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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
(Second meeting, Geneva, 5-6 July 2001)
(Item 3 of the provisional agenda)

ELEMENTS FOR A DRAFT INSTRUMENT ON POLLUTANT RELEASE AND TRANSFER REGISTERS RELATING TO SUBSTANCES, ACTIVITIES, TRANSFERS AND VALIDATION OF DATA

Prepared by the secretariat

1. At its first meeting, the Working Group on pollutant release and transfer registers (PRTR) established a technical group to undertake preparatory work in relation to four issues: substances, activities, transfers and data validation (CEP/WG.5/AC.2/2001/2, para. 50). The Working Group also agreed on a written commenting procedure, whereby delegations were invited to submit comments on these issues to the secretariat before 10 April 2001, and the secretariat was requested to prepare documentation which would provide the basis for the discussions in the technical group (CEP/WG.5/AC.2/2001/2, para. 52).

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2. The secretariat received comments from the following countries and organizations: Armenia, Georgia, Hungary, Poland, Republic of Moldova, Slovakia, Ukraine, United Kingdom, Uzbekistan, the European Chemical Industry Council (CEFIC), the European ECO Forum and the Regional Environmental Center for Central and Eastern Europe (REC). The present document has been prepared taking into account these comments and proposals and having regard to other relevant international agreements and processes.

Substances

3. At the first meeting of the Working Group, it was agreed that criteria should be developed for including substances in the list of substances to be covered by the PRTR instrument, and that the task of developing such criteria should be given to the technical group (CEP/WG.5/AC.2/2001/2, paras. 27, 31). A list of possible criteria, in some cases with corresponding definitions, is included in annex I. This would become part 1 of annex IV in a revised version of document CEP/WG.5/AC.2/2001/3, with the present parts 1 and 2 being renumbered as parts 2 and 3.

4. In the list of criteria, the column headed 'Source' provides information on other instruments where the terms in question have been used and is included for the sake of transparency and for the convenience of the Working Group. It is not envisaged that this column would remain in the annex to the instrument.

5. As the initial list of substances in the instrument would already have been adopted with the adoption of the instrument, the two contexts in which the criteria in annex I would have continuing relevance under the instrument would be:

(a) In the development of national lists of substances, which would take the mandatory list annexed to the instrument as a minimum but would have the possibility of including additional substances, taking into account specific national circumstances; and

(b) In the further elaboration by the Meeting of the Parties of the lists of substances (both mandatory and recommendatory) annexed to the instrument.

6. References to the part of the annex containing the list of criteria are therefore proposed for article 7 of document CEP/WG.5/AC.2/2001/3 and article 15, paragraph 6 (h)(ii), of document CEP/WG.5/AC.2/2001/6. The revised text proposed for article 7 is included in annex II. These references make it clear that the list of criteria would be for guidance purposes only. Thus it would not be necessary to have pollutants on the lists (at national level and in the instrument) corresponding to each of the criteria listed.

7. Two lists of substances are included in annexes III and IV. The list of substances included in annex III is intended to serve as part 2 of annex IV of the instrument according to the revision referred to in paragraph 3 above (the mandatory list), and the list included in annex IV is intended to serve as part 3 of annex IV of the instrument (the recommendatory list).

8. The lists in annexes III and IV have been compiled taking into account relevant international instruments, as follows:

(a) All the substances of the European Pollution Emission Register (EPER) and most of the corresponding thresholds have been included in annex III;

(b) All the substances regulated by the Kyoto Protocol to the United Nations Framework Convention on Climate Change, the Montreal Protocol on Substances that Deplete the Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR), Action Plan 1998-2003, Update 2000, Annex 2: Chemicals for Priority Action, the UN/ECE Protocol on Persistent Organic Pollutants, the UN/ECE Protocol on Heavy Metals and the UN/ECE Protocol to Abate Acidification, Eutrophication and Ground-Level Ozone have been included in annex III;

(c) Most of the substances regulated under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Annex I, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, relevant parts of the International Agency for Research on Cancer of the World Health Organization (WHO), Group I, the European Union (EU) list of priority substances in the field of water policy and the EU list of priority substances for further evaluation of their role in endocrine disruption have been included in annex III;

(d) All substances on the four priority lists adopted under Council Regulation 793/93/EEC on the evaluation and control of the risks of existing substances and a number of radioactive substances have been included in annex IV.

9. The columns indicating which substances are regulated under other international instruments are included for the information and convenience of the Working Group. It is not proposed that these columns would remain in the annex to the instrument.

10. Although thresholds have been proposed for releases of some substances to some media, there are many places where thresholds are not specified. In some cases, thresholds should eventually be included (allowing for the possibility that the threshold might be zero.) In other cases, releases of the substance in question to the medium indicated might not be considered significant for the purposes of triggering a reporting requirement.

11. The question of what order of magnitude should be used in the units of reporting for various pollutants is not addressed in annexes III and IV, although it was raised in some of the written comments by delegations. The pollutants range from substances which are highly toxic in minute quantities, where thousandths of a gram may be significant, to bulk substances, such as carbon dioxide, where emissions are measured in tons. The Working Group may wish to consider whether or how the instrument might specify the appropriate order of magnitude for the reporting unit in each case.

