



**Economic and Social  
Council**

Distr.  
GENERAL

CEP/WG.5/AC.2/2002/9  
15 October 2002

ORIGINAL: ENGLISH

**ECONOMIC COMMISSION FOR EUROPE  
COMMITTEE ON ENVIRONMENTAL POLICY**

Meeting of the Signatories to the  
Convention on Access to Information,  
Public Participation in Decision-making and  
Access to Justice in Environmental Matters

Working Group on Pollutant Release and Transfer Registers  
(Geneva, 16-17 September 2002)

**REPORT ON THE SIXTH MEETING**

1. The sixth meeting of the Working Group on Pollutant Release and Transfer Registers (PRTRs) was held in Geneva on 16-17 September 2002.
2. The meeting was attended by delegations from the Governments of Armenia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Finland, France, Georgia, Germany, Italy, Monaco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Ukraine, United Kingdom, United States of America, Uzbekistan and Yugoslavia.
3. The Commission of the European Communities and the European Environment Agency were represented.
4. The following non-governmental and regional organizations were represented: the Association of German Chambers of Industry and Commerce; Eco-Accord; the European Chemical Industry Council (CEFIC); European ECO Forum; GLOBE Europe; and the Regional Environmental Center for Central and Eastern Europe (REC).
5. The Chairperson of the Working Group, Mr. Karel Blaha (Czech Republic), welcomed participants and opened the meeting. He expressed gratitude on behalf of the Czech Republic to the international community for the support received during the recent flooding in his country.

6. The secretariat reported on relevant discussions that had taken place at the third meeting of the Working Group preparing for the first meeting of the Parties (Pula, Croatia, 8-10 July 2002). The analysis regarding the implications of the PRTR protocol being open to non-Parties to the Convention and non-ECE States, prepared by an ad hoc expert group at the request of the Preparatory Working Group, had been welcomed and it had been recommended that the PRTR Working Group should take its findings into account in its further work. The Preparatory Working Group had concluded that the draft decision of the Meeting of the Parties mandating the continuation of the work to prepare the draft protocol should specify that the protocol would be open to non-Parties to the Convention and to non-ECE States. Finally, it had been decided to separate the earlier draft decision on PRTRs (CEP/WG.5/2002/12) into two separate decisions, one establishing a new PRTR working group continue the task of preparing the draft protocol and the other concerning the holding of an extraordinary meeting of the Parties on the occasion of the Fifth Ministerial Conference 'Environment for Europe' in Kiev, May 2003 (MP.PP/2002/3 and 4).

## **I. ADOPTION OF THE AGENDA**

7. The provisional agenda as set out in document CEP/WG.5/AC.2/2002/8 was adopted with the agreement that, time permitting, the Working Group would also discuss articles 11-15 of the consolidated draft text according to the structure set out in document CEP/WG.5/AC.2/2002/10 (drawing upon the relevant articles of document CEP/WG.5/AC.2/2001/3).

## **II. THE 'VIRTUAL CLASSROOM'**

8. The state of the art of the Virtual Classroom was presented by Mr. Geert Van Grootveld (Netherlands), Mr. Ondrej Velek (Czech Republic) and Ms. Olga Speranskaya (ECO Accord). Mr. Van Grootveld presented the general part and reported that a vision document had been prepared containing the objectives of the Virtual Classroom as well as other issues. The vision document was made available to the Working Group. As for the organization of the Virtual Classroom, it was maintained that an international organization should have ownership of the project. Furthermore, the Global Environment Facility would be contacted for possible funding of the project.

9. Two short-term actions defined at the fifth meeting of the Working Group were presented (CEP/WG.5/AC.2/2002/6, annex). Mr. Ondrej Velek (Czech Republic) presented a project on benchmarking and demonstrated some examples, in particular related to substances. As concerns future work, Mr. Velek stated that the Classroom could be of help for adding and deleting substances and for the work on diffuse sources.

10. Ms. Olga Speranskaya presented a project on pilot guidebook chapters. She proposed a special part on how to start a municipal PRTR. This would be crucial for the Russian Federation, for example, where it was too early to talk about a national PRTR. Six regions were, however, already working hard on a PRTR, and more would follow suit. So, information on how to start a local PRTR was important. As NGOs could stimulate this work, Ms. Speranskaya had prepared several materials describing the development of a local PRTR system in the Russian Federation. These materials were available in English and in Russian on the web site of the Virtual Classroom. They included PRTR development in Russian pilot cities, PRTR development in the Archangel region, the development of PRTR in the Newly Independent States (NIS).

11. Following the previous meeting of the Working Group, some materials had been analysed to show how method descriptions based on the long emission inventory guidebook experience might look. Two chapters (cement and brewery) had been chosen, both covering sectors on the list of activities in the Aarhus Convention.

12. As for future work, Ms. Speranskaya noted that it would be interesting to develop a list of priority sectors for PRTR system in NIS to be prepared in English and in Russian. Finally, a PRTR reporting format was being prepared in Russian and in English, and it should be ready for the Virtual Classroom in the near future.

