

OSPAR CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE  
NORTH-EAST ATLANTIC  
MEETING OF THE OSPAR COMMISSION  
STOCKHOLM: 26-30 JUNE 2006

---

**OSPAR Recommendation 2006/1 on Reporting Formats on the Implementation  
and Effectiveness of OSPAR Measures Relating to the Vinyl Chloride Industry**

RECALLING Article 2(1) and (3) and Article 22 of the Convention for the Protection of the Marine Environment of the North-East Atlantic (“OSPAR Convention”);

RECALLING that the OSPAR Commission has adopted:

OSPAR Decision 98/4 on Emission and Discharge Limit Values for the Manufacture of Vinyl Chloride Monomer (VCM) including the Manufacture of 1,2-dichloroethane (EDC);

OSPAR Decision 98/5 on Emission and Discharge Limit Values for the Vinyl Chloride Sector, Applying to the Manufacture of Suspension-PVC (s-PVC) from Vinyl Chloride Monomer;

OSPAR Recommendation 99/1 on the Best Available Techniques for the Manufacture of Emulsion PVC (e-PVC);

OSPAR Recommendation 2000/3 on Emission and Discharge Limit Values for the Manufacture of Emulsion PVC (e-PVC) from Vinyl Chloride Monomer;

WISHING to rationalize the existing commitments of the Contracting Parties within the framework of the OSPAR Convention to report on the implementation and effectiveness of measures relating to the use of best available techniques to, and the emissions and discharges from, the vinyl chloride industry;

NOTING EC Council Directive 96/61/EC concerning Integrated Pollution Prevention and Control and corresponding legislation of other Contracting Parties;

**The Contracting Parties to the Convention for the Protection of the Marine Environment of the North-East Atlantic RECOMMEND:**

**1. Definitions**

1.1 For the purpose of the Recommendation:

- a. “the specified OSPAR measures” means OSPAR Recommendations 99/1 and 2000/3.
- b. “vinyl chloride industry” means those industrial sectors and plants to which the specified OSPAR measures apply.

**2. Purpose and scope**

2.1 The purpose of this Recommendation is to simplify and rationalize the existing reporting commitments by replacing the existing implementation reporting formats in the specified OSPAR measures with one single reporting format and aligning the reporting years set out in these measures.

2.2 This Recommendation relates to the commitments of Contracting Parties to report on the implementation and effectiveness of the specified OSPAR measures in the vinyl chloride industry and to the reporting requirements under OSPAR Decisions 98/4 and 98/5 as amended by OSPAR Decision 2006/1.

### **3. Provisions**

3.1 Contracting Parties should comply with their obligation to report on the implementation and effectiveness of the specified OSPAR measures by using the format at Appendix 1.

3.2 Section 5.1 of OSPAR Recommendation 99/1, and the first two sentences of section 5.1 of OSPAR Recommendation 2000/3 are replaced by:

“Reports on the implementation of this Recommendation should be submitted to the appropriate OSPAR subsidiary body for the first time in the intersessional period 2008/2009 for new and existing plants and every four years thereafter until this Recommendation is fully implemented unless otherwise specified by the Commission.”

3.3 The reporting format in the Appendix of each of the specified OSPAR measures is superseded by the reporting format at Appendix 1 of this Recommendation.

### **4. Entry into force**

4.1 This Recommendation has effect from 30 June 2006.

## Reporting format on the implementation and effectiveness of OSPAR measures relating to the vinyl chloride sector

Country: \_\_\_\_\_

**I. Implementation**

| Measure  | Reservation applies<br>Yes <sup>(1)</sup> /No | Is the measure applicable in your country?<br>Yes/No <sup>(2)</sup> | Is the measure fully implemented?<br>Yes/No <sup>(3)</sup> | Means of implementation <sup>(4), (5)</sup><br>1. legislation<br>2. administrative action<br>3. negotiated agreement |
|--|---|---|--|--|
| <b>PARCOM Decision 98/4</b><br>on Emission and Discharge Limit Values for the Manufacture of Vinyl Chloride Monomer (VCM) including the Manufacture of 1,2 dichloroethane (EDC)              |   |   |  |  |
| <b>PARCOM Decision 98/5</b><br>on Emission and Discharge Limit Values for the Vinyl Chloride Sector, Applying to the Manufacture of Suspension-PVC (s-PVC) from Vinyl Chloride Monomer (VCM) |   |   |  |  |
| <b>OSPAR Recommendation 99/1</b><br>on the Best Available Techniques for the Manufacture of Emulsion PVC (e-PVC)   |   |   |  |  |
| <b>OSPAR Recommendation 2000/3</b><br>on Emission and Discharge Limit Values for the Manufacture of Emulsion PVC (e-PVC) from Vinyl Chloride Monomer   |   |   |  |  |