12. There are some linkages between the lists of pollutants to be covered, the list of activities

to be covered and more general issues such as whether and in what manner diffuse sources are to be covered, or whether products or storage will be covered. A specific case of this is the class of chemicals used as pesticides. The most toxic of these have been included in the mandatory list, in recognition of their extreme toxicity and the fact that some releases may come from production processes, though it is recognized that the bulk of their impact arises from their use rather than their production.

13. Some pollutants which have been or are being phased out because of their extremely hazardous nature are included. This has been done for the sake of completeness, though it is recognized that in most cases their inclusion will not increase the reporting burden.

Activities/facilities

14. A list of the types of activities for which facilities undertaking those activities would be required to report under the instrument is included in annex V. This list is largely derived from annex I to the Convention (which in turn draws heavily from annex I to the EU Directive on integrated pollution prevention and control), with some modifications. It would serve as annex II to the instrument, according to the structure presented in document CEP/WG.5/AC.2/2001/3.

15. Some of the activities included in annex V would not necessarily be required to report during step 1, according to the step-by-step approach set out in document CEP/WG.5/AC.2/2001/3, but would very probably be required to report during subsequent steps. They have been included on the assumption that the inclusion of such activities would not create a significant additional administrative burden and would be less troublesome than either adding them to the list at a later stage or having separate lists for each step.

16. The issue of diffuse sources is not addressed in this document. However, the boundary between diffuse sources and point sources is not always very clear-cut. Some sources of releases of pollutants fall somewhere between point sources and diffuse sources, in that they are more location-specific than a typical diffuse source and yet not as concentrated as a typical point source. Examples are railway lines (which release copper), motorways (for which it may be useful to have more specific information on releases than that relating to the entire road network) and power lines (which emit non-ionizing radiation). These might be termed ‘line sources’. These ‘activities’ have not been included in annex V, but the Working Group may wish to consider them either in conjunction with point sources or in the future when discussing the issue of diffuse sources.

Transfers

17. At the first meeting of the Working Group, it was agreed that the PRTR instrument should cover both releases and transfers. At the same time, it was recognized that an appropriate definition of transfers had to be found.[1/] The Meeting considered the distinction between off-site and on-site transfers to be important, pointing to the need for separate definitions, though opinions were mixed as to the extent to which on-site transfers should be covered in the first step of establishing the PRTR.

18. Whereas the concept of ‘releases’ is generally understood to cover situations where pollutants are released from a facility (or other source) into the environment, the concept of ‘transfers’ applies to the movement of pollutants within or between facilities. Clearly, not all such movements need to be covered by a PRTR system, and the task of identifying which should be covered involves a balancing of the rights and needs of the public to have information relevant to health and the environment and the need of facilities to be able to function effectively.

19. In considering which information on transfers should be covered, the rationale for including information on transfers in a public reporting system should be considered. Pollutants which are the subject of transfers might later become releases which have an actual impact on the environment or health. Including information on transfers in a PRTR system helps to ensure a measure of transparency and accountability, both by revealing which activities and bodies are responsible (even if indirectly) for eventual releases and by providing information on the management of the pollutants. It may also provide information on the risks to health or the environment that may be posed by pollutants even when they are not (or not intended to be) released.

20. In view of the emphasis put by the Working Group on the distinction between off-site and on-site transfers, it would appear necessary to have separate definitions of these. In developing these definitions, the Working Group may need to consider further the basis for the separate treatment of on-site and off-site transfers. With respect to on-site transfers, it is clear that the reporting system does not need to cover every movement of a pollutant from one part of a facility to another. One important consideration supporting a differentiated treatment of on-site and off-site transfers is the notion that the facility is accountable as a whole for all of its releases and off-site transfers but that whatever goes on within its boundaries is its own business.

21. Against this may be set the argument that if substances are eventually released as a result of its activities, even if from a separate facility to which the pollutants are transferred (such as a waste-treatment plant), the facility's internal management of pollutants which leads to those eventual releases is a matter of legitimate public interest and concern. Similarly, if significant risks to the environment or health are posed by the existence of pollutants within a facility, this again would render information on the management of those pollutants a matter of legitimate interest for the public, including workers at the facility, even where no actual releases take place or are planned.

22. Furthermore, if on-site transfers are treated in a very different way to off-site transfers, an anomaly may arise whereby two processes which may be identical from a technical point of view (e.g. two cases involving the transfer of waste to a waste-water-treatment plant, in one case where the treatment plant is owned and operated within the facility and in the other where it is owned and operated by a neighbouring facility) might involve substantially different reporting requirements.

23. It was noted by the Working Group at its first meeting that disposal was covered in the definitions of both ‘release’ and ‘transfer’ in document CEP/WG.5/AC.2/2001/3. The reference to disposal via transfer covers situations where the pollutant is transferred to an intermediary body which then carries out the disposal, whereas when the facility directly disposes of waste to

the environment, this would be counted as a release.

24. In addressing the topic of transfers, the Working Group may wish to consider the following questions:

(a) What is the subject of the transfer? Document CEP/WG.5/AC.2/2001/3 uses the term ‘potential pollutants’ in the definition of ‘transfer’, though it has been pointed out that the term ‘potential’, introduced to emphasize the point that a substance being transferred is not necessarily causing pollution, is redundant because it is already used in the definition of ‘pollutant’. In the written comments, ‘substances themselves or in the form of mixtures or wastes’ has been put forward as quite a broad formulation, as well as terms which would narrow the range of substances to be covered, such as ‘wastes’ and ‘by-products’. If terms such as ‘wastes’ and ‘by-products’ are used, it has been proposed to specify what they mean either by reference to internationally accepted definitions, such as those in the Basel Convention, or by drawing up a list of their sources.

