APPENDIX C

FIELD TESTS

APPENDIX C1

GROUNDWATER TABLE READINGS FROM INSTALLED STANDPIPE PIEZOMETERS

GROUND WATER TABLE READINGS IN PIEZOMETER

Client	**M/S. TECNICAS REUNIDAS**	**Report No.**	**SD18000031**
Consultant	**NP**	**Date Reported**	**July 15, 2018**
Project Name	**Proposed SEWA Hamriyah Power Plant**	**Request No.**	**SD18000031**

Piezometer No.	Elevation (mSHMD)	Date	Time	Ground Water depth Below EGL (m)	GW Reduced Level (DMD) (m RL)
BH-01	4.124	12/06/18	7:40 AM	2.53	1.59
BH-02	4.191	12/06/18	7:55 AM	2.43	1.76
BH-03	4.532	12/06/18	7:50 AM	2.56	1.97
BH-04	4.312	12/06/18	7:45 AM	2.34	1.97
BH-05	4.632	12/06/18	7:35 AM	2.51	2.12

APPENDIX C2

IN-SITU TEST RESULTS OF WATER SAMPLES

In-situ Test Result of Water Samples								
Client	M/S. TECNICAS REUNIDAS			Request No.			SD18000031	
Project	Proposed SEWA Hamriyah Power Plant			Date Received			12/06/2018	
Sample Description	Ground Water			Date Tested			18/06/2018	
Elements	Unit	Test Method	MDL mg/L	Results				
				BH-1	BH-2	BH-3	BH-4	BH-5
pH*	-			7.06	7.48	7.45	7.67	7.55
Conductivity	ms/cm			30.72	64.59	63.67	62.10	48.31
TDS	ppt			15.37	32.32	31.85	31.05	24.15
Salinity	pSu			18.95	43.58	42.87	41.60	31.35
Temperature	°C			28	28	29	28.2	28.1

Note: * DAC Accredited

APPENDIX D

LABORATORY TEST RESULTS

APPENDIX D1

CHEMICAL TEST RESULTS OF WATER SAMPLES

ANALYSIS OF WATER

TEST REPORT ON ANALYSIS OF WATER

Owner	M/S. TECNICAS REUNIDAS	**Report No.**	SD18000031
Contractor	N.P.	**Date Reported**	15/07/18
Consultant	N.P.	**Sample No.**	SD18000031
Project No.	N.P.	**Request No.**	SD18000031
Project Name	Proposed SEWA Hamriyah Power Plant	**Client Reference**	Request Dated 13/06/2018(SC18-096 and S/D18-0031)

Sample Description	Water	**Sample Size**	5 Samples
Source	BH - 1,2,3,4,5	**Sampling Date**	12/06/18
Sample Location	Site	**Sampling Cert. No.**	N.P.
Lot No.	N.P.	**Sampling Method**	N.P.
Lot Size	N.P.	**Sampled By**	Client's Rep.

Test Method	See Below	**Sample Brt. In By**	Client's Rep.
Test Method Var.	None	**Date Received**	13/06/18
Tested By:	Princess, Hans	**Date Tested**	13 - 19/06/2018

I. CHEMICAL ANALYSIS:

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
Ammoniacal Nitrogen	mg/l	0.02	APHA 4500 NH_3 (F)	1.60	0.04	0.03	2.25	0.9	Not defined	Not defined
Flouride[1]	mg/l	0.1	APHA 4500 F^- (D)	0.9	1.5	1.5	1.6	1.5	Not defined	Not defined
Nitrate	mg/l	0.02	APHA 450 NO_3 (E)	0.40	0.04	0.31	0.22	0.13	Not defined	1.00E+04
Nitrite	mg/l	0.02	APHA 450 NO_2 (B)	0.03	0.03	0.03	<0.02	<0.02	Not defined	1.00E+03
Phosphate as PO_4	mg /l	0.6	APHA 4500 P (C)	1.3	0.7	0.8	0.6	<0.6	Not defined	Not defined

II. ORGANICS:

BTEX

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
Benzene[1]	µg/l	0.57	USEPA 8260 C	<0.57	<0.57	<0.57	<0.57	<0.57	30	5.0E+00
Toluene[1]	µg/l	0.88		587	199	164	<0.88	<0.88	1000	1.0E+03
Ethylbenzene[1]	µg/l	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	150	7.0E+02
Xylene (total)[1]	µg/l	2.69		<2.69	<2.69	<2.69	<2.69	<2.69	70	1.0E+04
BTEX[1]	µg/l	5.02		587	199	164	<5.02	<5.02	-	-

TOTAL PETROLEUM HYDROCARBONS (TPHCWG)

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
TPH C8-C38 ALIPHATIC	mg/L	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	Not defined	Not defined
TPH C6-C8 AROMATIC[1]	mg/L	0.01	USEPA 8260C	<0.01	<0.01	<0.01	<0.01	<0.01	Not defined	Not defined
TPH C10-C22 AROMATIC	mg/L	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.1	Not defined	Not defined

POLYNUCLEAR AROMATIC HYDROCARBONS

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
Naphthalene	µg/l	0.05	USEPA 8270 D	<0.05	<0.05	<0.05	<0.05	<0.05	70	1.50E+05
Acenaphthylene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.40E+05
Acenaphthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.40E+05
Fluorene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.90E+05
Phenanthrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	5	2.20E+05
Anthracene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	5	2.20E+06
Fluoranthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	1	2.90E+05
Pyrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.20E+05
Benz(a)anthracene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.5	2.00E+03
Chrysene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.2	2.00E+05
Benzo(b)fluoranthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.00E+03
Benzo(k)fluoranthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.00E+04
Benzo(a)pyrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.0E-01
Indeno(1,2,3-cd)pyrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.00E+03
Dibenz(a,h)anthracene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.00E+02
Benzo(g,h,i)perylene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.20E+05
Polynuclear Aromatic Hydrocarbons (PAHs)	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	-	-

