A.L. 227 ta' l-2001

ATT DWAR IL-ĦARSIEN TA' L-AMBJENT (ATT NRU. XX TA' L-2001)

Regolamenti ta' l-2001 dwar Limitu ta' Valuri u Objettivi ta' Kwalità għar-Rimi ta' Ċerti Sustanzi Perikoluż fl-Ambjent ta' l-Ilma

BIS-SAĦĦA tas-setgħat mogħtija bl-artikolu 3, 9, 11 u 28 ta' l-Att ta' l-2001 dwar il-Ħarsien ta' l-Ambjent, il-Ministru ta' l-Ambjent għamel dawn ir-regolamenti li ġejjin:-

Titolu u bidu fis-seħħ.

1. (1) It-titolu ta' dawn ir-regolamenti hu Regolamenti ta' l-2001 dwar Limitu ta' Valuri u Objettivi ta' Kwalità għar-Rimi ta' Ċerti Sustanzi Perikoluż fl-Ambjent ta' l-Ilma.

(2) Dawn ir-regolamenti għandhom jidħlu fis-seħħ f'dik id-data li l-Ministru responsabbli għall-ambjent jista' b'avviż fil-Gazzetta jistabbilixxi, u jistgħu jiġu hekk stabbiliti dati differenti għal disposizzjonijiet differenti u għanijiet differenti ta' dawn ir-regolamenti.

(3) Avviż magħmul skond is-subregolament (2) ta' dawn ir-regolamenti jista' jagħmel dawk id-disposizzjonijiet transitorji li jkunu jidhru lill-Ministru li jkunu meħtieġa jew spedjenti in konnessjoni mad-disposizzjonijiet li jkunu qed jingħiebu fis-seħħ.

Tifsir.

2. (1) F'dawn ir-regolamenti, kemm-il darba r-rabta tal-kliem ma tkunx teħtieġ xort'oħra:-

"awtorità kompetenti" tfisser id-Dipartiment għall-Ħarsien ta' l-Ambjent taħt id-direzzjoni tad-Direttur għall-Ħarsien ta' l-Ambjent u tali korp jew persuna oħra li l-Ministru responsabbli għall-ambjent jista' b'ordni fil-Gazzetta jippreskrivi u korpi jew persuni differenti jistgħu jiġu hekk imsemmija bħala l-awtorita` kompetenti għal disposizzjonijiet differenti u għal għanijiet differenti ta' dawn ir-regolamenti;

"impjant eżistenti" tfisser impjant industrijali li jkun qed jiffunzjona fid-data meta jiġu fis-seħħ dawn ir-regolamenti;

"impjant gdid" tfisser:

(a) impjant industrijali li jibda jiffunzjona wara d-dħul fis-seħħ ta' dawn ir-regolamenti;

(b) impjant industrijali eżistenti b'kapàċità għall-maniġġ ta' sustanzi li tiżdied sostanzjalment wara d-dħul fis-seħħ ta' dawn ir-regolamenti;

"impjant industrijali" tfisser impjant fejn isir il-maniġġ ta' sustanzi, jew ta' kull sustanza oħra li jkun fiha dawk is-sustanzi;

"limitu ta' valuri" tfisser il-valuri speċifikati fl-Anness II, taħt l-intestatura A, għar-rigward ta' sustanzi;

"maniġġ ta' sustanzi" tfisser kull proċess industrijali li jinvolvi l-produzzjoni, l-ipproċessar jew l-użu ta' sustanzi, jew kull proċess industrijali ieħor li fih tkun inerenti l-preżenza ta' dawk is-sustanzi;

"objettivi ta' kwalita" tfisser il-ħtiġijiet speċifikati fl-Anness II, taħt l-intestatura B, għar-rigward ta' sustanzi;

"sustanzi" tfisser dawk is-sustanzi perikoluzi, li jappartjenu lill-familji u gruppi ta' sustanzi li jidhru fil-Lista I fl-Anness mar-Regolamenti dwar Tniġġis Kaġunat minn Ċerti Sustanzi Perikoluzi Mormija fl-Ambjent ta' l-Ilma, li huma speċifikati fl-Anness II li jinsab ma' dawn ir-regolamenti;

(2) Dawn ir-regolamenti japplikaw għall-ilma msemmi fis-subregolament (2) ta' regolament 2 tar-Regolamenti dwar Tniġġis Kaġunat minn Ċerti Sustanzi Perikoluzi Mormija fl-Ambjent ta' l-Ilma, ħlief għall-ilma ta' taħt l-art.

Limitu ta' Valuri.

3. (1) Il-limitu ta' valuri, it-terminu ta' żmien għall-osservanza tagħhom u l-proċeduri għas-sorveljar tar-rimi huma stabbiliti fl-Annessi, taħt l-intestatura A.

(2) (a) L-awtorità kompetenti għandha tapplika l-limitu ta' valuri fil-post fejn l-ilma mormi li jkun fih is-sustanzi johroġ mill-impjant industrijali:

Iżda jekk l-awtorità kompetenti tikkonsidra li, fil-każ ta' ċerti sustanzi, għandha tistabbilixxi postijiet oħra fejn il-limitu ta' valuri japplikaw, dawk il- postijiet għandhom jiġu elenkati fl-Anness II.

(b) L-awtorità kompetenti tista' tippermetti li l-limitu ta' valuri jiġi applikat fil-post fejn l-ilma mormi jħalli l-impjant ta' trattament, meta l-ilma mormi li jkun fih dawn is-sustanzi jiġi ttrattat barra mill-impjant industrijali f'impjant ta' trattament li jkun intiż għat-tneħħija tagħhom.

(3) L-awtorità kompetenti għandha tiżgura li permess jew liċenża msemmija fir-regolament 4 tar-Regolamenti dwar Tniġġis Kaġunat minn Ċerti Sustanzi Perikoluži Mormija fl-Ambjent ta' l-Ilma, għandu jkun fihom disposizzjonijiet iebsin daqs dawk stabbiliti taħt l-intestatura A fl-Annessi għal dawn ir-regolamenti, ħlief meta l-awtorità kompetenti tkun qed tosserva is-subregolament (3) ta' regolament 3 tar- Regolamenti dwar Tniġġis Kaġunat minn Ċerti Sustanzi Perikoluži Mormija fl-Ambjent ta' l-Ilma, abbaži ta' l-intestatura B fl-Annessi ma' dawn ir-regolamenti. L-awtorità kompetenti għandha tirrevedi permess jew liċenza mill-inqas kull erba' snin.

(4) Mingħajr preġudizzju għall-obbligazzjonijiet li għandhom u li joriġinaw mis-subregolamenti (1), (2) u (3) ta' dan ir-regolament u tar-Regolamenti dwar Tniġġis Kaġunat minn Ċerti Sustanzi Perikoluži Mormija fl-Ambjent ta' l-Ilma, l-awtorità kompetenti tista' toħroġ permessi jew liċenzi għal impjanti ġodda, biss jekk dawk l-impjanti japplikaw *standards* li jkunu jikkorrispondu għall-aħjar mezzi tekniċi disponibbli meta dan ikun neċessarju għall-eliminazzjoni ta' tniġġis skond ir-regolament 3 ta' l-imsemmija regolamenti jew għall-prevenzjoni ta' tagħwiġ fil-kompetizzjoni.

