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FOREWORD

The IAEA was requested by the Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention 1972) to develop and maintain an inventory of radioactive material entering the marine environment from all sources. The rationale for having such an inventory is related to its use as an information base with which the impact of radionuclides from different sources entering the marine environment can be assessed and compared.

To respond to the request of the London Convention, the IAEA has undertaken the development of the inventory to include:

- disposal at sea of radioactive wastes, and
- accidents and losses at sea involving radioactive materials.

This report addresses disposal at sea of radioactive waste, a practice which continued from 1946 to 1993. It is a revision of IAEA-TECDOC-588, Inventory of Radioactive Material Entering the Marine Environment: Sea Disposal of Radioactive Waste, published in 1991. In addition to the data already published in IAEA-TECDOC-588, the present publication includes detailed official information on sea disposal operations carried out by the former Soviet Union and the Russian Federation provided in 1993 as well as additional information provided by Sweden in 1992 and the United Kingdom in 1997 and 1998.

The IAEA officers responsible for this report were R.C. Rastogi and K.-L. Sjoebloom of the Division of Radiation and Waste Safety.

EDITORIAL NOTE

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Annex A.8
NEW ZEALAND

Disposal period: 1954–1976

Total number of years of disposal operations: 11

Total number of sites: 4

Total number of containers dumped: 39

Total volume of containers dumped: 0.62 m³ approx.

Total activity: 1.04×10^3 GBq approx. (28.1 Ci)

Information provided to IAEA on: 23 March 1990

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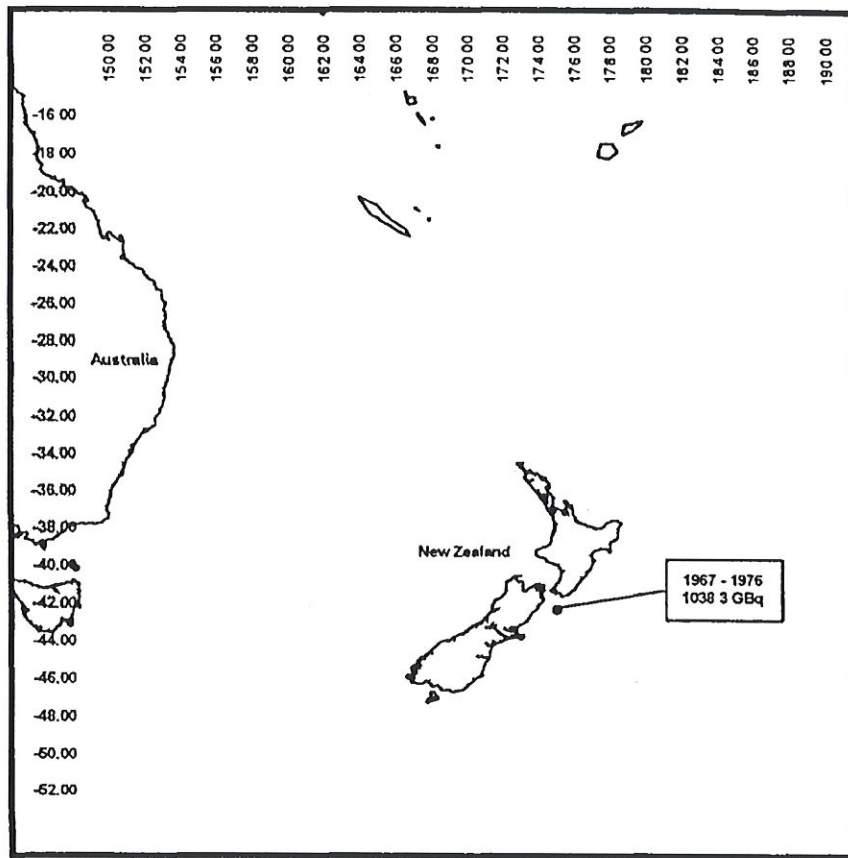


FIG. A.8. Geographical position of the dump site, disposal period and total activity disposed.

DATE	CO-ORDINATES		DEPTH m	Package	CONTAINER			Total volume l	ACTIVITY			Ra-226 GBq/mg
	Latitude	Longitude			Number	Type	Matrix		Total GBq	Alpha GBq	Beta-gamma GBq	
1, 1954	Site 1		18	Yes	4	Drum	-	-	-	-	-	-
2, 1955	Site 1		18	Yes	1	Barrel	-	-	-	-	-	-
3, 1956	Site 1		18	Yes	1	Barrel	-	-	-	-	-	-
4, 1956	Site 1		18	Yes	1	Barrel	-	-	-	-	-	-
5, 1961	Site 1		18	Yes	2	Drum	-	396	-	-	-	5 mg
					2	Drum	-	180	-	-	-	-
					1	Wooden Box	-	-	-	-	-	-
6, 1962	Site 2		549	Yes	2	Drum	-	396	-	-	-	0.74
					1	Drum	-	-	-	-	-	-
	Site 3:				4	Block	Concrete	-	-	-	-	4 mg
7, 1965	42 ° 13'S	176 ° 10'E	2600	No								
	Site 4 (area A):				1	Drum	Concrete	46.3	-	-	-	11 mg
8, 1967	42 ° 15'S	175 ° 00'E	2834	Yes	1	Block	Concrete	-	-	-	-	-
					9	Drum	Concrete	46.3	-	-	-	2.22
1, 1972	42 ° 15'S	175 ° 00'E	2834	Yes	2	Drum	Concrete	22.5	-	-	-	-
10, 1973	42 ° 15'S	175 ° 00'E	2834	Yes	7	Drum	Concrete	22.5	-	-	-	8.14
11, 1976	42 ° 15'S	175 ° 00'E	2834	Yes								
					39			1108.3	1039.0			(28.1 Ci)
				Total:								

Keys for co-ordinates:

Site 1: Three miles north-north west of Lyttelton Heads.

Site 2: Six miles south of Baring Heads.

Site 3: At a bearing of 135°, at a distance of 50 miles from Cape Palliser; disposal from an aircraft.