POLYCHLORINATED BIPHENYLS

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	µg/l	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
3,4,4',5-Tetrachlorobiphenyl (PCB81)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined
Total PCBs	µg/l	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	0.01	Not defined

SEMI-VOLATILE ORGANIC COMPOUNDS + TIC's

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
N-Nitrosodimethylamine	mg/L	0.001	USEPA 8270D	<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.00E+00
Pyridine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	30	7.30E+03
Phenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	2000	2.20E+06
Aniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.60E+04
Bis(2-chhloroethyl) ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.90E+02
2-Chlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	100	3.70E+04
1,3-Dichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	50	6.00E+04
1,4-Dichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	50	7.5E+01
Benzyl alcohol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+05
2-Methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.70E+05
1,2-Dichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	50	6.0E+02
Bis(2-chloroisopropyl) ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+03
4-Methylphenol/3-Methylphenol	mg/L	0.001		0.058	<0.001	<0.001	<0.001	<0.001	Not defined	3.70E+05
N-Nitrosodi-n-propylamine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+01
Hexachloroethane	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.10E+03
Nitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
Isophorone	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+05
2,4-Dimethylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+05
2-Nitrophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
Bis(2-chloroethoxy)methane	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.90E+02
2,4-Dichlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	30	2.20E+04
1,2,4-Trichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	7.0E+01

Naphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	70	1.50E+05
4-Chloroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Hexachlorobutadiene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.60E+03
4-Chloro-3-methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
2-Methylnaphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+04
1-Methylnaphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.00E+03
Hexachlorocyclopentadiene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.0E+01
2,4,6-Trichlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	7.30E+03
2,4,5-Trichlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	7.30E+05
2-Chloronaphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	6	5.80E+05
2-Nitroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+00
1,4-Dinitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+02
Dimethyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.80E+06
1,3-Dinitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+02
2,6-Dinitrotoluene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.00E+02
1,2-Dinitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Acenaphthylene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.40E+05
3-Nitroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+03
Acenaphthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.40E+05
2,4-Dinitrophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
4-Nitrophenol	mg/L	0.001	USEPA 8270D	<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
2,4-Dinitrotoluene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.00E+02
Dibenzofuran	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+04
2,3,5,6-Tetrachlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	2.20E+05
2,3,4,6-Tetrachlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	2.20E+05
Diethyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.80E+06
4-Chlrophenyl phenyl ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.40E-02
4-Nitroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.00E+04
4,6-Dinitro-2-methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Fluorene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+05
N-nitrosodiphenylamine (diphenylamine)	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.80E+05
1,2-Diphenylhydrazine (as azobenzene)	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.90E+03
4-Bromophenyl phenyl ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.40E+01
Hexachlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.5	1.0E+00
Pentachlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	3	1.0E+00
Phenanthrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	5	2.20E+05
Anthracene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	5	2.20E+06
Carbazole	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.00E+04
Di-n-butyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Fluoranthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	1	2.90E+05
Benzidine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	8.90E-01

3,3'-Dimethylbenzidine	mg/L	0.001	USEPA 8270D	<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Pyrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+05
Butyl benzyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Bis(2-ethylhexyl) adipate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Bis(2-ethylhexyl) phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	6.0E+00
3,3'-Dichlorobenzidine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.50E+02
Benz(a)anthracene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.5	Not defined
Chrysene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.2	2.00E+05
Di-n-octyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+04
Benzo(b)fluoranthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.00E+03
Benzo(k)fluoranthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.00E+04
Benzo(a)pyrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.0E-01
Indeno(1,2,3-cd)pyrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.00E+03
Dibenz(a,h)anthracene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.00E+02
Benzo(g,hi)perylene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.20E+05
TIC's	mg/L	-		ND	ND	ND	ND	ND	-	-

VOLATILE ORGANIC COMPOUNDS + TIC's

Tests	Unit	MDL	Test Method	Test Results						
				BH-01	BH-02	BH-03	BH-04	BH-05	Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
Dichlorodifluoromethane[1]	µg/L	0.92	USEPA 8260C	<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	Not defined
Chloromethane[1]	µg/L	0.84		<0.84	<0.84	<0.84	<0.84	<0.84	Not defined	1.60E+04
Vinyl chloride[1]	µg/L	3.13		<3.13	<3.13	<3.13	<3.13	<3.13	5	2.0E+00
Bromomethane[1]	µg/L	2.08		<2.08	<2.08	<2.08	<2.08	<2.08	Not defined	1.00E+04
Chloroethane[1]	µg/L	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	2.90E+06
Trichlorofluoromethane[1]	µg/L	0.58		<0.58	<0.58	<0.58	<0.58	<0.58	Not defined	2.20E+06
Acetonitrile[1]	µg/L	1.52		<1.52	<1.52	<1.52	<1.52	<1.52	Not defined	2.30E+05
Acetone[1]	µg/L	3.23		<3.23	<3.23	<3.23	<3.23	<3.23	Not defined	6.60E+06
Diethyl ether[1]	µg/L	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	Not defined
1,1-Dichloroethene[1]	µg/L	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	10.00	Not defined
Iodomethane[1]	µg/L	0.71		<0.71	<0.71	<0.71	<0.71	<0.71	Not defined	1.00E+04
Propionitrile[1]	µg/L	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.90E+03
Acrylonitrile[1]	µg/L	1.27		<1.27	<1.27	<1.27	<1.27	<1.27	5.00	3.80E+02
Methylene chloride[1]	µg/L	1.90		<1.90	<1.90	<1.90	<1.90	<1.90	Not defined	5.0E+00
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/L	1.01		<1.01	<1.01	<1.01	<1.01	<1.01	Not defined	Not defined
Allyl chloride[1]	µg/L	0.93		<0.93	<0.93	<0.93	<0.93	<0.93	Not defined	7.30E+04
Carbon disulfide[1]	µg/L	1.79		<1.79	<1.79	<1.79	<1.79	<1.79	Not defined	7.30E+05
trans-1,2-Dichloroethene[1]	µg/L	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	Not defined	Not defined
MTBE[1]	µg/L	1.44		<1.44	<1.44	<1.44	<1.44	<1.44	9.4	7.30E+04
1,1-Dichloroethane[1]	µg/L	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	10.00	Not defined
Chloroprene[1]	µg/L	1.21		<1.21	<1.21	<1.21	<1.21	<1.21	Not defined	Not defined
2-Butanone (MEK)[1]	µg/L	3.84		<3.84	<3.84	<3.84	<3.84	<3.84	Not defined	4.40E+06

