ANNEX 1

Conclusions and Recommendations of the Consultation on Priority Problems in Toxic Chemicals Control in Europe Baden, 3-6 November 1980

CONCLUSIONS

1. The Consultation stressed the importance of international cooperation in dealing with priority problems in toxic chemicals control in Europe. The European component of IPCS was considered the appropriate vehicle for achieving pan-European collaboration in this field.

2. The objectives of the regional programme on toxic chemicals control were considered to be highly relevant to the perceived priority problems in Europe, and the foreseen outputs and activities to be appropriate for the creation of a framework of regional cooperation in dealing with these problems.

3. It was felt that the priority problems identified by the Consultation were relevant to European countries, including the less developed ones, and that full participation of these countries in the regional programme would be essential for its success. The Consultation noted with satisfaction the current support of UNDP for this purpose and welcomed the prospects for continuation and extension of this support.

4. The Consultation noted with satisfaction the donations made by certain countries for the European component of IPCS and expressed the hope that the number of countries making voluntary contributions would increase in the future.

5. The Consultation identified priority problems requiring urgent consideration and attention by the governments and national institutions concerned, IPCS and other organizations, as listed in the recommendations below.

6. The Consultation noted with satisfaction the coordination of the European component of the global work of IPCS and the cooperation achieved with a number of intergovernmental organizations, and expressed its hope

that the cooperative effort would be further broadened and strengthened.

7. The Consultation noted with approval the recommendation of the IPCS technical committee that the Regional Office be entrusted with global responsibility for elements of the programme.

RECOMMENDATIONS

Governments and National Institutions

1. The European governments and national institutions are invited to extend full cooperation and assistance to the regional programme on toxic chemicals control, by making available the outputs of their current and future work on matters related to the programme and by making available, to the extent compatible with national priorities, the services of their experts.

2. In planning relevant national, sectorial and institutional activities, an effort should be made to relate them, to the extent possible, to the objectives and activities of the regional programme in order to maximize the synergistic effect of pooled resources.

WHO Regional Office for Europe

1. The environmental impact assessment (EIA) component of the regional programme, including development of methodologies for comprehensive assessment of all relevant environmental factors and their interaction, should receive priority. Environmental monitoring and epidemiological studies designed to verify the assessments should be included in the programme. Specifically, EIA studies of aluminium, copper and dyestuffs industries should be undertaken.

2. Promotion of emergency response systems should receive high priority, covering aspects such as focal points, rosters of experts, and adequate training for dealing with emergency situations arising from production, storage, distribution and use of toxic chemicals, including pesticides and their wastes.

3. Toxic wastes management should become an integral part of the regional programme, including attention to

low-waste technology, recycling and safe disposal practices.

4. The continued development of guidelines and limits for protection of the outdoor and indoor environment and the production of handbooks on various aspects of environmental management should be encouraged. Specifically, guidelines should be developed for:

- performance of epidemiological studies related to occupational exposure to toxic chemical substances;

- reduction of exposure to carcinogenic substances and suspected carcinogenic aromatic amines;

- development of regulatory schemes and control systems relating to consumer products (building materials, paints and glues, floors and other coverings, cosmetics and toys).

5. Methodologies for studies on persistence and environmental pathways of toxic chemicals should be developed. The methodology for evaluation of delayed and long-term toxic effects of low-dose exposure to chemicals and their mixtures, with reference to different biosystems and epidemiological studies, should also be developed and/or improved.

6. Considering the increasing proportion of populations suffering from allergies, hypersensitivities and intolerances, there is a need to instigate studies in this area as a matter of high priority.

7. The manual on drinking-water control, at present being developed by the Regional Office, should include a description of adequate methodology to ensure that toxic chemicals are not present at unacceptable levels in water supplies and are not generated through water treatment processes.

8. Specific studies on risk assessment of heavy metals and toxic chemicals arising from combustion processes, such as polyaromatic hydrocarbons, chlorinated dioxins and dibenzofuran, should be undertaken.

9. Specific studies on interaction between heavy metals, e.g. cadmium, lead and zinc, should be undertaken in conjunction with investigations performed in areas where

combined effects can be expected, e.g. mining, industrial activities and the deposition of wastes, particularly sludges.

10. Internationally comparable monitoring and epidemiological studies on exposure to asbestos, man-made fibres and aromatic amines, chlorophenols, petrochemicals, solvents and heavy metals (Pb, Cd, Cr, Mn, Hg) should be launched as appropriate. Epidemiological evidence on toxicity of groups of chemicals in specific situations or from specific sources, including pesticides, food and feed additives, should be collected.

11. A multimedia environmental and health monitoring study should be conducted in various types of production plants using vinyl chloride. The objective of the study would be to contribute to the harmonization of exposure limits and to improve medical surveillance.

12. The indoor environment should be given adequate attention, including the development of methodologies for assessment of emissions from building materials, paints and glues, floors and other coverings.

13. The training component should include:

- training of research workers in the methodology of toxicological evaluation;

- training in environmental and occupational epidemiology;

- training of personnel involved in occupational and environmental exposure control;

- training in pesticide toxicology;

- training in the analysis of chemical contaminants in the environment and their residues in food.

14. The programme component dealing with the development of arrangements for information exchange and technical cooperation should include the development of a system for rapid exchange of relevant information on toxic chemicals. A system for the rapid dissemination of new information relevant to reassessment of health risks should also be developed.

15. Programmes of information and education of the public and all persons involved in handling toxic chemicals should be developed.

International Programme on Chemical Safety

1. There is a need to improve methodologies for risk assessment, including animal study, extrapolation, modelling and risk-benefit analysis. The effect of interactions of various chemicals should be studied.