Note (1)

Please report on any progress towards lifting the reservation:

---

---

---

Note (2)

If the measure concerned is not applicable please state why (e.g. no relevant plant):

---

---

---

Note (3)

If the measure concerned is not fully implemented please state why and indicate when the measure is expected to be fully implemented:

---

---

---

Note (4)

Please specify the national measures taken to give effect to each of the measures:

---

---

---

Note (5)

Please specify any special difficulties encountered, such as practical or legal problems, in the implementation of each of the measures:

---

---

---

## II. Effectiveness

### Limit values for emissions and discharges

Please indicate the emissions and discharges of the substances and sum parameters listed in the tables for the following vinyl-chloride and PVC plants or installations. Where plants are operated in an integrated manner (an “installation”), plant-by-plant reporting is not required and reporting should cover the installation. Where an installation produced VCM and/or e-PVC and/or s-PVC, the reporting table should be combined ensuring that all parameters set out in the tables below were covered. Please give representative figure for each pollutant and- if possible- the observed range of figures from all plants.

Reporting on VCM and EDC parameters is on a voluntary basis.

Please also indicate - in brackets behind the figures – whether emission or discharge values are estimated (E), measured (M) or calculated (C). If data could not be made available, please indicate in the appropriate “remarks” section (e.g. if monitoring of substance in question is not specified in the permit for the plant or installation, and estimations or calculations are not available).

“Specific loads” are the amounts of emissions or discharges for each unit (usually tonne) of production that is produced in the year in question. “Total loads” are the amounts of emissions or discharges from the plant or installation in the year in question.

### 1. Vinyl Chloride Monomer (VCM) plants including manufacture of 1,2-dichloroethane (EDC) covered by OSPAR Decision 98/4

Please indicate number and capacity of VCM-plants/installations:

\_\_\_\_\_

Total capacity (t VCM/year): \_\_\_\_\_

#### a. Emissions to air

| Substances | Specific load <sup>1</sup><br>In reporting year <sup>2*</sup><br>kg/tonne of VCM produced | Alternatively:<br>Total load in reporting year<br>kg/year (comparison with<br>the base year) ** | Alternatively:<br>Concentration<br>mg/m <sup>3</sup> *** |
|------------|---|---|--|
| VCM        |   |   |  |
| EDC        |   |   |  |
| Dioxins    | a)  | a)  | a)   |

\* Please indicate under “remarks” how specific loads were calculated.

\*\* If reporting total loads, please add a baseline load for (2001) and please indicate associated actual production of VCM and report under “remarks” when installed production capacities have changed.

\*\*\* Please indicate the associated volumetric flow-rate and whether fugitive emissions are included.

a) mg (TEQ)/tonne of VCM produced **or** mg (TEQ)/year **or** ng (TEQ)/Nm<sup>3</sup>.

<sup>1</sup> Wherever possible this parameter should be reported

<sup>2</sup> The year for which data are to be reported in 2008/2009 is 2007.

**b. Discharges to water**

| Substances   | Specific load <sup>3</sup><br>In reporting year <sup>4*</sup> (°) | Alternatively:<br>Total load in reporting year<br>**<br>kg/year (°) | Alternatively:<br>Concentration<br>mg/l *** (°) |
|--|---|---|---|
| Chlorinated hydrocarbons<br>(g/tonne EDC purification<br>capacity) <sup>a)</sup> |   |   |   |
| Copper (total)<br>(g/tonne of oxychlorination<br>capacity) <sup>b)</sup>         |   |   |   |
| Dioxins<br>(µg TEQ/tonne<br>oxychlorination capacity) <sup>b)</sup>              |   |   |   |

- \* Please indicate under “remarks” how specific loads were calculated.
- \*\* If reporting total loads, please add a baseline load for (2001) and please indicate associated actual production of VCM and report under “remarks” when installed production capacities have changed.
- \*\*\* Please indicate the associated volumetric flow-rate.

- a) To be sampled after stripper, before secondary treatment. Chlorinated hydrocarbons may alternatively be calculated from AOX or EOX if a correlation, on a plant-by-plant basis, has been established. The application of those alternatives should be described in the implementation report.
- b) To be sampled after final treatment.
- c) In brackets: (Number of samples).

**c. Remarks:** (i.e. explanation if change in production capacity in the country appeared, method to calculate specific loads)

---



---



---



---

<sup>3</sup> Wherever possible this parameter should be reported  
<sup>4</sup> The year for which data are to be reported in 2008/2009 is 2007.

