The Rhine Action Programme: A Turning-Point in the Protection of the North Sea?

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Chapter 11

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A Turning-Point in the Protection of the North Sea?

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Introduction

An essential part of the regime for land-based marine pollution consists of international rules dealing exclusively with pollution of international watercourses. Though these rules necessarily protect a much wider range of interests, they nonetheless may have direct implications for the protection of the marine environment. This can pre-eminently be seen in the case of the North Sea. The rules dealing with pollution of the North Sea by watercourses—the 1974 Paris Convention for the Prevention of Marine Pollution from Land-based Sources,1 the 1984 and 1987 INSC Declarations,2 and EC law—are supplemented by the regime for one of the major polluters of the North Sea, the Rhine.

The potential importance of this regime has greatly increased now that the impasse in the co-operation between the riparian states of the Rhine has been broken by the adoption of the Rhine Action Programme (RAP) in September 1987.3 If implemented adequately, one of the effects of this non-legal and flexible instrument may be a substantial reduction of the pollution of the North Sea by the Rhine. The importance attached to the RAP was emphasized by the Ninth Ministerial Conference of the Member States of the International Rhine Commission.

which noted that it should serve as an example for all watercourses flowing into the North Sea.¹

In this contribution some observations will be made on issues that are raised by the impact of the RAP on the protection of the North Sea. After a discussion of the background and contents of the RAP attention will be paid to the relation between the RAP and other instruments dealing with the protection of the North Sea against pollution by watercourses, the possible harmonization between the RAP and these instruments, the special position of the EC, and the question whether the non-legal and flexible nature of the RAP may be regarded as a model for future instruments. The chapter closes with some concluding observations.

**Background of the Rhine Action Programme**

The adoption of the RAP can only be understood from the perspective of the history of co-operation between the riparian states of the Rhine. This co-operation was institutionalized in the International Rhine Commission (IRC).² The IRC has few independent powers—its tasks are confined to investigating into the nature, extent and origin of these investigations, appropriate measures to the states party³—but it does provide a framework for co-operation. Irregularly, the Member States of the IRC meet at the Ministerial level. Since 1972 ten Ministerial Conferences have been held.

Through the years, the main issues dealt with in this framework have been pollution by chlorides, thermal pollution, and chemical pollution. Of particular relevance for the present purpose is the last form of pollution, which is covered by the 1976 Rhine Chemical Pollution Convention.⁴ The main element of this Convention is the system of black- and grey-lists, intended to reduce the input of dangerous substances. It is precisely this element that has proved to be the most troublesome part of the Convention. In particular, progress in the establishment of limit-values for blacklist substances, which have to be proposed by the IRC and approved by the Member States,⁵ has proceeded slowly. In view of a lack of agreement on technical aspects⁶ and the considerable economic interests involved, the requirement of unanimity for their adoption⁷ has proven to be a major obstacle.⁸ Consequently, although in the past decade some progress has been made in the improvement of the water quality of the Rhine, it became increasingly clear that the efforts proposed to attain a significant improvement of the quality of the Rhine had become deadlocked.

Against this background the Sandoz disaster of 1 November 1986—causing major threats to the ecosystem of the Rhine⁹—was only the triggering event leading to agreement on a new approach to international water quality policy. The political need to provide an adequate answer to the Sandoz disaster was felt to be inescapable. After the incident the issue was taken up at the Ministerial level. At the Seventh Ministerial Conference of December 1986 agreement was reached on the necessity of a new instrument. This instrument is the Rhine Action Programme which was adopted at the Eighth Ministerial Conference held in Strasbourg in September 1987.

