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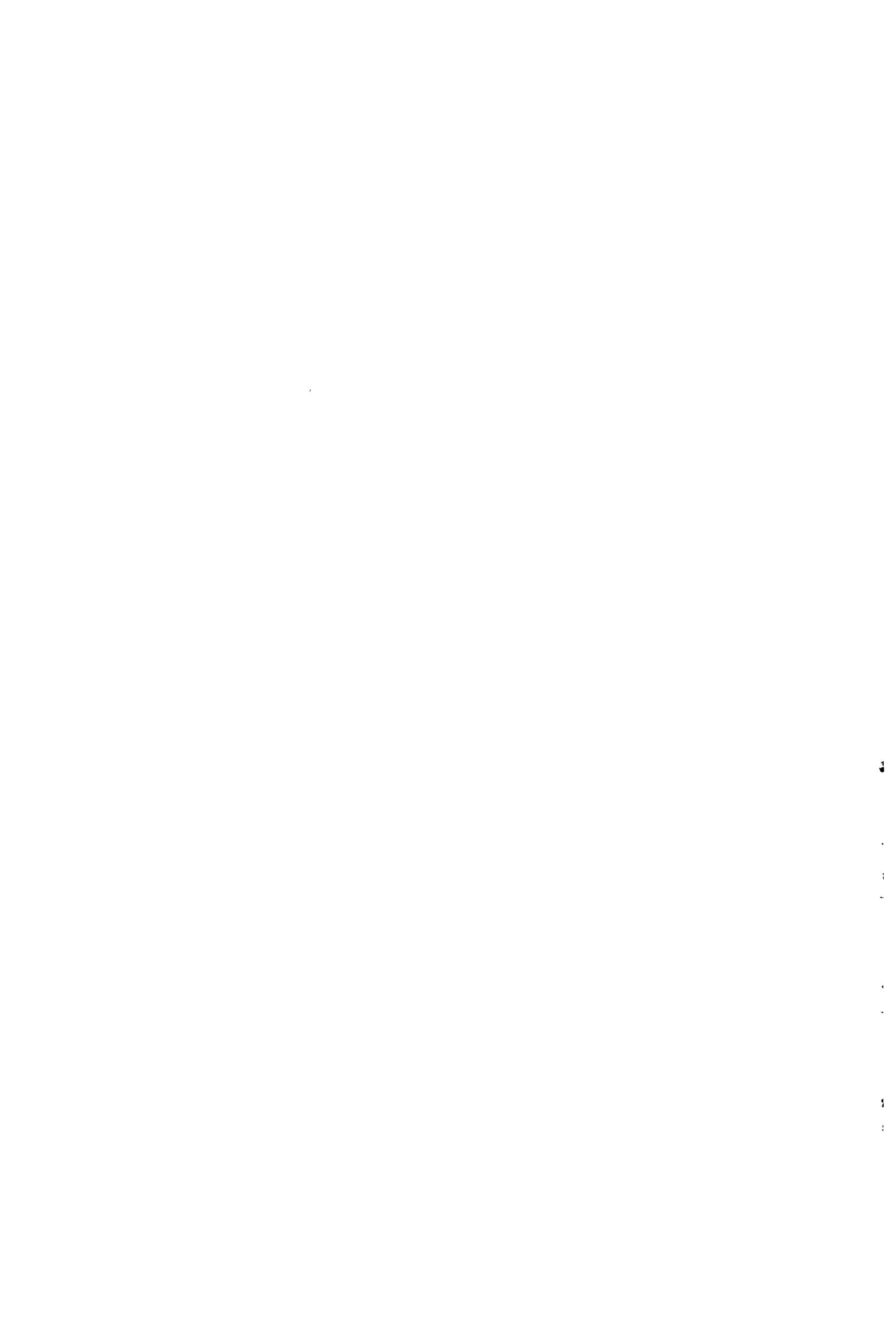
Report

drawn up on behalf of the Committee on the Environment,
Public Health and Consumer Protection

on waste

Rapporteur: Mrs V. SQUARCIALUPI

PE 83.248/fin.



At its sitting of 19 February 1982, the European Parliament referred the motion for a resolution tabled by Mr Muntingh and others on waste (Doc. 1-1056/81) pursuant to Rule 47 of the Rules of Procedure to the Committee on the Environment, Public Health and Consumer Protection.

At its meeting of 23 June 1982 the committee decided to draw up a report and appointed Mrs Squarcialupi rapporteur.

It considered the draft report at its meetings of 2 December 1982, 23 November 1983 and 25 January 1984. At the last-mentioned meeting it decided to include the motion for a resolution by Mrs Van Hemeldonck and others on the tragic accident at Huy on 30 June and the problem of transporting dangerous substances (Doc. 1-631/83) in the report and adopted the motion for a resolution unanimously.