Methacrylonitrile[1]	µg/L	1.09		<1.09	<1.09	<1.09	<1.09	<1.09	Not defined	1.50E+04
cis-1,2-Dichloroethene[1]	µg/L	0.56		<0.56	<0.56	<0.56	<0.56	<0.56	20	Not defined
Bromochloromethane[1]	µg/L	1.02		<1.02	<1.02	<1.02	<1.02	<1.02	Not defined	2.90E+05
Chloroform[1]	µg/L	1.18		<1.18	<1.18	<1.18	<1.18	<1.18	400.00	8.0E+01(F)
Methyl acrylate[1]	µg/L	0.66		<0.66	<0.66	<0.66	<0.66	<0.66	Not defined	1.50E+04
2,2-Dichloropropane[1]	µg/L	1.41		<1.41	<1.41	<1.41	<1.41	<1.41	80	3.00E+03
Tetrahydrofuran[1]	µg/L	1.70		<1.70	<1.70	<1.70	<1.70	<1.70	300.00	2.70E+04
1,2-Dichlorethane[1]	µg/L	0.46		<0.46	<0.46	<0.46	<0.46	<0.46	400.00	5.0E+00
1,1,1-Trichloroethane[1]	µg/L	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	300.00	2.0E+02
1,1-Dichloropropene[1]	µg/L	1.24		<1.24	<1.24	<1.24	<1.24	<1.24	Not defined	3.80E+02
Carbon Tetrachloride[1]	µg/L	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	5.0E+00
Benzene[1]	µg/L	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	30	5.0E+00
Dibromomethane[1]	µg/L	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	Not defined	2.70E+01
1,2-Dichloropropane[1]	µg/L	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	80	5.0E+00
Trichloroethene[1]	µg/L	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	500.00	Not defined
Bromodichloromethane[1]	µg/L	1.06		<1.06	<1.06	<1.06	<1.06	<1.06	Not defined	8.0E+01(F)
Methyl methacrylate[1]	µg/L	1.31		<1.31	<1.31	<1.31	<1.31	<1.31	Not defined	3.70E+05
cis-1,3-Dichloropropene[1]	µg/L	1.17		<1.17	<1.17	<1.17	<1.17	<1.17	Not defined	3.80E+02
4-Methyl-2-pentanone (MIBK)[1]	µg/L	3.30		<3.30	<3.30	<3.30	<3.30	<3.30	Not defined	5.80E+05
trans-1,3-Dichloropropene[1]	µg/L	1.17		<1.17	<1.17	<1.17	<1.17	<1.17	Not defined	2.00E+03
1,1,2-Trichloroethane[1]	µg/L	0.92	USEPA 8260C	<0.92	<0.92	<0.92	<0.92	<0.92	130.00	5.0E+00
Toluene[1]	µg/L	0.88		587	199	164	<0.88	<0.88	1000	1.0E+03
1,3-Dichloropropane[1]	µg/L	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	1000	2.00E+03
Ethyl methacrylate[1]	µg/L	1.07		<1.07	<1.07	<1.07	<1.07	<1.07	Not defined	6.60E+05
2-Hexanone[1]	µg/L	2.19		<2.19	<2.19	<2.19	<2.19	<2.19	Not defined	3.70E+04
Dibromochloromethane[1]	µg/L	0.82		<0.82	<0.82	<0.82	<0.82	<0.82	Not defined	8.0E+01(F)
1,2-Dibromoethane-EDB[1]	µg/L	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	5.0E-02
Tetrachloroethene[1]	µg/L	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	40	Not defined
1,1,1,2-Tetrachloroethane[1]	µg/L	1.04		<1.04	<1.04	<1.04	<1.04	<1.04	Not defined	Not defined
Chlorobenzene[1]	µg/L	0.6		<0.60	<0.60	<0.60	<0.60	<0.60	180	1.0E+02
Ethylbenzene[1]	µg/L	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	150	7.0E+02
m & p- Xylene[1]	µg/L	1.90		<1.90	<1.90	<1.90	<1.90	<1.90	70 (mixed isomers)	1.0E+04 Xylenes in general
Bromoform[1]	µg/L	0.75		<0.75	<0.75	<0.75	<0.75	<0.75	Not defined	8.0E+01(F)
cis-1,4-Dichloro-2-butene[1]	µg/L	1.11		<1.11	<1.11	<1.11	<1.11	<1.11	Not defined	Not defined
Styrene[1]	µg/L	0.83		<0.83	<0.83	<0.83	<0.83	<0.83	300	1.0E+02
1,1,2,2-Tetrachloroethane[1]	µg/L	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	Not defined	Not defined
o-Xylene[1]	µg/L	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	70 (mixed isomers)	1.0E+04 Xylenes in general
1,2,3-Trichloropropane[1]	µg/L	1.20		<1.20	<1.20	<1.20	<1.20	<1.20	Not defined	Not defined
trans-1,4-Dichloro-2-butene[1]	µg/L	1.52		<1.52	<1.52	<1.52	<1.52	<1.52	Not defined	Not defined
Isopropylbenzene[1]	µg/L	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	Not defined	Not defined
Bromobenzene[1]	µg/L	1.19		<1.19	<1.19	<1.19	<1.19	<1.19	Not defined	Not defined