**Contents of the Rhine Action Programme**

The RAP aims at the attainment of three objectives: species which used to live in the Rhine must become indigenous again, Rhine water must remain useful for drinking-water purposes and the sediments must be free of pollution by dangerous substances. To attain these objectives the RAP provides for a series of measures, most notably a reduction of structural pollution—encompassing pollution by diffuse sources, point sources and communal discharges—and a reduction of accidental pollution.¹⁰

Protection of the North Sea against pollution is not the prime concern of the RAP. Nonetheless, it may be an important side-effect of the protection of the Rhine. The measures contained in the RAP may have direct implications for the protection of the North Sea environment. The link with the North Sea has explicitly been acknowledged at the Fifty-Third Plenary Session of the IRC. In pursuance of the conclusions of the Ninth Ministerial Conference¹¹ the protection of the North Sea environment was added as a fourth objective to the RAP. The water quality of the North Sea must be improved so that the health of the ecosystem is guaranteed and is threatened neither by structural nor by accidental pollution.¹²

The agreement has a somewhat ambiguous character. On the one hand, the RAP is characterized by its non-legal¹³ and flexible nature. The realization of its objectives is left to the national level. The RAP lays down only general aims without

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¹ Parag. 159 of the Ninth Ministerial Conference. Bonn, 11 October 1988 (published by the Wirtschaftsverband, Bonn), para. x. 5.
³ Art. 2 of the 1963 Convention.
⁵ Art. 3(1)(2) jo. art. 5.
⁷ Art. 14(3).
⁸ At the time of writing, proposed measures have only been adopted for mercury discharged from the chlor-alkali industry and chromium (a grey-list substance).
¹⁰ RAP paras. 2.3.1 and 2.3.2.
¹¹ Para. x of the Communique of the Ninth Ministerial Conference.
¹² Cf. Art. 2 of the Rhine Chemical Pollution Convention, which mentions the quality of the marine environment as one of the elements which has to be taken into account by the taking of measures.
¹³ There are no indications that the signatory states intended to create a legal document; see for the view of the Government of The Netherlands: Parliamentary Papers Lower House 1987-1988, 12872, no.39, p. 4.
stipulating in detail how reduction measures should be put into effect at the national level. On the other hand, the RAP contains two elements which have to guarantee that the agreed reductions will be realized. First, the RAP contains a time-schedule according to which these measures have to be taken. The objectives of the RAP have to be realized in three consecutive stages: a first stage, finished at the end of 1989, a second one running until 1995, and a third running until 2000. Second, the RAP has been made subject to international supervision. The programme is continuously subject to modification and elaboration by the Ministerial Conferences and the IRC. At present 9 Working Groups of the IRC are entrusted with its elaboration. The implementation of the RAP is a recurring theme at the meetings of the IRC and the Ministerial Conferences. Among others things, to enhance its effectiveness a monitoring programme will be elaborated.

The Rhine Action Programme amidst other instruments

The relevance of the RAP for the protection of the North Sea environment can only be assessed in the light of the protection of the North Sea against pollution by watercourses offered by other applicable instruments—most notably the 1976 Rhine Chemical Pollution Convention, the 1974 Paris Convention, the 1984 and 1987 INSC Declarations, and EC legislation. The question whether the Rhine Action Programme goes beyond what already been achieved by the other instruments in particular presents itself with respect to two issues: accidental pollution and structural pollution. The RAP provides for a reduction of both forms of pollution in order to attain its fourth objective, the improvement of the water quality of the North Sea.

The issue of accidental pollution can be disposed of quickly. The issue is a greater problem for the Rhine than for the North Sea. The principal interest affected by such incidents is the supply of drinking-water. Besides, not all accidents with industrial installations on the Rhine cause serious pollution of the North Sea. Consequently, the forums dealing exclusively with the North Sea appear not to have concerned themselves with the issue. The 1987 INSC Declaration confines itself to the statement that the states shall ensure that industries using dangerous substances install appropriate facilities to prevent pollution as a result of accidents or to limit the consequences thereof. Also the Paris Commission has not dealt with the issue in depth. The matter came up for discussion in the Ninth Meeting of the Paris Commission but there was no consensus whether it is appropriate for the Paris Commission to deal with the prevention of pollution of the Convention area by emergencies or accidents at industrial plants under the terms of the Convention.