13. The Working Group supported the initiative of the Virtual Classroom. Mr. Van Grootveld informed the Working Group that the Virtual Classroom would be evaluated in October 2002 and that more information on its further development will be presented to the Working Group at its next meeting (November 2002).

### **III. PREPARATION OF A DRAFT PROTOCOL**

14. It was agreed that the contact group addressing the technical issues covered by the annexes would meet on the afternoon of 17 September 2002 and on the morning of 18 September 2002, and that the report of its meeting, annexing the revised lists of pollutants and facilities, would itself be annexed to the report of the Working Group's meeting (see annex below). Therefore, the Working Group did not have an opportunity to consider the report of the contact group or to discuss its findings.

15. The Working Group resumed the task of preparing the draft protocol, starting with article 7, paragraph 6, of document CEP/WG.5/AC.2/2002/7, it having been agreed at the previous meeting to discuss paragraph 5 (g) only following the discussion of paragraph 8.

#### **Reporting requirements (CEP/WG.5/AC.2/2002/7, art.7)**

16. Regarding paragraph 6, there was general agreement that the registers should include information on releases, and to some extent transfers, from accidents and from catastrophic events, though some delegations felt that it was necessary to specify off-site transfers and others felt that it was not necessary to refer to transfers at all in this context. However, the main disagreement concerned the extent to which the provision should require that this information should be distinguished on the register from information on routine and/or deliberate releases and transfers, and, if so, how the distinction should be made. Several delegations felt that it was not necessary to specify that these different types of releases or transfers should be identified distinctly on the register, whereas others felt that such a distinction would be of benefit to both the public and governmental authorities. Some felt it was important to distinguish between releases and transfers over which the facility operator should have some control (which would include both routine and certain accidental releases) from those caused by external events such as natural catastrophes. Others preferred to group releases from accidents with those from catastrophic events and to distinguish these from routine or deliberate releases. No changes were made to the paragraph.

17. It was agreed to remove the outer square brackets around paragraph 7 and recast it as follows:

“Each Party shall present on its register, in an adequate, spatial disaggregation, the information on releases of pollutants from diffuse sources required by article 6, including information on the type of methodology used to derive the information[, and, where available:

(a) The aggregate yearly releases of such pollutants to air, water and land, separated out by pollutant and diffuse source[, where those releases constitute a significant proportion of the total national releases of the particular pollutant]; and

(b) A comparison of the amounts for a given reporting year with amounts from the previous reporting year].”

18. Several delegations favoured the deletion of paragraph 8, as it related to the notion of a deferred obligation or automatic trigger contained in article 6, paragraph 2, to which they were opposed. Others considered the idea of such a ‘second step’ to be useful and a way to implement a step-by-step approach as required by the mandate of the Working Group, and in this context considered paragraph 8 to be useful. One delegation proposed to add a new subparagraph to it, as follows:

“(d) The following amounts, aligned in the register to allow for comparison with the same amounts reported for the current reporting year:

- (i) The sum of releases in paragraph 5, subparagraph (b), and the transfers off-site to disposal reported under subparagraph (c), excluding the releases resulting from catastrophic or one-time events, for the previous reporting year;
- (ii) The amounts transferred off-site for the previous reporting year, distinguishing whether the pollutant was transferred off-site for treatment, energy recovery, recycling, disposal or other type of release;
- (iii) The amounts transferred on-site for the previous reporting year, distinguishing whether the pollutant was transferred for treatment, energy recovery, or recycling.”

With this addition, it was agreed to keep the entire text of paragraph 8 in square brackets for further consideration by the drafting group.

19. Some delegations considered that paragraph 5 (g) could be deleted if paragraph 8 were to be kept in some form, but others argued that paragraph 5 (g) should be retained as it related to the first step whereas the text in paragraph 8 (amended or otherwise) related to a second step. It was agreed to keep the whole subparagraph in square brackets.

20. Regarding paragraph 9, several delegations questioned the need for such a provision and argued that, if it were to be retained, it should be recommendatory rather than obligatory, it should not specify that the lists of pollutants should be national (to allow for regional lists) and the references to resources should be deleted. Others considered the making of a national list of pollutants to be important, pointing out that the text did not make it mandatory to include pollutants additional to those required under the protocol or to use lower thresholds but rather provided this as an option. A link was made between this paragraph and the provisions on public participation, as it was argued that the making of national lists of pollutants would be one of the main areas in which the public might have the opportunity to participate. It was agreed to leave the paragraph unchanged, in square brackets, for further consideration by the drafting group.

21. Some delegations expressed their preference that Parties should be able to choose between pollutant-specific reporting of transfers and waste-specific reporting of transfers, i.e. both systems should be accommodated in the draft protocol. It was agreed that this option should be provided for in the draft text, without excluding other options.

**Reporting cycle (CEP/WG.5/AC.2/2002/7, art. 8)**

22. There was agreement among the governmental delegations to remove the square brackets around the final sentence in paragraph 1, thereby providing for the possibility that the second reporting year might be the second calendar year following the first reporting year.