(b) Should the purpose of the transfer be circumscribed by specifying the intended ‘use’ of the pollutant once it reaches its destination? If so, how? Should it be done differently for off-site and for on-site transfers? The range of purposes proposed in document CEP/WG.5/AC.2/2001/3 with respect to off-site transfers covers use, reuse, storage, treatment, energy recovery, recycling and disposal, and the last four of these elements would also be covered with respect to on-site transfers.

(c) Should it be specified in the instrument that the threshold for each pollutant applies to (i) the amount released only, (ii) either the amount released or the amount transferred, taken separately, or (iii) the amounts released and transferred combined? Is there any reason to use a different set of thresholds with respect to transfers than those used for releases, or to differentiate between the thresholds used for off-site and on-site transfers? Are there circumstances in which it would make sense to base the thresholds on the amounts of substances used rather than the amounts released or transferred?

(d) Is it sufficient to deal with storage within the definition of transfers (as one of the purposes for which the transfer is made) or might it also be necessary at some point to introduce a separate reporting requirement for the storage of pollutants? There is clearly a link between the issue of storage and that of risk or potential impact. Information on releases and transfers from a facility might not always be sufficient to inform the public of risks posed by stored substances (e.g. the explosion at a fireworks depot in the Netherlands in May 2000).

(e) Should pollutants in the form of, contained in or released from products be addressed (i) within the definitions of releases and transfers, (ii) in a separate definition, (iii) in a combination of these, or (iv) not at all? Products are referred to in the definitions of both ‘release’ and ‘transfer’ in document CEP/WG.5/AC.2/2001/3, and according to that document, both of these elements would form part of step 2. Whereas the inclusion of releases of pollutants from products would cover the final release from the product into the environment, inclusion of transfers in or as products would aim to cover the movement of those pollutants prior to their release into the environment. As with releases and transfers in general, the amounts released

cannot be added to the amounts transferred to produce a meaningful result, as this would incur the risk of double counting.

(f) Is there a need for special measures to avoid the risk or appearance of double counting of pollutants? These might include a reporting format which distinguishes between transfers to facilities which themselves are required to report and transfers to facilities (or other bodies) which fall outside the reporting regime.

Validation of data

25. As the technical group will only discuss the issues of substances, activities and transfers at its first meeting (CEP/WG.5/AC.2/2001/2, para. 50), more priority has been given to those three issues in the preparation of documentation. Some preliminary observations may however be made.

26. Points raised within the task force, at the first meeting of the Working Group or in the written comments may be summarized as follows:

(a) Data quality and accuracy is important, though one hundred per cent accuracy is not achievable;

(b) While the responsibility for data quality and accuracy rests with the operator of the facility, some independent validation of data is needed;

(c) Data validation should not be an obstacle to the timely inclusion of data on a public register, therefore a pragmatic balance needs to be struck between exhaustive validation and timeliness;

(d) Once a certain level of validation has been undertaken by the competent authority, subjecting data to public scrutiny is an effective method of further verifying its quality and accuracy.

26. In its future deliberations on the issue of data validation, the Working Group may wish to take into account work undertaken on this issue in other forums, such as the Convention on Long-range Transboundary Air Pollution's Task Force on Emission Inventories, the Organisation for Economic Co-operation and Development and the European Union and its related institutions, as well as experiences at national level such as that described in the written comments from the United Kingdom. The Working Group may also wish to consider to what extent the issue of data validation should be addressed in the instrument itself and to what extent it might be appropriate to develop guidance on the matter under the instrument.

Note

[1/] The Oxford Advanced Learner's Dictionary offers the following definition of 'transfer': "to move something or somebody from one place to another", whereas 'release' means "set free or

liberate something or someone". It follows that transfers should cover 'movements' from one specific place to another specific place, whereas releases would not be concerned with the destination of the substances or materials.

Annex I

CRITERIA FOR SELECTION OF POLLUTANTS

No.	Criteria	Source	Explanation, Definition
1	Explosive	91/689/EEC	Substances and preparations which may explode under the effect of flame or which are more sensitive to shocks or friction than dinitrobenzene.
2	Oxidizing	91/689/EEC and Basel	Substances and preparations which exhibit highly exothermic reactions when in contact with other substances, particularly flammable substances.
3	Highly flammable or flammable	91/689/EEC	
4	Irritant	91/689/EEC	Non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation.
5	Harmful	91/689/EEC	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve limited health risks.
6	Toxic – Poisonous (Acute)	91/689/EEC, Basel and OSPAR Strategy	Substances and preparations (including very toxic substances and preparations) which, if they are inhaled or ingested or if they penetrate the skin, may involve serious, acute or chronic health risks and even death.
8	Carcinogenic	91/689/EEC	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce cancer or increase its incidence.
9	Corrosive	91/689/EEC and Basel	Substances and preparations which may destroy living tissue on contact.
10	Infectious	91/689/EEC and Basel	Substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms.
11	Teratogenic	91/689/EEC	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce non-hereditary congenital malformations or increase their incidence.
12	Mutagenic	91/689/EEC	Substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may induce hereditary genetic defects or increase their incidence.
13	Reproductive toxic		
14	Neuro-toxic		
15	Endocrine-disrupting	OSPAR Strategy, EU priority list, 2000	
16	Releasing toxic or very toxic gases in contact with water, air or an acid	91/689/EEC and Basel	
17	Capable by any means, after	91/689/EEC and Basel	