By contrast, accidental pollution is dealt with in detail in the RAP. This is not surprising since the RAP is primarily a political answer to the Sandoz disaster. The RAP requires industrial installations to take a number of safety-measures. In the first stage the specific measures to be taken and a time-schedule will be drafted and in the second stage these measures will have to be implemented. The agreement runs to some extent parallel to the action undertaken by the EC. In both cases the Post-Seveso Directive was considered to provide insufficient protection as it did not even cover the Sandoz incident.

With respect to the second issue, structural pollution, the relation between the RAP and other instruments is somewhat more complex. It is in particular the cooperation on this subject that had reached an impasse before 1986. Hence, it is here that the non-legal and flexible nature of the RAP has made it possible to go beyond measures taken in other forums by making diverging measures acceptable for the participating states and the EC. The RAP distinguishes itself both by the substances it covers and by the strategy by which the input of these substances has to be reduced.

The point of departure of the RAP is the identification of a number of priority branches of industry—which will be left aside here—and priority substances. The RAP identifies 27 priority substances the input of which has to be reduced. As is shown in the Annex to this contribution, almost all of these substances have already been discussed in other forums, in particular within the IRC. A difference of principle exists with the less-detailed Annex to the 1987 INSC. Apart from this, the list of the RAP remains a far cry from the 83 and 129 substances included in respectively the IRC and the EC list of black and grey substances for which measures have to be adopted. A step forward was made at the Tenth Ministerial Conference in November 1989, where the list of priority substances was supplemented.

The RAP does distinguish itself on a substantive level, however. First, although many of the priority substances have been discussed, in relatively few cases has this resulted in meaningful obligations. With a small overstatement it can be concluded from the Annex that either the discussions have never been concluded or the results have not been reflected in non-committal decisions. The reduction of inputs required by the RAP goes beyond these efforts. This is, secondly, also true for the substances which are covered by stringent decisions of other forums. With respect to these substances the RAP distinguishes itself by its approach. The input of the priority sub-

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18 Originally, 1988 was indicated as the end of the first stage, but this was prolonged until the end of 1989 during the Ninth Ministerial Conference of October 1988.

19 RAP, para. 2.4.2.

20 Art. 3(c) provides that the Paris Convention among others deals with pollution of the maritime area through watercourses.

21 A major part of these Declarations is concerned with pollution of the North Sea through watercourses. See para. 1 of the 1984 Declaration, Part C of the Conclusions of the 1984 Conference and para. 2-4 of the Annex of the 1984 Declaration; para. xiv. 1-15 of the 1987 Declaration.


23 RAP, para. 2.3.2.


25 See further below p. 131.
stances has to be reduced by 50 per cent by 1995. After an inventory of existing discharges has been drawn up, the RAP provides for consultations between national authorities and individual point-dischargers. The actual reduction will have to be attained by the application of the best available technology (BAT). Basically, this approach resembles the approach of the 1987 INSC Declaration, but that is less specific and lacks the programmed character of the RAP. More important is that the approach of the RAP diverges from the strategy of the Rhine Chemical Pollution Convention, the Paris Convention and the EC, consisting of the establishment of emission or water quality standards. The general agreement on the reduction of inputs by application of BAT partly overrules the traditional approach. Depending on the circumstances the application of BAT may imply the taking of more or of less stringent measures than those required by existing emission or water quality standards.

How these two strategies are related is not quite clear. BAT is a concept which can be interpreted in different ways and at present it cannot be foreseen how it will be filled in by the IRC. Perhaps partly due to this uncertainty it has been decided not to abandon the establishment of limit-values in the framework of the Rhine Chemical Pollution Convention. The adoption of limit-values will also harmonize the commitments of states, which in view of the discretion to attain the 50 per cent reduction may differ. If indeed the two approaches will be pursued in parallel, it is arguably advantageous to establish a link between them. Inter alia, this may imply the adaptation of the limit-values and quality-objectives to the continuously evolving concept of BAT; only then will the distinct approaches keep pace with each other. Most instruments already provide for methods to adapt standards to new developments, but to date little use has been made thereof.