23. It was agreed to delete paragraph 2.

24. It was agreed to restrict the scope of paragraph 3 to Parties not being regional economic integration organizations and therefore to delete the first set of square brackets; to opt for a fifteen-month time-limit for incorporation of the information on the register rather than a twelve-month one as the general rule; and to allow a two-year time-limit in the case of information from the first reporting year, by removing the square brackets around the last sentence.

25. It was agreed to remove the square brackets around paragraph 4.

**Monitoring and record-keeping (CEP/WG.5/AC.2/2002/7, art. 9)**

26. There was a general concern that the word ‘monitoring’ was too narrow to capture the various ways of gathering the data which would form the basis for the reporting (e.g. calculation, estimation, etc.). It was therefore agreed to reword the title ‘Data collection and record-keeping’, and to substitute for the words in the first set of square brackets the following text: ‘to collect, in accordance with paragraph 2 and with appropriate frequency, the data needed to determine the facility’s releases and transfers subject to reporting under article 7’. Some delegations proposed ‘identify’ as an alternative to ‘collect’. Some delegations proposed to insert ‘off-site’ before ‘transfers’ in the first sentence, though others were opposed to this.

27. There was general support for a requirement to retain records of the data for five years rather than for three years or for an unspecified period; however, one delegation supported the period to be three years and both options were therefore kept in brackets as alternatives. One delegation proposed that it should be clear for which purpose the records of the data should be kept that the words “for inspection” should be inserted after the word “keep” in the paragraph. No delegations were opposed to this but some considered that it was not clear who should be able to inspect. They considered the word “inspect” to be too limited and proposed “make available”. It was agreed to continue the paragraph as follows: “and to keep available for competent authorities the records of the data from which the information was derived for a period of [three][five] years, starting from the end of the respective reporting year.”

28. It was agreed that the final sentence in square brackets, requiring the public accessibility of the records, should be deleted.

29. It was agreed to amend paragraph 2 by revising the opening words to read as follows: “Each Party shall require the owners or operators of facilities subject to reporting under article 7

to use ...”. Otherwise, the text was considered to be acceptable.

### **Quality assessment (CEP/WG.5/AC.2/2002/7, art. 10)**

30. It was agreed that the end of paragraph 1 should read: “assure the quality of the reported data” and that all other options in paragraph 1 should be deleted.

31. Regarding paragraph 2, some delegations considered “competent body” to be more appropriate than “competent authority” as this would allow other types of bodies, which were not necessarily public, to assess the quality of the data. It was decided to keep the term ‘competent authority’ and deal with the issue in the definition of that term in article 2. It was agreed to keep the term ‘credibility’ rather than ‘plausibility’ and to remove the remaining square brackets from the paragraph.

32. It was subsequently agreed to change the definition of “competent authority”, contained in document CEP/WG.5/AC.2/2002/10, article 2, paragraph 6, by inserting the words “, or any other competent body or bodies,” after the word ‘authorities’.

### **Confidentiality (proposed new article 10 bis)**

33. The European Community presented a proposal for a new article 10 bis on confidentiality, containing a list of exemptions based more or less verbatim on those listed in article 4, paragraph 4, of the Convention. Where confidential information had been withheld, the register would be required to indicate the type of information that had been withheld and the reason for doing so. It was proposed that the new article on confidentiality would replace the article on access to information.

34. There was general agreement on the need to include confidentiality provisions in the protocol, and broad support for addressing the issue in a separate article. Some delegations were sceptical about the relevance of some of the Convention’s exemptions in the PRTR context (e.g. concerning the breeding sites of rare species), and proposed to go through the exemptions one by one to see if they were really relevant with a view to producing a text specifically suited to PRTR information. Others considered that it might be difficult to predict whether a particular exemption could be relevant, and that to include exemptions which might not need to be used would in any case not do any harm. It was agreed to include the text in square brackets for further consideration by the drafting group.

35. A proposal prepared by the ECO Forum for a revised article on access to information also contained provisions relating to confidentiality. It was agreed that these provisions should be considered alongside the European Community’s proposed text as an alternative to it, also in square brackets.

### **Access to information**

36. Some delegations initially considered that it was not necessary to have a specific article on access to information, and that requirements relating to public accessibility could be dealt with elsewhere in the protocol. Others felt that it was important to have a specific article, to create an obligation to provide public access and to specify how this should be provided.

37. Discussion focused on a proposal for a revised version of article 10 of document

CEP/WG.5/AC.2/2001/3, put forward by the European ECO Forum. Some delegations considered that spelling out the obligation to provide public access in that proposal was useful. Several delegations expressed concerns about a proposed requirement that PRTR information should be published in paper form at the same time as becoming available electronically, both because of the resource implications and because it could delay the electronic availability. On the other hand, access to paper documents might be important in countries with limited Internet access. There was broad recognition of the need to cater for members of the public not having electronic access to information but it was proposed that this could be done in a more flexible way. Some delegations felt that the references to electronic information points for the public, and to links to other databases, was useful.