No.	Criteria	Source	Explanation, Definition
	disposal, of yielding another substance, e.g. a leachate, which possesses any of the characteristics in this list		
18	Ecotoxic	91/689/EEC	Substances and preparations which present or may present immediate or delayed risks for one or more sectors of the environment.
19	Persistent	Executive Body decision 1998/2, POPs, Annex D (b), and OSPAR Strategy	
20	Bio-accumulative	Executive Body decision 1998/2, POPs, Annex D (c), and OSPAR Strategy	
21	Volatile	UN/ECE VOC Protocol	Organic compounds of anthropogenic nature, other than methane, that are capable of producing photochemical oxidants by reactions with nitrogen oxides in the presence of sunlight.
22	Potential for long-range environmental transport	Executive Body decision 1998/2, POPs, Annex D (d)	
23	Having or potentially having an adverse effect on the stratospheric ozone layer	Montreal	
24	Radioactive		
25	Absorbing and re-emitting infrared radiation (greenhouse gases)	FCCC, art. 1	
26	Contributing to eutrophication (in particular, nitrates and phosphates)	96/61/EC, Annex III	
27	Having an unfavourable influence on the oxygen balance of water	96/61/EC, Annex III	
28	Contributing to acid rain	Gothenburg Protocol	
29	Contributing to the build-up of tropospheric ozone and other oxidizing photo-chemicals [VOCs]	Gothenburg Protocol	

No.	Criteria	Source	Explanation, Definition
30	Living modified organisms [LMOs]	Adapted from the Biosafety Protocol, art. 3	Biological entities possessing a novel combination of genetic material obtained through the use of modern biotechnology and capable of transferring or replicating genetic material, including sterile organisms, viruses and viroids.

91/689/EEC: Council Directive on hazardous waste of 12 December 1991.

Basel: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

OSPAR: Convention for the Protection of the Marine Environment of the North-East Atlantic.

EU priority list: 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.

Executive Body decision 1998/2: Executive Body decision 1998/2 on information to be submitted and the procedure for adding substances to annexes I, II or III to the Protocol on Persistent Organic Pollutants.

POPs, Annex D: Stockholm Convention on Persistent Organic Pollutants, Annex D (Information requirements and screening criteria).

UN/ECE VOC Protocol: Protocol concerning the Control of Emissions of Volatile Organic Compounds on Their Transboundary Fluxes (Protocol to the UN/ECE Convention on Long-range Transboundary Air Pollution).

Montreal: Montreal Protocol on Substances that Deplete the Ozone Layer.

FCCC: United Nations Framework Convention on Climate Change.

96/61/EC: Council Directive concerning integrated pollution prevention and control of 24 September 1996.

Gothenburg Protocol: Protocol to Abate Acidification, Eurotrophication and Ground-level Ozone (Protocol to the UN/ECE Convention on Long-range Transboundary Air Pollution).

Biosafety Protocol: Cartagena Protocol on Biosafety

Annex II

USE OF CRITERIA FOR SELECTION OF POLLUTANTS AND RESOURCES AT NATIONAL LEVEL

Possible text replacing article 7, paragraph 5, of document CEP/WG.5/AC.2/2001/3:

5. In order to implement the provisions of paragraphs 1 to 4 above, each Party shall establish a national list of pollutants and resources required to be reported to the competent authority and included in the national register, which shall contain as a minimum the pollutants and resources required to be reported under this instrument and the corresponding thresholds. The national lists may contain pollutants and resources additional to those contained in annex IV, and may establish lower thresholds for pollutants and resources than those contained in that annex.

6. Each Party shall regularly review its national list of pollutants and resources, including the corresponding thresholds, and shall update it having regard to the criteria included in annex IV, part 1, and the relevance of pollutants and resources additional to those listed in annex IV, parts 2 to 4, within its national context.

Annex III

MANDATORY LIST OF POLLUTANTS FOR REPORTING

No	CAS Numbers	Aarhus PRTR	Thresholds			EPER	Kyoto	Montreal	ECE POPs	Basel Annex I	ECE HM[1]	ECE Gothenburg	OSPAR	EU Priority	PIC	IARC Group 1
			Air kg/year	Water kg/year	Soil kg/year											
	Environmental issues															
1.		Methane (CH_4)	100 000			✔ air	✔									
2.		Carbon monoxide (CO)	500 000			✔ air										
3.		Carbon dioxide (CO_2)	100 000 000			✔ air	✔									
4.		Hydro-fluorocarbons (HFCs)	100			✔ air	✔									
5.		Nitrous oxide (N_2O)	10 000			✔ air	✔									
6.	7664-41-7	Ammonia (NH_3)	10 000			✔ air						✔				
7.		Non-methane volatile organic compounds (NMVOC)	100 000			✔ air						✔				
8.		Nitrogen oxides (NO_x/NO_2)	100 000			✔ air						✔				
9.		Perfluorocarbons (PFCs)	100			✔ air	✔									
10.		Sulphur hexafluoride (SF_6)	50			✔ air	✔									