2. The following groups of chemicals and single chemicals deserve high priority for health effect evaluation.

Anionic surfactants
Aromatic amines (especially β-naphthylamine)
Inorganic fluorides
Nitroso compounds
Polyaromatic hydrocarbons (PAH)

Acrylonitrile
Arsenic
Benzidine
Beryllium
Cadmium
Chromium
Dioxane
Ethylene oxide
Formaldehyde
Manganese
Nickel
Nitrobenzene
Styrene
Tetrachloroethylene
Tetrachloromethane
Trichlorethylene

3. Steps should be taken to stimulate research necessary for the generation of data where gaps in knowledge have been identified, especially as regards delayed and long-term effects of toxic chemicals, including pesticides and food additives, in order to enable the development of criteria for food, and occupational and environmental safety limits.

4. There is a need to generate data which would facilitate evaluation of pesticides and food additives by relevant expert committees and bodies, and enable them to develop or update health-based exposure limits, acceptable daily intakes, or other measures as appropriate, for a larger number of compounds. Such evaluation should take into account impurities and by-products arising from changes in technology.

ANNEX 2

Conclusions and Recommendations of Working Group on Occupational Profiles in Toxic Chemicals Control

Brussels, 15-19 December 1980

Conclusions

The Group noted the recommendations made by the Consultation on Manpower Development in Toxicology, Copenhagen, 1978 (EURO Reports and Studies, No. 9).

In particular, the Group strongly endorsed the necessity for governments to recognize that toxicology is a specialist subject in its own right, and to create sound career structures for toxicologists.

The Group noted with approval the increasing cooperation between WHO, other United Nations organizations and international organizations such as CEC, CMEA, OECD and the Council of Europe. In particular, the cooperation of CEC in the present meeting had made available valuable additional expertise.

It was agreed that it is important to consider the future development of toxicology and the type of toxicologist that should be developed, recognizing that the current development of toxicology in an ad hoc manner is not satisfactory. Thus, for example, universities should be encouraged to develop degree courses in toxicological sciences, as well as postgraduate training in advanced toxicology.

The Group recognized that, by whatever route the necessary skills and knowledge are acquired, the element of inservice experience is crucial. In all a person would need some three to five years of relevant studies and practice to develop sufficient expertise to be recognized as a toxicologist.

The Group agreed on the following approach:

- description of tasks,
- description of areas of knowledge,
- description of the knowledge required as a function of tasks,

- description of occupations requiring toxicological knowledge.

The following categories of tasks were established:

(1) experimental animal toxicology
(2) experimental phytotoxicology
(3) clinical toxicology
(4) epidemiology
(5) exposure evaluation
(6) risk assessment
(7) advice and consultation
(8) management and training in toxic chemical assessment.

The Group considered each group but paid particular attention to experimental toxicology.

It was concluded that a toxicologist is in effect defined by the tasks he could be expected to perform, in many cases in collaboration with other toxicologists or allied scientists. The concept of the toxicological team was particularly emphasized in the light of the increasing number of scientific disciplines involved in toxicological assessments. The leader of such a team would be a senior toxicologist. The tasks that a toxicologist should be responsible for were established.

The Group strongly endorsed the importance of the role of the senior toxicologist, both in giving advice to governments and in developing toxicological services. Urgent attention should be given to the training and the development of such key scientists.

The Group considered several other professions or occupations for which extensive knowledge of toxicology is required (e.g. occupational health physicians and epidemiologists), and their professional profiles in relation to toxicology.

The great importance of epidemiology and monitoring programmes for the evaluation and risk assessment of toxic chemicals was recognized.

The Group identified a series of other professions where some knowledge of toxicology is desirable and recommended that their profiles in relation to toxicology be developed. It drew up a preliminary list of these professions, recognizing that this could be extended.

Recommendations

1. WHO and other organizations should bring to the attention of governments the urgent need for toxicological expertise, permanent toxicological services and, for all relevant personnel categories, toxicological training programmes.

2. Governments should support the development of degree courses in toxicological sciences at universities and the development of appropriate career structures. It is also important that in the medical profession toxicology be recognized as a specialty. National and international postgraduate training in advanced toxicology should be encouraged.

3. Governments should support and encourage a multidisciplinary approach to toxicological problems and assessments.

4. In consideration of the importance of ecotoxicology in relation to toxic chemicals control and human welfare, urgent attention should be given to developing a list of tasks and occupational profiles for this discipline. Ecotoxicology should be included as an area of study in the development of curricula for training personnel in toxic chemicals control.

5. WHO should give high priority to furthering the programme on manpower training in toxicology, particularly the development of curricula and a survey of institutes in the Region which can provide training in toxicology.

ANNEX 3

Recommendations of the Working Group on Contingency Planning for, and Response to, Emergencies and Accidents involving Potentially Toxic Chemicals

Bilthoven, Netherlands, 9-13 February 1981

1. Governments should be encouraged to develop nationwide comprehensive contingency plans for effective and rapid response to accidents involving the release of potentially toxic chemicals. The plans should cover response at all levels, including the operational level (industrial plants, transport and storage facilities) and the level of local, regional and national government agencies. They should include such key items as definition of responsibilities, lines of communication, access to information, equipment, manpower, etc. These plans should be compatible with contingency plans for other peacetime emergencies, including natural disasters.

2. To assist governments in this task, the WHO Regional Office for Europe should develop and publish a guideline document on model contingency plans for response to accidents and emergencies involving the release of potentially toxic chemicals. The model submitted to the Working Group, after modification and amplification, could serve as a basis for this guideline document.

3. The Regional Office should initiate an activity aimed at chemical accident prevention. A study of past accidents, their causes and the circumstances in which they occurred should serve as a basis for identifying accident-prone processes and situations, thus facilitating the definition and implementation of preventive measures.