(5) L-awtorità kompetenti għandha tuża il-metodu ta' referenza ta' analiżi mogħti taħt l-intestatura C fl-Anness II:

Iżda l-awtorità kompetenti tista' tuża limiti oħra ta' kxif, preċiżjoni u eżattezza li mill-inqas ikunu tajbin daqs dawk stabbiliti taħt l-intestatura C fl-Anness II.

(6) L-awtorità kompetenti għandha tħabrek biex tiżgura li l-miżuri meħuda konformi ma' dawn ir-regolamenti ma jkunu jirriżultaw f'ebda żieda fit-tniġġis ta' mezzi oħra, l-aktar il-ħamrija u l-arja, b'dawn is-sustanzi.

Sorveljar ta' l-ambjent ta' l-ilma.

4. (1) L-awtorità kompetenti għandha tkun responsabbli għas-sorveljar ta' l-ambjent ta' l-ilma li jintlaqtu mir-rimi li jsir minn stabbilimenti industrijali u minn sorsi oħra ta' rimi sinifikattivi.

(2) Fil-każ ta' rimi li jolqot l-ibħra ta' Malta u ta' xi Stat ieħor, l-awtorità kompetenti involuta għandha tikkoopera ma' l-awtoritajiet kompetenti ta' Malta u ta' Stati oħra bil-għan li jkun hemm armonizazzjoni tal-proċeduri ta' sorveljar.

Programmi ta' eliminazzjoni.

5. (1) L-awtorità kompetenti għandha, għar-rigward ta' sustanzi li għalihom hemm referenza speċifika fl-Anness II, tħejji programmi speċifiċi biex tevita jew telimina tniġġis ta' dawn is-sustanzi minn sorsi sinifikattivi, inkluż sorsi multepliċi u diffużi, ħlief għal sorsi ta' rimi suġġetti għal tali regolamenti oħra li jkunu fis-seħħ u li jkunu jistabbilixxu regoli dwar limitu ta' valur jew *standards* ta' emissjoni.

(2) Il-programmi għandhom jinkludu kull miżura u teknika l-aktar adatta għat-tibdil, iż-żamma jew ir-riċiklar tas-sustanzi msemmija fis-subregolament (1).

(3) Il-programmi speċifiċi għandhom jiġu implimentati fil-ħames snin wara d-dħul fis-seħħ ta' dawn ir-regolamenti u li jkollhom speċifikatament x'jaqsmu mas-sustanza involuta.

Reati taħt dawn ir-regolamenti.

6. Persuna tkun ħatja ta' reat kontra dawn ir-regolamenti jekk-

(a) tonqos milli tħares xi disposizzjoni ta' dawn ir-regolamenti jew xi ordni leġittimament mogħtija skond xi disposizzjoni ta' dawn ir-regolamenti; jew

(b) tikser xi restrizzjoni, projbizzjoni jew ħtiega imposta minn jew taħt dawn ir-regolamenti; jew

(ċ) taġixxi bi ksur ta' xi disposizzjoni ta' dawn ir-regolamenti; jew

(d) tassoċja ruħha jew tittanta tassoċja ruħha ma' xi persuna, jew tgħin, jew tħajjar, lil xi persuna oħra b'liema mezz ikun, inkluż ir-reklamar, l-għoti ta' pariri jew il-ħlas ta' flus biex tikser id-disposizzjonijiet ta' dawn ir-regolamenti jew biex tonqos milli tħares xi disposizzjoni tagħhom, inkluża kull ordni mogħtija leġittimament skond xi disposizzjoni ta' dawn ir-regolamenti, jew biex tikser xi restrizzjoni, projbizzjoni jew ħtieġa imposta minn jew taħt dawn ir-regolamenti.

Pieni.

7. Min jagħmel reat kontra dawn ir-regolamenti jista', meta jinsab ħati, jeħel:

(a) meta jinsab ħati għall-ewwel darba, multa ta' mhux anqas minn ħames mitt lira iżda mhux iżjed minn elf lira;

(b) meta jinsab ħati għat-tieni darba jew aktar drabi, multa ta' mhux anqas minn elf lira iżda mhux iżjed minn elfejn lira, jew għal priġunerija għal żmien mhux iżjed minn sentejn, jew għal dik il-multa u priġunerija flimkien.

Iżda meta persuna tinsab ħatja li tkun għamlet reat taħt dawn ir-regolamenti bl-użu ta' vettura, sid dik il-vettura, meta dan ikun japplika, jkun responsabbli bl-istess mod u fl-istess qies:

Iżda wkoll il-qorti għandha tordna lil persuna li tkun insabet ħatja li għamlet reat kontra dawn ir-regolamenti tħallas għall-ispejjeż imġarrba mill-entitajiet pubbliċi u/jew persuni oħra mqabbda minnhom involuti fl-implimentazzjoni ta' dawn ir-regolamenti, u biex tiġi rranġata l-ħsara kkawżata lill-ambjent b'riżultat ta' dak ir-reat, ir-revoka tal-permess maħruġ mill-Pulizija u l-konfiska tal-*corpus delicti*.

Applikabilità tal-Kodiċi Kriminali.

8. (1) Id-disposizzjonijiet ta' l-artikolu 23 u s-subartikolu (1) ta' l-artikolu 30 tal-Kodiċi Kriminali għandhom, *mutatis mutandis*, japplikaw għal proċedimenti dwar reati kontra dawn ir-regolamenti, b'dan illi l-iskwalifika milli persuna jkollha jew tikseb liċenza, permess jew awtorità m'għandha f'ebda każ tkun għal inqas minn sena.

Kap. 9.

(2) Minkejja d-disposizzjonijiet ta' l-artikolu 370 tal-Kodiċi Kriminali, il-proċedimenti dwar reat kontra dawn ir-regolamenti għandhom isiru quddiem il-Qorti tal-Maġistrati (Malta) jew il-Qorti tal-Maġistrati (Għawdex), skond ma jista' jkun il-każ, u għandhom ikunu skond id-disposizzjonijiet tal-Kodiċi Kriminali li jirregolaw il-proċedura quddiem dawk il-qrati bħala qrati ta' ġudikatura kriminali.

(3) Minkejja d-disposizzjonijiet tal-Kodiċi Kriminali, l-Avukat Ġenerali għandu dejjem ikollu dritt ta' appell quddiem il-Qorti ta' Appell Kriminali minn kull sentenza mogħtija mill-Qorti tal-Maġistrati (Malta) jew mill-Qorti tal-Maġistrati (Għawdex) dwar proċedimenti għal xi reat kontra dawn ir-regolamenti.

Lingwa ta' l-Annessi.

9. L-Annessi I u II li jinsabu ma' dawn ir-regolamenti qegħdin jiġu ppubblikati bil-lingwa Ingliża flimkien mat-test Ingliż ta' dawn ir-regolamenti.

ANNEX I

GENERAL PROVISIONS

This Annex is divided into three headings which set out the general provisions applicable to all the substances concerned:

-A: limit values for emission standards,

-B: quality objectives,

-C: reference methods of measurement.

The general provisions are amplified and supplemented in Annex II by a series of specific provisions applicable to individual substances.