n-Propylbenzene[1]	µg/L	1.26		<1.26	<1.26	<1.26	<1.26	<1.26	Not defined	Not defined
2-Chlorotoluene[1]	µg/L	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	Not defined
4-Chlorotoluene[1]	µg/L	1.22		<1.22	<1.22	<1.22	<1.22	<1.22	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/L	1.08		<1.08	<1.08	<1.08	<1.08	<1.08	Not defined	Not defined
Pentachloroethane[1]	µg/L	1.18		<1.18	<1.18	<1.18	<1.18	<1.18	Not defined	Not defined
tert-Butylbenzene[1]	µg/L	1.06		<1.06	<1.06	<1.06	<1.06	<1.06	Not defined	Not defined
1,2,4-Trimethylbenzene[1]	µg/L	1.05		<1.05	<1.05	<1.05	<1.05	<1.05	Not defined	Not defined
sec-Butylbenzene[1]	µg/L	0.97		<0.97	<0.97	<0.97	<0.97	<0.97	Not defined	Not defined
1,3-Dichlorobenzene[1]	µg/L	0.94		<0.94	<0.94	<0.94	<0.94	<0.94	50	Not defined
1,4-Dichlorobenzene[1]	µg/L	1.25	USEPA 8260C	<1.25	<1.25	<1.25	<1.25	<1.25	50	7.5E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/L	1.50		<1.50	<1.50	<1.50	<1.50	<1.50	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/L	0.93		<0.93	<0.93	<0.93	<0.93	<0.93	50	6.0E+02
n-Butylbenzene[1]	µg/L	1.88		<1.88	<1.88	<1.88	<1.88	<1.88	Not defined	Not defined
1,2-Dibromo-3-Chloropropane[1]	µg/L	2.50		<2.50	<2.50	<2.50	<2.50	<2.50	Not defined	2.0E-01
1,2,4-Trichlorobenzene[1]	µg/L	1.78		<1.78	<1.78	<1.78	<1.78	<1.78	10	7.0E+01
Naphthalene[1]	µg/L	3.92		<3.92	<3.92	<3.92	<3.92	<3.92	70.00	Not defined
Hexachlorobutadiene[1]	µg/L	1.40		<1.40	<1.40	<1.40	<1.40	<1.40	Not defined	Not defined
1,2,3-Trichlorobenzene[1]	µg/L	0.93		<0.93	<0.93	<0.93	<0.93	<0.93	10	Not defined
TIC's	µg/L	-		N.D.	N.D.	N.D.	N.D.	N.D.	-	-

Notes:

1. ISO/IEC 17025-2005 Accredited Test: [1]-ENAS
2. The test results relate only to the item(s) tested. This report shall not be reproduced except in full, without written approval of ACES.
3. 22nd Edition of APHA Methods is used.
4. **ND**: Not Detected.
5. In absence of reference values within Dutch Intervention Values (2017) and US EPA (2017) MCL; limit values from "Texas Risk Reduction Program" were considered.

ANALYSIS OF WATER ADDITIONAL WORKS

TEST REPORT ON ANALYSIS OF WATER

Owner	ACES - Dubai	**Report No.**	HMR18006041
Contractor	Not Provided	**Date Reported**	15/07/18
Consultant	Not Provided	**Sample No.**	HMS18004019
Project No.	Not Provided	**Request No.**	HMQ18004019
Project Name	Not Provided	**Client Reference**	Request Dated 08/07/2018(SC18-096 and SD18000031)

Sample Description	Water	**Sample Size**	5 Samples
Source	PZ BH-01E,02E,03E,04E,05E	**Sampling Date**	08/07/18
Sample Location	Site	**Sampling Cert. No.**	Not Provided
Lot No.	Not Provided	**Sampling Method**	Not Provided
Lot Size	Not Provided	**Sampled By**	Client's Rep.

Test Method	See Below	**Sample Brt. In By**	Client's Rep.
Test Method Var.	None	**Date Received**	08/07/18
Tested By:	Princess	**Date Tested**	09 - 14/07/2018

I. CHEMICAL ANALYSIS:

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater	US EPA (2017) MCL (µg/l
				BH-01E	BH-02E	BH-03E	BH-04E	BH-05E		
Ammoniacal Nitrogen	mg/l	0.02	APHA 4500 NH_3 (F)	1.26	0.65	1.55	2.7	1.6	Not defined	Not defined
Flouride[1]	mg/l	0.1	APHA 4500 F^- (D)	1.3	0.7	1.9	1.9	1.8	Not defined	Not defined
Nitrate	mg/l	0.02	APHA 450 NO_3 (E)	0.04	0.09	<0.02	0.04	0.09	Not defined	1.00E+04
Nitrite	mg/l	0.02	APHA 450 NO_2 (B)	<0.02	0.26	<0.02	<0.02	<0.02	Not defined	1.00E+03
Phosphate as PO_4	mg /l	0.6	APHA 4500 P (C)	<0.6	<0.6	<0.6	<0.6	<0.6	Not defined	Not defined

II. ORGANICS:

BTEX

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
				BH-01E	BH-02E	BH-03E	BH-04E	BH-05E		
Benzene[1]	µg/l	0.57	USEPA 8260 C	<0.57	<0.57	<0.57	<0.57	<0.57	30	5.0E+00
Toluene[1]	µg/l	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	1000	1.0E+03
Ethylbenzene[1]	µg/l	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	150	7.0E+02
Xylene (total)[1]	µg/l	2.69		<2.69	<2.69	<2.69	<2.69	<2.69	70	1.0E+04
BTEX[1]	µg/l	5.02		<5.02	<5.02	<5.02	<5.02	<5.02	-	-

VOLATILE ORGANIC COMPOUNDS + TIC's

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
				BH-01E	BH-02E	BH-03E	BH-04E	BH-05E		
Dichlorodifluoromethane[1]	µg/L	0.92	USEPA 8260C	<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	Not defined
Chloromethane[1]	µg/L	0.84		<0.84	<0.84	<0.84	<0.84	<0.84	Not defined	1.60E+04
Vinyl chloride[1]	µg/L	3.13		<3.13	<3.13	<3.13	<3.13	<3.13	5	2.0E+00
Bromomethane[1]	µg/L	2.08		<2.08	<2.08	<2.08	<2.08	<2.08	Not defined	1.00E+04
Chloroethane[1]	µg/L	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	2.90E+06
Trichlorofluoromethane[1]	µg/L	0.58		<0.58	<0.58	<0.58	<0.58	<0.58	Not defined	2.20E+06
Acetonitrile[1]	µg/L	1.52		<1.52	<1.52	<1.52	<1.52	<1.52	Not defined	2.30E+05
Acetone[1]	µg/L	3.23		<3.23	<3.23	<3.23	<3.23	<3.23	Not defined	6.60E+06