38. Following the discussions, the ECO Forum put forward a revised proposal for the article on access to information, which was discussed by the Working Group. There was general support for this proposal, as it seemed to capture most of the concerns expressed. The article would precede the proposed article on confidentiality. It was decided that the drafting group should take the proposal into account at its forthcoming meeting, taking into account the specific comments made during the discussion:

(a) A general obligation on Parties to ensure public access to information on the register in accordance with the provisions of the protocol, as set out in paragraph 1 of the ECO Forum proposal, was considered to be useful;

(b) As to paragraph 2 of the ECO Forum proposal, which concerned specific requests for information, it was suggested to refer to “information” throughout the provision rather than “data”. It was felt that to refer only to the provision of access to paper copies was too restrictive and that it would be preferable to refer to “any other means”, which could include paper copies. Finally, some concerns were raised as to possible confusion between the two ways of providing access, namely direct access to the register through the Internet, which should be more or less immediate and continuous, and access to information on the register obtained through the submission of a request, which could be through the Internet or by other means, for which a longer time period (e.g. 15 days or one month) might be applicable;

(c) There was general agreement that the information in the register should be available to the public free of charge, but that it should be possible for competent authorities to make a reasonable charge for providing paper copies of the information. Some delegations considered that it would be better to address the issues (dealt with in paragraph 3 of the ECO Forum proposal) in two separate paragraphs, the former stating that access should be free of charge and the latter that competent authorities may make a reasonable charge for providing access on paper or by any other means. Some delegations were of the opinion that only the data in the register which were readily accessible through the Internet should be available free of charge, and that the question of charges should arise only with respect to providing copies of the information (whether in paper or other form);

(d) Most delegations were not in favour of a requirement on Parties to develop electronic information points providing public access to PRTR databases. However, there was general agreement on the inclusion of recommendatory language along these lines. It was agreed not to include a reference to the need to facilitate public access outside normal office hours;

(e) Most delegations were in favour of including a provision requiring each Party to provide links in its register to existing, publicly accessible databases containing information on

releases and transfers of radioactive substances, radiation, and genetically modified organisms and products containing or derived from genetically modified organisms, which could be placed in article 5 (Design/Structure). One delegation preferred this to be optional rather than mandatory, so it was agreed to provide for both possibilities in square brackets ('[shall][may]').

#### **Regional registers (CEP/WG.5/AC.2/2001/3, art. 13)**

39. Most delegations were not in favour of a requirement in the protocol to establish a regional register in addition to the national registers and favoured the deletion of the draft article on this subject. Some delegations considered such a requirement to be useful, pointing to the positive experience in developing a regional register in North America. The Working Group agreed to keep the article in square brackets for the time being.

#### **IV. FUTURE PROCESS**

40. Regarding the future process, the drafting group would meet during the following days in order to assist the Chairman in preparing a complete revised draft text of the body of the protocol. This, along with the report of the meeting, would be transmitted to the new PRTR Working Group which the Meeting of the Parties was expected to establish (see MP.PP/2002/3). The new Working Group was expected to hold its first and probably only meeting during the week 25 to 29 November 2002. For the sake of clarity in the further stages of the negotiations, all governmental delegations were encouraged to establish before that meeting whether they would be present in a negotiating capacity or as observers.

#### **V. ADOPTION OF THE REPORT AND CLOSURE OF THE MEETING**

41. The Working Group adopted the draft report on the understanding that the Chairperson and the secretariat would be entrusted with its finalization and that the French- and Russian-speaking delegations would reserve their positions until the report was available in French and Russian as well.

42. The Chairperson thanked all participants for their active and constructive participation in the meeting, the secretariat for its assistance and support and the interpreters, and closed the meeting.

## Annex

### **REPORT FROM THE CONTACT GROUP**

1. The contact group met on 17 and 18 September 2002 to discuss the annexes to the protocol. The delegations of Armenia, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, Germany, Italy, Netherlands, Spain, Sweden, United States, Commission of the European Communities, Regional Environmental Center for Central and Eastern Europe, European ECO Forum, ECO-Accord, CEFIC and GLOBE Europe were represented at the meeting.<sup>1</sup> The meeting was chaired by Mr. Bernd Mehlhorn (European Commission).
2. The working document of the contact group was the report of the fifth meeting of the Working Group (CEP/WG.5/AC.2/2002/6).
3. The contact group functioned according to the following procedure: each activity or substance listed in the draft annexes was discussed and its inclusion/exclusion was voted upon by the participants. The opinion of the majority to include or exclude an activity/substance was then reflected in the respective annexes. If a parity of votes occurred, the activity/substance was accepted on the lists. Organizations and observers were given the same voting power as the ECE member states. The Chairman as a representative of the European Community abstained from voting.
4. The procedure resulted in new draft annexes with changes shown in correction mode, where all square brackets are deleted (see appendices I and II).
5. One delegation was in favour of preparing a list of criteria to be included as an introduction to annex II, explaining the mechanism for the selection of substances.