The issue of the relation between the application of BAT and limit-values or water quality standards is less relevant for nutrients, a specific category of the priority substances. Other forums have chosen an equally flexible approach as the RAP, and have not (yet) set any specific standards. The decisions of the 1987 INSC Conference and the Paris Commission on the reduction of the input of nutrients are identical to the approach of the RAP, requiring a reduction of their input by 50 per cent. The Proposal for a Council Directive aiming at the protection of the aquatic environment against pollution by nitrates from diffuse sources reflects a somewhat different, but equally general approach. As these agreements will be elaborated, questions concerning their relation may arise, however. The Ninth Ministerial Conference of the Rhine States has agreed on limit-values for municipal waste water discharges. The proposed Community Directive provides for the establishment of such standards as well, and in the Paris Commission the issue has been raised of the establishment of water-quality objectives.

Thus, while the measures provided for in the RAP for the reduction of accidental and structural pollution of, among others, the North Sea in a number of respects differ from what has been attained in other forums, much depends on the way in which these measures will be elaborated and implemented in the near future. Only on that basis will it be possible to assess its value for the protection of the North Sea against pollution by watercourses.

**Harmonization with North Sea co-operation**

The fact that in some respects the RAP goes beyond other instruments dealing with the protection of the North Sea against pollution by watercourses is not surprising. Such differences are precisely the raison d'être of a specific action programme for a river. They reflect the advantages of a small and relatively homogeneous forum where the issue of transboundary water pollution is dealt with in relative isolation from other issues. Besides, regional differences between water systems can be great and require solutions geared to the specific situation.

Nonetheless, a certain harmonization between the RAP and other instruments may have advantages. First and foremost this is a matter of efficiency. Both the elaboration of new standards and the exercise of supervision through monitoring in different forums are so closely related that by adjusting them to each other overlap can be prevented. Also the objective of creating standards as uniform as possible for all rivers, which—as experience has taught—is an important incentive for co-operation, can only be attained by harmonization. And third, to deal adequately with the pollution of the North Sea by watercourses it could be argued that the relatively far-reaching approach of the RAP should be utilized for all major rivers flowing into the North Sea.

On the basis of such arguments it has been suggested that harmonization should be pursued. The ultimate aim of such harmonization between the management of different waters should, if it has been proposed, be an integrated decision-making system with respect to water pollution by international commissions for, e.g., the Rhine, the Meuse, the Scheldt, the Ems, the North Sea and the Wadden Sea. At present the pursuit of more moderate harmonization can be seen. Three forms can be distinguished: harmonization at the national level, adjustment of the international agreements for dealing with the Rhine to those dealing with the North Sea, and vice versa.

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20 See further sect. VII.
21 E.g. Art. 14(1)(2) of the Rhine Chemical Pollution Convention; Art. 9 of Directive 75/795/EEC; Art. 6(3) of Directive 86/280/EEC.
23 In the RAP only two forms of nutrients are included—phosphates and ammonium—while the other forums deal with the broader category of nutrients—a difference that can be attributed to the fact that phosphates and ammonium are forms of nutrients especially relevant for fresh water pollution.
24 See Annex for references.
25 Communiqué of the Ninth Ministerial Conference, para. iii. 1.
26 See the Tenth Annual Report of PARCOM, Annex 17, "Future Work of the Nutrients Working Group".
First, different commitments can be harmonized in the implementation stage. Such adjustment has been pursued by, e.g., the Netherlands by two main approaches. First, the lists of substances provided for by the RAP and the INSC Declaration have been combined. Second, national measures taken in implementing the RAP will be applied to all rivers, which in facto means that the measures taken to reduce all river inputs in the North Sea are covered by the agreement of the RAP.54 Harmonization at this level of course only provides the most basic advantage: greater efficiency at the national level.