Diethyl ether[1]	µg/L	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	Not defined
1,1-Dichloroethene[1]	µg/L	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	10.00	Not defined
Iodomethane[1]	µg/L	0.71		<0.71	<0.71	<0.71	<0.71	<0.71	Not defined	1.00E+04
Propionitrile[1]	µg/L	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.90E+03
Acrylonitrile[1]	µg/L	1.27		<1.27	<1.27	<1.27	<1.27	<1.27	5.00	3.80E+02
Methylene chloride[1]	µg/L	1.90		<1.90	<1.90	<1.90	<1.90	<1.90	Not defined	5.0E+00
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/L	1.01		<1.01	<1.01	<1.01	<1.01	<1.01	Not defined	Not defined
Allyl chloride[1]	µg/L	0.93		<0.93	<0.93	<0.93	<0.93	<0.93	Not defined	7.30E+04
Carbon disulfide[1]	µg/L	1.79		<1.79	<1.79	<1.79	<1.79	<1.79	Not defined	7.30E+05
trans-1,2-Dichloroethene[1]	µg/L	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	Not defined	Not defined
MTBE[1]	µg/L	1.44		<1.44	<1.44	<1.44	<1.44	<1.44	9.4	7.30E+04
1,1-Dichloroethane[1]	µg/L	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	10.00	Not defined
Chloroprene[1]	µg/L	1.21		<1.21	<1.21	<1.21	<1.21	<1.21	Not defined	Not defined
2-Butanone (MEK)[1]	µg/L	3.84		<3.84	<3.84	<3.84	<3.84	<3.84	Not defined	4.40E+06
Methacrylonitrile[1]	µg/L	1.09		<1.09	<1.09	<1.09	<1.09	<1.09	Not defined	1.50E+04
cis-1,2-Dichloroethene[1]	µg/L	0.56		<0.56	<0.56	<0.56	<0.56	<0.56	20	Not defined
Bromochloromethane[1]	µg/L	1.02		<1.02	<1.02	<1.02	<1.02	<1.02	Not defined	2.90E+05
Chloroform[1]	µg/L	1.18		<1.18	<1.18	<1.18	<1.18	<1.18	400.00	8.0E+01(F)
Methyl acrylate[1]	µg/L	0.66		<0.66	<0.66	<0.66	<0.66	<0.66	Not defined	1.50E+04
2,2-Dichloropropane[1]	µg/L	1.41		<1.41	<1.41	<1.41	<1.41	<1.41	80	3.00E+03
Tetrahydrofuran[1]	µg/L	1.70	USEPA 8260C	<1.70	<1.70	<1.70	<1.70	<1.70	300.00	2.70E+04
1,2-Dichlorethane[1]	µg/L	0.46		<0.46	<0.46	<0.46	<0.46	<0.46	400.00	5.0E+00
1,1,1-Trichloroethane[1]	µg/L	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	300.00	2.0E+02
1,1-Dichloropropene[1]	µg/L	1.24		<1.24	<1.24	<1.24	<1.24	<1.24	Not defined	3.80E+02
Carbon Tetrachloride[1]	µg/L	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	5.0E+00
Benzene[1]	µg/L	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	30	5.0E+00
Dibromomethane[1]	µg/L	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	Not defined	2.70E+01
1,2-Dichloropropane[1]	µg/L	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	80	5.0E+00
Trichloroethene[1]	µg/L	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	500.00	Not defined
Bromodichloromethane[1]	µg/L	1.06		<1.06	<1.06	<1.06	<1.06	<1.06	Not defined	8.0E+01(F)
Methyl methacrylate[1]	µg/L	1.31		<1.31	<1.31	<1.31	<1.31	<1.31	Not defined	3.70E+05
cis-1,3-Dichloropropene[1]	µg/L	1.17		<1.17	<1.17	<1.17	<1.17	<1.17	Not defined	3.80E+02
4-Methyl-2-pentanone (MIBK)[1]	µg/L	3.30		<3.30	<3.30	<3.30	<3.30	<3.30	Not defined	5.80E+05
trans-1,3-Dichloropropene[1]	µg/L	1.17		<1.17	<1.17	<1.17	<1.17	<1.17	Not defined	2.00E+03
1,1,2-Trichloroethane[1]	µg/L	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	130.00	5.0E+00
Toluene[1]	µg/L	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	1000	1.0E+03
1,3-Dichloropropane[1]	µg/L	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	1000	2.00E+03
Ethyl methacrylate[1]	µg/L	1.07		<1.07	<1.07	<1.07	<1.07	<1.07	Not defined	6.60E+05
2-Hexanone[1]	µg/L	2.19		<2.19	<2.19	<2.19	<2.19	<2.19	Not defined	3.70E+04
Dibromochloromethane[1]	µg/L	0.82		<0.82	<0.82	<0.82	<0.82	<0.82	Not defined	8.0E+01(F)
1,2-Dibromoethane-EDB[1]	µg/L	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	5.0E-02