The following took part in the vote: Mr Collins, chairman; Mr Ryan and Mrs Weber, vice-chairmen; Mrs Squarcialupi, rapporteur; Mr Bombard, Mr Ceravolo (deputizing for Mr Spinelli), Mr Forth, Mr Ghergo, Mrs Van Hemeldonck, Mr Muntingh, Mrs Pruvot (deputizing for Mrs Scrivener), Mrs Schleicher, Mrs Seibel-Emmerling and Mrs Spaak.

The report was tabled on 3 February 1984.

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The Committee on the Environment, Public Health and Consumer Protection hereby submits to the European Parliament the following motion for a resolution together with explanatory statement:

MOTION FOR A RESOLUTION

on waste

The European Parliament,

- having regard to the motion for a resolution on waste (Doc. 1-1056/81),
 - having regard to the motion for a resolution on the tragic accident at Huy on 30 June and the problem of transporting dangerous substances (Doc. 1-631/83),
 - having regard to the economic study carried out by the Management Committee for Waste which states inter alia that waste is produced by 350,000 Community undertakings with more than 2,000,000 employees and that waste management contributes between 7 and 9.5% to the gross domestic product,
 - having regard to the report of the Committee on the Environment, Public Health and Consumer Protection (Doc. 1-1376/83),
- A. aware of the danger inherent in the Community's annual production of more than 2,000 million tons of urban, agricultural, animal and industrial waste, the quantity and quality of which pose a series of problems for man and the environment and which, despite the low level of economic growth, are increasing by 3% each year,
- B. whereas the environmental action programmes for 1973, 1977 and 1982 have already raised the problem of waste and the intervention needed,
- C. aware that a Community waste policy is needed in view of the high economic and social cost of waste and its threat to mankind and the environment,

- D. convinced that it is possible to maintain and even improve living standards without squandering more raw materials and energy and without increasing pollution, in fact by reducing or eliminating it in many cases,
 - E. conscious of the fact that the Community could coordinate and improve research into new technologies, exchanges of experience and the circulation of registers of waste products,
 - F. aware that waste contains substances with a high potential value such as metals, glass, rubber and paper and that a Community which is a major importer of raw materials should give urgent attention to the question of recycling since 78 to 90 % of waste is currently destroyed or tipped when it could often be recycled,
1. Believes that waste management and the recycling industries in the European Community could be considered as an important factor in economic recovery since they could create many new jobs, insofar as they are profitable in the case of private undertakings;
 2. Therefore calls on the Commission of the European Communities:
 - (a) to draw up proposals for the acquisition as soon as possible of comparative data, uniform terminology and more precise information on the production of waste, particularly toxic and dangerous waste;
 - (b) to indicate investment requirements in the sector, possible means of financing and research and ways of using more appropriate technologies for recovering waste;
 - (c) to encourage local and regional coordination for instance by creating regional and, possibly, inter-regional registers of waste products, industrial waste exchange agencies and an industrial waste classification service;
 - (d) to devise campaigns to make the general public, producers of waste and workers more aware of the problem, in the interests of a proper management of domestic, industrial and agricultural waste;
 - (e) to carry out a study on how to reduce the production of urban waste;

3. Calls further on the Commission:

- (a) to prepare a multi-annual programme for waste management in the countries of the European Community, supplementing the third Community action programme on the environment and containing provisions which will safeguard and improve the degree of protection for the environment and public health against the dangers caused by waste, and in particular toxic and harmful waste, and at the same time give the greatest possible encouragement by the utilization of the waste obtained as by-products from raw materials and energy sources;
 - (b) to speed up the implementation of the plan for a data bank covering waste and recycling (EWADAT) with a view to bringing the bank into operation at the earliest possible date;
 - (c) to submit to the Council a second multi-annual research and development programme in the field of recycling of urban and industrial waste with a view to:
 - continuing the Community measures following the completion of the first programme for the period 1979-1983 with an extension of the practical measures and an increase in financial endowment;
 - utilizing waste by-products thereby also helping to prevent pollution and the squandering of resources;
4. Stresses the role of local administrations in the more rational management of resources and land with a view to protecting human health and the environment, also as regards the treatment and disposal of waste; stresses particularly the role of large urban centres where waste incineration plants using the most up-to-date techniques can make energy savings possible (district heating and hot water);
5. Calls on the Member States that have not yet conformed to Directive 78/319/EEC of 20 March 1978 on toxic and dangerous waste¹ to do so promptly;

¹ OJ L 84 of 31.3.1978

6. Also calls on the Council of Ministers to adopt as soon as possible the regulation (or directive) on the trans-frontier transport of dangerous waste¹;
7. Welcomes the inclusion in the 1984 budget of three new entries relating to waste management and more specifically to:
 - (a) preventive measures against pollution and the dangers from toxic and harmful waste; evaluation of the dangers to human health and the environment arising from toxic and dangerous waste;
 - (b) actions on the utilization of industrial, urban and agricultural waste, sludge and effluent;
 - (c) the implementation of legal rules on waste management and pollution of the soil;
8. Hopes, in conclusion, that the problem of waste will be solved in particular by the introduction of production cycles and treatment processes that considerably reduce the quantity of waste generated, to which end undertakings will have to be encouraged to adjust their production cycles and treatment processes accordingly;
9. Instructs its President to forward this resolution to the Commission of the European Communities, the Council of Ministers and the governments of the Member States.