HEADING A

Limit values, dates set for compliance therewith and procedures for monitoring discharges

1. The limit values and the dates set for compliance therewith are set out in Annex II, under heading A, in respect of the different types of industrial plant concerned.

2. The quantities of substances discharged are expressed in terms of the quantity of substances produced, processed or used by the industrial plant during the same period or, in accordance with sub-regulation (1) of regulation 6 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, of another parameter characteristic of that activity

3. Limit values for industrial plants which discharge substances and which are not mentioned under heading A in Annex II shall, where necessary, be determined by the Council at a later stage. Meanwhile, the competent authority shall set, in accordance with the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, emission standards for discharges of such substances. Such standards shall take into account the best technical means available and shall not be less stringent than the most nearly comparable limit value set out under heading A in Annex II. This paragraph shall also apply where an industrial plant has activities other than those for which limit values have been set under heading A in Annex II and which are likely to be a source of discharges of substances.

4. Limit values expressed as concentrations which, in principle, shall not be exceeded are given in Annex II under heading A, in respect of the industrial plants concerned. In no instance may limit

values expressed as maximum concentrations, when they are not the only values applicable, be greater than limit values expressed by weight divided by water requirements per element characteristic of the polluting activity. However, because the concentration of these substances in effluents depends on the volume of water involved, which varies for different processes and plants, the limit values expressed in terms of the weight of the substances discharged in relation to the parameters characteristic of the activity given under heading A in Annex II, shall be complied with in all cases

5. A monitoring procedure shall be instituted to check whether the discharges of substances comply with the emission standards. This procedure shall provide for the taking and analysis of samples and for measurement of the flow of the discharge and the quantity of substances handled or, where appropriate, measurement of the parameters characteristic of the activity causing pollution as listed in Annex II, heading A. In particular, should the quantity of substances handled be impossible to determine, the monitoring procedure may be based on the quantity of substances that may be used as a function of the production capacity on which the authorization was based.

6. A sample representative of the discharge over a period of 24 hours shall be taken. The quantity of substances discharged over one month shall be calculated on the basis of the daily quantities of substances discharged. Annex II may, however, lay down for discharges of certain substances quantitative thresholds below which the competent authority may apply a simplified monitoring procedure.

7. The sampling and flow measurement provided for in paragraph 5 shall normally be effected at the points of application of the limit values provided for in sub-regulation (2) of regulation 3. However, where necessary to ensure that the measurements comply with the requirements of heading C of the Annexes, the competent authority may allow the sampling and flow measurement to be effected at another point before that at which the limit values apply, provided that:

(a) all waters discharged from the plant that may have been polluted by the substance in question are taken into account by those measurements;

(b) regular checks show that the measurements are fully representative of the quantities discharged at the points of application of the limit values or are always higher.

HEADING B

Quality objectives, dates set for compliance therewith and procedure for monitoring compliance with them

1 Should the competent authority opt for the exception provided for in sub-regulation (3) of regulation 7 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, the emission standards which it shall establish and apply, pursuant to regulation 6 of these regulations, shall be fixed so that the appropriate quality objective or objectives from those fixed pursuant to paragraphs 2 and 3 below is or are complied with in the area affected by discharges of substances. The competent authority shall determine the area affected in each case and shall select from the quality objectives fixed pursuant to paragraphs 2 and 3 below the objective or objectives that it deems appropriate having regard to the intended

use of the area affected, while taking account of the fact that the purpose of this Directive is to eliminate all pollution.

2.With a view to eliminating pollution, as defined in the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, and pursuant to regulation 3 of those regulations, the quality objectives and dates set for compliance therewith are set out under heading B in Annex II.

3. Unless otherwise specified under heading B in Annex II, all the concentrations mentioned as quality objectives shall refer to the arithmetic mean of the results obtained over a year.

4. Where more than one quality objective is applied to waters within one area, the quality of the water shall be sufficient to comply with each of those objectives.

5. For each authorization granted pursuant to these regulations, the competent authority shall specify the detailed rules, monitoring procedures and dates for ensuring compliance with the quality objective or objectives concerned.

6. In accordance with sub-regulation (3) of regulation 7 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, the competent authority shall, for each quality objective chosen and applied, report to the Commission on:

(a) the points of discharge and the means of dispersal;

(b) the area in which the quality objective is applied;

(c) the location of sampling points;

(d) the frequency of sampling;

(e) the methods of sampling and measurement;

(f) the results obtained.

7. Samples shall be taken at a point sufficiently close to the discharge point to be representative of the quality of the aquatic environment in the area affected by the discharges, and the frequency of sampling shall be sufficient to show any changes in the aquatic environment, having regard in particular to natural variations in hydrological conditions.

HEADING C

Reference methods of measurement and limit of detection

1 The definitions given in the Methods of Measurement and Frequencies of Sampling and Analysis of Surface Water Intended for the Abstraction of Drinking Water Regulations, 2000[1] shall apply in the context of these regulations.

2. The reference methods of measurement to be used for determining the concentration of the substances in question and the limit of detection for the environment concerned are set out under heading C in Annex II.

3. The limit of detection, the accuracy and the precision of the method are specified for each substance under heading C in Annex II.

4. Effluent flow measurements shall be carried out to an accuracy of ± 20 %.

[1] Still to transpose Council Directive 79/869/EEC of 9 October 1979 OJ N° L 271, 29. 10 1979, p. 44.

ANNEX II

SPECIFIC PROVISIONS

1.Relating to carbon tetrachloride

2.Relating to DDT

3. Relating to pentachlorophenol

4. Relating to aldrin, dieldrin, endrin and isodrin

5. Relating to hexachlorobenzene

6. Relating to hexachlorobutadiene

7. Relating to chloroform

8. Relating to 1,2-dichloroethane (EDC)

9. Relating to trichloroethylene (TRI)

10. Relating to perchoroethylene (PER)

11. Relating to trichlorobenzene (TCB).

The numbering of the substances listed in this Annex corresponds to the list of 129 substances contained in the communication from the Commission to the Council of 22 June 1982(1).

Should substances be included in future in this Annex which are not set out in the abovementioned list, they shall be numbered in chronological order of inclusion beginning with N° 130.

I. Specific provisions relating to carbon tetrachloride (N° 13)[2]

CAS N° 56-23-5[3]

Heading A(13): Limit values for emission standards

Type of industrial plant([4])([5])	Type of average value	Limit values expressed as[6] weight	concentration	To be complied with as from
1. Carbon tetrachloride production by perchlorination	Monthly	a) process involving washing 40g CCl_4 per tonne of total production capacity of CCl_4 and perchlorethylene	1,5mg/l	1.1.2003
		b) process not involving washing: 2,5g/tonne	1,5mg/l	
	Daily	a) process involving washing: 80g/tonne	3mg/l	
		b) process not involving washing: 5g/tonne	3mg/l	
2. Production of chloromethanes by methane chlorination (including high-pressure electrolytic chlorine generation) and from methanol	Monthly	10 g CCl_4 per tonne of total production capacity of chloromethanes	1,5mg/l	1.1.2003
	Daily	20 g/tonne	3 mg/l	
3. Production of chlorofluorocarbons[7]	Monthly	---	---	---
	Daily	---	---	---

[2] Regulation 5 applies in particular to use of carbon tetrachloride in industrial laundries

[3] CAS (Chemical Abstract Service) number

[4] Among the industrial establishments referred to under heading A. point 3. of Annex I. reference is made in particular to plants using carbon tetrachloride as a solvent.

