

## Pre-disposal Sampling Results Form

Version 2 - June 2017

This form should be used to submit the results from your pre-disposal sampling plan.

Full information must be provided in all relevant sheets of this workbook. The blue cells in each worksheet indicate where information can be entered.

Where information cannot be provided, or where there are more than 30 samples required, please contact the Marine Scotland - Licensing Operations Team (MS-LOT) using the contact details below.

Once you have completed this form, send it (including any reference number for the dredging and sea disposal marine licence application in the subject header of your email) to the following email address:  
[ms.marinelicensing@gov.scot](mailto:ms.marinelicensing@gov.scot)

If you have any questions in relation to this form contact MS-LOT:

Marine Scotland - Licensing Operations Team  
Marine Laboratory  
375 Victoria Road  
Aberdeen, AB11 9DB

01224 295579

[ms.marinelicensing@gov.scot](mailto:ms.marinelicensing@gov.scot)









**PR Details**

Total amount to be dredged (wet tonnes)

**Explanatory Notes:**

The values entered for each determinand should be an average wet weight concentration from all the samples representing the material to be disposed to sea. They should be entered in the units stated in the Unit of measurement column in the table below.  
Results above Action Level 1 will be highlighted in blue and above Action Level 2 in red.

**Average for the total dredge area:**

Sample ID	Unit of measurement		
Total Solids	%	50	
Gravel	%	7.78	
Sand	%	55.5	
Silt	%	36.7	
Arsenic (As)	mg/kg	6.2	
Cadmium (Cd)		0.22	
Chromium (Cr)		11.2	
Copper (Cu)		36.5	
Mercury (Hg)		0.06	
Nickel (Ni)		8.5	
Lead (Pb)		26.6	
Zinc (Zn)		73.1	
Dibutyltin (DBT)		0.194	
Tributyltin (TBT)		0.415	
Acenaphth		µg/kg	5.9
Acenaphthylene			6.37
Anthracn			17.3
BAA	46.1		
BAP	59.8		
BBF	52.6		
BEP			
Benzghip	43.5		
BKF	53		
C1N			
C1PHEN			
C2N			
C3N			
Chrysene	52.4		
Debenzah	8.48		
Flurant	92		
Fluorene	7.54		
Indypr	45.03		
naph	10.5		
perylene			
phenant	45.3		
pyrene	118		
THC	219352		
PCB28	0.14		
PCB52	0.18		
PCB101	0.31		
PCB118	0.22		
PCB138	0.43		
PCB153	0.45		
PCB18			
PCB105			
PCB110			
PCB128			
PCB141			
PCB149			
PCB151			
PCB156			
PCB158			
PCB170			
PCB180	0.28		
PCB183			
PCB187			
PCB194			
PCB31			
PCB44			
PCB47			
PCB49			
PCB66			
ICES7	2.01		
AHCH			
BHCH			
GHCH			
DIELDRIN			
HCB			
DDE			
DDT			
TDE			
BDE100	<0.05		
BDE138	<0.05		
BDE153	0.07		
BDE154	<0.05		
BDE17	0.06		
BDE183	<0.05		
BDE209	9.44		
BDE28	<0.05		
BDE47	0.14		
BDE66	0.12		
BDE85	<0.05		
BDE99	0.17		

**Comments:**

**Laboratory Details**

**Explanatory Notes:**  
Please complete a separate worksheet for each laboratory (e.g. complete 'Laboratory\_1' worksheet for 1 laboratory and complete 'Laboratory\_2' worksheet for a second laboratory). If there are more than 3 laboratories then please contact MS-LOT.