¹ OJ C 184 of 11.7.1983, p. 50

EXPLANATORY STATEMENT1. Preliminary considerations

1.1 At first sight, the motion for a resolution seems to address itself to the problems associated with all types of waste (solid urban waste, industrial waste and agricultural waste). But if we consider the specific references (Council Directive of 20 March 1978 relating to toxic and dangerous waste; Copenhagen Conference of March 1981; the concern expressed about the existence of 40 million tonnes of chemical waste; the case of the toxic waste in Lekkerkerk in the Netherlands), we can assume that it would be more appropriate to concentrate our attention on toxic and dangerous waste or, more generally, on the problems of industrial waste.

1.2 However, this approach will make our task all the more complicated because, unlike solid urban waste products which can be grouped into a few well-defined types such as paper, glass, plastics, organic products, scrap metal and inert materials, industrial waste products run into thousands, originate in different sectors and productive cycles and are commonly dangerous.

1.3 In order not to lose sight of the central preoccupation of the motion for a resolution, we shall therefore give fuller consideration to the industrial sector, not least because - as emerged from the convention on 'the recycling and treatment of chemical and industrial waste in Europe' held in Milan in June 1982 under the auspices of the Commission's Directorate-General for the Environment and the Standing Technological Conference of European Local Authorities (STCELA) - the relevant technologies and legislative and organizational instruments have reached a high level of sophistication. Indeed, we have passed beyond the pioneering and experimental stage and are now engaged in the development and assessment of more advanced systems of control, recycling and disposal which could encourage economic activity aimed at raw materials and energy savings, with a consequent reduction in production costs.

2. General problems associated with waste

2.1 The concept of the 'transformation of matter' exists in nature, but not the concept of 'waste'. The processes to which the fundamental constituents of the biosphere are subject have always obeyed the celebrated law 'nothing is created, nothing is destroyed'. Moreover, the earth is not an inexhaustible reservoir of natural resources, nor does it possess a rubbish chute for the disposal of products and by-products regarded as waste.

2.2 It was only after the industrial revolution and when the first conurbations were created that the concept of 'waste' emerged, because the new system of production meant:

- (a) ever increasing specialization of output, in which it was sought to make the most of the principal product - and all the cost-cutting effort was devoted to that end - while the by-products, its environmental impact and the health of the workers making it were neglected;
- (b) in-built obsolescence - i.e. a deliberately planned poor durability of the product and its unsuitability for further use - which is the result of consumerism generated by the need to conquer everwider markets.

2.3 It can thus be said that a waste product is matter to which its owner attaches no value and which he wants to be rid of. But, given the short supply of some resources and the fact that they are not renewable, there is a social cost attached to this - even if the matter concerned is only a by-product of the main production process - which is much higher than the 'economic cost' assigned to that matter at that moment in time.

3. Types of waste produced in the Community

3.1 The MUNTINGH motion for a resolution states that 1,800 million tonnes of waste are produced in the Community every year, that this quantity includes 40 million tonnes of chemical waste, half of which is toxic or dangerous, and that waste production is increasing by 2% to 3% per annum.

3.2 In order to check the reliability of these data, we must add together the figures for waste production in the individual Member States and, more importantly, for the purpose of assessing the types of product constituting the waste, distinguish between the various sectors involved.

From the data available for the ten Member States we arrive at the following breakdown:

Solid urban waste	79 million tonnes per annum
Industrial waste	150 million tonnes per annum
Agricultural and animal waste	1,400 million tonnes per annum
	<hr/>
Total	1,629 million tonnes per annum

3.3 The following conclusions can be drawn from these data:

- (a) agricultural residues, which consist of organic products (plant fibres, animal faeces) and which are relatively innocuous and easily reintegrated into the natural environment, are clearly of overwhelming importance in the final figure (which is only slightly lower than that given in the MUNTINGH document);
- (b) the 150 million tonnes recorded for industrial waste is by far the most disturbing datum not just because of the enormous scale of the wastage involved and the sheer diversity of the products, sectors and production cycles of origin, but also because of the harmfulness to human health and the environment of hundreds of products or mixtures of products;
- (c) much of the waste considered to be toxic or dangerous is produced by the chemicals industry, the electroplating industry, some sections of the metallurgical and mechanical industries (cutting oils, varnishes, etc.) and even purification plants (for industrial sludge);
- (d) the quantity of solid urban waste, which consists of a few types of relatively homogeneous waste (organic residues, paper, plastics, scrap metal, glass), could be substantially reduced by introducing appropriate collection systems.