#### **Annex on activities**

6. In order to improve the wording of activity 6(h), it was agreed to invite suggestions, which should be forwarded to the secretariat.
7. The question of applying different threshold systems (either capacity or number of employees and substance use) for the individual activities was discussed. The contact group proposed that a table should be developed with three columns. The first column would include the description of the activity, and the other two columns would contain thresholds for a capacity-related system and a system related to the number of employees and substance use. Parties would be able to choose one or other system.
8. The United States delegation agreed to produce, as soon as possible and in due time before the next meeting, a matrix where the employee- and substance-use-related thresholds would be directly attributed to the activities. In addition, it would forward a document that converted the activities currently listed in annex I into the classification system based on the International Standard Industrial Classification of all Economic Activities (ISIC).

---

<sup>1</sup> Based on registration of participants on 18 September 2002.

### **Annex on pollutants**

9. The limited time did not allow for discussion of threshold values for individual substances and it was proposed that this should be discussed at the next meeting, if the Working Group determined that release and transfer thresholds should be included in the protocol. If the release and transfer thresholds were to be adapted, the relevance of the selected substances as regards releases to air, water, land and transfer would also have to be evaluated.

## Appendix I

### ANNEX ON ACTIVITIES INCORPORATING CHANGES PROPOSED BY THE CONTACT GROUP

#### 1. Energy sector

- (a) Mineral oil and gas refineries;
- (b) Installations for gasification and liquefaction;
- (c) Thermal power stations and other combustion installations with a heat input of 50 megawatts (MW) or more;
- (d) Coke ovens;
- {(e) Coal rolling mills and installations for the manufacture of coal products and solid smokeless fuel;};
- ~~{(f) Nuclear power stations and other nuclear reactors including the dismantling or decommissioning of such power stations or reactors (except research installations for the production and conversion of fissionable and fertile materials whose maximum power does not exceed 1 kW continuous thermal load);~~
- ~~(g) Installations for the reprocessing of irradiated nuclear fuel;~~
- ~~(h) Installations designed:
 
  - ~~(i) For the production or enrichment of nuclear fuel;~~
  - ~~(ii) For the processing of irradiated nuclear fuel or high level radioactive waste;~~
  - ~~(iii) For the final disposal of irradiated nuclear fuel;~~
  - ~~(iv) Solely for the final disposal of radioactive waste;~~
  - ~~(v) Solely for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the production]~~~~

#### 2. Production and processing of metals

- (a) Metal ore (including sulphide ore) roasting or sintering installations;
- (b) Installations for the production of pig iron or steel (primary or secondary melting) including continuous casting, with a capacity exceeding 2.5 tons per hour;
- (c) Installations for the processing of ferrous metals:
  - (i) Hot-rolling mills with a capacity exceeding 20 tons of crude steel per hour;
  - (ii) Smitheries with hammers the energy of which exceeds 50 kilojoules per hammer, where the calorific power used exceeds 20 MW;
  - (iii) Application of protective fused metal coats with an input exceeding 2 tons of crude steel per hour;

- (d) Ferrous metal foundries with a production capacity exceeding 20 tons per day;
- (e) Installations:
  - (i) For the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes;
  - (ii) For the smelting, including the alloying, of non-ferrous metals, including recovered products (refining, foundry casting, etc.), with a melting capacity exceeding 4 tons per day for lead and cadmium or 20 tons per day for all other metals;
- (f) Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m<sup>3</sup>.

### 3. Mineral industry

~~[(a) Underground mining and related operations]; opencast mining where the surface of the site exceeds 25 hectares;~~

(b) Installations for the production of cement clinker in rotary kilns with a production capacity exceeding 500 tons per day or lime in rotary kilns with a production capacity exceeding 50 tons per day or in other furnaces with a production capacity exceeding 50 tons per day;

(c) Installations for the production of asbestos and the manufacture of asbestos-based products;

(d) Installations for the manufacture of glass including glass fibre with a melting capacity exceeding 20 tons per day;

(e) Installations for melting mineral substances including the production of mineral fibres with a melting capacity exceeding 20 tons per day;

(f) Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tons per day, and/or with a kiln capacity exceeding 4 m<sup>3</sup> and with a setting density per kiln exceeding 300 kg/m<sup>3</sup>.

~~[(g) Quarries, gravel pits and opencast mining where the surface of the site exceeds 25 hectares, or peat extraction, where the surface of the site exceeds 150 hectares.]~~

### 4. Chemical industry

- (a) Chemical installations for the production of basic organic chemicals, such as:
  - (i) Simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
  - (ii) Oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones,

- carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins;
  - (iii) Sulphurous hydrocarbons;
  - (iv) Nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates;
  - (v) Phosphorus-containing hydrocarbons;
  - (vi) Halogenic hydrocarbons;
  - (vii) Organometallic compounds;
  - (viii) Basic plastic materials (polymers, synthetic fibres and cellulose-based fibres);
  - (ix) Synthetic rubbers;
  - (x) Dyes and pigments;
  - (xi) Surface-active agents and surfactants;
- (b) Chemical installations which produce basic inorganic chemicals, such as:
- (i) Gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride;
  - (ii) Acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids;
  - (iii) Bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;
  - (iv) Salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate;
  - (v) Non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide;
- (c) Chemical installations for the production of phosphorous-, nitrogen- or potassium-based fertilizers (simple or compound fertilizers);
- (d) Chemical installations for the production of basic plant health products and of biocides;
- (e) Installations using a chemical or biological process for the production of basic pharmaceutical products;
- (f) Installations for the production of explosives and pyrotechnic products.