In general the second option will not be very worthwhile, since the agreements made with respect to the North Sea will hardly ever go beyond what is agreed for the Rhine. Nonetheless, the implementation of the fourth objective of the RAP—preservation of the ecological quality of the North Sea—will have consequences for the measures adopted, e.g., for the selection of priority substances. This was foreseen during the Ninth Ministerial Conference. The Conference agreed on measures for nitrogen, which in general is a greater problem for the North Sea than for the Rhine.55 The measures are, however, more general than those contained in the 1987 INSC Declaration and some discrepancies remain.

More relevant is the third strategy: the promotion of the approach of the RAP on a broader level. The Member States of the IRC have made some efforts to generalize the approach of the RAP to the North Sea level. These efforts are to some extent reflected in the 1987 INSC Declaration. On some issues the 1987 Declaration has generalized the approach of the RAP to all watercourses flowing into the North Sea. Consequently, the participating states have accepted a similar approach to that of the RAP. As noted, however, the 1987 INSC Declaration is less specific and less instrumentalized than the RAP. Consequently, further adjustment has been deemed to be desirable. At the Ninth Ministerial Conference it was agreed that the measures agreed upon in the RAP and the INS Conferences should be further adjusted to each other.56

At present two institutional developments can be witnessed which may contribute to such adjustment. To date, the IRC neither participates in the Paris Commission, nor has it participated in the first two INSC Conferences. However, the IRC has been invited to participate as an observer in the Paris Commission and the Third INSC Conference.57 Another development important for a broader application of the RAP approach is that all states responsible for pollution of the North Sea by watercourses will be involved in the North Sea forums. Switzerland will participate in the Third INSC Conference and the German Democratic Republic and Czechoslovakia will have an observer status at this Conference. All three states will be invited to participate in the Paris Commission.58

The position of the EC

As noted above, a major feature of the RAP is that it has broken the impasse in the IRC. In part, this was possible because the RAP circumvented the problems that stem from the key position that is taken by the EC in the IRC and more generally in the system of protection of the North Sea against pollution by watercourses.

One of the main reasons behind the activities of the Community in the field of water pollution was the perceived need to harmonize the obligations the Member States had undertaken, or were about to undertake in the Paris Convention, the Rhine Chemical Pollution Convention and the 1974 Draft Strasbourg Convention. It aimed at a "Europeanization" of fragmented attempts at water protection.59 Such harmonization indeed fulfilled a function; it was only after the adoption of Directive 76/464 that the Rhine Chemical Pollution Convention could be concluded.60 Since then the EC has pursued the objective of harmonization in international forums.

As is now well known, this has caused some problems. The progress made in the IRC has been determined to an important extent by the progress made within the EC. For one thing, on a number of occasions the European Commission has lacked a mandate to negotiate on a specific item, which in some cases has resulted in delays in the decision-making process. During the Ninth Ministerial Conference the Council of the EC was requested to provide the European Commission with a general mandate to negotiate on regional agreements.61 However, in the short term a solution to this problem is not to be expected.

On a substantial level the key position of the EC has manifested itself in the fact that as a rule only those measures could be agreed within the framework of the IRC which were preceded by comparable measures of the Community. In general the Commission has objected to binding measures being taken in international forums in which one or more Member States participated in case the Community had not yet taken action on the topic concerned or in case the measures adopted in the Community were less stringent.62 As is shown in the Annex, all measures taken since in elaborating the Rhine Chemical Pollution Convention were, at the time of their coming into force, covered by a Community directive and of the measures in force none contains standards more stringent than the Community directives. Although more stringent measures on the internal level are allowed by Community law—most EC directives in the field of water pollution are minimum directives—in

55 Communiqué of the Ninth Ministerial Conference, para. iii. 4.
56 Ibid., para. ii. 2.
58 See RAP, para. x. 3.
61 Ibid.
62 Communiqué of the Ninth Ministerial Conference, para. vii. 2. See also "Proposal for a Council Decision Authorizing the Commission to Negotiate and Approve on Behalf of the Community Certain Measures as Part of the Implementation of International Agreements of a Regional Nature Relating to Environmental Protection to which the Community is a Party" (COM(86) 536 final of 1 December 1986).
63 See André Nollkaemper, "The European Communities and International Environmental Cooperation, Legal Aspects of External Community Powers" (1987) Legal Issues of European Integration, No.2, pp. 55–91 at pp. 82 et seq.
The Rhine Action Programme: an example for future instruments?