4. The strategies to be deployed

4.1 Since the production of waste is an intrinsic part of our modern style of development and, in particular, of our production and consumption system, and since the quantities and types of waste produced have reached extremely serious limits, we may legitimately ask whether it is possible to reverse the trend and whether it is possible to maintain a decent standard of living without causing pollution and without squandering resources and energy.

4.2 The answer is in the affirmative, despite the very real difficulties involved. To achieve the desired objective, we need not only more appropriate technologies for the recovery of raw materials and energy in the waste disposal and elimination processes, but also incentives for the use of, and research into, new technologies, as well as local and regional planning to promote new production methods and life-styles.

5. The means of effectively reducing and disposing of solid urban waste

5.1 Refuse tips - whether or not subject to control - contain an assortment of different types of waste (paper, glass, plastics, scrap metal, organic materials, etc.) which totally precludes recycling or the recovery of energy. Tipping is currently used to dispose of 85% of solid urban waste and is a serious menace to human health and the environment. With appropriate controls, however, tips consisting of selected types of waste could be created which could subsequently be re-used or incinerated for the production of energy. In this way, stocks of materials could be built up which, although unusable over a period of time, could in due course be effectively exploited.

5.2 Unlike refuse tips, incineration avoids the accumulation of decomposing materials, the 'consumption' of land as refuse sites and the danger of pollution of surface and ground waters. It also allows the energy contained in the waste - on average greater than 1,000 - 1,100 kcal/kg - to be recovered and used to produce heat and electricity.

The greatest drawback, apart from the final loss of material, is the atmospheric pollution caused by the burning of plastics and chlorine compound (PVC, PCB) which are almost always present in solid urban and industrial

waste. Unless the material is burnt at sufficiently high temperatures (about 1400°C) and unless appropriate (particularly sophisticated) extraction equipment is used, there is a risk of particularly dangerous and harmful substances such as PCB, vinyl chloride, dioxine and their compounds being released into the atmosphere.

5.3 Recycling, on the other hand, is a process that allows waste materials to be put to some further use once they have been separated out. However, the plants used for such separation consume a great deal of energy. Greater efficiency would be achieved if the materials destined for recycling and re-use were sorted and graded beforehand, i.e. at the stage when the waste is actually produced. This more sensible process would call for the cooperation of the public at large and require the collection of waste materials to be organized in a different way.

6. Liquid waste from the domestic sector

6.1 Domestic-based water pollution consists of the end products of the human metabolism, and water used for washing and rinsing dishes, floors and clothes that has a relatively high content of food, scraps, soap and synthetic detergents. Most of the waste products thus consist of organic substances, particularly nitrates and phosphates. Although these substances are not particularly harmful they serve to fertilize the waterbed and, given their quantity and concentration in time and space, represent a real danger to water. It is not by chance that nitrates and phosphates are among the main causes of eutrophication or super-fertilization of bodies of water in the developed countries, from the Great Lakes in Northern America to the Adriatic (the first strike in history against 'red algae' occurred along its northern coast).

6.2 Traditional purification systems

The most pressing problem is thus to reduce the quantity of nutrients contained in water in order to reduce the BOD (biochemical oxygen demand), the quantity of oxygen needed to break down organic substances.

Traditional purification systems (first and second stage purifiers using filters, mechanical sedimentation and organic decomposition by means of aerobia) are not always effective. Their main drawbacks are:

- high energy consumption;
- the rigidity of the purifying system which does not tolerate other substances in sewage, particularly heavy metals that could kill bacteria and prevent the purifier from functioning;
- the creation of a considerable quantity of sludge whose disposal creates further environmental problems (refuse tips, incineration etc.,).

6.3 Other means of reducing domestic water pollution

As regards phosphorus in detergents, the main scientific research commitment is directed towards replacing triphosphates by other substances which, although they guarantee the housewife the same degree of cleanliness, do not entail such high environmental costs. At present, there are three possible alternative products: nitrilo-tri-acetic acid, synthetic zeolite and citric acid, but their effects on health and the environment have still to be determined.

Another solution to which many countries (Sweden, Norway, Finland, Switzerland, the USA, Germany and the Netherlands) have turned is the gradual reduction or partial replacement of the phosphorus percentage depending on the type of detergent and the characteristics of the body of water into which the waste water is discharged. (In Norway, the government has succeeded in banning the advertising of products containing phosphates and has obtained an undertaking from the industry to supply phosphate-free detergents in the area of Lake Mjosa, which is showing signs of eutrophication).