~~15. Extraction, transport and storage of petroleum, gas, oil and chemicals:~~

~~(c) Installations for the storage of petroleum, petrochemical, or chemical products with a capacity of 200 000 tons or more.~~

## **{6. Waste management**

(a) Installations receiving hazardous wastes (> 10 tons/day) for incineration, pyrolysis, recovery, chemical treatment or landfilling ;

~~{(b) Installations for the incineration of municipal waste with a capacity exceeding 3 tons per hour;}~~

~~{(c) Installations for the disposal of non-hazardous waste with a capacity exceeding 50 tons per day;}~~

~~{(d) Landfills receiving more than 10 tons per day or with a total capacity exceeding 25000 tons, excluding landfills of inert waste;}~~

(f) Installations for the disposal or recycling of animal carcasses and animal waste with a treatment capacity exceeding 10 tons per day;

~~{(g) Municipal ~~w~~Waste-water treatment plants with a capacity exceeding 1500 000 population equivalent;}~~

~~{(h) Independently operated industrial waste-water treatment plants which serve one or more activities of this annex with a capacity exceeding 10 000 m<sup>3</sup>/day.}~~

## **7. Paper and wood production and processing**

Industrial plants for:

(a) The production of pulp from timber or similar fibrous materials;

(b) The production of paper and board and other wood products (such as chipboard, fibreboard and plywood) with a production capacity exceeding 20 tons per day;

~~{(c) The manufacture, processing or treatment of wood and wood products (such as chipboard, fibreboard and plywood)}~~

(c) Treatment/preservation of wood and wood products with a capacity exceeding 5 tons/day.

## **{8. Agriculture and aquaculture}**

[(a) Installations for the intensive rearing of poultry or, pigs or cattle with more than:

(i) 40 000 places for poultry;

(ii) 2 000 places for production pigs (over 30 kg);

(iii) 750 places for sows;

~~{(b) Intensive aquaculture exceeding 1000 tons of fish and shellfish per year.}~~

## 9. Animal and vegetable products from the food and beverage sector

- (a) Slaughterhouses with a carcass production capacity greater than 50 tons per day;
- ~~(b)~~ Treatment and processing intended for the production of food and beverage products from:
  - (i) Animal raw materials (other than milk) with a finished product production capacity greater than 75 tons per day;
  - (ii) Vegetable raw materials with a finished product production capacity greater than 300 tons per day (average value on a quarterly basis);~~‡~~
- (c) Treatment and processing of milk, the quantity of milk received being greater than 200 tons per day (average value on an annual basis).

## 10. Other activities

- (a) Plants for the pretreatment (operations such as washing, bleaching, mercerization) or dyeing of fibres or textiles where the treatment capacity exceeds 10 tons per day;
- (b) Plants for the tanning of hides and skins where the treatment capacity exceeds 12 tons of finished products per day;
- (c) Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kg per hour or more than 200 tons per year;
- (d) Installations for the production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitization;
- ~~(e)~~ Installations for the building and repairing of ships with a capacity for ships more than 100 m long.~~‡~~

## Appendix II

### ANNEX ON POLLUTANTS INCORPORATING CHANGES PROPOSED BY THE CONTACT GROUP

NB: The United States believes that all substances should be considered for all media. If this thinking is accepted there will be no need for the "Priority for Air" or "Priority for Water" columns.

No	Footnote or Y or N	Tech Grp Category	Priority for air	Priority for water	CAS Numbers	Aarhus PRTR	EPER Air	EPER Water	EPER	Kyoto	Montreal	POP	Basel	Heavy Metal	Gothenburg	Ospar	WFD	PLC	IARC Group 1
1	Y4	I	X			Methane (CH <sub>4</sub> )	x			x									
2	Y4	I	X			Carbon monoxide (CO)	x												
3	Y4	I	X			Carbon dioxide (CO <sub>2</sub> )	x			x									
4	Y4	I	X			Hydro-fluorocarbons (HFCs)	x			x									
5	Y4	I	X			Nitrous oxide (N <sub>2</sub> O)	x			x									
6	Y	I	X		7664-41-7	Ammonia (NH <sub>3</sub> )	x								x				
7	Y4	I	X			Non-methane volatile organic compounds (NMVOC)	x								x				
8	Y4	I	X			Nitrogen oxides (NO <sub>x</sub> /NO <sub>2</sub> )	x								x				
9	Y4	I	X			Perfluorocarbons (PFCs)	x			x									
10	Y4	I	X			Sulphur hexafluoride (SF <sub>6</sub> )	x			x									
11	Y4	I	X			Sulphur oxides (SO <sub>x</sub> /SO <sub>2</sub> )	x								x				
12	Y4	I		X		Total nitrogen		x											
13	Y4	I		X		Total phosphorus		x					x						
14	Y2	I	X			Hydrochlorofluorocarbons (HCFCs)					x								
15	Y2	I	X			Chlorofluorocarbons (CFCs)					x								
16	Y2	I	X			Halons					x								
17	Y	I	X	X	7440-38-2	Arsenic and compounds (as As)	x	x					x	x					x
18	N44	III			7440-41-7	Beryllium and compounds (as Be)							x						x
19	Y	I	X	X	7440-43-9	Cadmium and compounds (as Cd)	x	x					x	X		X	x		x
20	Y	I	X	X	7440-47-3	Chromium (excl. Cr VI) and	x	x						X					