4. Since chemical accidents are likely to occur in the future in spite of all the preventive measures that may be taken, the Regional Office should develop guideline documents on the rehabilitation of affected areas, including contaminated groundwater and soil.

5. The effectiveness of the emergency response depends to a large extent on the availability of trained personnel. Training for emergency and accident prevention and response should be included in the manpower development component of the international programme on chemical safety, for which the WHO Regional Office for Europe has global responsibility.

6. National and international information systems containing data on chemicals and their toxicity should be strengthened, linked and geared to provide the relevant information quickly to those responsible for handling emergencies and accidents.

7. To assist the authorities in making the difficult and often crucial decisions on evacuation, WHO should develop guidelines on "emergency tolerance limits" for various chemicals.

ANNEX 4

Conclusions and Recommendations of the Planning Meeting on Monitoring and Epidemiological Studies for Toxic Chemicals Control

Copenhagen, 5-8 May 1981

CONCLUSIONS

1. The Consultation stressed the importance of internationally coordinated monitoring and epidemiological studies on potentially toxic chemicals in the European Region.

2. A number of priority problems in toxic chemicals which were identified at an earlier consultation* were discussed, and outline proposals for monitoring and epidemiological studies were submitted for consideration by WHO.

3. Detailed proposals were developed for internationally coordinated pilot monitoring and epidemiological studies on two classes of chemical problems of current concern in the European region. These proposals are by way of illustration of the types of protocol required for design of pilot studies. The problems chosen do not necessarily represent the most immediate priority for internationally coordinated studies.

RECOMMENDATIONS

The Link Between Monitoring and Epidemiology

1. There is a need for substantial improvement in the compatibility of monitoring data and data produced or used by health information systems and epidemiological studies. This will be facilitated by:

- The preparation of detailed protocols for studies involving both monitoring and epidemiological components;

* Consultation on Priority Problems in Toxic Chemicals Control in Europe, Baden, Austria, 3-6 November 1980.

- the establishment of systems to link health information and environmental monitoring programmes;

- the encouragement of regular contacts, common training activities and cooperative projects for epidemiologists and those involved in monitoring programmes.

Exposure assessment

2. Biological monitoring is a very valuable tool for the assessment of exposure to chemicals. National and international efforts in the European Region should be strengthened to obtain compatible data from biological monitoring programmes and to accelerate development of biological monitoring.

These efforts should build upon the foundations of the UNEP/WHO Pilot Project on Biological Monitoring, with which close links should be ensured.

3. Particularly in cases where direct measurement of exposure through biological monitoring is impracticable, attempts should be made to relate measurements of ambient levels of chemicals in air, water, food or products to actual individual exposures. Pilot projects to elucidate these relationships should be devised, taking due account of existing relevant international monitoring programmes, in particular the UNEP/WHO Pilot Project on the Assessment of Exposure to Air Pollutants, and the Joint FAO/WHO Food and Animal Feed Contamination Monitoring Programme.

4. A systematic evaluation of alternative methods for estimation or measurement of exposure should be undertaken for each chemical selected for study. The evaluation should summarize relevant available knowledge, identify the population groups likely to be at risk, and specify the usage of methods available.

Multiple Pathways and Exposures

5. In cases where present or likely future exposures to a chemical from diverse sources may be of concern, pilot monitoring projects which link exposures to the contributing sources should be undertaken, so that the main sources can be identified, and the critical pathways can be established.

6. In addition to risk evaluations of individual chemicals, population and source related studies should be undertaken in order to determine the nature of exposure to diverse chemicals and the resulting health risks. Pilot monitoring and epidemiological studies of multiple exposures should be carried out.

Development of Epidemiological Methodology

7. There is a need for developing environmental research based on quantitative, experimental and quasi-experimental epidemiological methods. Such research should cover fields including dose or time-distribution of the dose and effect, extrapolation to low doses, multiple exposure analysis, attributable risk assessment, interactions, multiple effects, host susceptibility assessment of efficiency and effectiveness of various environmental protection interventions.

8. There is a need for a better adaptation of epidemiological tools to the specificities of environmental problems. This should lead to the search for the most relevant health parameters, including pre-recorded health statistics (for long-term environmental effects), short-latency effects (e.g. human reproduction); intermediate steps in morbidity processes (e.g. biological monitoring, paraclinical investigation). Efforts should also be made to match the epidemiological methodology used (e.g. clinical, analytical, ecological epidemiology) to the type of monitoring and/or population available.

Sampling, Analysis, Quality Assurance

9. Monitoring and epidemiological procedures for sampling, analysis, data handling and presentation should be standardized, as far as practicable, for those chemicals which have been identified as of priority in the European region.

10. The development of quality assurance procedures resulting from the UNEP/WHO Health Related Pilot Projects should be used as a basis for their more extensive development in the European region, as necessary.

Monitoring networks and epidemiological surveillance

11. In some cases the results of internationally coordinated pilot monitoring and epidemiological studiesmay indicate the need for larger-scale projects or routine national monitoring and epidemiological programmes. Where the chemicals or problems in question are of common interest to a number of countries in the European region, individual national activities should, as far as possible, be designed and coordinated at the international level, and be based on existing capabilities throughout the European region.

Links with Other International Activities and Activities in Other Regions

12. Monitoring and epidemiological programmes carried out in conjunction with WHO Regional Office for Europe should take due account of relevant existing or planned programmes under the auspices of other international organizations, in particular UNEP, CEC, CMEA and OECD. Active cooperation should be established with related programmes of other organizations whenever appropriate.

13. The experience gained and the results of monitoring and epidemiological programmes on chemicals carried out in the European region should be made available to those other regions which are likely to encounter similar problems in the future.

