

## THE COUNCIL,

Having regard to Article 5(b) of the Convention on the Organisation for Economic Co-operation and Development of 14th December 1960;

Having regard to the Report and Conclusions of the Joint ad hoc Group on Air Pollution from Fuel Combustion in Stationary Sources [OECD Paris 1973];

Having regard to the Decision of the Council of 18th April 1972 concerning a Co-operative Technical Programme to Measure the Long-Range Transport of Air Pollutants [Doc. No. C(72)13(Final)];

Having regard to the Resolution of the Council of 20th and 24th October 1972 concerning an Overall Programme on Long-Term Energy Policies and Related Questions [Cf. C/M(72)28 Part II (Final), Item 253];

Having regard to the Recommendation of the Council of 26th May 1972 on Guiding Principles concerning International Economic Aspects of Environmental Policies [Doc. No. C(72)128];

Considering the large number of possible methods to control air pollution from stationary sources, such as use of high efficiency particulate arrestment equipment, desulphurisation before, during and after combustion, the use of tall stacks, plant siting, use of clean fuels in urban areas, and district heating system;

Considering the flexibility of policy permitted by this wide range of appropriate actions, and the relative efficiencies of the various instruments;

Considering the above possibilities for emission control and fuel cleaning, the costs in capital investment and running, and where possible the benefits achieved by reducing pollution;

Considering the implications of the international fuel supply situation;

Recognising that clean fuels include those rendered clean by removal of pollutants as well as naturally clean;

Recognising that States have a responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States.

On the proposal of the Environment Committee;

I. RECOMMENDS that the governments of Member countries should, in respect of stationary emission sources, adopt as environment policy objectives, to be implemented as soon as possible:

- (a) to encourage the use of clean fuels in sources emitting near ground level, especially in urban areas and where emissions occur under unfavourable meteorological conditions;
- (b) to ensure the adequate supply of clean fuels by encouraging the installation, where necessary of desulphurisation facilities at refineries and other appropriate installations;
- (c) to limit the maximum sulphur content of distillate fuels;
- (d) to encourage the confinement of high polluting fuels to large installations equipped with tall chimneys and, where necessary, with advanced particulate arrestment facilities, and/or, whenever appropriate, desulphurisation facilities;
- (e) to encourage the efficient use of fuels.

In taking action on (a) to (e) both the impact on local and regional conditions as well as that on the environment of other States should be taken into consideration.

II. INVITES the Governments of Member countries:

- (a) to inform the Organisation by 1st March 1975 of the action taken pursuant to this Recommendation or the reasons which

have not permitted such action to be taken at this time;

(b) to exchange information regularly, wherever possible, on the following subjects in respect of stationary emission sources.

(i) In the Environment Committee:

- on measures to control emissions of particulate matter and sulphur oxides from low-level sources;
- on limits set on sulphur content of fuels;
- on means for controlling emissions of particulate matter and sulphur oxides from large installations the extent to which such measures are employed and their effectiveness;
- on the application of fuel cleaning processes.

(ii) In the Energy Committee:

- on developments aimed at increasing the efficient use of fossil fuels.

III. NOTES the "Technical Note on Emissions of Sulphur Oxides and Particulate Matter from Fuel Combustion in Stationary Sources" contained in the Annex which constitutes an integral part of this Recommendation.

## ANNEX

### TECHNICAL NOTE ON EMISSIONS OF SULPHUR OXIDES AND PARTICULATE MATTER FROM FUEL COMBUSTION IN STATIONARY SOURCES

#### Policy for Air Pollution Control

1. The study on Air Pollution from Fuel Combustion in Stationary Sources, undertaken jointly by the Air Management Sector Group of the Environment Committee, the Energy Committee and the Oil Committee, gives rise to concern with regard to the air pollution conditions which arise from the continued increase in the use of fossil fuels. Because of the differing circumstances in countries and the future possible changes in technology, flexible policies are needed for the control of air pollution from fuel combustion. It is considered that first policy priority should be directed towards reducing ambient air concentrations in the urban areas where these are not tolerable. The Guidelines for action to reduce emission of sulphur oxides and particulate matter from fuel combustion in stationary sources, as set out in Annex, are directed specifically towards this objective. These Guidelines are

based on action now being taken in many Member countries.