Tetrachloroethene[1]	µg/L	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	40	Not defined
1,1,1,2-Tetrachloroethane[1]	µg/L	1.04		<1.04	<1.04	<1.04	<1.04	<1.04	Not defined	Not defined
Chlorobenzene[1]	µg/L	0.6		<0.60	<0.60	<0.60	<0.60	<0.60	180	1.0E+02
Ethylbenzene[1]	µg/L	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	150	7.0E+02
m & p- Xylene[1]	µg/L	1.90		<1.90	<1.90	<1.90	<1.90	<1.90	70 (mixed isomers)	1.0E+04 Xylenes in general
Bromoform[1]	µg/L	0.75		<0.75	<0.75	<0.75	<0.75	<0.75	Not defined	8.0E+01(F)
cis-1,4-Dichloro-2-butene[1]	µg/L	1.11		<1.11	<1.11	<1.11	<1.11	<1.11	Not defined	Not defined
Styrene[1]	µg/L	0.83		<0.83	<0.83	<0.83	<0.83	<0.83	300	1.0E+02
1,1,2,2-Tetrachloroethane[1]	µg/L	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	Not defined	Not defined
o-Xylene[1]	µg/L	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	70 (mixed isomers)	1.0E+04 Xylenes in general
1,2,3-Trichloropropane[1]	µg/L	1.20		<1.20	<1.20	<1.20	<1.20	<1.20	Not defined	Not defined
trans-1,4-Dichloro-2-butene[1]	µg/L	1.52		<1.52	<1.52	<1.52	<1.52	<1.52	Not defined	Not defined
Isopropylbenzene[1]	µg/L	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	Not defined	Not defined
Bromobenzene[1]	µg/L	1.19		<1.19	<1.19	<1.19	<1.19	<1.19	Not defined	Not defined
n-Propylbenzene[1]	µg/L	1.26		<1.26	<1.26	<1.26	<1.26	<1.26	Not defined	Not defined
2-Chlorotoluene[1]	µg/L	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	Not defined
4-Chlorotoluene[1]	µg/L	1.22	USEPA 8260C	<1.22	<1.22	<1.22	<1.22	<1.22	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/L	1.08		<1.08	<1.08	<1.08	<1.08	<1.08	Not defined	Not defined
Pentachloroethane[1]	µg/L	1.18		<1.18	<1.18	<1.18	<1.18	<1.18	Not defined	Not defined
tert-Butylbenzene[1]	µg/L	1.06		<1.06	<1.06	<1.06	<1.06	<1.06	Not defined	Not defined
1,2,4-Trimethylbenzene[1]	µg/L	1.05		<1.05	<1.05	<1.05	<1.05	<1.05	Not defined	Not defined
sec-Butylbenzene[1]	µg/L	0.97		<0.97	<0.97	<0.97	<0.97	<0.97	Not defined	Not defined
1,3-Dichlorobenzene[1]	µg/L	0.94		<0.94	<0.94	<0.94	<0.94	<0.94	50	Not defined
1,4-Dichlorobenzene[1]	µg/L	1.25		<1.25	<1.25	<1.25	<1.25	<1.25	50	7.5E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/L	1.50		<1.50	<1.50	<1.50	<1.50	<1.50	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/L	0.93		<0.93	<0.93	<0.93	<0.93	<0.93	50	6.0E+02
n-Butylbenzene[1]	µg/L	1.88		<1.88	<1.88	<1.88	<1.88	<1.88	Not defined	Not defined
1,2-Dibromo-3-Chloropropane[1]	µg/L	2.50		<2.50	<2.50	<2.50	<2.50	<2.50	Not defined	2.0E-01
1,2,4-Trichlorobenzene[1]	µg/L	1.78		<1.78	<1.78	<1.78	<1.78	<1.78	10	7.0E+01
Naphthalene[1]	µg/L	3.92		<3.92	<3.92	<3.92	<3.92	<3.92	70.00	Not defined
Hexachlorobutadiene[1]	µg/L	1.40		<1.40	<1.40	<1.40	<1.40	<1.40	Not defined	Not defined
1,2,3-Trichlorobenzene[1]	µg/L	0.93		<0.93	<0.93	<0.93	<0.93	<0.93	10	Not defined
TIC's	µg/L	-		N.D.	N.D.	N.D.	N.D.	N.D.	-	-

TOTAL PETROLEUM HYDROCARBONS (TPHCWG)

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
				BH-01E	BH-02E	BH-03E	BH-04E	BH-05E		
TPH C8-C38 ALIPHATIC	mg/L	0.01	USEPA 8015D	<0.01	<0.01	<0.01	<0.01	<0.01	Not defined	Not defined
TPH C6-C8 AROMATIC[1]	mg/L	0.01	USEPA 8260C	<0.01	<0.01	<0.01	<0.01	<0.01	Not defined	Not defined
TPH C10-C22 AROMATIC	mg/L	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	Not defined	Not defined

POLYNUCLEAR AROMATIC HYDROCARBONS

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
				BH-01E	BH-02E	BH-03E	BH-04E	BH-05E		
Naphthalene	µg/l	0.05	USEPA 8270 D	<0.05	<0.05	<0.05	<0.05	<0.05	70	1.50E+05
Acenaphthylene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.40E+05
Acenaphthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.40E+05
Fluorene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.90E+05
Phenanthrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	5	2.20E+05
Anthracene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	5	2.20E+06
Fluoranthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	1	2.90E+05
Pyrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.20E+05
Benz(a)anthracene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.5	2.00E+03
Chrysene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.2	2.00E+05
Benzo(b)fluoranthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.00E+03
Benzo(k)fluoranthene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.00E+04
Benzo(a)pyrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.0E-01
Indeno(1,2,3-cd)pyrene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.00E+03
Dibenz(a,h)anthracene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.00E+02
Benzo(g,h,i)perylene	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	2.20E+05
Polynuclear Aromatic Hydrocarbons (PAHs)	µg/l	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	-	-

POLYCHLORINATED BIPHENYLS

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
				BH-01E	BH-02E	BH-03E	BH-04E	BH-05E		
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	µg/l	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
3,4,4',5-Tetrachlorobiphenyl (PCB81)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined
Total PCBs	µg/l	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	Not defined