No	Footnote or Y or N	Tech Grp Category	Priority for air	Priority for water	CAS Numbers	Aarhus PRTR	EPER Air	EPER Water	Kyoto	Montreal	POP	Basel	Heavy Metal	Gothenburg	Ospar	WFD	PLC	IARC Group 1
						compounds (as Cr)												
21	N	I				[Chromium VI and compounds]						x						x
22	Y	I	X	X	7440-50-8	Copper and compounds (as Cu)	x	x				x	X					
23	Y	I	X	X	7439-97-6	Mercury and compounds (as Hg)	x	x				x	X		X	x		
24	Y	I	x	X	7440-02-0	Nickel and compounds (as Ni)	x	x					X			x		x
25	Y	I	x	X	7439-92-1	Lead and compounds (as Pb)	x	x				x	X		X	x		
26	Y	I	x	X	7440-66-6	Zinc and compounds (as Zn)	x	x				x	X					
27	<del>N3</del>	II	x	X	7782-49-2	<del>Selenium and compounds (as Se)</del>						x	X					
28	<del>N44</del>	III			34256-82-1	Acetochlor												
29	<del>Y4</del>	I		X	15972-60-8	<del>Alachlor</del>										x		
30	<del>Y6</del>	II		X	309-00-2	<del>Aldrin</del>					x						x	
31	<del>Y4</del>	I		X	1912-24-9	<del>Atrazine</del>										x		
32	<del>N44</del>	III			542-88-1	Bis(chloromethyl)ether												x
33	N	III			2425-06-1	Captafol 2930-80-2												x
34	<del>Y6</del>	II		X	57-74-9	<del>Chlordane</del>					x							x
35	<del>Y6</del>	II		X	143-50-0	<del>Chlordecone</del>					x							
36	N	III		X	6164-98-3	<del>Chlordimeform</del>												x
37	<del>Y4</del>	I		X	470-90-6	<del>Chlorfenvinphos</del>										x		
38	Y	I		X	855-358-48	Chloro-alkanes (C10-13)		x							X	x		
39	N	III			510-15-6	Chlorobenzilate												x
40	<del>Y4</del>	I		X	2921-88-2	<del>Chlorpyrifos</del>										x		
41	<del>Y6</del>	II		X	50-29-3	<del>DDT</del>					x							x
42	N	III			95-76-1	<del>3,4-Dichloro aniline 96-76-1</del>												
43	Y	I	x	X	107-06-2	1,2-dichloroethane (EDC)	x	x								x		
44	Y	I	x	X	75-09-2	Dichloromethane (DCM)	x	x								x		
45	N	III			115-32-2	Dicofol									X			
46	<del>Y6</del>	II		X	60-57-1	<del>Dieldrin</del>					x							x
47	<del>Y4</del>	I		X	330-54-1	<del>Diuron</del>										x		
48	<del>Y4</del>	I		X	115-29-7	<del>Endosulphan</del>									X	x		
49	<del>Y6</del>	II		X	72-20-8	<del>Endrin</del>					x							