Since the objectives of the RAP only have to be realized by 1995, at present little can be said about its effectiveness. Nonetheless, the approach of the RAP has already been regarded as a model approach for action programmes for other rivers flowing into the North Sea. In The Netherlands it has been proposed that similar action programmes for the Meuse and the Scheldt be drawn up. Similar proposals have been made for the Elbe and the Weser and, more in general, for all important transboundary rivers. While the establishment of such action programmes would be a worthwhile undertaking, doubts can be expressed whether the success of such action programmes is dependent on the adoption of a similar non-legal and flexible form as the RAP.

In the early seventies the generality and vagueness of customary international law and the absence of specific international agreements led to the drawing up of a large number of legally binding international agreements. This was not an autonomous development, but the result of a conscious choice: formulating specific obligations and moulding these in legal forms has always been thought to have a number of advantages and has often been considered to be essential for environmental protection. Hence, the general character of some international rules has been severely criticized. The European Parliament Report on the implementation of water directives identified as a major problem the vagueness of provisions, leaving too much room for interpretation at the national level. Corresponding to this line of thought, the legal nature and the possibility of drawing up detailed regulations were the main rationale behind the Rhine Chemi-

independently on the international level. The value of a far-reaching and comprehensive environmental policy of the Community is undisputed but would not in this option determine the international environmental policy of its Member States. A first step towards this option was set at the Ninth Ministerial Conference, which noted that neither the taking of measures by the IRC, nor their stringency is dependent upon the taking of comparable measures by the EC. But at the same time it was anticipated that the entry into force of the measures could be delayed if acceptance by the Community was not forthcoming, and in order to circumvent this problem the Member States were willing to apply those measures before their entry into force. In any case this option presupposes a solution for the mandate issue.

30 Communiqué of the Ninth Ministerial Conference, para. vii.
31 Ibid, para. x. 4.
Cal Pollution Convention in order to realize the objectives of the non-legal long-
term programme of the IRC adopted in 1976. The advantages of legal instru-
ments have never been exploited, however. In fact the existence of very detailed
regulations has often turned out to be a major obstacle to progress. Experience has
taught that the drawing up of programmes that satisfy the requirements of all
stringent approach has, seemingly, failed resort has been taken to the
national implementation mechanisms can take a long time. Now that the legal and
slow procedures by its flexible approach. It is not clear whether
this approach will work, and doubts have already arisen. At the Ninth Ministerial
Conference it was agreed to determine whether a new legal basis was required in
that elaboration of the Rhine Chemical Pollution Convention should be continued
since in the long run it may be a more stable basis. The legally binding character has
• been considered as an important advantage which can survive changes in political
preferences that can threaten political agreements.

In any case it is clear that the legal nature of international instruments is only one
of many variables determining their effectiveness. Practice has shown that there is
not always a difference in effectiveness between legal and non-legal rules. Factual
consensus between states is in this respect more important than the formal legal
character. It will not be possible to conclude that an enhancement of the quality of the
Rhine, and thereby of the North Sea, is attributable to the form of the inter-
national instrument. Consequently, while the adoption of international instruments
for other rivers flowing into the North Sea has to be pursued, it is submitted that in
the final analysis the form and nature of the instrument is only of relative
importance for successful co-operation in comparison to the presence of the precondition
for successful co-operation—a perception of common interests.

Conclusion

The adoption of the RAP is a classic example of the inevitable incremental charac-
ter of international environmental policy. The fact that the RAP has been estab-
lished next to other instruments dealing with partly the same subject-matter has
raised a number of questions which in this contribution could only be touched
upon.