SEMI-VOLATILE ORGANIC COMPOUNDS + TIC's

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) Groundwater (µg/l)	US EPA (2017) MCL (µg/l
				BH-01	BH-02	BH-03	BH-04	BH-05		
N-Nitrosodimethylamine	mg/L	0.001	USEPA 8270D	<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.00E+00
Pyridine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	30	7.30E+03
Phenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	2000	2.20E+06
Aniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.60E+04
Bis(2-chhloroethyl) ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.90E+02
2-Chlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	100	3.70E+04
1,3-Dichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	50	6.00E+04
1,4-Dichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	50	7.5E+01
Benzyl alcohol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+05
2-Methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.70E+05
1,2-Dichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	50	6.0E+02
Bis(2-chloroisopropyl) ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+03
4-Methylphenol/3-Methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.70E+05
N-Nitrosodi-n-propylamine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+01
Hexachloroethane	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.10E+03
Nitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
Isophorone	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+05
2,4-Dimethylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+05
2-Nitrophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
Bis(2-chloroethoxy)methane	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.90E+02
2,4-Dichlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	30	2.20E+04
1,2,4-Trichlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	7.0E+01
Naphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	70	1.50E+05
4-Chloroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Hexachlorobutadiene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.60E+03
4-Chloro-3-methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
2-Methylnaphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+04
1-Methylnaphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.00E+03
Hexachlorocyclopentadiene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.0E+01
2,4,6-Trichlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	7.30E+03
2,4,5-Trichlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	7.30E+05
2-Chloronaphthalene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	6	5.80E+05
2-Nitroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+00
1,4-Dinitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+02
Dimethyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.80E+06
1,3-Dinitrobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+02
2,6-Dinitrotoluene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.00E+02

1,2-Dinitrobenzene	mg/L	0.001	USEPA 8270D	<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Acenaphthylene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.40E+05
3-Nitroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+03
Acenaphthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.40E+05
2,4-Dinitrophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
4-Nitrophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.50E+04
2,4-Dinitrotoluene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	3.00E+02
Dibenzofuran	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+04
2,3,5,6-Tetrachlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	2.20E+05
2,3,4,6-Tetrachlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	10	2.20E+05
Diethyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	5.80E+06
4-Chlrophenyl phenyl ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.40E-02
4-Nitroaniline	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.00E+04
4,6-Dinitro-2-methylphenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Fluorene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.90E+05
N-nitrosodiphenylamine (diphenylamine)	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.80E+05
1,2-Diphenylhydrazine (as azobenzene)	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.90E+03
4-Bromophenyl phenyl ether	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.40E+01
Hexachlorobenzene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.5	1.0E+00
Pentachlorophenol	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	3	1.0E+00
Phenanthrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	5	2.20E+05
Anthracene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	5	2.20E+06
Carbazole	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	1.00E+04
Di-n-butyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Fluoranthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	1	2.90E+05
Benzidine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	8.90E-01
3,3'-Dimethylbenzidine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Pyrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.20E+05
Butyl benzyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Bis(2-ethylhexyl) adipate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	Not defined
Bis(2-ethylhexyl) phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	6.0E+00
3,3'-Dichlorobenzidine	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	4.50E+02
Benz(a)anthracene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.5	Not defined
Chrysene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.2	2.00E+05
Di-n-octyl phthalate	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	7.30E+04
Benzo(b)fluoranthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.00E+03
Benzo(k)fluoranthene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.00E+04
Benzo(a)pyrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.0E-01
Indeno(1,2,3-cd)pyrene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.00E+03
Dibenz(a,h)anthracene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	Not defined	2.00E+02
Benzo(g,hi)perylene	mg/L	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	0.05	2.20E+05
TIC's	mg/L	-		ND	ND	ND	ND	ND	-	-

Notes:

1. ISO/IEC 17025-2005 Accredited Test: [1]-ENAS
2. The test results relate only to the item(s) tested. This report shall not be reproduced except in full, without written
3. 22nd Edition of APHA Methods is used.
4. **ND**: Not Detected.

METALS IN WATER

Test Report on Metals in Water												
Client		M/S. TECNICAS REUNIDAS						Request No.			SD18000031	
Project		Proposed SEWA Hamriyah Power Plant						Date Received			12/06/2018	
Sample Description		Ground Water						Date Tested			18/06/2018	
Elements		Unit	Test Method	MDL mg/L	Results							
					BH-1	BH-2	BH-3	BH-4	BH-5	Dutch Intervention Value µg/L	Dutch Intervention Value mg/L	US EPA (2017) µg/L
Arsenic*	As	mg/L	APHA3120B	0.12	<0.12	<0.12	<0.12	<0.12	<0.12	60	0.06	1.0E+01
Barium*	Ba	mg/L	APHA3120B	0.12	<0.12	<0.12	<0.12	<0.12	<0.12	625	0.625	2.0E+03
Beryllium*	Be	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	15	0.015	4.0E+00
Boron*	B	mg/L	APHA3120B	0.09	3.085	3.035	2.797	2.824	2.432	-	-	-
Cadmium*	Cd	mg/L	APHA3120B	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	6	0.006	5.0E+00
Calcium*	Ca	mg/L	APHA3120B	0.11	235.8	474.4	460.0	462.2	305.3	-	-	-
Chromium (Total)*	Cr	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	0.03	1.0E+02
Copper*	Cu	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	75	0.075	1.3E+03
Iron (Total)*	Fe	mg/L	APHA3120B	0.09	0.279	0.006	<0.09	<0.09	<0.09	-	-	-
Lead*	Pb	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-
Magnesium	Mg	mg/L	APHA3120B	0.10	518.2	1566	1488	1374	1021	-	-	-
Manganese*	Mn	mg/L	APHA3120B	0.02	0.233	0.622	0.606	0.107	0.117	-	-	-
Molybdneum	Mo	mg/L	APHA3120B	0.01	<0.01	0.013	0.013	<0.01	0.013	300	0.3	-
Nickel *	Ni	mg/L	APHA3120B	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	75	0.075	-
Potassium	K	mg/L	APHA3120B	0.10	234.9	467.6	448.1	443.1	325.0	-	-	-
Selenium*	Se	mg/L	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	5.0E+01
Sodium	Na	mg/L	APHA3120B	0.12	594.8	13700	12850	12220	8763	-	-	-
Vanadium	V	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-
Zinc*	Zn	mg/L	APHA3120B	0.02	<0.02	0.006	<0.02	<0.02	0.013	800	0.8	-
Mercury	Hg	mg/L	APHA3120B	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.3	0.0003	2.0E+00
Sulphate*	SO_4	mg/L	BS1377 P.3 CL 5		1853	3008	2310	3084	2264	-	-	-
Chloride*	Cl	mg/L	BS1377 P.3 CL 7		8799	23349	22637	22281	15191	-	-	-
pH*			BS1377 P.3 CL 9		7.3	7.5	7.5	7.8	7.6	-	-	-
Carbonates		mg/L	ASTM D 1067-11		Nil	Nil	Nil	Nil	Nil	-	-	-
Bicarbonates		mg/L	ASTM D 1067-11		1776	507	556	519	701	-	-	-
Total Alkalinity as $CaCo_3$		mg/L	APHA		1455	416	455	426	574	-	-	-
Total Hardness as $CaCo_3$		mg/L	APHA		2740	7685	7325	6858	5000	-	-	-