Pesticides

14. More countries in the European Region should be encouraged to participate in the GEMS programme of monitoring pesticide residues in breast milk. In countries which are already participating in this programme, the data should be made available for use in risk assessment as soon as practicable. Furthermore due to the importance of this problem in the European Region, internationally coordinated activities in this field should be launched.

ANNEX 5

Conclusions and Recommendations of the Working Group on Guidelines for the Control of Toxic and Other Hazardous Chemical Waste

Garmisch-Partenkirchen, 17-20 March 1981

Conclusions

1. One of the first requirements for the development of a proper system of hazardous waste management is the availability of good information on the quantities and nature of waste, and on currently used management practices.

2. When considering the problems of managing hazardous waste, attention needs to be given to the impact on health and the environment with respect to both short-term acute and long-term, more insidious, effects such as groundwater pollution.

3. Socioeconomic and political aspects have to be considered within the context of hazardous waste management.

4. Many technologies are currently available for hazardous waste management. A particular technology is usually not appropriate for all wastes. When a waste can be dealt with in several ways, generally the more "powerful" the technology and the lower the residual risk, the higher will be the cost. The appropriate technology in any particular case should be based on the concept of best practicable means. Such methods are not static and may change as technology develops and as society demands. Research and development is required in many domains and should be encouraged.

5. With regard to worker protection, a clear distinction should be made between the "hazardous" waste which poses minimal risk to the workers and that which constitutes a significant risk unless special safety precautions are taken. In general, the precautions should be at least as strong as for the corresponding pure substance unless it can be shown that the risk from the waste is significantly less.

6. Transport of hazardous waste is best controlled in the context of general regulations on the transport of dangerous goods. However, hazardous waste can present additional problems in that it has no positive value to the generator or transporter, its composition may not be precisely known

and mixing of incompatible wastes for convenience in transit may create a hazard.

7. Any national policy for hazardous waste management should be such that hazardous waste will have an acceptable legal treatment or disposal route. If this is not so, then the policy will encourage improper disposal.

8. Hazardous waste management legislation can take many forms, depending on the legal system and other factors in the country. Legislation can be based on environmental discharge standards, environmental quality objectives, and economic incentives and disincentives, or a combination of any of these can be used for the purpose.

9. Hazardous waste management must be based on the premise that the waste generator will be held responsible for selecting licensed contractors capable of safe transport and treatment or disposal of the waste. In some instances, it will be necessary for a waste generator to seek advice outside his own competence in order to discharge this responsibility.

10. Where the legal system of the country permits it, both individuals and corporate bodies employing them shall be accountable for the consequences of any proved ma'practice or negligence within their responsibility in the management of hazardous waste at any point in the life cycle of the waste. Laws should be formulated to permit their prosecution.

11. "Sudden and accidental" insurance coverage for hazardous waste management facilities is commonly available and often required under existing control programmes. Environmental damage insurance is an important but highly specialized measure. Adequate (or unlimited) insurance of the latter type may not be available unless a state insurance scheme is instituted.

Recommendations

1. The UNEP International Register of Potentially Toxic Chemicals and the WHO Regional Office for Europe should jointly produce documentation, including both executive guidelines and a code of good practice, which will serve as a guide to decision makers with responsibility for the

management of hazardous waste (many detailed recommendations on the form and content of such documentation were made by the Group).

2. On certain (mainly technical) aspects of the overall hazard problem, much more detailed background information and documentation should be produced by WHO following the completion of the current activity.

3. Formal, legalistic definitions of terms such as "hazardous waste" should not be attempted in the context of international guidelines at this time. The best way forward is to adopt pragmatic working definitions which focus more on the hazard characteristics of the waste than on its form or composition.

4. Comprehensive analytical data on the composition of many wastes can be extremely difficult to obtain. Therefore, requirements for analytical information on waste composition should be consistent with the necessity to decide upon appropriate management methods and to evaluate inherent risks. Such analysis should use verified protocols and methods.

5. Transfrontier shipment of hazardous waste should be regulated on the basis of pre-notification to the designated competent authorities of both the exporting and the receiving country. It should be the responsibility of the receiving country to ensure that the waste is transported, treated and disposed of according to its standards, but specific attention needs to be given to the problems of developing countries, whose authorities may not have the expertise to evaluate the technical feasibility or environmental safety of the intended disposal facility in their territory.

6. Much is known about technologies for hazardous waste management as applied in developed countries, but rather less where developing countries are concerned. Considerable attention in the ongoing UNEP/WHO activity should, therefore, be given to identifying the specific problems of developing countries and to providing guidance on solving them. Research and development work should also be encouraged.

7. Uncontrolled dumping is an unsatisfactory method of disposal for hazardous waste and should be phased out. However, specific guidance should be given to developing

countries, both on alternatives and on procedures for closing existing dumps, so that they do not pose problems in the future.

8. Post-closure care of land disposal sites (landfills, surface impoundments, etc.), which have been used for hazardous waste, should include appropriate monitoring for potential pollution, and also measures aimed at preventing the inappropriate use of the land in the future. The fact that a site has been used for land disposal of hazardous waste should be recorded in the ownership deeds.

9. It is recommended that in the general environmental protection law, which countries have or are planning to promulgate, appropriate institutional measures should be stipulated for the management of hazardous waste.

10. It should be a government's responsibility to provide an adequate system of laws, controls and administrative procedures for hazardous waste management. Other governmental responsibilities will vary according to the constitution and practices in the individual country. However, the right of appeal against decisions by the competent authorities should be safeguarded.

11. Hazardous waste management should be regulated on the basis of "cradle-to-grave" control. Sources (producers) of hazardous waste should be registered, and all interim storage, transport, treatment and disposal facilities should be licensed. A manifest or trip-ticket system should be used to ensure that the waste arrives at its designated destination.