**Laboratory 1 Details:**  
Laboratory name: SOCOTEC UK  
Year: 2023

<b>LabRefMat</b>	<b>Q1</b>	Does the laboratory carrying out the analyses undertake the analysis of blank samples and laboratory reference materials with each batch of samples of waste and other material dumped in the maritime area that is analysed by that laboratory?	Yes
<b>CompAnal</b>	<b>Q2</b>	Does the laboratory carrying out the analyses undertake periodic comparative analysis of laboratory reference materials and certified reference materials?	Yes
<b>QAQC</b>	<b>Q3</b>	Does the laboratory carrying out the analyses undertake the compilation of quality control charts based upon the data resulting from the analyses of the laboratory reference materials and certified reference materials, and the use of those quality control charts to monitor analytical performance in relation to all samples of dumped wastes or other materials?	Yes
<b>InterlabCaleb</b>	<b>Q4</b>	Does the laboratory carrying out the analyses undertake periodic participation in interlaboratory comparison exercises, including, where possible, international comparison exercises?	Yes
<b>InternatCaleb</b>	<b>Q5</b>	Does the laboratory carrying out the analyses undertake periodic participation in national and, where possible, international laboratory proficiency schemes?	Yes
<b>SpikedSamples</b>	<b>Q6</b>	If the answer to questions 4 or 5 is 'Yes' then does the laboratory analyse samples of substances which are provided by the organisers of the scheme?	Yes
<b>BlindSamples</b>	<b>Q7</b>	If the answer to questions 4 or 5 is 'Yes' then does the laboratory confirm that the composition of those samples is not disclosed in advance?	Yes
<b>Ranking</b>	<b>Q8</b>	If the answer to questions 4 or 5 is 'Yes' then does the laboratory confirm that the results of the scheme for each participating laboratory are made available to all participating laboratories?	Yes
<b>FracAnal</b>	<b>Q9</b>	Enter the size fraction that is analysed i.e. Whole or less than 63µm etc.	<63µm(metals)
<b>GranMeth</b>	<b>Q10</b>	PSA method	Distribution by wet & dry sieving and laser diffraction
<b>OCMeth</b>	<b>Q11</b>	Organic Carbon method	Carbonate removal and sulfurous acid/combustion at 1600°C/NDIR,
<b>MetExtrType</b>	<b>Q12</b>	Method of extraction used for metal analysis	Aquaregia
<b>MethOfDetMetals</b>	<b>Q13</b>	Method of detection used for metal analysis	ICP-MS
<b>PAHExtrType</b>	<b>Q14</b>	Method of extraction used for poly aromatic hydrocarbon analysis	Methano/DCM solvent extraction with silica clean up and copper clean up stages
<b>MethOfDetPAH</b>	<b>Q15</b>	Method of detection used for poly aromatic hydrocarbons analysis	GCMS
<b>OHExtrType</b>	<b>Q16</b>	Method of extraction used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	Ultrasonic acetone/hexane solvent extraction
<b>MethOfDetOH</b>	<b>Q17</b>	Method of detection used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	GCMSMS
<b>OTExtrType</b>	<b>Q18</b>	Method of extraction used for organotin analysis	Derivatisation and solvent extraction
<b>MethOfDetOT</b>	<b>Q19</b>	Method of detection used for organotin analysis	GCMS