## 2. Suspension-PVC (s-PVC) covered by OSPAR Decision 98/5

Please indicate number and capacity of plants: \_\_\_\_\_

Total capacity (tonnes s-PVC/year): \_\_\_\_\_

### a. Emissions to air

| Substances          | Specific load <sup>5</sup><br>In reporting year <sup>6*</sup><br>g/tonne of s-PVC produced | Alternatively:<br>Total load in reporting year<br>kg/year (comparison with<br>the base year) ** | Alternatively:<br>Concentration<br>mg/m <sup>3</sup> *** |
|---------------------|--|---|--|
| VCM (point sources) |  |   |  |
| VCM (fugitives)     |  |   |  |

\* Please indicate under "remarks" how specific loads were calculated.

\*\* If reporting total loads, please add a baseline load for (2001) and please indicate associated actual production of VCM and report under "remarks" when installed production capacities have changed.

\*\*\* Please indicate the associated volumetric flow-rate.

### b. Discharges to water

| Substances            | Specific load <sup>7</sup><br>In reporting year <sup>8*</sup><br>g/tonne of s-PVC produced | Alternatively:<br>Total load in reporting year<br>kg/year (comparison with<br>the base year) ** | Alternatively:<br>Concentration<br>mg/l *** |
|-----------------------|--|---|---|
| VCM <sup>a), b)</sup> |  |   |   |

\* Please indicate under "remarks" how specific loads were calculated.

\*\* If reporting total loads, please add a baseline load for (2001) and please indicate associated actual production of VCM and report under "remarks" when installed production capacities have changed.

\*\*\* Please indicate the associated volumetric flow-rate.

a) Please state correlation when VCM data are based on AOX or EOX measurements.

b) After effluent stripper, before secondary treatment.

**c. Remarks:** (i.e. explanation if change in production capacity in the country appeared, method to calculate specific loads)

---



---



---



---

<sup>5</sup> Wherever possible this parameter should be reported

<sup>6</sup> The year for which data are to be reported in 2008/2009 is 2007.

<sup>7</sup> Wherever possible this parameter should be reported

<sup>8</sup> The year for which data are to be reported in 2008/2009 is 2007.

### 3. Emulsion-PVC Plants (e-PVC) covered by the OSPAR Recommendations 99/1 and 2000/3

Please indicate number and capacity of plants: \_\_\_\_\_

Total capacity (tonnes e-PVC/year): \_\_\_\_\_

**a. Emissions** **to** **air:**

| Substances  | Specific load <sup>9 a)</sup><br>In reporting year <sup>10*</sup><br>g/tonne of e-PVC produced | Alternatively:<br>Total load in reporting year <sup>a)</sup><br>kg/year (comparison with<br>the base year) ** | Alternatively:<br>Concentration <sup>a)</sup><br>mg/m <sup>3</sup> *** |
|---|--|---|--|
| VCM (point sources)                                     |  |   |  |
| VCM (arising from PVC waste – all environmental routes) |  |   |  |

\* Please indicate under “remarks” how specific loads were calculated.

\*\* If reporting total loads, please add a baseline load for (2001) and please indicate associated actual production of VCM and report under “remarks” when installed production capacities have changed.

\*\*\* Please indicate the associated volumetric flow-rate and whether fugitive emissions are included.

a) In brackets: (Number of samples)

**b. Discharges to water**

| Substances   | Specific load <sup>11</sup><br>In reporting year <sup>12*</sup><br>g/tonne of PVC produced | Alternatively:<br>Total load in reporting year<br>kg/year (comparison with<br>the base year) ** | Alternatively:<br>Concentration<br>mg/l *** |
|--|--|---|---|
| VCM (producing only e-PVC) <sup>a), b)</sup>                       |  |   |   |
| VCM (producing e-PVC and s-PVC at the same site) <sup>a), b)</sup> |  |   |   |

\* Please indicate under “remarks” how specific loads were calculated.

\*\* If reporting total loads, please add a baseline load for (2001) and please indicate associated actual production of VCM and report under “remarks” when installed production capacities have changed.

\*\*\* Please indicate the associated volumetric flow-rate.

a) Please state correlation when VCM data are based on AOX or EOX measurements.

b) After effluent stripper, before secondary treatment.

<sup>9</sup> Wherever possible this parameter should be reported

<sup>10</sup> The year for which data are to be reported in 2008/2009 is 2007.

<sup>11</sup> Wherever possible this parameter should be reported

<sup>12</sup> The year for which data are to be reported in 2008/2009 is 2007.