No	CAS Numbers	Aarhus PRTR	Thresholds			EPER	Kyoto	Montreal	ECE POPs	Basel Annex I	ECE HM[1]	ECE Gothenburg	OSPAR	EU Priority	PIC	IARC Group 1
			Air kg/year	Water kg/year	Soil kg/year											
11.		Sulphur oxides (SO_x/SO_2)	150 000			✔ air						✔				
12.		Total nitrogen		50 000		✔ water										
13.		Total phosphorus		5 000		✔ water				✔						
14.		Hydrofluorocarbons (HCFCs)	100					✔								
15.		Chlorofluorocarbons (CFCs)	100					✔								
16.		Halons	100					✔								
	Metals															
17.	7440-38-2	Arsenic and compounds (as As)	20	5		✔ air/water				✔	(✔)					✔
18.	7440-41-7	Beryllium and compounds (as Be)	0.001							✔						✔
19.	7440-43-9	Cadmium and compounds (as Cd)	10	5		✔ air/water				✔	✔		✔			✔
20.	7440-47-3	Chromium (excl. Cr VI) and compounds (as Cr)	100	50		✔ air/water					(✔)					
21.		Chromium VI and compounds								✔						✔
22.	7440-50-8	Copper and compounds (as Cu)	100	50		✔ air/water				✔	(✔)					
23.	7439-97-6	Mercury and compounds (as Hg)	10	1		✔ air/water				✔	✔		✔		✔	
24.	7440-02-0	Nickel and compounds (as Ni)	50	20		✔ air/water					(✔)					✔
25.	7439-92-1	Lead and compounds (as Pb)	200	20		✔ air/water				✔	✔		✔			
26.	7440-66-6	Zinc and compounds (as Zn)	200	100		✔ air/water				✔	(✔)					
27.	7782-49-2	Selenium and compounds (as Se)								✔	(✔)					
	Chlorinated Organic Substances															
28.	34256-82-1	Acetochlor												✔		
29.	15972-60-8	Alachlor												✔		

No	CAS Numbers	Aarhus PRTR	Thresholds			EPER	Kyoto	Montreal	ECE POPs	Basel Annex I	ECE HM[1/]	ECE Gothenburg	OSPAR	EU Priority	PIC	IARC Group 1
			Air kg/year	Water kg/year	Soil kg/year											
30.	309-00-2	Aldrin	100	0.0005					✔						✔	
31.	1912-24-9	Atrazine	100	0.06										✔		
32.	542-88-1	Bis(chloromethyl)ether														✔
33.	2425-06-1 2930-80-2	Captafol													✔	
34.	57-74-9	Chlordane							✔						✔	
35.	143-50-0	Chlordecone							✔							
36.	6164-98-3	Chlordimeform													✔	
37.	470-90-6	Chlorfenvinphos		0.01										✔		
38.		Chloro-alkanes (C10-13)[2/]		1		✔ water							✔			
39.	510-15-6	Chlorobenzilate													✔	
40.	2921-88-2	Chlorpyrifos												✔		
41.	50-29-3	DDT		0.0005					✔						✔	
42.	95-76-1 96-76-1	3,4-Dichloro aniline												✔		
43.	107-06-2	1,2-dichloroethane (EDC)	1 000	10		✔ air/water										
44.	75-09-2	Dichloromethane (DCM)	1 000	10		✔ air/water										
45.	115-32-2	Dicofol											✔			
46.	60-57-1	Dieldrin		0.0025					✔						✔	
47.	330-54-1	Diuron												✔		
48.	115-29-7	Endosulphan		0.0005									✔			
49.	72-20-8	Endrin		0.0005					✔							
50.		Halogenated organic compounds (as AOX)		1 000		✔ water				✔						
51.	76-44-8	Heptachlor							✔							
52.	118-74-1	Hexachlorobenzene (HCB)	10	1		✔ air/water			✔						✔	
53.		Hexachlorobutadiene (HCBD)		1		✔ water										
54.	608-73-1	1,2,3,4,5,6-hexachlorocyclohexane (HCH)	10	1		✔ air/water			✔				✔		✔	
55.	58-89-9	Lindane													✔	
56.	330-55-2	Linuron		0.800										✔		
57.	72-43-5	Methoxychlor											✔			
58.	2385-85-5	Mirex							✔							
59.	505-60-2	Mustard gas (Sulphur mustard)														✔