[5] A simplified monitoring procedure may be introduced if annual discharges do not exceed 30kg a year

[6] In view of the volatility of carbon tetrachloride and in order to ensure compliance with sub-regulation (6) of regulation 3. where a process involving agitation in the open air of effluent carbon tetrachloride. is used. the competent authority shall require compliance with the limit values upstream of the plant concerned: it shall ensure that all water likely to be polluted shall taken fully into account.

[7] It is not possible at present to adopt limit values for this sector

Heading B (13): Quality Objectives[8]

Environment	Quality objective	Unit of measurement	To be complied with as from
Estuary water	12	µg/lCCl4	1 1.2003
Inland surface waters	12	µg/lCCl4	1.1.2003
Internal coastal wastes other than estuary waters	12	µg/lCCl4	1.1.2003
Territorial waters	12	µg/lCCl4	1.1.2003

Heading C (13): Reference method of measurement,

1.The reference method of measurement to be used for determining the presence of carbon tetrachloride in effluents and water is gas chromatography.

A sensitive detector shall be used when concentration levels are below 0,5 mg/l and in this case the determination limit[9] is 0,1 ig/l. For concentration levels higher than 0,5 mg/l a determination limit of 0,1 mg/l is acceptable.

2.The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the determination limit.

II. Specific provisions relating to DDT (N° 46)([10])([11])

CAS N° 50-29-3[12]

STANDSTILL: The concentration of DDT in the aquatic environment, sediments and/or molluscs and/or shellfish and/or fish shall not increase significantly with time.

Heading A (46): Limit values for emission standards[13][14]

[8] Without prejudice the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations. 2000. where there is no evidence of any problem in meeting and continuously maintaining the quality objective set out above, a simplified monitoring procedure may be introduced.

[9] The "determination limit" xg of a given substance is the smallest quantity, quantitatively determinable in a sample ion the basis of a given working method, which can still be distinguished

[10] The sum of the isomers 1,1,1-trichloro-2,2 bis (p-chlorophenyl) ethane, 1,1,1-trichloro-2 (o-chlorophenyl) –2-(p-chlorophenyl) ethane; 1,1,1-dichloro-2,2 bis (p-chlorophenyl) ethylene; and 1,1,1-dichloro-2,2 bis (p-chlorophenyl) ethane.

[11] Regulation 5 applies to DDT if sources other than those mentioned in this Annex are identified.

[12] CAS (Chemical Abstract Service) number.

[13] With regard to new plants, the best technical means available shall already make it possible to lay down, for DDT, emission standards lower than 1g/tonne substances produced.

[14] On the basis of experience gained in implementing these regulations, the Competent Authority in good time, proposals aimed at fixing more stringent limit values.

Type of industrial plant[15][16]	Type of average value	Limit value expressed as g/tonne of substances produced, handled or used	Limit value expressed as mg/l of water discharged	To be complied with as from
Production of DDT including formulation of DDT on the same site	Monthly	8	0,7	1.1.2003
	Daily	16	1,3	1.1.2003
	Monthly	4	0,2	1.1.2006
	Daily	8	0,4	1.1.2006

Heading B (46) Quality Objectives

Environment	Quality objective	Unit of measurement	To be complied with as from
Estuary water	10 for the isomer para-para-DDT 25 for total DDT	µg/l	1.1.2003
Inland surface waters	10 for the isomer para-para-DDT 25 for total DDT	µg/l	1.1.2003
Internal coastal wastes other than estuary waters	10 for the isomer para-para-DDT 25 for total DDT	µg/l	1.1.2003
Territorial waters	10 for the isomer para-para-DDT 25 for total DDT	µg/l	1.1.2003

Heading C (46): Reference method of measurement

1. The reference method of measurement to be used for determining DDT in effluents and the aquatic environment is gas chromatography with electron capture detection after extraction by means of an appropriate solvent. The limit of determination[17] for total DDT is approximately 4 µg/l for the aquatic environment and 1 µg/l for effluents, depending on the number of extraneous substances present in the sample.

2. The reference method to be used for determining DDT in sediments and organisms is gas chromatography with electron capture detection after appropriate preparation of samples. The limit of determination[18] is 1 µg/kg.

[15] Among the industrial plants referred to under heading A, point 3, of Annex I, reference is made in particular to plants formulating DDT away from the production site and to the dicofol production industry.

[16] A simplified monitoring procedure may be introduced if annual discharges do not exceed 1kg a year.

[17] The "limit of determination" xg of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.

[18] *Ibid*

3. The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the limit of determination.[19]

III. Specific provisions relating to pentachlorophenol (N° 102)[20][21]

CAS N° 87-86-5[22]

STANDSTILL: The concentration of PCP in sediments and/or molluscs and/or shellfish and/or fish shall not increase significantly with time.

Type of industrial plant[23][24]	Type of average value	Limit value expressed as g/tonne production/ utilization capacity	Limit value expressed as mg/l of water discharged	To be complied with as from
Production of sodium pentachlorophenate by hydrolysis of hexachlorobenzene	Monthly	25	1	1.1.2003
	Daily	50	2	1.1.2003

Heading B (102) Quality objectives

Environment	Quality objective	Unit of measurement	To be complied with as from
Estuary water	2	µg/l	1.1.2003
Inland surface waters	2	µg/l	1.1.2003
Internal coastal wastes other than estuary waters	2	µg/l	1.1.2003
Territorial waters	2	µg/l	1.1.2003

Heading C (102): Reference method of measurement

1. The reference method of measurement to be used for determining pentachlorophenol in effluents and the aquatic environment is high-pressure liquid chromatography or gas chromatography with electron-capture detection after extraction by means of an appropriate

[19] *Ibid.*
[20] The chemical compound 2,3,4,5,6-Pentachloro-1-hydroxybenzene and its salts.
[21] Regulation 5 applies to pentachlorophenol, and particularly to its use for treating wood.
[22] CAS (Chemical Abstract Service) number.
[23] Among the industrial plants referred to under heading A, point 3, of Annex I, reference is made in particular to plants producing sodium pentachlorophenate by saponification and to those producing pentachlorophenol by chlorination.
[24] A simplified monitoring procedure may be introduced if annual discharges do not exceed 3kg a year.

solvent. The limit of determination[25] is 2 µg/l for effluents and 0,1 µg/l for the aquatic environment.

2. The reference method to be used for determining pentachlorophenol in sediments and organisms is high-pressure liquid chromatography or gas chromatography with electroncapture detection after appropriate preparation of samples. The limit of determination[26] is 1 µg/kg.