2. It is for each country to decide what conditions are tolerable under the various circumstances pertaining to that country. The responsibility of authorities for the general health and welfare of the population as well as protecting the natural and living environment will be reflected in this decision as to tolerable conditions. The decision will also be political, depending on many circumstances including the costs of control. Each country should calculate for itself the impact of projected emissions on ambient levels of pollutants, especially in urban areas. Each country should also bear in mind the "responsibility of States to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States" (Principle 21, Stockholm Declaration on the Environment).

3. It is stressed that regional and global levels of pollution, including the effects of mass transport of pollution and the long-term build-up of pollution in the upper atmosphere, appears to be important and the question of reducing total emissions will have to be considered. A decision will be taken depending on the results of the OECD Co-operative Technical Programme to Measure the Long Range Transport of Air Pollutants. For the present the application of the most practicable means for reducing all emissions is highly recommended.

#### Implementation of Control Policies for Ground Level Concentrations

4. Ground level concentrations of pollutants can be reduced in a number of different ways, as follows:

- (a) use of clean fuels, such as gas and low sulphur liquid fuels;
- (b) removal of pollutants after combustion and before emission;
- (c) dispersion of pollutants by means of tall stacks;
- (d) more efficient use of fuels.

5. For domestic, commercial and small scale industrial installations emitting near ground level, it is not technically and economically feasible to use tall stacks or remove sulphur oxides after combustion. Particulate arrestment equipment can be applied in some cases. The most effective way of reducing emissions from these small sources is by means of clean fuels.

6. For the large scale industrial sources, besides using clean fuels, it is also practicable to apply advanced particulate arrestment equipment. Some countries also consider it feasible to apply desulphurisation. It is further practicable, under most meteorological conditions after arrestment of particulate matter, to disperse residual emission from large installations by means of properly designed tall stacks. Under unfavourable meteorological conditions, however, use of clean fuels might be the only means of reducing ambient pollution concentrations.

7. Some measures considered appropriate for more efficient use of fuels are as follows:

- (i) combined optimal use of power and heat;
- (ii) use of district heating in certain areas under appropriate climatic conditions;
- (iii) use of high efficiency boilers and regular maintenance of existing boilers;
- (iv) establishment of regulations and higher standards for improved thermal insulation of new buildings.

The general question of efficiency of use of fuels is the subject of a study now being undertaken by the Energy Committee. The present guidelines therefore make no recommendation in this respect.

## Clean Fuels

8. It is stressed that natural clean fuels are in short supply and there is a need to avoid mutual interference in implementation of those air pollution control policies which depend on the availability of clean fuels. Techniques are available for cleaning fuels by removing a portion of the sulphur content. The cost of fuel cleaning varies considerably with the type of fuel and amount of sulphur removed.

## Removal of Pollutants after Combustion

9. Advanced particulate arrestment equipment is readily available and application on a wide scale is regarded as practicable. Desulphurisation processes for stack gases are at the stage of industrial development, but only a few countries consider that they are technically and economically feasible at this time.

## Nitrogen Oxides

10. Besides sulphur oxides and particulate matter, fuel combustion gives rise to considerable emissions of nitrogen oxides. The

Environment Committee, through its Air Management Sector Group, has under investigation the probable future problem of nitrogen oxides, especially in relation to the formation of photochemical air pollution. Since the final results of this study are not yet available, especially with respect to the most effective means of reducing these substances, the proposed guidelines do not cover nitrogen oxides.

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In adopting this Recommendation, the Council:

1. TOOK NOTE of the Note by the Environment Committee of 8th April 1974 concerning the Recommendation [Doc. No. C(74)16(1st Revision)];
2. APPROVED the derestriction of the Recommendation.