No	CAS Numbers	Aarhus PRTR	Thresholds			EPER	Kyoto	Montreal	ECE POPs	Basel Annex I	ECE HM[1/]	ECE Gothenburg	OSPAR	EU Priority	PIC	IARC Group 1
			Air kg/year	Water kg/year	Soil kg/year											
60.		PCDD +PCDF (dioxins +furans) (as Teq)	0.001			✔ air			✔	✔			✔			✔
61.	608-93-5	Pentachlorobenzene												✔		
62.	87-86-5	Pentachlorophenol (PCP)	10			✔ air							✔		✔	
63.	1336-36-3	Polychlorinated biphenyls (PCBs)		0.002					✔				✔		✔	
64.	61788-33-8	Polychlorinated terphenyls (PCT)													✔	
65.	122-34-9	Simazine												✔		
66.	1746-01-6	2,3,7,8-Tetrachlorodibenzo-para-dioxin (TCDD)														✔
67.	127-18-4	Tetrachloroethylene (PER)	2 000			✔ air										
68.	56-23-5	Tetrachloromethane (TCM)	100			✔ air										
69.	87-61-6 120-82-1	Trichlorobenzenes[3/] (TCBs)	10			✔ air							✔			
70.	71-55-6	1,1,1-trichloroethane	100			✔ air										
71.	79-00-5	1,1,2-trichloroethane														
72.	79-34-5	1,1,2,2-tetrachloroethane														
73.	79-01-6	Trichloroethylene (TRI)	2 000			✔ air										
74.	67-66-3	Trichloromethane	500			✔ air										
75.	8001-35-2	Toxaphene							✔							
76.	50471-44-8	Vinclozolin												✔		
77.	75-01-4	Vinyl chloride[4/]	100													✔
	Other Organic Compounds															
78.	92-67-1	4-Aminobiphenyl														✔
79.	120-12-7	Anthracene												✔		
80.	71-43-2	Benzene	1 000	1		✔ air										
81.	92-87-5	Benzidine														✔
82.	80-05-7	Bisphenol A												✔		
83.		Polybrominated biphenyls (PBB)[5/]													✔	
84.		Brominated diphenylethers (PBDE)		1		✔water							✔			
85.		Tetrabrominatedbisphenol A (TBBPA)											✔			

No	CAS Numbers	Aarhus PRTR	Thresholds			EPER	Kyoto	Montreal	ECE POPs	Basel Annex I	ECE HM[1]	ECE Gothenburg	OSPAR	EU Priority	PIC	IARC Group 1
			Air kg/year	Water kg/year	Soil kg/year											
86.		Tris(2,3-dibromopropyl) phosphate											✔			
87.	88-85-7	Dinoseb and Dinoseb salts													✔	
88.	106-93-4	1,2-dibromoethane (EDB)													✔	
89.	732-26-3	Dodecylphenol											✔			
90.		Nonylphenol ethoxylates (NP/NPEs) and related substances		1									✔			
91.	140-66-9	Octylphenol		1									✔			
92.	100-41-4	Ethyl benzene														
93.	75-21-8	Ethylene oxide														✔
94.	640-19-7	Fluoroacetamide													✔	
95.	36355-01-8	Hexabromobiphenyl							✔							
96.	107-46-0	Hexamethyl disiloxane (HMDS)											✔			
97.	34123-59-6	Isoproturon												✔		
98.	12427-38-2	Maneb												✔		
99.	137-42-8	Metam Natrium												✔		
100.		Musk xylene											✔			
101.	91-20-3	Naphthalene		1										✔		
102.	91-59-8	2-Naphthyl-amine														✔
103.		Organotin compounds (as total Sn)		50		✔ water										
104.	117-84-0 117-81-7	Di-(2-ethyl hexyl)phthalate (DEHP)											✔	✔		
105.	85-68-7	Butyl benzyl phthalate (BBP)														
106.		Di-n-butylphthalate (DBP)											✔			
107.	108-95-2	Phenols (as total C)		20		✔ water				✔						
108.		Polycyclic aromatic hydrocarbons (PAHs)	50	5		✔ air/water							✔			
109.	108-46-3	Resorcinol												✔		
110.	100-42-5	Styrene												✔		
111.	98-51-1	4-tert-butyltoluene											✔			
112.	108-88-3	Toluene		1												
113.		Tributyltin and compounds		0.005									✔			
114.		Triphenyltin and compounds		0.005									✔			
115.		Other organic tin											✔			

No	CAS Numbers	Aarhus PRTR	Thresholds			EPER	Kyoto	Montreal	ECE POPs	Basel Annex I	ECE HM[1]	ECE Gothenburg	OSPAR	EU Priority	PIC	IARC Group 1
			Air kg/year	Water kg/year	Soil kg/year											
		compounds														
116.	137-26-8	Thiram												✔		
117.		Total organic carbon (TOC) (as total C or COD/3)		50 000		✔ water										
118.	1582-09-8	Trifluralin												✔		
119.	1330-20-7	Xylenes	100	1												
120.	12122-67-7	Zineb												✔		
	Other Compounds															
121.		Chlorides (as total Cl)		2 000 000		✔ water										
122.		Chlorine and inorganic compounds (as HCl)	10 000			✔ air				✔						
123.	12001-28-4	Crocidolite													✔	
124.	1332-21-4	Asbestos								✔						✔
125.		Cyanides (as total CN)		50		✔ water				✔						
126.		Fluorides (as total F)		2000		✔ water										
127.		Fluorine and inorganic compounds (as HF)	5 000			✔ air										
128.		HCN	200			✔ air										
129.		PM10 (particulate matters)	50 000			✔ air										
130.	14808-60-7	Silica, crystalline														✔
131.		Fly ash														

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

ECE POPs: 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 Annex I:	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Annex I
ECE HM:	The UN/ECE Protocol on Heavy Metals
ECE 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
EU Priority:	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)

Notes

[1/] In accordance with article 7, paragraph 1 (b), of the Protocol, each Party shall, where appropriate, collect and report relevant information relating to its emissions of other heavy metals. On this voluntary basis, Parties report on their emissions of As, Cr, Cu, Ni, Se and Zn, which are marked with (✔) in the table.