3. The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the limit of determination.[27]

IV. Specific prodivions relating to:

24 aldrin (No 1)[28] CAS-No 309-00-2
25 dieldrin (No 71)[29] CAS No 60-57-1
26 endrin (No 77)[30] CAS-No 72-20-8
27 isodrin (No 130)[31] CAS-No 465-73-6

Heading A (1,71,77,130): Limit values for emission standards[32]

Type of industrial plant[33]	Type of average value	Limit value expressed as weight discharged[34]	Limit value expressed as concentration in effluent µg/l of water	To be compli-ed with as from
Production of aldrin or dieldrin or endrin including formulation of these substances on the same site	Monthly	3 g per tonne of total production capacity (g/tonne)	2	1.1.2003
	Daily	15 g per tonne of total production capacity (g/tonne)[36]	10[35]	1.1.2003

[25] The "limit of determination" xg of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.
[26] *Ibid.*
[27] *Ibid.*
[28] Aldrin is the chemical compound $C_{12}H_8Cl_6$
1,2,3,4,10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexaHYDRO-1, 4-endo-5, 8-Exo-dimethanonaphtalene.
[29] Dieldrin is the chemical compound $C_{12}H_8Cl_6O$
1,2,3,4,10,10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-5, 8-exo-dimethanonaphtalene.
[30] Endrin is the chemical compound $C_{12}H_8Cl_6O$
1,2,3,4,10,10-hexachloro-6, 7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-1, 4-endo-5, 8-endo-dimethanonaphtalene.
[31] Isodrin is the chemical compound $C_{12}H_8Cl_6$
1,2,3,4,10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-1, 4-endo-5, 8-endo-dimethanonaphtalene.
[32] The limit values indicated in this heading shall apply to the total discharge of aldrin, dieldrin and endrin.
[33] Among the industrial plants referred to under heading A, point 3, of Annex I, reference is made in particular to plants formulating aldrin or dieldrin or endrin away from the production site
[34] These figures take into account of the total amount of water passing through the plant.
[35] If possible, daily values should not exceed twice the monthly value.

Heading B (1,71,77,130): Quality objectives

Environment	Substance	Quality objectives ng/l to be complied with as from:	
		1.1.2003	1.1.2008
Inland surface waters	Aldrin	30 in total	10 in total
Esutary waters	Dieldrin	30 in total	10 in total
Internal coastal waters other than estuary waters	Endrin	5 in total	5 in total
Territorial waters	Isodrin	30 in total	5 in total

Standstill: The concentration(s) of aldrin or dieldrin or endrin or isodrin in sediments or molluscs or shellfish or fish shall not increase significantly with time.

Heading C (1, 71, 77, 130): Reference method of measurement

1. The reference method of measurement to be used for determining aldrin, dieldrin, endrin and/or isodrin in effluents and the aquatic environment is gas chromatography with electron-capture detection after extraction by means of an appropriate solvent. The limit of determination[37] for each substance is 2,5 ng/l for the aquatic environment and 400 ng/l for effluents, depending on the number of parasite substances present in the sample.

2. The reference method to be used for determining aldrin, dieldrin and/or endrin and/or isodrin in sediments and organisms is gas chromatography with electron-capture detection after appropriate preparation of samples. The limit of determination is 1 µg/kg dry weight for each separate substance.

3 The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the limit of determination.

V. Specific provisions relating to hexachlorobenzene (HCB) (No 83)

CAS-118-74-1

Heading A (83): Limit values for emission standards

Standstill There shall be no significant direct or indirect increase over time in pollution arising from discharges of HCB and affecting concentrations in sediments or molluscs or shellfish or fish.

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[36] If possible, daily values should not exceed twice the monthly value.

[37] The "limit of determination" x g of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.

Type of industrial plant[38][39][40]	Type of average value	Limit value expressed as weight	concentration	To be complied with as from
1. HCB production and processing	Monthly	10 g HCB/tonne of HCB production capacity	1mg/l of HCB	1.1.2003
	Daily	20 g HCB/tonne of HCB production capacity	2mg/l of HCB	1.1.2003
2 Production of perchloro ethylene (PER) and carbon tetrachloride (CCl_4) by perchlorination	Monthly	1,5 g HCB/tonne HCB of PER + CCl_4 total production capacity	1,5 mg/l of	1.1.2003
	Daily	3 g HCB/tonne of PER + CCl_4 total production capacity	3mg/l of HCB	1.1.2003
Production of trichloroethylene or perchloroethylene by any other process[41]	Monthly	---	---	---
	Daily	---	---	---

Heading B (83): Quality objectives[42]

Standstill: The concentration of HCB in sediments or molluscs or shellfish or fish shall not increase significantly with time

Environment	Quality objective	Unit of measurement	To be complied with

[38] A simplifies monitoring procedure may be introduced if annual discharges do not exceed 1 kg a year.

[39] Among the industrial plants referred to under Annex I, heading A, point 3, reference is made in particular to industrial plants producing quintozene and tecnazene, industrial plants producing chlorine by chlor-alkali electrolysis with graphite electrodes, industrial rubber processing plants, plants manufacturing pyrotechnic products and plants producing vinylchloride.

[40] On the basis of experience gained in implementing these regulations, and taking into account the fact that the use of best technical means already makes it possible to apply in some cases much more stringent values than those indicated above, the Council shall decide, on the basis of proposals from the Commission, upon more stringent limit values.

[41] It is not possible at present to adopt limit values for this sector. The Competent authority shall adopt such limit values at a later stage. In the meantime, the competent authority shall apply national emission standards in accordance with Annex I, heading A, point 3.

[42] The Commission shall keep under review the possibility of setting more stringent quality objectives, taking into account measured concentrations of HCB in sediments or molluscs or shellfish or fish, and shall report to the Council, for decision as to whether any changes should be made to these regulations.

			as from
Inland surface water	0,03	µg/l	1.1.2003
Estuary waters	0,03	µg/l	1.1.2003
Internal coastal wastes other than estuary waters	0,03	µg/l	1.1.2003
Territorial waters	0,03	µg/l	1.1.2003

Heading C (83): Reference method of measuremen

1. The reference method of measurement to be used for determining the presence of HCB in effluents and waters shall be gas chromatography with electron-capture detection after extraction by means of an appropriate solvent.

The limit of determination[43] for HCB shall be within the range 1 to 10 ng/l for waters and 0,5 to 1 µg/l for effluents depending on the number of extraneous substances present in the sample.

2 The reference method to be used for determining HCB in sediments and organisms is gas chromatography with electron-capture detection after appropriate preparation of the sample. The limit of determination[44] shall be within the range 1 to 10 µg/kg of dry matter.

3. The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the limit of determination.[45]

VI. Specific provisions relating to hexachlorobutadiene (HCBD) (No 84)

CAS-87-68-3

Heading A (84): Limit values for emission standards

Standstill: There shall be no significant direct or indirect increase over time in pollution arising from discharges of HCB and affecting concentrations in sediments or molluscs or shellfish or fish.

Type of industrial plant[46][47][48]	Type of average value	Limit value expressed as		To be compli-ed with as from
		weight	concentration	
1 Production of	Monthly	1,5 g HCBD/tonne	1,5mg/l of HCBD	1.1.2003

[43] The "limit of determination" x g of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.

[44] *Ibid*

[45] *Ibid*

[46] A simplifies monitoring procedure may be introduced if annual discharges do not exceed 1 kg a year

[47] Among the industrial plants referred to under Annex I, heading A, point 3, reference is made in particular to industrial plants using HCBD for technical purposes.

