

OSPAR CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE
NORTH-EAST ATLANTIC

MEETING OF THE RADIOACTIVE SUBSTANCES COMMITTEE (RSC)

BERN: 19 – 22 FEBRUARY 2007

**Revised Reporting Formats for Producing the Annual Reports on Radioactive
Discharges from the Nuclear and the Non-Nuclear Sectors**

Following the recommendations of the Expert Assessment Panel, RSC 2007 agreed on the following arrangements for producing the Annual Report on liquid discharges from the nuclear sector and the Annual Report on Radioactive Discharges from the non nuclear sector:

1. The Report on Discharges from the Nuclear sector and the Report on Discharges of Radioactive Discharges from the non nuclear sector should be kept as two separate reports, each one with their own assessment.
2. There is a single Expert Assessment Panel to assess both reports. The EAP will be led by Bob Russ (UK), assisted by Michel Chartier (France) and Ann-Christin Hägg (Sweden).

Revised format for Reporting on Liquid Discharges from the Nuclear sector

3. Contracting Parties will report their discharges in accordance with the Reporting format at Appendix 1 to this annex. It builds on the old reporting format (Agreement 1996-2) amended in Table 2 to delete the rows on limits, as only discharges should be reported. The subtitle to Table 2 has also been amended to read “operational discharges of radioactive substances”.
4. The column on “Net Electrical Output” should be reported on Mw(e)·hour per installation where data is available. Where not possible, Contracting Parties should explain in footnotes that the net electrical output is per region, or per country.
5. Exceptional discharges will be reported within the Nuclear Discharges Report as a separate Table. Contracting Parties will report exceptional discharges separately on a slightly modified format (sheet) which does not include anymore the row on limits in accordance with the revised Table 2. The title of the Table has also been slightly amended to read “discharges from decommissioning and treatment/recovery of old waste”, in order to allow for reporting on treatment of old waste categories.

Revised Procedures for Reporting on Radioactive Discharges from the Non-Nuclear Sector

6. Contracting Parties should report their discharges from the non-nuclear sectors following the revised procedures at Appendix 2 to this Annex. The revision builds on the current reporting procedures (Agreement 2005-7) amended to include discharges from radiochemical manufacturing within Table 1 and Appendix 1 of the Procedures. Two new columns have also been added to Appendix 1 of the Procedures in order to accommodate total alpha and total beta discharges reported from the non oil and gas non-nuclear sectors.

Table 2 Nuclear Power Stations

Map Ref.	Country Site	Discharges to	Reactors Number and Type	Installed Capacity MW (e) 200?	Net Electrical Output MW (e),h 200?	Operational discharges of radioactive substances (1) in 200? (TBq)													
						Tritium	other (2) (3) radio-nuclides	Specific radionuclides											
								gross (2) a-activity	gross (2) b-activity (ex. Tritium)	Co 58	Co 60	Zn 65	Sr 90	Zr/Nb 95	Ru 106	Ag 110m	Sb 125	Cs 134	Cs 137
Belgium																			
B1	Doel	Schelde	4 PWR	393/433			[2a,b]												
B2	Tihange	Meuse	3 PWR	962/1008			[2a,b]												
France (4)																			
F1	Bellemeville-	Loire	2 PWR	2600															
F2	Cattenom	Mosel	4 PWR	5200															
F3	Chinon	Loire	4 PWR	3600															
F4	Chooz (5)	Meuse	2 PWR	2900															
F5	Civaux	Vienne	2 PWR	2900															
F6	Dampierre-	Loire	4 PWR	3600															
F7	Fessenheim	Rhine	2 PWR	1800															
F8	Flamanville	North Sea	2 PWR	2600															
F10	Golfech (6)	Garonne	2 PWR	2600															
F11	Gravelines	North Sea	6 PWR	5400															
F12	Le Blayais	Gironde	4 PWR	3600															
F14	Nogent-	Seine	2 PWR	2600															
F15	Paluel	North Sea	4 PWR	5200															
F16	Penly	North Sea	2 PWR	2600															
F18	Saint Laurent	Loire	2 PWR	1800															
Federal Republic of Germany																			
D1	Biblis A	Rhine	1 PWR	1225															
D1	Biblis B	Rhine	1 PWR	1300															
D2	Brokdorf	Elbe	1 PWR	1440															
D3	Brunsbüttel	Elbe	1 BWR	806															
D4	Grafenrheinfeld	Main	1 PWR	1345															
D5	Grohnde/	Weser	1 PWR	1430															
D7	Kahl	Main	1 BWR	16	(9)														
D8	Krümmel/	Elbe	1 BWR	1316															
D9	Lingen/	Ems	1 PWR	1363															
D9	Lingen	Ems	1 BWR	268	(10)														
D10	Mülheim-	Rhine	1 PWR	1302	(9)														
D11	Neckar-	Neckar	1 PWR	1365															
D11	Neckar-	Neckar	1 PWR	357															
D12	Obrigheim	Neckar	1 PWR	357															