12. Any licence for a waste treatment or disposal facility must specify the right of legitimate access for the competent authorities and must allow them to carry out necessary works to remedy the effects of malpractice at the licence holder's cost if he cannot or will not take remedial action himself.

13. All personnel involved in hazardous waste management should be properly trained, including those at the policy, management and operational levels. Training programmes need to be developed, particularly in countries where hazardous waste management is still in the early stages.

14. Reports and papers relating to the present discussions and to further work in the same field should be distributed

to national ministries concerned with commerce and transportation, in addition to those concerned with the environment and health, which normally receive UNEP and WHO materials.

15. Public involvement in hazardous waste management activities should be encouraged, and education of the public in this subject should therefore be undertaken.

16. UNEP/WHO should develop methodology both for identification and location of abandoned dumping sites containing hazardous waste, and for their reclamation, specifically with a view to the guidance of developing countries.

UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT NUMBER RER/79/016

EUROPEAN COOPERATION ON ENVIRONMENTAL HEALTH ASPECTS OF THE CONTROL OF CHEMICALS

FIRST MEETING

of the

PROJECT STEERING COMMITTEE

BADEN, AUSTRIA

7 NOVEMBER 1980

ICP/RCE 903 (6)

ENGLISH ONLY

Opening of the Meeting

The first meeting of the Steering Committee on the UNDP-supported project "European Cooperation on Environmental Health Aspects of the Control of Chemicals" was convened by the WHO Regional Office for Europe in Baden at the kind invitation of the Government of Austria, and was attended by representatives of nine European countries participating in the project and three United Nations organizations. A list of participants is attached as Appendix 1.

The meeting was opened by Mr R. Knutsson (United Nations Development Programme). He explained that UNDP's contribution was principally of a catalytic nature, to provide those essential inputs which the Governments themselves could not provide without external support. In this connexion, it was therefore necessary for UNDP to know, at least approximately, what contributions Governments themselves could and were prepared to make towards the implementation of the project. The allocation of UNDP regional funds now depended to a considerable extent on Government support for a specific project, and one important aspect in considering the allocation of funds was the manner and extent to which Governments were committing financial and manpower resources to this project.

Dr A. Gilad (WHO Regional Office for Europe) explained to participants that the Project Steering Committee had been established within the framework of the project itself, and that the main purpose of this first meeting was to identify priority activities to be incorporated in the project workplan, to define national contributions in kind, and to review the draft project document and the progress of activities to date.

Election of Officers

Professor J.A. Indulski and Dr L.J. Saliba were elected Chairman and Rapporteur respectively.

Adoption of the Agenda

The Meeting adopted the agenda attached as Appendix 2 to this report.

Structure and Methods of Operation of Regional UNDP Projects

Mr R. Knutsson (UNDP) explained to participants that UNDP was currently consulting Governments on their preferences with regard to projects for implementation during the next 5-year period, starting 1 January 1982. Insofar as regional projects for Europe were concerned, it was estimated that, after taking into account the ongoing projects, UNDP expected to have approximately 2 million US dollars per year for the funding of new regional projects over this next 5-year period. Draft regional plans were being prepared by UNDP for submission to Governments, and the draft programme would then be approved at the UNDP meeting, scheduled in March 1981 in ECE, Geneva, prior to their final endorsement by the Governments of the region.

During the ensuing discussions several participants stressed the importance of this project both as regards the subject matter and because ten European countries are expected to participate in it. All Government representatives expressed the hope that this project would receive high priority.

In this regard Mr Knutsson explained that the normal method of communication between UNDP and Governments was through formally established channels, and individual priorities would therefore initially have to be determined by each Government at a central level. It was therefore up to the Governments themselves to establish the degree of priority which they felt should be accorded to this particular project. UNDP also required to know the inputs of Government contributions in detail.

The participants also expressed concern about the availability of funds for the project during the current cycle (i.e. up to the end of 1981), apart from the next cycle commencing in 1982. They also agreed that it was of extreme importance to know what kind of support the project would obtain from UNDP, as obviously very little work could be done solely on the basis of Government contributions.

National Priorities and Inputs

All members of the Steering Committee representing their Governments delivered brief statements during the meeting outlining their national priorities and national contributions in kind that they were making, or planning to make, in the form of programmes and activities. Seven

participants also provided, in writing, summary lists on their national contributions. These lists are attached as Appendix 3. The other two participants agreed to submit statements on their national contributions to the project in the near future. It was also agreed that all summary lists would be expanded and re-submitted in the form of workplans for each of the proposed activities, including descriptions of the activity components, timing and costing. Furthermore, each workplan covering contributions in kind would be accompanied by equipment requirements needed for each specific activity.

From statements made by participants, it emerged clearly that the individual national priorities related to the problems of chemicals safety were interlinked in varying degrees, being either identical or complementary, thus requiring a framework for international cooperation. Furthermore, the activities which were planned in individual countries were a clear reflection of the keen interest being shown in the project.

Review of the Draft Project Document

The meeting discussed various items of the draft project document, and unanimously expressed agreement with its objectives and activities. The Committee confirmed that the conclusions and recommendations of the Consultation on Priority Problems in Toxic Chemicals Control in Europe, held in Baden, Austria, between 3 and 6 November 1980, were valid for the project. These conclusions and recommendations were similarly adopted by the Committee. (see Annex 1)

Review of Progress, Workplan and Budget

Dr M.H. Draper, (Chief Technical Adviser), outlined the activities detailed in the interim progress report of the project, which was presented to participants. He described activities already launched in the fields of (a) Programme Planning and Priorities, (b) Manpower Development, (c) Toxic Wastes Management, (d) Contingency Planning, (e) Impact Assessment, and (f) Technical Cooperation and Exchange of Information, as well as their present status. The budgetary status of the project was also presented in detail to participants.

