITTLE MR F. R. BUTLER MR MOUNTFIELD MR BURGNER MR TURNBULL MR WALLER

10 DOWNING STREET
LONDON SW1A 2AA

From the Private Secretary

8 July 1987

See Peter

STRATEGIC MINERAL STOCKPILE

The Prime Minister has seen the Chancellor of the Duchy of Lancaster's minute of 7 July seeking authority to proceed with disposals from the Strategic Mineral Stockpile. The Prime Minister is content for these disposals to be made on the basis previously agreed. She would like to be kept regularly in touch with plans for any subsequent disposals.

I am copying this letter to the Private Secretaries to members of OD, the Private Secretaries to the Secretaries of State for Energy, the Environment and Employment and the Private Secretary to Sir Robert Armstrong.

*you search.
Chris Powell*

(C. D. POWELL)

Peter Smith, Esq.,
Office of the Chancellor of the Duchy of
Lancaster

CONFIDENTIAL

FROM: J W STEVENS

DATE: 15 July 1987

1. MR WALLER *15/7*
2. CHANCELLOR

cc. Chief Secretary
Financial Secretary
Sir P Middleton
Sir G Littler
Mr F E R Butler
Mr Mountfield
Mr Burgner
Mr Turnbull

OK

STRATEGIC MINERAL STOCKPILE

1. The Chancellor of the Duchy's minute of 7 July to the Prime Minister seeks agreement to proceed with certain minor disposals from the strategic mineral stockpile recommended by the Ad Hoc Group of officials before the election.

Background

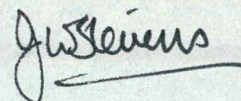
2. The Ad Hoc Group reported for the second time in May and recommended that disposals amounting to £13 million should be made in the current financial year in line with the provision for receipts from stockpile sales in the DTI Estimates. Your minute of 25 May recorded your agreement to the disposals proceeding, but you also proposed that there should be a further review in order to identify further potential disposals in time for the 1988-89 Estimates. In the event the Prime Minister decided that a decision on the disposals should not be taken until after the Election.

Current Position

3. In his latest minute Mr Clarke seeks agreement to proceed with disposals but expresses doubts about whether a further review later this year is justified unless there is a significant change in either the South African situation or industry stocks. These proposals received the Prime Minister's agreement (Private Secretary letter of 8 July) before Mr Clarke's minute arrived here.

Conclusion

4. Although not committed to formal review now, Mr Clarke's formulation is sufficiently flexible to accomodate a further examination of the stockpile should events dictate. We will keep a close watch on this at official level. We therefore see no need for you to comment.

A handwritten signature in cursive script, reading "J W Stevens", with a horizontal line underneath the name.

J W STEVENS

CONFIDENTIAL

20



FROM: CATHY RYDING

DATE: 20 July 1987

MR J W STEVENS

cc: CST

FST.

Sir P Middleton

Sir G Littler

Mr F E R Butler

Mr Mountfield

Mr Burgner

Mr Turnbull

Mr Waller

STRATEGIC MINERAL STOCKPILE

The Chancellor was grateful for your minute of 15 July and agrees that there is no need for him to comment.

CR

CATHY RYDING



No action required.

Prop

H/EXCHEQUER	
REC.	28 JUL 1987 ✓ 28/7
ACTION	MR J STEVENS
COPIES TO	CST FST
	SIR P. MIDDLETON
	SIR G LITTLE
	MR FER BUTLER
	MR MOUNTFIELD
	MR BURGNER
	MR TURNBULL
	MR LALLER.

TO:
PRIME MINISTER

FROM:
KENNETH CLARKE

28 July 1987

STRATEGIC MINERAL STOCKPILE

1 You asked to be kept informed of plans for the disposal of the more vulnerable materials in the strategic mineral stockpile.

2 The report of the Group of Officials circulated in May proposed the disposal of excess stocks of vanadium above the recommended target. This was subject to a final assessment of the effect on vanadium supplies of any fall in South African steel production following the imposition of EC sanctions, and any other relevant developments.

3 We are satisfied having consulted the major UK industrial users that any knock-on effects from the EC ban imposed in September 1986 would have become evident by now.



Furthermore, the prevailing view is that the EC ban has in practice had no discernible effect on vanadium supplies which remain freely available. We have no reason to expect the position to change in the foreseeable future.

4 In the circumstances I intend to authorise officials to implement the agreed recommendation to dispose of stocks of vanadium in excess of the 6 months' target.

5 I am copying this minute to members of OD, Secretaries of State for Energy, the Environment and Employment, and to Sir Robert Armstrong.

A handwritten signature in black ink, appearing to be the initials 'L' followed by a flourish.

K C

CONFIDENTIAL

PP3 P1

FROM: D T COGGLE
DATE: 29 July 1987

- MW*
29/7
1. MR WALLER
 2. PS/CHANCELLOR

cc PS/Chief Secretary
PS/Financial Secretary
Sir P Middleton
Sir G Littler
Mr F E R Butler
Mr Mountfield
Mr Burgner
Mr Turnbull

STRATEGIC MINERAL STOCKPILE

As requested by the Prime Minister, in a Private Secretary letter dated 8 July, the Chancellor of the Duchy of Lancaster is informing colleagues of the proposed disposal of excess stocks of vanadium.

2. In his letter dated 28 July the Chancellor of the Duchy says that, as recommended by the ad-hoc group in its May 1987 report, a final assessment has been made of the effect on vanadium supplies following EC sanctions against South Africa and the effect on South African steel production. This shows that the EC ban has had no discernible effect on vanadium supplies which remain freely available. He will, therefore, authorise officials to implement the agreed recommendation to dispose of stocks in excess of the six month target.

3. As this letter was sent for the information of colleagues there is no action for the Chancellor to take.

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10 DOWNING STREET
LONDON SW1A 2AA

CH/EXCHEQUER	
REC.	30 JUL 1987
ACTION	MR STEVENS
COPIES TO	CST FST SIR P MIDDLETON SIR A. LITTLER MR FER BUTLER MR MOUNTFIELD MR BURNER MR TURNBULL MR WALLER.

From the Private Secretary

29 July 1987

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Dear Peter.

STRATEGIC MINERAL STOCKPILE

The Prime Minister has seen the Chancellor of the Duchy's minute of 28 July about the disposal of excess stocks of vanadium in the strategic mineral stockpile. She agrees with the action proposed.

I am sending copies of this letter to the Private Secretaries to the members of OD, to the Private Secretaries to the Secretaries of State for Energy, Environment and Employment, and to the Private Secretary to Sir Robert Armstrong.

Yours sincerely,
Charles Powell

CHARLES POWELL

Peter Smith, Esq.,
Office of the Chancellor of the Duchy of Lancaster.

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