Nonetheless, the adoption of the RAP has been a major event in water quality
management in Europe. It has generated political commitment and thereby given a
new incentive to the slowly developing work in the framework of the Rhine Chemi-
cal Pollution Convention. It remains to be seen whether the impulse given by the
RAP will be of a permanent character or whether the IRC will—in view of the
time-consuming inventorization of discharges and the elaboration of harmonized
rules for their reduction—reach again the impasse that has characterized its pre-
vious work. But it seems clear that the RAP, at least indirectly, contributes to the
protection of the North Sea environment. Even if not all results live up to expecta-
tions, its implications for the protection of the marine environment go beyond
what has been achieved for other international rivers. In this respect the RAP has
set the trend for future instruments. If the RAP indeed will be followed by compar-
able instruments for other rivers flowing into the North Sea, it may in retrospect be
considered as a turning-point for the protection of the North Sea against pollution
through watercourses.

But the RAP will not be the last word. It hardly reflects a proper balance
between the flexibility required and the obvious need to obtain meaningful obliga-
tions. In addition, many issues concerning its relation with the EC and other for-
ums remain to be settled. In this respect, the RAP does not give the lie to the
statement that the choice of instruments for the conduct of international environ-
mental policy is more often than not a leap in the dark.

37 Mingst, op. cit. 167.
38 On disuse of legal proceedings following pollution incidents see Darrell, op. cit. 453.
39 RAP, para. vii. 6.
40 Cf. J. G. Lammers, "The Rhine: Legal Aspects of the Management of a Transboundary River", in
440-457, at p. 451; see also sect. VII.
41 M. Bothe, "Legal and Non-legal Norms—A Meaningful Distinction in International Relations?" in
42 Plate, op. cit. 4.
Annex

Action on Priority Substances of the Rhine Action Programme Undertaken by the International Rhine Commission (IRC), the European Community (EC), the Paris Commission (PAR.) and the North Sea Ministerial Conferences (NMC)

**Aldrin, Dieldrin, Endrin and Isodrin**
NMC: Annex A of the 1987 North Sea Ministerial Declaration

**Ammonium**
PAR.: PARCOM Recommendation 88/2 (10th Annual Report Annex 18) and PARCOM: Recommendation 89/4
NMC: Annex E of the 1987 North Sea Ministerial Declaration

**Benzene**
IRC: A Recommendation is in discussion in Working Group B

**Cadmium**
NMC: Annex A of the 1987 North Sea Ministerial Declaration

**Carbon tetrachloride**
NMC: Annex A of the 1987 North Sea Ministerial Declaration

**Chloroaniline**
none

**Chloroform**

**Chloronitrobenzene**
IRC: A Proposal is in discussion in Working Group B

**Chromium**

**Copper, Nickel, Zinc, Lead**

**Dichloroethane**
IRC: A Proposal is in discussion in Working Group B

**Endosulfan**
IRC: A Proposal is in discussion in Working Group B of the IRC

**Hexachlorobenzene**

**Hexachlorobutadiene**

**Mercury**
PAR.: PARCOM Recommendation 1981; PARCOM Decision 85/1; PARCOM Decision 89/1; PARCOM Recommendation 89/3
NMC: Annex A of the 1987 North Sea Ministerial Declaration

**Parathion**
IRC: A Recommendation is in discussion in Working Group B

**PCBs/PCTs**
NMC: Annex A of the 1987 North Sea Ministerial Declaration

**Pentachlorophenol**
IRC: IRC Recommendation 1988 (not yet into force).

**Perchloroethylene**
IRC: A Proposal is in discussion in Working Group B

**Phosphates**
PAR.: PARCOM Recommendation 88/2 (10th Annual Report Annex 18) and PARCOM: Recommendation 89/4
NMC: Annex E of the 1987 North Sea Ministerial Declaration

**Trichlorobenzene**
IRC: A Proposal is in discussion in Working Group B

**Trichloroethane**
IRC: A Proposal is in discussion in Working Group B

**Trichloroethylene**
IRC: A Proposal is in discussion in Working Group B