[48] On the basis of experience gained in implementing these regulations, and taking into account the fact that the use of best technical means already makes it possible to apply in some cases much more stringent values than those indicated above, competent authority shall decide upon more stringent limit values.

perchloroethylene (PER) and carbon tetrachloride (CCl_4) by perchlorination	Daily	of HCB production capacity of PER + CCl_4 3 g HCBD/tonne of HCB production capacity of PER + CCl_4	 3mg/l of HCBD	1.1.2003
2. Production of tri-chloroethylene or perchloroethylene by any other process[49]	Monthly Daily	--- ---	--- ---	--- ---

Heading B (84) : Quality objectives[50]

Standstill The concentration of HCBD in sediments or molluscs or shellfish or fish shall not increase significantly with time

Environment	Quality objective	Unit of measurement	To be complied with as from
Inland surface water	0,1	µg/l	1.1.2003
Estuary waters	0,1	µg/l	1.1.2003
Internal coastal wastes other than estuary waters	0,1	µg/l	1.1.2003
Territorial waters	0,1	µg/l	1.1.2003

Heading C (84): Reference method of measurement

1. The reference method of measurement to be used for determining HCBD in effluents and waters shall be gas chromatography with electron-capture detection after extraction by means of an appropriate solvent.

The limit of determination[51] for HCBD shall be within the range 1 to 10 ng/l for waters and 0,5 to 1 µg/l for effluents, depending on the number of extraneous substances present in the sample.

2. The reference method to be used for determining HCBD in sediments and organisms is gas

[49] It is not possible at present to adopt limit values for this sector. The Competent Authority shall adopt such limit values at a later stage. In the meantime, the competent authority shall apply national emission standards in accordance with Annex I, heading A, point 3.

[50] The Competent Authority shall keep under review the possibility of setting more stringent quality objectives, taking into account measured concentrations of HCBD in sediments or molluscs or shellfish or fish.

[51] The "limit of determination" x g of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.

chromatography with electron-capture detection after appropriate preparation of the sample. The limit of determination[52] shall be within the range 1 to 10 µg/kg of dry matter. 3. The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the limit of determination.[53]

VII. Specific provisions relating to chloroform ($CHCl_3$) (No 23)[54]

CAS-67-66-3

Heading A (23): Limit values for emission standards

Type of industrial plant[55][56]	Limit value (monthly averages) expressed as[57][58]		To be complied with as from
	weight	concentration	
1. Production of chloromethanes from methanol or from a combination of methanol and methane[59]	10g $CHCl_3$/tonne of total production capacity of chloro-methanes	1mg/l	1 1.2003
2. Production of chloromethanes by chlorination of methane	7,5 g $CHCl_3$/tonne of total production capacity of chloro-methanes	1mg/l	1 1.2003
3. Production of chlorofluorocarbon (CFC)[60]	---	---	---

[52] *Ibid.*

[53] *Ibid.*

[54] In the case of chloroform. The Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations. 2001 shall apply to discharges from industrial processes which may in themselves contribute significantly to the level of chloroform in the aqueous effluent. in particular it shall apply to those mentioned under Heading A of this Annex. Regulation 5 of these regulations applies if sources other than those listed in this Annex are identified.

[55] Among the industrial plants referred to under Heading A. point 3 of Annex I. special reference is made. in the case of chloroform. to plants manufacturing monomer vinyl chloride using dichlorethane pyrolysis. those producing bleached pulp and other plants using $CHCl_3$ as a solvent and plants in which cooling waters or other effluents are chlorinated The Council shall adopt limit values for these sectors at a later stage acting on proposals from the Commission.

[56] A simplified monitoring procedure may be introduced if annual discharges do not exceed 30 kg a year.

[57] Daily average limit values are equal to twice the monthly average values.

[58] In view of the volatility of chloroform and in order to ensure compliance with sub-regulation (6) of regulation 3, where a process involving agitation in the open air of effluent containing chloroform is used. the competent authority shall require compliance with the limit values upstream of the plant concerned. it shall ensure that all water likely to be polluted is taken fully into account

[59] I.e. by hydrochlorination of methanol. chlorination of methyl chloride.

[60] It is not possible at present to adopt limit values for this sector The Competent Authority shall adopt such limit values at a later date In the meantime. the competent authority shall apply national emission standards in accordance with Annex I. heading A. point 3.

Heading B: Quality objectives[61]

Environment	Quality objective	Unit of measurement	To be complied with as from
Inland surface water	12	µg/l	1.1.2003
Estuary waters	12	µg/l	1.1.2003
Internal coastal wastes other than estuary waters	12	µg/l	1.1.2003
Territorial waters	12	µg/l	1.1 2003

Heading C (23): Reference method of measurement

1. The reference method of measurement to be used for determining the presence of chloroform in effluents and the aquatic environment shall be gas chromatography.

A sensitive detector shall be used when concentration levels are below 0,5 mg/l and in this case the determination limit[62] is 0,1 µg/l. For concentration levels higher than 0,5 mg/l a determination limit of 0,1 mg/l is acceptable.

2. The accuracy and precision of the method shall be ± 50 % at a concentration which represents twice the value of the determination limit.

VIII: Specific provisions relating to 1,2 dichloroethane (EDC) (No 59)[63]

CAS – No 107-06-2

Heading A: Limit values for emission standards[64]

Type of industrial plant[6566]	Type of average value	Limit values expressed as	To be complied

[61] Without prejudice to the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2001, where there is no evidence of any problem in meeting and continuously maintaining the quality objective set out above, a simplified monitoring procedure may be introduced.

[62] The "determination limit" x g of a given substance is the smallest quantity, quantitatively determinable in a sample on the basis of a given working method, which can still be distinguished from zero.

[63] Regulation 5 applies in particular to EDC used as a solvent away from a production or processing site if annual discharges amount to less than 30kg/year. Such small discharges may be exempted from the requirements of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2001. Notwithstanding sub-regulation (3) of regulation 5 of these regulations, the competent authority shall implement its specific programmes not later 1 January 2003.

[64] In view of the volatility of EDC and in order to ensure compliance with sub-regulation (6) of regulation 3, where the process used involves open-air agitation of the effluents containing EDC, the competent authority shall require compliance with the limit values upstream of the plants concerned; they shall ensure that all waters likely to be polluted are properly taken into account.

		Weight (g/tonne)[67]	concentration (mg/litre)[68]	with as from
(a) Production only of 1,2 dichloroethane (without processing or use on the same site)	Monthly	24	2	1.1.2003
		2,5	1,25	1.1.2005
	Daily	25	4	1.1.2003
		5	2,5	1.1.2005
(b) Production of 1,2dichloroethane, and processing or use at the same site, except for the use defined in (e) below[69] [70]	Monthly	26	6	1.1.2003
		27	2,5	1.1.2005
	Daily	28	12	1.1.2003
		10	5	1.1.2005
(c) Processing of 1,2-dichloroethane into substances other than vinyl chloride[71]	Monthly	2,5	1	1.1.2003
	Daily	5	2	1.1.2003
(d) Use of EDC for degreasing metals (away from an	Monthly	---	0,1	1.1.2003
	Daily	---	0,2	1.1.2003

[65] The purified EDC production capacity includes that fraction of the EDC which is not cracked in the vinyl chloride (VC) production unit associated with the EDC production unit and which is recycled to the EDC purification section of the plant. Production or processing capacity is the capacity authorized by the administration or, failing that, the highest annual quantity produced or processed over the four years prior to the granting or review of the authorization. The capacity authorized by the administration should not differ greatly from actual production

[66] A simplified monitoring procedure may be introduced where annual discharges do not exceed 30 kg/year.