Dr A. Gilad (WHO) explained to participants that the project could provide coordination, expert advice, sub-contracts for the performance of specific studies by appropriate

institutions, fellowships of varying duration, organization of training courses, and equipment, both expendable and non-expendable depending on available resources. Dr Gilad also explained the budget in detail, as well as the present budgetary status of the project. He stressed that it was important to translate national priorities into regional priorities.

During the discussion which ensued, the participants expressed general concern about the inadequacy of the present budget. Countries were in dire need of this type of programme. Consideration should also be given to the fact that the resources made available by UNDP under this project would be shared by no less than ten European countries.

Participation of International Organizations

The representative of FAO, Dr R. Malik, described FAO activities in fields relevant to the project. He informed participants of his discussions with WHO which resulted in an agreement for FAO participation in the project as an Associated Agency. This participation would mainly be in the field of agrichemicals, particularly pesticides. Dr Gilad informed participants that preliminary discussions with FAO had indicated that the involvement of FAO in the project could be tentatively calculated in terms of finance at approximately US $50 000.

Dr Gilad informed participants that ILO had agreed, in principle, that they should assume the major responsibility for a survey of legislation related to worker protection and for participation in courses covering aspects related to training of workers in safety procedures.

The United Nations Environment Programme/International Register of Potentially Toxic Chemicals has contributed to the work of the project by executing, jointly with the Monitoring and Assessment Research Centre, UK, surveys and background studies, under contractual arrangements. Complementary work on subjects closely related to the project objectives was also being contributed by the Commission of European Communities, who were engaged in a component study under the objective of manpower development, and were also actively participating in the forthcoming Working Group on Occupational Profiles in Toxic Chemicals Control. Discussions on further collaboration with CEC and CMEA are in progress. OECD supplied background material and

participated actively in one of the consultations organized with the assistance of the project.

General Discussion

In reviewing the various programme components, the meeting decided that it was not possible to reduce or delete any of the proposed activities, as any such reduction or deletion would have serious repercussions on the whole programme, since all the components were intimately interlinked.

The meeting urged UNDP to recognize the importance of the project, and the urgent need for the provision of adequate funds to finance it. It was unanimously recognized by the Representatives of the participating Governments that the budget was insufficient and if possible should be expanded, that a larger allocation should be made for the acquisition of equipment, that the training component should be expanded to allow for more fellowships, as well as general courses and seminars, and that a larger allocation should be made for the undertaking of specific studies by contractual arrangement.

Following a discussion of the various alternative possibilities available, the meeting agreed that the funds earmarked for equipment during the current preparatory phase should be temporarily and urgently reallocated to the training component. It was also agreed that it was essential to continue with the present level of activities without interruption and a further UNDP contribution of approximately US $ 350 000 (apart from still uncommitted funds from the current preparatory phase budget) under an expanded Preliminary Activities allocation should be requested in order to provide for the necessary continuity, until the full project document is approved and signed.

Second Phase Project

The meeting also discussed the requirements for the Second Phase of the project and agreed that, in order to cover requirements adequately, a UNDP contribution of US $ 2 500 000 would be necessary.

The representative of UNDP expressed the view that a proposed budget of US $ 2 500 000 was unrealistic, considering the total amount of funds at the disposal of UNDP for regional projects. He noted the intention of the Steering Committee to extend the preliminary phase of the

project until mid-1981, and that this would require an extra UNDP input of approximately US $ 350 000. He also expressed the opinion that the allocation of US $ 60 000 for equipment was intended as a stand-by for specific requirements by participating countries as and when they arose in connexion with the implementation of the project.

The Government representatives on the Committee noted the remarks of the UNDP representative, but argued that the proposed budget of US $ 2 500 000 over a 5-year period represented only US $ 500 000 a year, to be shared by ten European countries, cooperating on a project concerned with one of the major problems affecting the European region today. Viewed in this light, the Government Representatives on the Steering Committee considered this level of support to be not unreasonable and requested the Executing Agency to develop appropriate documentation.

Conclusions and Recommendations

All Government Representatives at the Steering Committee unanimously:

1. noted the progress report submitted by the Chief Technical Adviser and expressed their satisfaction at the considerable progress achieved during the preliminary activities phase of project operations;

2. expressed their concern that, while most of the funds provided under this preliminary activities phase have been spent and/or committed, additional funds needed for the continuation of the work have not been provided;

3. confirmed the continuing strong interest of the Governments in the project and, having reviewed the stated project objectives and proposed activities, concluded that these should serve as a basis for development of the workplan;

4. confirmed that the conclusions and recommendations of the Consultation on Priority Problems in Toxic Chemicals Control in Europe, held immediately prior to the Steering Committee meeting, were valid for the UNDP supported project and requested that these conclusions and recommendations be appended to the current Project Steering Committee report;

5. noted with satisfaction the cooperative arrangements being made with FAO and ILO and the collaboration with

UNEP/IRPTC, CEC, CMEA, OECD and other organizations and requested that the collaboration be continued and further strengthened;

6. noted with satisfaction that seven of the participating Governments have defined the contents and scope of their proposed contributions in kind and invited those of the participating Governments that have not yet done so, to define their contributions as a matter of urgency;

7. decided that, in order to facilitate continuation of the most urgent activities of this project, the existing uncommitted provision of US $ 60 000 for equipment should be re-allocated to the training component;

8. stressed the urgency of provision of funds to permit continuation of the activities and decided to request UNDP to approve an additional phase of preliminary activities, as an interim measure, starting in December 1980 and lasting until the end of June 1981. It has been estimated that approximately US $ 350 000 would be needed for this purpose, in addition to the unspent balances from the first preliminary activities phase;

9. requested the Executing Agency to develop a project proposal for the second phase of the UNDP-supported Project "European Cooperation on Environmental Health Aspects of the Control of Chemicals" (RER/79/016), to start in July 1981 and to submit it to the forthcoming UNDP meeting concerned with the planning for the 1982-1986 period. The Government Representatives on the Steering Committee considered that the appropriate size of the UNDP contribution to the second phase project would be US $ 2 500 000 with the increased provisions for training, equipment and subcontracts;

10. urged the members to ensure that the project proposal mentioned in paragraph 9 above receives adequate attention from the appropriate ministries of their own Governments, that it is accorded highest possible priority and that it is submitted on time and through the proper channels.