		LOD/LOQ	Precision (%)	Recovery (%)
mg/kg	Hg	0.01	4.2	94
	As	0.5	2.7	95
	Cd	0.04	3.6	104
	Cu	0.5	2.9	103
	Pb	0.5	3	104
	Zn	2	2.6	113
	Cr	0.5	3.1	98
	Ni	0.5	3.6	100
	TBT	0.001	12.62	77
	DBT	0.001	12.62	75
	PCB28	0.08	12.56	107
PCB31				
PCB44				
PCB47				
PCB49				
PCB52	0.08	6.999	115	
PCB66				
PCB101	0.08	8.43	111	
PCB105				
PCB110				
PCB118	0.08	14.61	105	
PCB128				
PCB138+163	0.08	12.93	110	
PCB141				
PCB149				
PCB151				
PCB153	0.08	7.41	109	
PCB156				
PCB158				
PCB170				
PCB180	0.08	9.85	97	
PCB183				
PCB187				
PCB194				
DDE				
DDT				
DDD				
Dieldrin				
Lindane				
HCB				
BDE17	0.05	7.6	102	
BDE28	0.05	2.8	97	
BDE47	0.05	3.4	111	
BDE66	0.05	8.5	104	
BDE85	0.05	14.4	84	
BDE99	0.05	9.3	102	
BDE100	0.05	5.3	117	
BDE138	0.05	10.1	86	
BDE153	0.05	6.5	112	
BDE154	0.05	3.9	102	
BDE183	0.05	11	99	
BDE209	0.1	4.5	101	
ACENAPTH	1	6.68	95	
ACENAPHY	1	7.74	116	
ANTHRACN	1	4.95	69	
BAA	1	9.8	64	
BAP	1	9.07	55	
BBF	1	8.44	87	
BENZGHIP	1	13.46	70	
BEP				
BKF	1	8.9	84	
C1N				
C1PHEN				
C2N				
C3N				
CHRYSENE	1	7.87	84	
DBENZAH	1	19.23	107	
FLUORENE	1	5.25	59	
FLUORANT	1	4.36	84	
INDPYR	1	17.1	69	
NAPTH	1	3.02	61	
PERYLENE				
PHENANT	1	5.41	78	
PYRENE	1	4.29	72	
THC	100	N/A	97	

**Laboratory Details**

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**Laboratory 2 Details:**

Laboratory name:	
Year:	

<b>LabRefMat</b>	<b>Q1</b>	Does the laboratory carrying out the analyses undertake the analysis of blank samples and laboratory reference materials with each batch of samples of waste and other material dumped in the maritime area that is analysed by that laboratory?	
<b>CompAnal</b>	<b>Q2</b>	Does the laboratory carrying out the analyses undertake periodic comparative analysis of laboratory reference materials and certified reference materials?	
<b>QAQC</b>	<b>Q3</b>	Does the laboratory carrying out the analyses undertake the compilation of quality control charts based upon the data resulting from the analyses of the laboratory reference materials and certified reference materials, and the use of those quality control charts to monitor analytical performance in relation to all samples of dumped wastes or other materials?	
<b>InterlabCaleb</b>	<b>Q4</b>	Does the laboratory carrying out the analyses undertake periodic participation in interlaboratory comparison exercises, including, where possible, international comparison exercises?	
<b>InternatCaleb</b>	<b>Q5</b>	Does the laboratory carrying out the analyses undertake periodic participation in national and, where possible, international laboratory proficiency schemes?	
<b>SpikedSamples</b>	<b>Q6</b>	If the answer to questions 4 or 5 is 'Yes' then does the laboratory analyse samples of substances which are provided by the organisers of the scheme?	
<b>BlindSamples</b>	<b>Q7</b>	If the answer to questions 4 or 5 is 'Yes' then does the laboratory confirm that the composition of those samples is not disclosed in advance?	
<b>Ranking</b>	<b>Q8</b>	If the answer to questions 4 or 5 is 'Yes' then does the laboratory confirm that the results of the scheme for each participating laboratory are made available to all participating laboratories?	
<b>FracAnal</b>	<b>Q9</b>	Enter the size fraction that is analysed i.e. Whole or less than 63µm etc.	
<b>GranMeth</b>	<b>Q10</b>	PSA method	
<b>OCMeth</b>	<b>Q11</b>	Organic Carbon method	
<b>MetExtrType</b>	<b>Q12</b>	Method of extraction used for metal analysis	
<b>MethOfDetMetals</b>	<b>Q13</b>	Method of detection used for metal analysis	
<b>PAHExtrType</b>	<b>Q14</b>	Method of extraction used for poly aromatic hydrocarbon analysis	
<b>MethOfDetPAH</b>	<b>Q15</b>	Method of detection used for poly aromatic hydrocarbons analysis	
<b>OHExtrType</b>	<b>Q16</b>	Method of extraction used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
<b>MethOfDetOH</b>	<b>Q17</b>	Method of detection used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
<b>OTExtrType</b>	<b>Q18</b>	Method of extraction used for organotin analysis	
<b>MethOfDetOT</b>	<b>Q19</b>	Method of detection used for organotin analysis	