[67] These limit values relate:

- for sectors (a) and (b), to purified EDC production capacity expressed in tonnes.
- for sector (c), to EDC processing capacity expressed in tonnes.

However, in the case of sector (b), if the processing and utilization capacity is greater than the production capacity, the limit values shall be applied in relation to the global processing and utilization capacity. If there are several plants on the same site, the limit values shall apply to the plants taken together

[68] Without prejudice to the provisions of heading A (4) in Annex I, these concentration limits relate to the following reference volumes:

(a) 2 m^3/tonne of purified EDC production capacity;

(b) 2.5 m^3/tonne of purified EDC production capacity;

(c) 2.5 m^3/tonne of EDC processing capacity;

(c) 2.5 m^3/tonne of EDC processing capacity

[69] The limit values take account of all diffuse internal sources or of EDC used as a solvent within the industrial production site; this shall ensure a reduction in EDC discharges of more than 99 %. Nevertheless, the combination of the best available technology and the absence of any diffuse internal source enables reduction amounts greater than 99.9 % to be achieved

[70] The following limit value shall be complied with as 40 g EDC/tonne of purified EDC production capacity (monthly and daily averages). The limit value expressed as concentration is deduced on the basis of the volume of water discharged by the plant(s) concerned

[71] The production of the following substances specifically is involved here: ethylene diamine, ethylene polyamine, 1,1,1-trichloroethane, trichloroethylene and perchloroethylene

industrial site covered by (b)[72]			
(e) Use of EDC in the production of ion exchangers[73]	Monthly Daily	--- ---	--- ---

Heading B (59): quality objectives.

Environment	Quality objectives (µg/litre)	To be complied with as from
Inland surface waters	10	1.1.2003
Estuary waters	10	1.1.2003
Inland coastal waters other than estuary waters	10	1.1.2003
Territorial waters	10	1.1.2003

The Commission shall compare the results of the monitoring carried out, in accordance with regulation 14 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, with an indicative concentration of 2,5 µg/litre.

The Commission shall, by 1998, re-examine the quality objectives on the basis of the experience acquired in the application of the present measures.

Heading C (59): reference method of measurement .

1. The reference method of measurement to be used for determining the presence of 1,2-dichloroethane in effluents and the water environment is gas chromatography with electron capture detection after extraction by means of an appropriate solvent or gas chromatography following isolation by means of the "purge and trap" process and trapping by using a cryogenically cooled capillary trap. The limit of determination is 10 µg/litre for effluents and 1 µg/litre for the water environment.

2. The accuracy and precision of the method shall be plus or minus 50 % at a concentration which represents twice the value of the limit of determination.

3. Member States may determine concentrations of EDC by reference to the quantity of AOX, EOX or VOX, provided that the Commission is first satisfied that these methods give equivalent results and until the general solvent Directive is adopted.

The Member States concerned shall establish regularly the relationship in concentration between EDC and the parameter used.

IX. Specific provisions relating to trichloroethylene (TRI) (No 121)[74]

[72] These limit values apply only to plants the annual discharges from which exceed 30 kg/year.

[73] It is not possible at present to adopt limit values for this sector. In the meantime, the Competent Authority shall apply national limit values in accordance with Annex I, heading A, point 3

CAS 79.01.6

Heading A (121): limit values for emission standards[75]

Type of industrial plants[76]	Type of average value	Limit values expressed as weight (g/tonne)[77]	concentration (mg/litre)[78]	To be complied with as from
1. Trichloroethylene (TRI) and perchloroethylene (PER) production	Monthly	10	2	1.1.2003
		2,5	0,5	1.1.2005
	Daily	20	4	1.1.2003
		5	1	1.1.2005
2. Use of TRI for degreasing metals[79]	Monthly		0,1	1.1.2003
	Daily		0,2	1.1.2003

Heading B (121): quality objectives

Environment	Quality objectives (µg/litre)	To be complied with as from
Inland surface waters	10	1.1.2003
Estuary waters	10	1.1.2003
Inland coastal waters other than estuary waters	10	1.1.2003
Territorial waters	10	1.1.2003

The Commission shall compare the results of the monitoring carried out, in accordance with regulation 14 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, with an indicative concentration of 2,5 mg/litre.

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[74] Regulation 5 applies in particular to TRI used as a solvent for dry-cleaning, for the extraction of grease or odours and for degreasing metals where annual discharges amount to less than 30 kg/year. Such small discharges may be exempted from the requirements of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2001.

[75] In view of the volatility of trichlorocthylene and in order to ensure compliance with sub-regulation (6) of regulation 3, where the process used involves open-air agitation of the effluents containing tricholoroethylene, the competent authority shall require compliance with the limit values upstream of the plants concerned; it shall ensure that all waters likely to be polluted are properly taken into account.

[76] A simplified monitoring procedure may be introduced where annual discharges do not exceed 30 kg/year.

[77] For sector (a), limit values for TRI discharges relate to overall TRI + PER production capacity. For existing plant using dehydrochlorination of tetrachloroethane, the capacity of production is equivalent to the capacity of TRI-PER production, the ratio of TRI-PER production taken at one third. Production or processing capacity is the capacity authorized by the administration or, failing that, the highest annual quantity produced or processed over the four years prior to the granting or review of the authorization. The capacity authorized by the administration should not differ greatly from actual production.

[78] Without prejudice to the provisions of heading A (4) in Annex I, TRI limit concentrations relate to the following reference values: - sector (a), 5 m^3/tonne of TRI + PER production.

[79] These limit values apply only to industrial plants the annual discharges from which exceed 30 kg/year.

The Commission shall re-examine the quality objectives on the basis of the experience acquired in the application of the present measures.

Heading C (121): reference method of measurement

1. The reference method of measurement to be used for determining the presence of trichloroethylene (TRI) in effluents and the water environment shall be gas chromatography with electron capture detection after extraction by means of an appropriate solvent.

The limit of determination for TRI is 10 µg/litre for effluents and 0,1 µg/litre for the water environment

2. The accuracy and precision of the method shall be plus or minus 50 % at a concentration which represents twice the value of the limit of determination.

3. The competent authority may determine concentrations of TRI by reference to the quantity of AOX, EOX or VOX provided that the Commission is first satisfied that these methods give equivalent results and until the general solvent Directive is adopted. The competent authority shall establish regularly the relationship in concentration between TRI and the parameter used.

X. Specific provisions relating to perchloroethylene (PER) (No 111)[80]

CAS-127-18-4

Heading A (111): limit values for emission standards[81]

Type of industrial plant[82]	Type of average value	Limit values expressed as weight (g/tonne)[83]	concentration (mg/litre)[84]	To be complied with as from
(a). Trichloroethylene (TRI) and perchloroethylene (PER) production (TRE-PER processes)	Monthly	10	2	1.1.2003
		2,5	0,5	1 1 2005
	Daily	20	4	1.1 2003
		5	1	1 1 2005

[80] Regulation 5 applies in particular to PER used as a solvent for dry-cleaning, for the extraction of grease or odours and for degreasing metals where annual discharges amount to less than 30 kg/year.