Revised Reporting Procedures for Discharges of Radioactive Substances from Non-nuclear Sectors

Table 1 – Sectors with the Potential to Make Discharges of Radioactive Substances to the OSPAR Maritime Area

Contracting Party	Oil/gas extraction (inc. on-shore)	Phosphate Industry	Titanium-Dioxide Pigment	Steel	Rare-Earth	Medical	Universities and Research Centres	GTLDS & ICSD ¹	Radiochemical production
Belgium	Not present	Present	Present	Present	Not present	Present	Present	?	?
Denmark	Present	Present	Not present	Not present	Not present	Present	Present	?	?
Finland	Not present	Present	Present	Present	Not present	Present	Present	?	?
France	Present	Present	Present	Present	Present	Present	Present	?	?
Germany	Present	Not present	Present	Present	Not present	Present	Present	?	?
Iceland	Not present	Not present	Not present	Not present	Not present	Present	Present	Not present	?
Ireland	Present	Not present	Not present	Not present	Not present	Present	Present	Not present	?
Luxembourg	Not present	Not present	Not present	Present	Not present	Present	Present	?	?
Netherlands	Present	Present	Present	Present	Not present	Present	Present	?	?
Norway	Present	Not present	Present	Present	Not present	Present	Present	Present	?
Portugal	Not present	Present	Not present	Present	Not present	Present	Present	?	?
Spain	Present	Present	Present	Present	Not present	Present	Present	Not present	Not present
Sweden	Not present	Not Present	Not present	Not Present	Not present	Present	Present	Not present	?
Switzerland	Not present	Not present	Not present	Present	Not present	Present	Present	Present	?
UK	Present	Not present	Present	Present	Present	Present	Present	Present	Present

¹ This column refers to “manufacture of americium sources for Gaseous Tritium Light Devices (GTLDS) and Ionising-Chamber Smoke Detectors (ICSD).

Appendix 1 to the procedures

General format for reporting on discharges of radioactive substances from non-nuclear sectors (other than oil/gas)

DISCHARGES FROM NON-NUCLEAR SECTORS		Year:															
Country, sector and sub-region																	
[name of contracting Party]		Discharges of specified radionuclides [2]															
	OSPAR sub-region [1]	I-131	Tc-99	H-3	C-14	P-32 ⁴	S-35 ⁴	Cr-51 ⁴	I-125	Pb-210	Po-210	Ra-226	Ra-228	Th-228	Am-241	Total alpha	Total beta/gamma
Medical Sector	[number of sub-region]																
Universities & Research centres [3]																	
Phosphate industry																	
Titanium Dioxide Pigment manufactures																	
Primary Steel Manufacture																	
Rare Earth production																	
Manufacture of Am sources of GTLDs & Ionising Chamber Smoke																	

Detectors (ICSD)																	
Radiochemical Production																	

Notes:

- 1) Specify the OSPAR sub-region to which the discharges are made. If a Contracting Party has discharges to more than one OSPAR sub-region, then the discharges to each sub region should be specified separately on separate lines. The five OSPAR sub-regions are:
 - (I) The Arctic,
 - (II) The Greater North Sea (including the English Channel),
 - (III) the Celtic seas,
 - (IV) the Bay of Biscay/Golfe de Gascogne and Iberian coastal waters, and
 - (V) the wider Atlantic.

The definitions of these and a map are given in the Strategy for the Joint Assessment and Monitoring Programme.
- 2) Describe briefly the nature of discharges, including their origin and their essential physical and chemical properties. Describe briefly how the amounts of radioactivity discharged were estimated, explaining how the non-reporting of the discharges not reaching the reporting threshold have been handled.
- 3) Radionuclides other than the 6 specified in Appendix 1 can be reported, particularly if the activity exceeds that for one of the listed radionuclides. Estimates can be based on the quantities purchased or administered.
- 4) For Contracting Parties that require universities and research centres to use holding tanks to reduce concentration of P-32, S-35 and Cr-51 in liquid discharges, reporting should be limited to confirming that this is done