

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

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

PR Details

Total amount to be dredged (wet tonnes) 520,000

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	%	36.3
Gravel	%	0.01
Sand	%	24.02
Silt	%	75.97
Arsenic (As)	mg/kg	7.4
Cadmium (Cd)		0.05
Chromium (Cr)		24.1
Copper (Cu)		12.1
Mercury (Hg)		0.24
Nickel (Ni)		13.6
Lead (Pb)		21.1
Zinc (Zn)		51.6
Dibutyltin (DBT)		0.005
Tributyltin (TBT)		<0.005
Acenaphth		13.1
Acenaphthylene		21.1
Anthracn		51.3
BAA	92	
BAP	99	
BBF	102	
BEP		
Benzghip	107	
BKF	92.9	
C1N		
C1PHEN		
C2N		
C3N		
Chrysene	93.6	
Debenzah	16.9	
Flurant	163	
Fluorene	33.7	
Indypr	87.4	
naph	86.4	
perylene		
phenant	128	
pyrene	196	
THC	132692	
PCB28	0.34	
PCB52	0.22	
PCB101	0.33	
PCB118	0.38	
PCB138	0.46	
PCB153	0.49	
PCB18		
PCB105		
PCB110		
PCB128		
PCB141		
PCB149	µg/kg	
PCB151		
PCB156		
PCB158		
PCB170		
PCB180	0.33	
PCB183		
PCB187		
PCB194		
PCB31		
PCB44		
PCB47		
PCB49		
PCB66		
ICES7	2.56	
AHCH	<0.1	
BHCH	<0.1	
GHCH	<0.1	
DIELDRIN	0.18	
HCB	1.5	
DDE	0.44	
DDT	<0.1	
TDE	0.69	
BDE100	<0.05	
BDE138	<0.05	
BDE153	<0.05	
BDE154	<0.05	
BDE17	<0.05	
BDE183	<0.05	
BDE209	27.93	
BDE28	<0.05	
BDE47	0.12	
BDE66	<0.05	
BDE85	<0.05	
BDE99	0.09	

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
Year: 2023

LabRefMat	Q1	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
CompAnal	Q2	Does the laboratory carrying out the analyses undertake periodic comparative analysis of laboratory reference materials and certified reference materials?	Yes
QAQC	Q3	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
InterlabCaleb	Q4	Does the laboratory carrying out the analyses undertake periodic participation in interlaboratory comparison exercises, including, where possible, international comparison exercises?	Yes
InternatCaleb	Q5	Does the laboratory carrying out the analyses undertake periodic participation in national and, where possible, international laboratory proficiency schemes?	Yes
SpikedSamples	Q6	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
BlindSamples	Q7	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
Ranking	Q8	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
FracAnal	Q9	Enter the size fraction that is analysed i.e. Whole or less than 63µm etc.	<63µm(metals)
GranMeth	Q10	PSA method	Distribution by wet & dry sieving and laser detracton
OCMeth	Q11	Organic Carbon method	Carbonate removal and sulfurous acid/combustion at 1600°C/NDIR,
MetExtrType	Q12	Method of extraction used for metal analysis	Aquaregia
MethOfDetMetals	Q13	Method of detection used for metal analysis	ICP-MS
PAHExtrType	Q14	Method of extraction used for poly aromatic hydrocarbon analysis	Methano/DCM solvent extraction with silica clean up and copper clean up stages
MethOfDetPAH	Q15	Method of detection used for poly aromatic hydrocarbons analysis	GCMS
OHExtrType	Q16	Method of extraction used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	Ultrasonic acetone/hexane solvent extraction
MethOfDetOH	Q17	Method of detection used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	GCMSMS
OTExtrType	Q18	Method of extraction used for organotin analysis	Derivatisation and solvent extraction
MethOfDetOT	Q19	Method of detection used for organotin analysis	GCMS