		LOD/LOQ	Precision (%)	Recovery (%)
mg/kg	Hg			
	As			
	Cd			
	Cu			
	Pb			
	Zn			
	Cr			
	Ni			
	TBT			
	DBT			
	PCB28			
	PCB31			
µg/kg	PCB44			
	PCB47			
	PCB49			
	PCB52			
	PCB66			
	PCB101			
	PCB105			
	PCB110			
	PCB118			
	PCB128			
	PCB138+163			
	PCB141			
	PCB149			
	PCB151			
	PCB153			
	PCB156			
	PCB158			
	PCB170			
	PCB180			
	PCB183			
	PCB187			
	PCB194			
	DDE			
	DDT			
	DDD			
	Dieldrin			
	Lindane			
	HCB			
	BDE17			
	BDE28			
	BDE47			
	BDE66			
	BDE85			
	BDE99			
	BDE100			
	BDE138			
	BDE153			
	BDE154			
	BDE183			
	BDE209			
	ACENAPTH			
	ACENAPHY			
ANTHRACN				
BAA				
BAP				
BBF				
BENZGHIP				
BEP				
BKF				
C1N				
C1PHEN				
C2N				
C3N				
CHRYSENE				
DBENZAH				
FLUORENE				
FLUORANT				
INDPYR				
NAPTH				
PERYLENE				
PHENANT				
PYRENE				
THC				



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Year:	

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<b>FracAnal</b>	<b>Q9</b>	Enter the size fraction that is analysed i.e. Whole or less than 63µm etc.	
<b>GranMeth</b>	<b>Q10</b>	PSA method	
<b>OCMeth</b>	<b>Q11</b>	Organic Carbon method	
<b>MetExtrType</b>	<b>Q12</b>	Method of extraction used for metal analysis	
<b>MethOfDetMetals</b>	<b>Q13</b>	Method of detection used for metal analysis	
<b>PAHExtrType</b>	<b>Q14</b>	Method of extraction used for poly aromatic hydrocarbon analysis	
<b>MethOfDetPAH</b>	<b>Q15</b>	Method of detection used for poly aromatic hydrocarbons analysis	
<b>OHExtrType</b>	<b>Q16</b>	Method of extraction used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
<b>MethOfDetOH</b>	<b>Q17</b>	Method of detection used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
<b>OTExtrType</b>	<b>Q18</b>	Method of extraction used for organotin analysis	
<b>MethOfDetOT</b>	<b>Q19</b>	Method of detection used for organotin analysis	

		LOD/LOQ	Precision (%)	Recovery (%)
mg/kg	Hg			
	As			
	Cd			
	Cu			
	Pb			
	Zn			
	Cr			
	Ni			
	TBT			
	DBT			
	PCB28			
	PCB31			
µg/kg	PCB44			
	PCB47			
	PCB49			
	PCB52			
	PCB66			
	PCB101			
	PCB105			
	PCB110			
	PCB118			
	PCB128			
	PCB138+163			
	PCB141			
	PCB149			
	PCB151			
	PCB153			
	PCB156			
	PCB158			
	PCB170			
	PCB180			
	PCB183			
	PCB187			
	PCB194			
	DDE			
	DDT			
	DDD			
	Dieldrin			
	Lindane			
	HCB			
	BDE17			
	BDE28			
	BDE47			
	BDE66			
	BDE85			
	BDE99			
	BDE100			
	BDE138			
	BDE153			
	BDE154			
	BDE183			
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	ACENAPTH			
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	BENZGHIP			
	BEP			
BKF				
C1N				
C1PHEN				
C2N				
C3N				
CHRYSENE				
DBENZAH				
FLUORENE				
FLUORANT				
INDPYR				
NAPTH				
PERYLENE				
PHENANT				
PYRENE				
THC				

Grab	Yes
Core	No