[81] In view of the volatility of perchloroethylene and in order to ensure compliance with sub-regulation (6) of regulation 3, where the process used involves open-air agitation of the effluents containing perchloroethylene, the competent authority shall require compliance with the limit values upstream of the plants concerned: it shall ensure that all waters likely to be polluted are properly taken into account.

[82] A simplified monitoring procedure may be introduced where annual discharges do not exceed 30 kg/year.

[83] For sectors (a) and (b) the limit values for PER discharges relate either to overall TRI + PER production capacity or to overall TETRA + PER production capacity

Production or processing capacity is the capacity authorized by the administration or, failing that, the highest annual quantity produced or processed over the four years prior to the granting or review of the authorization. The capacity authorized by the administration should not differ greatly from actual production.

[84] Without prejudice to the provisions of heading A (4) in Annex I. PER limit concentrations relate to the following reference volumes - (a), 5 m³/tonne of TRI + PER production. - (b), 2 m³/tonne of TETRA + PER production.

(b) Carbon tetrachloride and perchloroethylene production (TETRA-PER processes)	Monthly Daily	10 2,5 20 5	5 1,25 10 2,5	1.1.2003 1.1.2005 1.1.2003 1.1.2005
(c) Use of PER for degreasing metals[85]	Monthly Daily	--- ---	0,1 0,2	1.1.2003 1.1.2003
(d) Chlorofluorocarbon production[86]	Monthly Daily	--- ---	--- ---	--- ---

Heading B (111): quality objectives

Environment	Quality objectives (µg/litre)	To be complied with as from
Inland surface waters	10	1.1.2003
Estuary waters	10	1.1.2003
Inland coastal waters other than estuary waters	10	1.1.2003
Territorial waters	10	1.1.2003

The Commission shall compare the results of the monitoring carried out, in accordance with regulation 14 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, with an indicative concentration of 2,5 µg/litre.

The Commission shall re-examine the quality objectives on the basis of the experience acquired in the application of the present measures.

Heading C (111): reference method of measurement

1. The reference method of measurement to be used for determining the presence of perchloroethylene (PER) in effluents and the water environment shall be gas chromatography with electron capture detection after extraction by means of an appropriate solvent.

The limit of determination for PER is 10 µg/litre for effluents and 0,1 µg/litre for the water environment.

2. The accuracy and precision of the method shall be plus or minus 50 % at a concentration which represents twice the value of the limit of determination.

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[85] These limit values apply only to industrial plants the annual discharges from which exceed 30 kg/year.

[86] It is not possible at present to adopt limit values for this sector. In the meantime, the competent authority shall apply national emission standards in accordance with Annex I, heading A, point 3.

3. The competent authority may determine concentrations of PER by reference to the quantity of AOX, EOX or VOX, provided that the Commission is first satisfied that these methods give equivalent results and until the general solvent Directive is adopted.

The competent authority shall establish regularly the relationship in concentration between PER and the parameter used.

XI. Specific provisions relating to trichlorobenzene[87] (TCB) (117, 118)[88]

Heading A (117, 118): limit values for emission standards

Standstill: There shall be no significant direct or indirect increase over time in pollution arising from discharges of TCB and affecting concentrations in sediments or molluscs or shellfish or fish.

Type of industrial plant	Type of average value	Limit values expressed as weight (g/tonne)[89]	concentration (mg/litre)[90]	To be complied with as from
(a). Production of TCB via dehydrochlorination of HCH and/or processing TCB	Monthly	25	2,5	1.1.2003
		10	1	1.1.2005
	Daily	50	5	1.1.2003
		20	2	1.1.2005
(b) Production and/or processing of chlorobenzenes via chlorination of benzene[91]	Monthly	5	0,5	1.1.2003
		0,5	0,05	1 1.2005
	Daily	10	1	1 1.2003
		1	0,1	1 1.2005

[87] Regulation 5 applies in particular to TCB used as a solvent or colouring support in the textile industry, or as a component of the oils used in transformers until such time as there is specific legislation on this subject.

[88] TCB may occur as one of the following three isomers:
- 1, 2, 3-TCB - CAS 87/61-6;
- 1, 2, 4-TCB - CAS 120-82-1 (No 118 of the EEC list);
- 1, 3, 5-TCB - CAS 180-70-3.

Technical TCB (No 117 of the EEC list) is a mixture of these three isomers, with a preponderance of 1,2,4-TCB, and may also contain small quantities of di-and tetrachlorobenzene. In any case, these provisions apply to the total TCB (the sum of the three isomers).

[89] The limit values for discharges of TCB (sum of the three isomers) are given:
- for sector (a): in relation to the total TCB production capacity,
- for sector (b): in relation to the total production or processing capacity for mono- and dichlorobenzenes.

Production or processing capacity is the capacity authorized by the administration or, failing that, the highest annual quantity produced or processed over the four years prior to the granting or review of the authorization. The capacity authorized by the administration should not differ greatly from actual production.

[90] Without prejudice to the provisions of heading A (4) in Annex I, limit concentrations relate to the following reference volumes: - sector (a): 10 m3/tonne of TCB produced or processed, - sector (b): 10 m3/tonne of mono- and dichlorobenzene produced or processed.

[91] For the existing plants discharging less than 50 kg/year by 1 January 2003, the limit values which are to be complied with at this date are equal to half of the limit values which are to be complied with as from 1 January 2001

Heading B (117, 118): quality objectives

Standstill: There shall be no significant increase over time in the concentration of TCB in sediments or molluscs or shellfish or fish.

Environment	Quality objectives (µg/litre)	To be complied with as from
Inland surface waters	0,4	1.1.2003
Estuary waters	0,4	1.1.2003
Inland coastal waters other than estuary waters	0,4	1.1.2003
Territorial waters	0,4	1.1.2003

The Commission shall compare the results of the monitoring carried out, in accordance with regulation 14 of the Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment Regulations, 2000, with an indicative concentration of 0,1 µg/litre.

The Commission shall re-examine the quality objectives on the basis of the experience acquired in the application of the present measures.

Heading C (117, 118): reference method of measurement

1. The reference method of measurement to be used for determining the presence of trichlorobenzene (TCB) in effluents and the water environment shall be gas chromatography with electron capture detection after extraction by means of an appropriate solvent. The limit of determination for each isomer separately is 1 µg/litre for effluents and 10 ng/litre for the water environment.

2. The reference method to be used for determining TCB in sediments and organisms is gas chromatography with electron capture detection after appropriate preparation of the sample. The limit of determination for each isomer separately is 1 µg/kg of dry matter.

3. The competent authority may determine concentrations of TCB by reference to the quantity of AOX or EOX, provided that the Commission is first satisfied that these methods give equivalent results and until the general solvent Directive is adopted.

The competent authority shall establish regularly the relationship in concentration between TCB and the parameter used.

4. The accuracy and precision of the method shall be plus or minus 50 % at a concentration which represents twice the value of the limit of determination.