[2/] Also covering short-chained chlorinated paraffins (SCCP).

[3/] TCBs could be broken down into:

1,2,4 – trichlorobenzene (120-82-1)
1,3,5 – trichlorobenzene (108-70-1)

[4/] Synonyms: Chloroethylene, Chloroethene, Ethylene monochloride

[5/] PBB could be broken down into:

Hexa – 36355-01-8
Octa – 27858-07-7
Deca – 13654-09-6

Annex IV

RECOMMENDATORY LIST OF ADDITIONAL POLLUTANTS FOR REPORTING

No.	EU Priority List	CAS Number	Substance	Threshold		
				Air	Water	Soil
			Radionuclides			
1.			americium isotopes			
2.			antimony-125			
3.			argon-41			
4.			caesium-134			
5.			caesium-137			
6.			carbon-14			
7.			cerium-144			
8.			cobalt-60			
9.			iodine-129			
10.			iodine-131			
11.			krypton-85			
12.			niobium-95			
13.			phosphorus-32/33			
14.			plutonium isotopes			
15.			radium isotopes			
16.			radon-222			
17.			ruthenium-106			
18.			strontium-90			
19.			sulphur-35			
20.			technetium-99			
21.			thorium-230			
22.			thorium-232			
23.			tritium			
24.			uranium			
25.			zirconium-95			
26.			other radionuclides			
			Chlorinated Organic Substances			
27.	2	3327-22-8	(3-chloro-2-hydroxypropyl) trimethylammonium chloride			
28.	1	106-46-7	1,4-dichlorobenzene			
29.	4	38051-10-4	2,2-bis(chloromethyl)trimethylene bis(bis(2-chloroethyl)phosphate)			
30.	1	1570-64-5	4-chloro-o-cresol			
31.	3	85535-85-9	alkanes, C14-17, chloro			
32.	3	79-11-8	chloroacetic acid			
33.	2	75-45-6	chloro difluoro methane			
34.	4	77-47-4	hexachlorocyclopentadiene			
35.	4	13674-84-5	tris(2-chloro-1-methylethyl) phosphate			
36.	3	115-96-8	tris(2-chloroethyl) phosphate			
37.	4	13674-87-8	tris[2-chloro-1(chloromethyl)ethyl] phosphate			
			Other Organic Substances			
38.	4	112-90-3	(Z)-octadec-9-enylamine			
39.	4	1506-02-1	1-(5,6,7,8-tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one			
40.	2	68515-48-0	1,2-benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich			
41.	2	68515-49-1	1,2-benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich			
42.	4	1222-05-5	1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran			
43.	2	123-91-1	1,4-dioxane			
44.	4	107-98-2	1-methoxypropan-2-ol			
45.	2	88-12-0	1-vinyl-2-pyrrolidinone			
46.	1	112-34-5	2-(2-butoxyethoxy) ethanol			
47.	1	111-77-3	2-(2-methoxy ethoxy) ethanol			
48.	4	79-94-7	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol			
49.	3	3033-77-0	2,3-epoxypropyltrimethylammonium chloride			
50.	2	25167-70-8	2,4,4-trimethylpentene			

No.	EU Priority List	CAS Number	Substance	Threshold		
				Air	Water	Soil
51.	4	121-14-2	2,4-dinitrotoluene			
52.	4	111-76-2	2-butoxyethanol			
53.	4	112-07-2	2-butoxyethyl acetate			
54.	2	110-80-5	2-ethoxyethanol			
55.	2	111-15-9	2-ethoxy ethyl acetate			
56.	1	103-11-7	2-ethyl hexyl acrylate			
57.	2	98-01-1	2-furaldehyde			
58.	4	108-65-6	2-methoxy-1-methylethyl acetate			
59.	4	994-05-8	2-methoxy-2-methylbutane			
60.	1	110-49-6	2-methoxyethyl acetate			
61.	4	88-72-2	2-nitrotoluene			
62.	3	80-05-7	4,4'-isopropylidene diphenol			
63.	1	101-77-9	4,4'-methylenedianiline			
64.	1	95-80-7	4-methyl-m-phenylenediamine			
65.	3	81-14-1	4'-tert-butyl-2',6'-dimethyl-3',5'-dinitroacetophenone			
66.	4	98-73-7	4-tert-butylbenzoic acid			
67.	3	81-15-2	5-tert-butyl-2,4,6-trinitro-m-xylene			
68.	1	75-05-8	acetonitrile			
69.	1	107-02-8	acryl aldehyde			
70.	1	79-06-1	acrylamide			
71.	1	79-10-7	acrylic acid			
72.	1	107-13-1	acrylonitrile			
73.	4	61788-46-3	amines, coco alkyl			
74.	4	61788-45-2	amines, hydrogenated tallow alkyl			
75.	2	1790-33-8	amines, tallow alkyl			
76.	1	62-53-3	aniline			
77.	1	67774-74-7	benzene, C10-13 -alkyl derivs.			
78.	2	117-81-7	bis(2-ethylhexyl) phthalate			
79.	3	10039-54-0	bis(hydroxylammonium) sulphate [hydroxyl amine sulphate]			
80.	1	1163-19-5	bis(pentabromophenyl)ether			
81.	1	110-65-6	but-2-yne-1,4-diol			
82.	1	106-99-0	buta-1,3-diene [1,3-butadiene]			
83.	1	98-82-8	cumene			
84.	1	110-82-7	cyclohexane			
85.	2	26761-40-0	di-"isodecyl" phthalate			
86.	2	28553-12-0	di-"isononyl" phthalate			
87.	2	77-78-1	dimethyl sulphate			
88.	1	107-64-2	dimethyldioctadecylammonium chloride			
89.	1	117-84-0	dioctyl phthalate			
90.	1	32536-52-0	diphenyl ether, octabromo derivative			
91.	3	122-39-4	diphenylamine			
92.	1	65996-92-1	distillates (coal tar)			
93.	1	60-00-4	edetic acid [ethylene diamine tetra acetic acid]			
94.	1	141-97-9	ethyl acetoacetate			
95.	2	25637-99-4	hexabromocyclododecane			
96.	1	79-41-4	methacrylic acid			
97.	2	100-97-0	methenamine			
98.	1	79-20-9	methyl acetate			
99.	1	80-62-6	methyl methacrylate			
100.	3	26447-40-5	methylenediphenyl diisocyanate			
101.	2	75-56-9	methyloxirane [propulene oxide]			
102.	2	95-33-0	n-cyclohexylbenzothiazole-2-sulphenamide			
103.	3	98-95-3	nitrobenzene			
104.	2	90-04-0	o-anisidine			
105.	4	124-30-1	octadecylamine			
106.	2	109-66-0	pentane			
107.	3	30899-19-5	pentanol			
108.	3	110-85-0	piperazine			
109.	3	65996-93-2	pitch, coal tar, high-temp.			
110.	2	71-23-8	propan-1-ol [propanol]			
111.	3	75-91-2	tert-butyl hydroperoxide			
112.	3	1634-04-4	tert-butyl methyl ether			
113.	1	64-02-8	tetrasodium ethylenediaminetetraacetate [tetrasodium salt]			

