



**Radiological Protection Institute of Ireland**  
An Institiúid Éireannach um Chosaint Raideolaíoch

FAO: Pat O'Reill

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Mr Pat Corcoran  
Assistant Principal  
Department of Agriculture, Fisheries and Food  
Coastal Management Division  
Building C  
West Cork Technology Park  
Clonakilty  
Co. Cork

12 January 2010

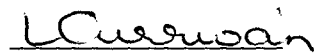
Dear Mr Corcoran,

The Radiological Protection Institute of Ireland has analysed sediment samples from Dublin Port and I attach a copy of the results of the radiological analyses.

The results indicate that dumping of these materials at sea will not result in a radiological hazard.

If you have any further queries please do not hesitate to contact me for assistance.

Yours Sincerely

  
Lorraine Curriuan  
Laboratory Manager





## Laboratory Test Report

**Report Date:** 12<sup>th</sup> January 2010

**Samples Tested on Behalf of:**

Warren Boal  
Principal Engineer Rivers & Coastal  
Jacobs  
2/F 28 Adelaide Street  
Belfast  
Northern Ireland  
BT2 8GD

**Laboratory Analysis:** High Resolution Gamma Spectrometry with appropriate density correction

**Sample Type:** Marine Sediment ex Dublin Port

**Date of Receipt:** 3<sup>rd</sup> December 2009

**Date of Analysis:** 7<sup>th</sup> December 2009 – 6<sup>th</sup> January 2010

**Results:**

RPII Reference	Client Reference	Coordinates	Nuclide	Activity Concentration (Bq/kg, dry) <sup>1</sup>
ES0900801	SL02	53 20.652 N 006 13.000W	K-40	246 ± 25
			I-131	Less than 1
			Cs-134	Less than 1
			Cs-137	15 ± 1
			Ra-226	11 ± 0.4
			U-235	2 ± 0.1
			U-238	21 ± 1



ES0900802	SL03	53 20.684 N 006 12.840 W	K-40	292 ± 29
			I-131	Less than 2
			Cs-134	Less than 1
			Cs-137	33 ± 2
			Ra-226	14 ± 1
			U-235	2 ± 1
			U-238	10 ± 1
ES0900803	SL04	53 20.758 N 006 13.400 W	K-40	253 ± 25
			I-131	Less than 1
			Cs-134	1 ± 0.1
			Cs-137	20 ± 1
			Ra-226	14 ± 1
			U-235	2 ± 0.1
			U-238	14 ± 1
ES0900805	SL14	53 20.778 N 006 11.940 W	K-40	278 ± 28
			I-131	Less than 1
			Cs-134	Less than 1
			Cs-137	1 ± 0.1
			Ra-226	9 ± 0.4
			U-235	1 ± 0.1
			U-238	13 ± 1
ES0900806	SL16	53 20.553 N 006 12.072 W	K-40	308 ± 31
			I-131	Less than 1
			Cs-134	Less than 1
			Cs-137	8 ± 1
			Ra-226	13 ± 1
			U-235	2 ± 0.1
			U-238	25 ± 1

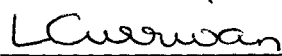


ES0900807	SL17	53 20.580 N 006 08.740 W	K-40	200 ± 21
			I-131	Less than 2
			Cs-134	Less than 2
			Cs-137	10 ± 1
			Ra-226	10 ± 1
			U-235	1 ± 0.2
			U-238	22 ± 2

Note:

(1) Quoted uncertainties are ±1 SD counting statistics

The Radiological Protection Institute of Ireland received eight samples from Dublin Port Company on 3rd of December 2009. These samples were taken from Dublin Port. Two of these samples were unsuitable for analysis and the client was contacted. The subsequent six samples were prepared by placing an aliquot of sample in a well-defined counting geometry. These were then measured on a high-resolution gamma spectrometer. Appropriate density corrections were applied to the resultant spectra to take account of the differences in sample density. Dry to wet weight ratio was determined for the sample. Results are quoted on a dry weight basis.

  
**Lorraine Currivan**  
**Laboratory Manager**

Notes:

- This report relates only to the samples tested.
- This report shall not be reproduced except in full, without the approval of the Institute
- The following scientific officers may sign test reports on behalf of the laboratory manager: Mr David Pollard, Ms Mary Fegan, Mr Kevin Kelleher, Ms Alison Dowdall
- Where applicable, the number following the symbol ± is the combined standard uncertainty and not a confidence interval.