For more general organic substances (nitrates and phosphates) obtained from metabolic activity, special attention is being given to the use of biological systems that depurate and produce biomass (algae, aquatic plants, microbic biomasses with a high protein content).

Some research work and pilot plants have shown the effectiveness of some aquatic plants (particularly beda weed) cultivated in appropriately constructed lagoons fed by sewage which, apart from considerably reducing pollution, allow energy to be recovered (as food or by means of incineration) once they have been gathered and dried.

Moreover, after being analysed and disinfected, sewage can be directly used in cultivated fields but this obviously depends on the composition of the waste, the type of crop and the properties of the soil.

Another possibility is anaerobic (in the absence of oxygen) digestion which combines the sludge left after purification with the organic fraction of solid urban waste and agricultural and animal waste to produce biogas (or methane gas) and fertilizers.

Lastly, in combination with agricultural and animal waste, compost could be obtained for use as a fertilizer.

7. The means of effectively reducing and disposing of industrial waste

7.1 The problem of disposing of industrial waste is more serious and complex because of the sheer quantity of some substances and their danger to man and the natural environment. The high cost involved in properly disposing of industrial waste and the need to reduce the consumption of raw materials call for a thorough review of all stages of the production cycle, from the planning stage to the consumption stage and right up to the point at which materials become waste products.

7.2 Re-use of the waste - which, in effect, is a by-product - is not possible without some knowledge of the entire productive system of the area concerned, whether it be a municipality, a region or the country as a whole. Environmental pollution associated with waste derives from the sectoral nature of modern industrial development: every producer is organized in such a way as to promote and sell the principal product, on a market with which he is well acquainted, while he neglects, misuses and degrades the by-products by dumping them on the environment as waste. The effect of this unsystematic approach is to turn waste into a source of speculation for those in the disposal business who, without being subject to any form of public control, relieve manufacturers of the inconvenience of disposing of their waste, while operating in a manner which usually poses a threat to the environment and the health of the population and excludes the possibility of recovering raw materials or energy.

7.3 In every productive cycle the chemical composition and properties of all types of manufacturing waste should be known and each type precisely named for the purposes of identification. Moreover, mixing of the various types of waste produced at the different manufacturing stages should be avoided. The more homogeneous the waste, the easier it will be to re-use it, whether in the same productive cycle or as a raw material for other types of production. The objective must be to create stocks of homogeneous by-products which can be re-used at any time or whenever economic and technological conditions are such that they can be used effectively. Thus the advantage of building up stocks of homogeneous waste materials lies in the fact that they will not lose their actual or potential value.

7.4 Solving the problems involved can also be facilitated by changes to the productive cycles and the manufacturing processes. Indeed, it has often been found possible to make a by-product usable by modifying the processes involved in the manufacture of the principal product. In some cases, this will result in a marked increase in the overall output of the productive system.

7.5 For the purpose of managing a process as complex as the re-use of industrial by-products, it will be necessary to develop an information network at regional, national and Community level which would guarantee an adequate exchange of information and knowledge and increasingly effective public control, so that resources could be recovered and the environment and human health properly protected. One of the essential features of such a network would be the maintenance of a waste register similar to that introduced by the Region of Lombardy in Italy.

7.6 Liquid industrial waste

While the above applies to both solid and liquid industrial waste, it must be pointed out that industrial water pollution involves much more complex and diversified mechanisms than does domestic pollution. Naturally, there are industries whose waste waters contain large quantities of organic substances similar to domestic sewage. Food industries (jam factories, distilleries, breweries, sugar refineries, dairies, slaughter houses, dressed pork factories and meat or fish canning factories etc.,) and farms fall into this category.

There are however sectors (textiles, chemicals, leather, paper, metallurgical, electroplating) whose liquid waste contains an enormous quantity of toxic or at least harmful substances whose effect on health, flora and fauna may become apparent much later or much further away and whose seriousness cannot yet be assessed. The list of pollutants and possible solutions would require an appropriate publication that would not only assemble general data but venture as far as analysing in detail individual productive cycles.

For instance, a papermill that manufactures only one ton of paper a day creates as much pollution as 4,000 or 12,000 inhabitants depending on the manufacturing processes used. Effluents from canneries contain chromium, lime and sulphides, all substances which even if highly diluted, seriously damage the environment. Not to mention the chemical, pharmaceutical, petro-chemical, pesticides, plastics, detergents and synthetic soap industries.