No	Footnote or Y or N	Tech Grp Category	Priority for air	Priority for water	CAS Numbers	Aarhus PRTR	EPER Air	EPER Water	EPER	Kyoto	Montreal	POP	Basel	Heavy Metal	Gothenburg	Ospar	WFD	PLC	IARC Group 1	
78	<del>N44</del>	III			92-67-1	4-Aminobiphenyl														x
79	<del>Y7</del>	I		X	120-12-7	Anthracene											x			
80	Y	I	X	X	71-43-2	Benzene	x	(x)									x			
81	<del>N44</del>	III			92-87-5	Benzidine														x
82	<del>N44</del>	III			80-05-7	Bisphenol A														
83	N	III				Polybrominated biphenyls (PBB)												x		
84	<del>Y4</del>	I		X		Brominated diphenylethers (PBDE)		x								X	x			
85	<del>N44</del>	III			79-94-7	Tetrabrominatedbisphenol A (TBBPA)										X				
86	N	III			126-72-7	Tris(2,3-dibromopropyl) phosphate										X				
87	N	III			88-85-7	Dinoseb and Dinoseb salts													x	
88	N	III			106-93-4	1,2-dibromoethane (EDB)													x	
89	N	III			732-26-3	Dodecylphenol										X				
90	<del>Y7</del>	I		X		Nonylphenol ethoxylates (NP/NPEs) and related substances										X	(X)			
91	<del>N7</del>	I		X	140-66-9	Octylphenol										X	(X)			
92	<del>Y4</del>	I		X	100-41-4	Ethyl benzene		(x)												
93	<del>Y44</del>	III			75-21-8	Ethylene oxide														x
94	N	III			640-19-7	Fluoroacetamide													x	
95	<del>N9</del>	II		X	36355-01-8	Hexabromobiphenyl						x								
96	N	III			107-46-0	Hexamethyl disiloxane (HMDS)										X				
97	<del>Y4</del>	I		X	34123-59-6	soproturon											X			
98	N	III			12427-38-2	Maneb														
99	N	III			137-42-8	Metam Natrium														
100	N	III			81-15-2	Musk xylene										X				
101	<del>Y7</del>	I		X	91-20-3	Naphthalene											X			
102	<del>N44</del>	III			91-59-8	2-Naphthyl-amine														x
103	<del>Y4</del>	I		X		Organotin compounds (as total Sn)		x												
104	<del>Y7</del>	I		X	117-81-7	Di-(2-ethyl hexyl)phthalate (DEHP)										X	X			
105	<del>N44</del>	III			85-68-7	Butyl benzyl phthalate (BBP)														
106	N	III			84-74-2	Di-n-butylphthalate (DBP)										X				

No	Footnote or Y or N	Tech Grp Category	Priority for air	Priority for water	CAS Numbers	Aarhus PRTR	EPER Air	EPER Water	Kyoto	Montreal	POP	Basel	Heavy Metal	Gothenburg	Ospar	WFD	PLC	IARC Group 1
107	<u>Y4</u>	I		X	108-95-2	<del>Phenols (as total C)</del>		x				x						
108	<u>Y4</u>	I	x	X		<del>Polycyclic aromatic hydrocarbons (PAHs)<sup>1/</sup></del>	x	x							X	X		
109	N	III			108-46-3	Resorcinol												
110	<u>N44</u>	III			100-42-5	Styrene												
111	N	III			98-51-1	4-tert-butyltoluene									X			
112	<u>Y4</u>	I		X	108-88-3	<del>Toluene</del>		(x)										
113	<u>Y2</u>	III		X		Tributyltin and compounds									X	X		
114	<u>Y2</u>	III		X		Triphenyltin and compounds									X			
115	N	III				Other organic tin compounds									X			
116	N	III			137-26-8	Thiram												
117	<u>Y4</u>	I		X		<del>Total organic carbon (TOC) (as total C or COD/3)</del>		x										
118	<u>Y4</u>	I		X	1582-09-8	<del>Trifluralin</del>										X		
119	<u>Y4</u>	I		X	1330-20-7	<del>Xylenes</del>		(x)										
120	<u>N24</u>	??			12122-67-7	Zineb												
121	<u>Y4</u>	I		X		<del>Chlorides (as total Cl)</del>		x										
122	Y	I	X			Chlorine and inorganic compounds (as HCl)	x					x						
123	N	III			12001-28-4	<del>Crocidolite</del>											x	
124	<u>Y44</u>	III			1332-21-4	<del>Asbestos</del>						x						x
125	Y	I		X		Cyanides (as total CN)		x				x						
126	<u>Y4</u>	I		X		<del>Fluorides (as total F)</del>		x										
127	<u>Y4</u>	I	X			<del>Fluorine and inorganic compounds (as HF)</del>	x											
128	Y	I	X			HCN	x											
129	<u>Y4</u>	I	X			<del>PM10 (particulate matters)</del>	x											
130	N	III			14808-60-7	Silica, crystalline												x
131	N	ND				Fly ash												

<sup>1/</sup> PAHs includes benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene (derived from the Convention on Long-range Transboundary Air Pollution/POPs Protocol)

***List of abbreviations:***

CAS:	Chemical Abstract Services
EPER:	Commission Decision of 17 July 2000 on the implementation of a European pollutant emission register (EPER) (2000/479/EC)
Kyoto:	Kyoto Protocol to the United Nations Framework Convention on Climate Change
Montreal:	Montreal Protocol on Substances that Deplete the Ozone Layer
POP:	UN/ECE Protocol on Persistent Organic Pollutants (POPs). This also covers all the POPs included in the global Convention on POPs (with the addition of HCH, PCDD, PCDF and Chlordecone)
Basel:	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Annex I
HM:	The UN/ECE Protocol on Heavy Metals
Gothenburg:	The UN/ECE Protocol to Abate Acidification, Eutrophication and Ground-level Ozone
OSPAR:	Convention for the Protection of the Marine Environment of the North-East Atlantic, Action Plan 1998-2003, Update 2000, Annex 2: Chemicals for Priority Action
PIC:	Rotterdam Convention on the Prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in International Trade
WFD:	List of priority substances in the field of water policy and list of high priority substances for further evaluation of their role in endocrine disruption
IARC Group 1:	International Agency for Research on Cancer of the World Health Organization (WHO)