		LOD/LOQ	Precision (%)	Recovery (%)
mg/kg	Hg	0.01	4.2	83
	As	0.5	2.7	99
	Cd	0.04	3.6	83
	Cu	0.5	2.9	101
	Pb	0.5	3	93
	Zn	2	2.6	93
	Cr	0.5	3.1	100
	Ni	0.5	3.6	98
	TBT	0.001	12.62	85
	DBT	0.001	12.62	62
	PCB28	0.08	12.56	62
µg/kg	PCB31			
	PCB44			
	PCB47			
	PCB49			
	PCB52	0.08	6.999	91
	PCB66			
	PCB101	0.08	8.43	96
	PCB105			
	PCB110			
	PCB118	0.08	14.61	85
	PCB128			
	PCB138+163	0.08	12.93	128
	PCB141			
	PCB149			
	PCB151			
	PCB153	0.08	7.41	90
	PCB156			
	PCB158			
	PCB170			
	PCB180	0.08	9.85	100
	PCB183			
	PCB187			
	PCB194			
	DDE	0.1	8.2	83
	DDT	0.1	10.6	54
	DDD	0.1	11	57
	Dieldrin	0.1	10.8	112
	Lindane	0.1	8.5	108
	HCB	0.1	2.8	93
	BDE17	0.05	7.6	82
	BDE28	0.05	2.8	99
	BDE47	0.05	3.4	107
	BDE66	0.05	8.5	99
	BDE85	0.05	14.4	85
	BDE99	0.05	9.3	114
	BDE100	0.05	5.3	103
	BDE138	0.05	10.1	59
	BDE153	0.05	6.5	117
	BDE154	0.05	3.9	88
	BDE183	0.05	11	102
	BDE209	0.1	4.5	114
	ACENAPTH	1	6.68	92
	ACENAPHY	1	7.74	102
	ANTHRACN	1	4.95	66
	BAA	1	9.8	66
	BAP	1	9.07	61
	BBF	1	8.44	87
	BENZGHIP	1	13.46	77
	BEP			
	BKF	1	8.9	76
C1N				
C1PHEN				
C2N				
C3N				
CHRYSENE	1	7.87	84	
DBENZAH	1	19.23	97	
FLUORENE	1	5.25	55	
FLUORANT	1	4.36	85	
INDPYR	1	17.1	75	
NAPTH	1	3.02	60	
PERYLENE				
PHENANT	1	5.41	77	
PYRENE	1	4.29	72	
THC	100	N/A	93	

Laboratory Details

Explanatory Notes:
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Laboratory 2 Details:

Laboratory name:	
Year:	

LabRefMat	Q1	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?	
CompAnal	Q2	Does the laboratory carrying out the analyses undertake periodic comparative analysis of laboratory reference materials and certified reference materials?	
QAQC	Q3	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?	
InterlabCaleb	Q4	Does the laboratory carrying out the analyses undertake periodic participation in interlaboratory comparison exercises, including, where possible, international comparison exercises?	
InternatCaleb	Q5	Does the laboratory carrying out the analyses undertake periodic participation in national and, where possible, international laboratory proficiency schemes?	
SpikedSamples	Q6	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?	
BlindSamples	Q7	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?	
Ranking	Q8	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?	
FracAnal	Q9	Enter the size fraction that is analysed i.e. Whole or less than 63µm etc.	
GranMeth	Q10	PSA method	
OCMeth	Q11	Organic Carbon method	
MetExtrType	Q12	Method of extraction used for metal analysis	
MethOfDetMetals	Q13	Method of detection used for metal analysis	
PAHExtrType	Q14	Method of extraction used for poly aromatic hydrocarbon analysis	
MethOfDetPAH	Q15	Method of detection used for poly aromatic hydrocarbons analysis	
OHExtrType	Q16	Method of extraction used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
MethOfDetOH	Q17	Method of detection used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
OTExtrType	Q18	Method of extraction used for organotin analysis	
MethOfDetOT	Q19	Method of detection used for organotin analysis	

		LOD/LOQ	Precision (%)	Recovery (%)
mg/kg	Hg			
	As			
	Cd			
	Cu			
	Pb			
	Zn			
	Cr			
	Ni			
	TBT			
	DBT			
	µg/kg	PCB28		
PCB31				
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				

Laboratory Details

Explanatory Notes:
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Laboratory 3 Details:

Laboratory name:	
Year:	

LabRefMat	Q1	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?	
CompAnal	Q2	Does the laboratory carrying out the analyses undertake periodic comparative analysis of laboratory reference materials and certified reference materials?	
QAQC	Q3	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?	
InterlabCaleb	Q4	Does the laboratory carrying out the analyses undertake periodic participation in interlaboratory comparison exercises, including, where possible, international comparison exercises?	
InternatCaleb	Q5	Does the laboratory carrying out the analyses undertake periodic participation in national and, where possible, international laboratory proficiency schemes?	
SpikedSamples	Q6	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?	
BlindSamples	Q7	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?	
Ranking	Q8	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?	
FracAnal	Q9	Enter the size fraction that is analysed i.e. Whole or less than 63µm etc.	
GranMeth	Q10	PSA method	
OCMeth	Q11	Organic Carbon method	
MetExtrType	Q12	Method of extraction used for metal analysis	
MethOfDetMetals	Q13	Method of detection used for metal analysis	
PAHExtrType	Q14	Method of extraction used for poly aromatic hydrocarbon analysis	
MethOfDetPAH	Q15	Method of detection used for poly aromatic hydrocarbons analysis	
OHExtrType	Q16	Method of extraction used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
MethOfDetOH	Q17	Method of detection used for organohalogens inc PCBs, pesticides, flame retardants etc analysis	
OTExtrType	Q18	Method of extraction used for organotin analysis	
MethOfDetOT	Q19	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				
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C2N				
C3N				
CHRYSENE				
DBENZAH				
FLUORENE				
FLUORANT				
INDPYR				
NAPTH				
PERYLENE				
PHENANT				
PYRENE				
THC				

Grab	Yes
Core	No