7.7 Some techniques for purification and preventing pollution have brought to light the possibility of protecting the environment and saving resources and energy. For instance, it is possible to :

- recover solvents from the organic synthesis industry,
- recover hydrochloric acid from the production of chlorinated solvents
- extract phenols from reflux waters
- regenerate sulphuric acid from the production of monomers
- recover mercury from electrolytic and catalytic sludge
- extract sulphuric acid, iron, titanium and heavy metals from 'red mud'
- recover silver from the argentiferous sludge produced by photo-sensitive materials
- use varnish sediment
- use varnishes with a high solid content
- recover heavy metals from galvanic baths
- recover acids and metallic compounds from pickling baths
- reuse used oils as energy
- replace oil quenching by water quenching
- recover laminating oils
- separate heavy metals from water used in processing leather
- reduce and recover water used in medium and high temperature industrial processing
- recover sugar from the processing water used in the confectionery industry
- treat moulds from yeast factories to produce feedingstuffs and fertilizers.

7.8 The list could cover hundreds of other sectors and industries but the main problem now is to establish what incentives there can be for launching an effective waste recovery policy and for properly managing waste. There are four possibilities:

- creating mixed consortiums (public and private) for the construction and management of plants to purify, pre-treat, collect and distribute recovered waste
- intersectoral exchanges of recovered waste
- modifying production plants which, while maintaining production capacity, would reduce the quantity of waste substances
- abolishing taxation on the combustion of recovered oils to produce energy (electricity + heat).

8. The means of effectively reducing and disposing of agricultural waste

8.1 The agricultural and livestock sector is characterized by an enormous production of organic residues resulting from structural changes in agricultural production and stock farming: intensive cultivation, single-crop farming, industrial cattle-breeding.

8.2 A particularly significant contribution towards improving the environmental and energy situation of our agri-foodstuffs system could come from measures aimed at the 'decongestion' of the areas with the highest concentration of animal farming establishments and agricultural processing industries. However, much could be done now to reduce the scale of the problems involved which would be of undoubted benefit to the environment and to the energy sector. For instance, steps could be taken to:

- determine the nature and the properties of the different residues;
- site the centres where the residues are produced;
- evaluate the technical and economic contribution that could be made to the recovery processes;
- establish a market for products (energy resources, protein substances, fertilizers) recovered from the residues.

8.3 Recovery for use as fertilizers

Apart from preventing water pollution, the recycling of animal faeces for use as fertilizers would halt the depletion of organic substances from the soil. Italian agriculture for instance uses the equivalent of 16 billion kcal/year of chemical fertilizers but does not use - or disposes incorrectly of - the energy equivalent of almost 21 billion kcal/year of nutrients present in animal faeces.

Modern stock-farming technologies do not allow for efficient recovery (solutions highly diluted in water used to clean stalls are discharged into rivers). If water consumption were reduced until dry cleaning techniques were adopted, sewage could be put to better and more economic agronomic use, and more economically stored in the winter months when no fertilization is possible.

Other waste that can be restored to the soil includes waste from grain crops (straw etc.,) provided no more advantageous use can be found for it as food or energy. Another possibility is composting with the organic breakdown of solid and liquid urban waste.

8.4 Anaerobic digestion

Animal sewage and vegetable waste lend themselves to methane fermentation to produce biogas, reduce pollution and recover fertilizers. In view of the high cost to plants and their management, the production of biogas by cooperatives is to be recommended. Use could then be made of more advanced production techniques and techniques for processing biological gas and full control and compliance with internal safety standards and external environmental protection standards would be guaranteed.

8.5 Waste as a source of protein

For some time waste silage has become common in the USA and some European countries. Straw and maize stalks are put in silos along with fermentable materials such as animal faeces or distiller's wash to obtain feedingstuffs of

considerable value. Various wastes from the food industry (protein flour from butchers' scraps, pea and tomato haulms, beet tops etc.,) have for some time been recovered by the feedingstuffs industry. In many countries, dried chicken droppings are recycled into feedingstuffs for ruminants.

An activity that has developed alongside the processing of milk in cheese factories is pig breeding, which uses that industry's main waste product, whey. If waste is to be used for feeding purposes an accurate public control system will be needed to ensure that the various products do not harm the health of people who eat the meat produced in this way.

9. Community directives, national laws and standards

9.1 The purpose of Directive 75/442/EEC of 15 July 1975 is to introduce more extensive rules for the protection of the environment, while preventing disparities in the costs borne by users for the disposal of waste products.

9.2 The principles of this Directive are as follows:

- (a) in the disposal of waste, maximum recovery must be guaranteed with a view to conserving natural resources;
- (b) the cost of disposing of waste, less any proceeds deriving from the treatment of waste, must be apportioned in accordance with the 'polluter pays' principle;
- (c) undertakings which collect, transport, store, deposit and dispose of waste must obtain proper authorization.

9.3 The Directive enjoins the Member States to standardize their legislation by June 1977. Yet in Italy, for example, it was only in September 1982 that the provisions of the Directive were assimilated by government decree into national law.

