

IAEA-TECDOC-1242

***Inventory of accidents and
losses at sea involving
radioactive material***



INTERNATIONAL ATOMIC ENERGY AGENCY

IAEA

September 2001

ACCIDENTS AT SEA RESULTING IN ACTUAL OR POTENTIAL RELEASE TO THE MARINE ENVIRONMENT

Date	Vessel involved	Geographical area	Co-ordinates		Depth (m)	Radioactive material involved	Recovered	Total activity	Marine monitoring	Release occurred	Estimated activity released
			Latitude	Longitude							
1967	Submarine ¹	Kola Bay off Severomorsk	69° N	33° E	-	Reactor core	Yes	-	-	-	-
11 Apr 1968	Diesel submarine K-129 (a)	Pacific 1230 miles from Kamchatka	40° 06' N	179° 57'	6000	2 Nuclear warhead(s)	Yes	37 GBq	-	-	-
10 Jan 1970	Submarine ¹	Mediterranean Sea Bay of Naples	-	-	-	Nuclear torpedoes	No	-	-	-	-
8 Apr 1970	Nuclear submarine K-8 (b)	Bay of Biscay	-	-	4000	2 reactors Nuclear warhead(s)	No	9.25 PBq 30 GBq	-	-	-
Apr 1970	Submarine ¹	Northeast Atlantic	-	-	-	Reactor core 4 nuclear weapons	No	-	-	-	-
Sep 1974	Kashin-class destroyer ¹	Black Sea	-	-	-	Nuclear weapons	No	-	-	-	-
1978	Lighter "Nike" ¹ (c)	Off Kolguyev Island Southeastern Barents Sea	69° 31' N	47° 56.03'	-	Unenclosed solid radioactive LLW and ILW	No	1.5 TBq	-	-	-
Jun 1983	Submarine ¹	Northwest Pacific off Kamchatka Peninsula	-	-	-	Reactor core 8 nuclear weapons	No	-	-	-	-
8 Feb 1983	Satellite "Cosmos 1402" ¹ (d)	South Atlantic 1600 km East of Brazil	-	-	-	Reactor core U-235, Sr-90, Cs-137	No	1 PBq	-	-	-
10 Aug 1985	Nuclear submarine K-431 (e)	Soviet Pacific Coast, Chazhma Bay Shkotovo-22	43° N	132° E	-	Reactor core	Yes	185 TBq	Yes	Yes	-
6 Oct 1986	Nuclear submarine K-219 (f)	Atlantic Bermudas	31° 29' N	54° 42' W	5500	2 reactors	No	9.25 PBq	-	-	-
20 Aug 1987	RTG power supply (g)	Sea of Okhotsk, off Sakhalin island	50° 02' N ²	144° E	-30	Sr-90 sealed source	No	25.3 PBq	-	-	-

¹ Accident not confirmed

² Estimated. The area where the RTG sank is between latitude 49° 59' N and 50° 5' 5" N, and between longitude 144° 3' 6" E and the coastline.