Appendix 1

LIST OF PARTICIPANTS

A. GOVERNMENT-NOMINATED PARTICIPANTS

BULGARIA

Prof. Fina P. Kaloyanova
Director, Institute of Hygiene and Occupational Health, Sofia

CZECHOSLOVAKIA

Dr V. Kodat
Director, Department of Hygiene, Epidemiology and Microbiology, Ministry of Health, Prague

GREECE

Dr M. Zaphiropoulos
Environmental Pollution Control Project, Athens

HUNGARY

Prof. M. Timar
Director, National Institute of Occupational Health, Budapest

MALTA

Dr L.J. Saliba
Principal Officer, Ministry of Health & Environment, Valletta

POLAND

Prof. J.A. Indulski
Director, Institute of Occupational Medicine, Lodz

PORTUGAL

Prof. A. Lobato De Faria
General Directorate of Health, Lisbon

TURKEY

Mrs Nida Besbelli
Toxicologist and Pharmacist, Refik Saydam Central Institute of Hygiene, Ankara

YUGOSLAVIA

Dr V. Adamovic
Chief, Institute of Health Protection, S.R. of Serbia, Department of Sanitary Chemistry, Belgrade

B. REPRESENTATIVES OF OTHER ORGANIZATIONS

Food and Agriculture Organization of the United Nations (FAO)

Dr R. Malik
Senior Officer, Food Science Control and Consumer Protection Group, FAO, Rome

United Nations Development Programme (UNDP)

Mr R. Knutsson, UNDP, European Office, Geneva

C. WORLD HEALTH ORGANIZATION

Regional Office for Europe

Dr M.H. Draper
Chief Technical Adviser, UNDP Project RER/79/016

Dr A. Gilad (Secretary)
Regional Officer for Environmental Systems Management

Appendix 2

AGENDA

1. Opening statement

2. Election of Officers and adoption of agenda

3. Introduction: Structure and methods of operation of regional UNDP projects

4. Statements of the Steering Committee members on:

   (i) National priorities;

   (ii) National contributions in kind

5. Review of the draft project document

6. Review of the draft workplan and budget

7. Meeting of the drafting committee

8. Adoption of conclusions and recommendations

9. Closure of the meeting

CONTRIBUTIONS IN KIND OF THE PARTICIPATING GOVERNMENTS

Submitted to

First Meeting of the Steering Committee
UNDP-supported project "European Cooperation on
Environmental Health Aspects of the Control of Chemicals"
(RER/79/016)

Baden, Austria, 7 November 1980

Note: The representatives of Greece and Czechoslovakia undertook to define their contributions in kind in the near future

CONTRIBUTIONS IN KIND OF THE PARTICIPATING STATES

(as submitted to the Steering Committee and subsequently revised and amended by the Governments)

BULGARIA

OBJECTIVE	ACTIVITY [a]	SUBJECT	TIME	COST (TOTAL US $)
3	3.1.1. - 3.1.2.	Biological monitoring of lead.	1981-1982	
3	3.1.1. - 3.1.6.	Methodologies for assessment of emissions from polymeric building materials.	1981	
3	3.1.1. - 3.1.6.	Health and biological monitoring systems for workers exposed to pesticides.	1981-1982	
3	3.1.1. - 3.1.8.	Vinyl chloride. Environmental and health monitoring study in production of polyvinylchloride.	1981-1983	
5	5.3.7.	International course on "toxicology of pesticides."	1981	
7	7.1.1. - 7.1.4.	Complex methods for standardization of toxic substances in soil.	1981	
7	7.1.1. - 7.1.4.	Systems for preliminary control for sanitary registration of pesticides.	1981	
7	7.1.1. - 7.1.4.	Methodology for toxicological assessment of cosmetics.	1981	
				410,000

[a] Activity numbers refer to Objectives, Outputs and Activities as described in Project Document UNDP number RER/79/016/B/01/14.

CZECHOSLOVAKIA

OBJECTIVE	ACTIVITY[a]	SUBJECT	TIME	COST (TOTAL US $)
3	3.1.	Monitoring of health hazard from an intake of chemical preservative agents and artificial sweeteners in food.	1981-1985	
3	3.1.1. - 3.1.5.	Development of a system for assessment of skin effects in man of cosmetics, household preparations and products of general use.	1981-1985	
2	2.1.1. - 2.1.5.	Development of impact assessment procedures for the control of chemicals.	1981-1985	
3	3.1.1. - 3.1.4.	Methodological approach to biological monitoring of exposure to acrylonitrile.	1981-1982	250,000

GREECE

OBJECTIVE	ACTIVITY [a]	SUBJECT	TIME	COST (TOTAL US $)
1	1.1.1.	Survey of problems in industry and community, harmonization with the EEC guidelines.	1980-1981	
3	3.1.1. - 3.1.8.	Monitoring systems for CO and ozone.	1981	
3	3.3.5.	Monitoring of exposure to lead in urban areas.	1981	
3	3.1.1. - 3.1.8.	Monitoring of chlorinated hydrocarbons, pesticides and metals in marine organisms.	1981	
3	3.1.1. - 3.1.8.	Monitoring of mycotoxins in food.	1981-1983	
3	3.1.1. - 3.1.8.	Monitoring of herbicides in aquatic organisms (shrimp & fish).	1981-1983	
3	3.1.1. - 3.1.8.	Phthalic esters, colorants and nitrites - monitoring as food additives.	1981	535,000