9.4 Following decentralization, responsibility for the treatment of waste passed to the regions. The Region of Lombardy, which was the first to introduce a systematic law on waste, was the subject of the convention on the

recycling of industrial waste which was held in Milan last June under the auspices of the Commission of the European Communities and the Standing Technological Conference of European local authorities (STCELA). Based in London, STCELA aims to promote cooperation between European local authorities, so that their interests might be better served by modern technology, and to establish a dialogue between local government and European industry with a view to encouraging industrial innovation.

9.5 The legislation introduced by the Region of Lombardy lays down precise specifications for waste disposal plants, defines the requisite control structures and spells out the procedures to be followed for obtaining the various types of authorization. It also covers the setting up of an information network, establishes the most suitable technical means for recovering the by-products of the manufacturing process and provides for:

- (a) the keeping of a register of waste products or by-products;
- (b) the keeping of a card-index of specific waste products to ensure that the properties, origin and possible destinations of industrial waste and, in particular, of toxic and dangerous waste are at all times known.

The Region of Lombardy's legislation also offers incentives to undertakings which consume fewer raw materials and less energy than others for the same output.

10. The industrial waste exchange agencies

10.1 The control and re-use of by-products are also facilitated by the industrial waste exchange agencies, which have attracted the interest of the Community and which were first created and developed in almost all the industrialized countries of Europe in 1970.

10.2 The main function of these agencies is to collect, classify and publish requests to buy and offers to sell the waste products of industrial processing. Transactions are administered by the chambers of commerce or by the manufacturers' associations, as the case may be. The aim of the agencies is not only to facilitate the buying and selling of manufacturing waste, but

also to stimulate supply and demand. Indeed, it has been the practice in Germany for offers of certain by-products to be published even while the establishments concerned are trying to determine whether a market for those by-products actually exists.

10.3 An information and industrial waste classification service should be created to collect data from regional level through to Community level and to analyse the data collected by sector or by area on the basis of recovery and recycling criteria.

10.4 Such a service would be particularly valuable as far as toxic and dangerous waste is concerned. At Community level, this waste is subject to the provisions of Directive 78/319/EEC of 20 March 1978, which was originally intended to implement the Directive of 15 July 1975. In the course of consultations with Member States' experts, however, it assumed the form of an additional outline directive on toxic and dangerous waste, although its field of application was restricted to a range of substances and materials listed in a special annex.

10.5 This directive on toxic and dangerous waste must be supplemented to include the results of the work accomplished by the Commission with the assistance of national experts on 'priority measures' and 'additional problems', which involve:

- (a) the accompanying identification documents specified in Article 14 (2) of the directive: 'When toxic and dangerous waste is transported in the course of disposal it shall be accompanied by an identification form.....'; this rule should be applied with particular rigour where such waste is transported across frontiers, as frequently happens, for example, between the Netherlands and neighbouring countries;
- (b) examination of documentation recommending the safety standards to be met with a view to avoiding risks or accidents and indicating the behaviour of products while in motion, and revision of labelling as appropriate;
- (c) supervision and management of the final repository of waste materials and formulation of technical standards for the planning of disposal operations;

- (d) general and specific problems relating to transport;
- (e) consideration of the advisability of setting concentration limits for the substances listed in the annex to the directive;
- (f) proposing technical guidelines for the re-use or the safe disposal of particular types of waste (organic-halogen compounds, used solvents, residues resulting from the electroplating process, arsenic);
- (g) research and development projects and, in particular, compilation of an inventory of projects already completed or in progress in the Member States and at Community level and identification of those still needing to be undertaken.

10.6 The second part of the Commission programme in the sphere of toxic and dangerous waste should cover the following:

- (a) completion of the list of substances annexed to the directive;
- (b) exchange of information and knowledge concerning centralized treatment plants;
- (c) wrapping and packaging (positioning of containers, decontamination, destruction of worn containers);
- (d) insurance and civil liability;
- (e) re-use of secondary raw materials;
- (f) replacement of materials and new procedures;
- (g) incineration of waste to produce energy;
- (h) chemical, physical and biological methods of treatment.

11. Role of the local administrations

11.1 The final question that arises may be put as follows: 'Who, in such a serious economic situation and in the face of a problem as difficult as the treatment of waste, can and must take the necessary steps to encourage an ever more rational use of resources and the land with a view to protecting human health and the environment?'

11.2 The Milan convention demonstrated that, with their ability to plan waste disposal and treatment operations on the spot and to arrange meetings between the public and private organizations involved, the local administrations are in the best position to promote the kind of measures considered in this document. These administrations, however, are not yet in a position to intervene independently in operations so closely bound up with the chemicals industry or in the marketing of recycled by-products which are subject to the laws of supply and demand.