No.	EU Priority List	CAS Number	Substance	Threshold		
				Air	Water	Soil
114.	4	26523-78-4	tris(nonylphenyl) phosphite			
115.	3	5064-31-3	trisodium nitrilo triacetate			
116.	1	108-05-4	vinyl acetate			
			Inorganic Substances			
117.	4	7784-18-1	aluminium fluoride			
118.	4	11113-50-1	boric acid			
119.	4	10043-35-3	boric acid, crude natural			
120.	4	7789-75-5	calcium fluoride			
121.	4	1309-64-4	diantimony trioxide			
122.	4	1330-43-4	sodium tetraborate, anhydrous			
123.	1	7664-39-3	hydrogen fluoride			
124.	2	7722-84-1	hydrogen peroxide			
125.	3	11138-47-9	perboric acid, sodium salt			
126.	4	1310-73-2	sodium hydroxide			
127.	2	7681-52-9	sodium hypochlorite			
128.	3	13775-53-6	trisodium hexafluoroaluminate			
129.	3	15096-52-3	trisodium hexafluoroaluminate [cryolite]			

Annex V

ACTIVITIES FOR FACILITY REPORTING

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 site.

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; [1/]
(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^3.

3. Mineral industry:

(a) Underground mining and related operations;

(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^3 and with a setting density per kiln exceeding 300 kg/m^3;

(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: [2/]

(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;

(g) Chemical installations in which chemical or biological processing is used for the production of protein feed additives, ferments and other protein substances.

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

(a) Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tons/day in the case of petroleum and 500 000 cubic metres/day in the case of gas;

(b) Pipelines for the transport of gas, oil or chemicals with a diameter of more than 800 mm and a length of more than 40 km;

(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 for the incineration, pyrolysis, recovery, chemical treatment or landfill of hazardous waste;

(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 25 000 tons, excluding landfills of inert waste;

(e) Installations for shredding;

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

(g) Waste-water treatment plants with a capacity exceeding 150 000 population equivalent.

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 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).

8. Agriculture and aquaculture

(a) Installations for the intensive rearing of poultry, 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; or

(iv) 400 cows.

(b) Intensive aquaculture.[3/]

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) Domestic and international airports (LTO-<1000m);[3/]

(b) Inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1 350 tons;

(c) Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1 350 tons;

(d) Dredging operations;[3/]

(e) 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;

(f) Plants for the tanning of hides and skins where the treatment capacity exceeds 12 tons of finished products per day;

(g) 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;

(h) Installations for the production of carbon (hard-burnt coal) or electrographite by means of incineration or graphitization;

(i) Installations for the building and repairing of ships;[3/]

(j) Crematoria;[3/]

(k) Abstraction and treatment of drinking water;[3/]

(l) Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres;

(m) Overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km;

(n) Research facilities and hospitals using radionuclides;[3/]

(o) Installations for the manufacture or storage of nuclear, chemical or biological weapons.

11. Any activity not covered within the above paragraphs but from which releases and transfers of substances in annex IV, part 2, of this instrument consistently exceed the corresponding thresholds.

Notes

1/ The term ‘ton’ refers to metric tons (1,000 kg or 2,204.6 lb).
2/ Production within the meaning of the categories of activities contained in paragraph 4 means the production on an industrial scale of substances and groups of substances.
3/ The Working Group might like to consider adding a threshold to this activity.