HUNGARY

OBJECTIVE	ACTIVITY[a]	SUBJECT	TIME	COST (TOTAL US $)
2	2.1.1. - 2.1.2.	Assessment of environmental waste disposal from aluminium foundries (in soil)	1981 and onwards	
3	3.1.7. - 3.1.2.	Biological monitoring of industrial workers exposed to lead and cadmium (epidemiology)	1981	
3	3.3.1. - 3.3.4.	Assessment of health effects of occupational exposures in aluminium metallurgy (exposure to PAH and workers morbidity)	1980-1981	
3	3.3.1. - 3.3.4.	The study of health of populations exposed to combined environmental pollution by aluminium foundries and heat power stations,	1981 and onwards	
3	3.1.7. - 3.1.2.	Monitoring of health effects of occupational exposure to toluene and perchloroethylene,	1980-1981	
				520,000

MALTA

OBJECTIVE	ACTIVITY[a]	SUBJECT	TIME	COST (TOTAL US $)
1	1.1.1.	Comprehensive updating of list of problems in industry and the community arising from toxic chemicals.	1981	
2	2.1.1.	Development of an integrated EIA system	1981-1982	
3	3.1.1. - 3.1.2.	Development of pesticide residue monitoring system for food products.	1981 and onwards	
		Upgrading of heavy metal monitoring system.	1981	
		Epidemiological studies on areas still to be finalized in the fields of occupational and community health.	1981 and onwards	
4	4.1.1. - 4.1.2.	Establishment of Contingency Plans to meet possible accident situations involving toxic chemicals (mainly on a localized basis).		200,000 (approx)

[a] Activity numbers refer to Objectives, Outputs and Activities as described in Project Document UNDP number RER/79/016/B/01/14.

POLAND

OBJECTIVE	ACTIVITY[a]	SUBJECT	TIME	COST (TOTAL US $)
1	1.1.2, - 1.1.3.	Setting a uniform scope of procedures and methods for testing toxicity.	1981-1983	
2	2.1.1, - 2.1.4.	Evaluation of the influence of wastes from copper mines on pollution of surface waters, plants and bottoms with heavy metals.	1981-1985	
2	2.1.1. -2.1.4.	Assessment of environmental pollution by metals and its impact on human health from copper mills (application for planning localization of dwelling regions).	1981-1983	
3	3.3.1. - 3.3.5.	Influence of the urban environmental pollution on the levels of metals in body fluids of inhabiting population.	1981-1985	
3	3.1.1. - 3.1.8.	Assessment of industrial emission and environmental impact assessment of PAH (combined coke and chemical plants).	1981-1984	
3	3.1.1. - 3.1.4.	Methodological approach to biological monitoring of exposure to acrylonitrile.	1981-1982	

POLAND (continued)

OBJECTIVE	ACTIVITY	SUBJECT	TIME	COST (TOTAL US $)
3	3.1.1. - 3.1.4.	Assessment of food products as a source of metal intake in man.	1981-1985	
3	3.1.1. - 3.1.8.	Establishment of monitoring system for control of chemicals in industry.	1981-1984	
5	5.3.7.	International course on "Health effects of combined exposures to chemicals in work and community environments."	1981 (November)	
7	7.1.	Preparation of a guide book of analytical methods for determinations of industrial chemical air pollutants.	1981-1984	2.3 million

ROMANIA

OBJECTIVE	ACTIVITY[a]	SUBJECT	TIME	COST (TOTAL US $)
1	1.1.1.	Preparation of list of industrial and environmental problems.	1981	
2	2.1.1.	Evaluation of methods and practices in estimating chemical pollution of soil in view of their use in current practices.	1981-1985	
3	3.1.1. - 3.1.4.	Systems of monitoring of chemical air pollution in view of evaluation of the risk for the public health.	1981-1985	
3	3.3.1. - 3.3.6.	Epidemiological studies on several groups of chemicals: inorganic fluorides, lead, amino and nitro compounds, petrochemicals, chlorinated solvents, asbestos, organic chlorinated pesticides.	1981-1985	
4	4.1.1. - 4.1.4.	Establishment of contingency plans to meet possible accident situations involving toxic chemicals in industry.	1981-1983	

TURKEY

OBJECTIVE	ACTIVITY	SUBJECT	TIME	COST (TOTAL US $)
3	3.1.1. - 3.1.8.	Monitoring of heavy metals and pesticides residues (supply and irrigation waters, fruits and vegetables, water and salt from the Tuz Lake).	1981 - onwards	

[a] Activity numbers refer to Objectives, Outputs and Activities as described in Project Document UNDP number RER/79/016/B/01/14.

YUGOSLAVIA

OBJECTIVE	ACTIVITY[a]	SUBJECT	TIME	COST (TOTAL US $)
1	1.1.1.	Identification of sources of environmental contaminations. List of priority problems.	1981-1985	
3	3.1.	Monitoring of some metals and pesticides in air and water in Serbia.	1981-1985	
3	3.1.	Monitoring of daily intake of chemicals in food in Serbia (pesticides, metals, nitrites, nitrates, mycotoxins).	1981-1985	
3	3.1.	Assessment of drinking water contamination with organic synthetic chemicals in Serbia.	1981-1985	
3	3.1.	Monitoring of pesticides, metals and organic contaminants in food, air and water (in Slovania)	1981-1985	

4.7 million

[a] Activity numbers refer to Objectives, Outputs and Activities as described in Project Document UNDP number RER/79/016/B/01/14