11.3 Meetings between public and private associations have the advantage of reconciling the economic interests which are the prime concern of the private operator with the interests of the environment, which the public authorities are able to safeguard through the control they exercise over the methods and systems used.

11.4 This new approach has been dictated by the need to provide the maximum protection for the environment against the toxic effects of waste and, at the same time, by the need to recover as many by-products as possible and, where no other option exists, to convert them into heat and energy.

12. Questions to the Commission

12.1 To what extent have the Member States adapted their legislation to Directive 74/442/EEC of 15 July 1975 and Directive 78/319/EEC of 20 March 1978?

12.2 Would it be possible to supplement the directive on toxic and dangerous waste on the basis of the 'priority measures' and the 'additional problems' enumerated in paragraphs 9.5. and 9.6. of this working document?

12.3 How much research into new technologies for the disposal and elimination of waste has so far been carried out at Community level? Have coordinated programmes been introduced for research into new technologies for the recovery of raw materials and energy?

12.4 Would a European register of waste products be of any value? Could the creation of an information service for the classification of industrial waste be considered at Community level? *

12.5 What future programmes is the Commission preparing in association with STCELA?

MOTION FOR A RESOLUTION (DOCUMENT 1-1056/81)

tabled by Mr MUNTINGH, Mr COLLINS, Mrs SEIBEL-EMMERLING, Mrs A. KROUWEL-VLAM, Mrs B. WEBER

on behalf of the Socialist Group

pursuant to Rule 47 of the Rules of Procedure

on waste

The European Parliament,

- aware of the fact that 1,800 million tonnes of waste are produced in the Community every year,
- aware of the fact that waste production is increasing by 2% to 3% every year,
- aware of the fact that this quantity includes 40 million tonnes of chemical waste, half of which can be qualified as toxic or dangerous,
- concluding that this situation may present serious dangers for the population and the natural environment, as shown by the numerous cases of toxic pollution which have come to light recently,
- having regard to the Council Directive of 20 March 1978 relating to toxic and dangerous waste (78/319/EEC), Article 4 of which requires the Member States to take appropriate measures to prevent the production of waste and to encourage recycling, reprocessing, re-use and reclamation of raw materials,
- aware of the conclusions reached by experts attending the Conference on Chemical Waste organized by the Commission in Copenhagen in March 1981 concerning the pronounced tendency to develop storage rather than re-processing facilities,

- aware of the fact that in France and Germany roughly 60% of waste and in the United Kingdom as much as 90% of waste is disposed of on land,
- whereas the lack of adequate reprocessing capacities encourages legal and illegal transfrontier transport of waste - particularly from the Netherlands to neighbouring countries and the North Sea - with all the attendant risks,
- concluding that the broad package of possible measures contained in the aforementioned directive has been implemented in a very one-sided manner, resulting in the development of storage facilities rather than in increased recycling, reprocessing and re-use,
- concluding that if waste continues to be stored, the dangers for the population and the environment will subsist,
- concluding that storage can lead to unnecessarily high land restoration costs as in the case of the toxic waste in Lekkerkerk in the Netherlands, where dumping of the waste was opted for in order to save the few thousand guilders that it would have cost to treat it; apart from the inconvenience involved, the cost of repairing the damage has already reached 200 million guilders,
- whereas the waste produced every year contains raw materials potentially worth 10,000 million EUA and 70% to 80% of these raw materials are dumped in unprocessed form; and whereas consequently an opportunity to reduce the Community's raw material import bill by between 5,000 million and 7,000 million EUA is lost,
- concluding that the present trend in waste disposal policy is towards large-scale wastage of scarce energy supplies and finite raw materials,

request the Commission :

1. to draw up supplementary proposals such as to prevent the production of waste and to encourage recycling, reprocessing, re-use and reclamation of raw materials;
2. to organize, in preparation for these proposals and as a matter of priority, the conference on the reprocessing of waste which it was agreed in Copenhagen should be held before the end of 1981.

MOTION FOR A RESOLUTION (DOCUMENT 1-631/83)

tabled by Mrs VAN HEMELDONCK, Mrs WEBER and Mrs LIZIN

pursuant to Rule 47 of the Rules of Procedure

on the tragic accident at Huy on 30 June and the
problem of transporting dangerous substances

The European Parliament,

- A - aware of the tragic accident at Huy on Thursday, 30 June in which there were 3 fatalities including one girl burnt alive,
- B - whereas the lorry involved in the accident was carrying toxic substances (acids) in drums which were insufficiently strong, barely secured and did not withstand the initial impact,
- C - having regard to its resolution of 8 June 1983 requesting a proposal for a resolution on the transport of dangerous substances and products and in particular the annex detailing safety markings,
 - 1. Emphasizes the urgent need for a European regulation on the transport of toxic substances;
 - 2. Instructs its competent committee to investigate the circumstances of this accident.