Note: *DAC Accredited

METALS IN WATER ADDITIONAL WORKS

Test Report on Metals in Water												
Client	M/S. TECNICAS REUNIDAS							Request No.	SD18000031			
Project	Proposed SEWA Hamriyah Power Plant							Date Received	07/07/2018			
Sample Description	Ground Water							Date Tested	09-11/07/2018			
Elements		Unit	Test Method	MDL mg/L	Results							
					BH-01E	BH-02E	BH-03E	BH-04E	BH-05E	Dutch Intervention Value µg/L	Dutch Intervention Value mg/L	US EPA (2017) µg/L
Arsenic*	As	mg/L	APHA3120B	0.12	<0.12	<0.12	<0.12	<0.12	<0.12	60	0.06	1.0E+01
Barium*	Ba	mg/L	APHA3120B	0.12	<0.12	<0.12	<0.12	<0.12	<0.12	625	0.625	2.0E+03
Beryllium*	Be	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	15	0.015	4.0E+00
Boron*	B	mg/L	APHA3120B	0.09	3.394	3.332	3.148	3.324	3.153	-	-	-
Cadmium*	Cd	mg/L	APHA3120B	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	6	0.006	5.0E+00
Calcium*	Ca	mg/L	APHA3120B	0.11	205.8	408.1	344.9	496.2	363.4	-	-	-
Chromium (Total)*	Cr	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	0.03	1.0E+02
Copper*	Cu	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	75	0.075	1.3E+03
Iron (Total)*	Fe	mg/L	APHA3120B	0.09	0.346	<0.09	<0.09	<0.09	<0.09	-	-	-
Lead*	Pb	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-
Magnesium	Mg	mg/L	APHA3120B	0.10	493.5	1177	1144	1385	1214	-	-	-
Manganese*	Mn	mg/L	APHA3120B	0.02	0.104	<0.02	0.164	0.034	0.110	-	-	-
Molybdneum	Mo	mg/L	APHA3120B	0.01	<0.01	<0.01	0.014	<0.01	0.015	300	0.3	-
Nickel *	Ni	mg/L	APHA3120B	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	75	0.075	-
Potassium	K	mg/L	APHA3120B	0.10	239.3	405.0	380.1	481.0	400.3	-	-	-
Selenium*	Se	mg/L	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	5.0E+01
Sodium	Na	mg/L	APHA3120B	0.12	5560	10250	9645	11890	10080	-	-	-
Vanadium	V	mg/L	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	-
Zinc*	Zn	mg/L	APHA3120B	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	800	0.8	-
Mercury	Hg	mg/L	APHA3120B	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.3	0.0003	2.0E+00
Sulphate*	SO_4	mg/L	BS1377 P.3 CL 5		2053	2762	2511	3147	2702	-	-	-
Chloride*	Cl	mg/L	BS1377 P.3 CL 7		9378	18773	18062	22499	18595	-	-	-
pH*			BS1377 P.3 CL 9		7.4	7.4	7.2	7.5	7.5	-	-	-
Carbonates		mg/L	ASTM D 1067-11		Nil	Nil	Nil	Nil	Nil	-	-	-
Bicarbonates		mg/L	ASTM D 1067-11		1087	773	785	556	592	-	-	-
Total Alkalinity as $CaCo_3$		mg/L	APHA		891	634	644	455	485	-	-	-
Total Hardness as $CaCo_3$		mg/L	APHA		2563	5905	5610	6988	5947	-	-	-

Note: * DAC Accredited

APPENDIX D2

CHEMICAL TEST RESULTS OF SOIL SAMPLES

ANALYSIS OF SOIL

TEST REPORT ON ANALYSIS OF SOIL

Owner	M/S. TECNICAS REUNIDAS	**Report No.**	SD18000031
Contractor	N.P.	**Date Reported**	15/07/18
Consultant	N.P.	**Sample No.**	SD18000031
Project No.	N.P.	**Request No.**	SD18000031
Project Name	Proposed SEWA Hamriyah Power Plant	**Client Reference**	Request dated 10/06/2018 (SC18-096)
Sample Description	Soil	**Sample Size**	23 samples/2 kg each
Source	See below	**Sampling Date**	09/06/18
Sample Location	See below	**Sampling Cert. No.**	N.P.
Lot No.	N.P.	**Sampling Method**	N.P.
Lot Size	N.P.	**Sampled By**	Client's Rep.
Test Method Var.	None	**Sample Brt. In By**	Client's Rep.
Tested By:	Winelen, Hans	**Date Received**	10/06/18
		Date Tested	10 - 13/06/2018

TOTAL ORGANIC CARBON :

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
Total Organic Carbon	%	0.01	Walkley-black method	0.04	0.04	0.03	0.04	0.04	0.04	-	

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
Total Organic Carbon	%	0.01	Walkley-black method	0.05	0.04	0.05	0.04	0.03	0.05	-	

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
Total Organic Carbon	%	0.01	Walkley-black method	0.05	0.01	0.02	0.05	0.05	0.05	-	

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-15	TP-16	TP-17	TP-18	TP-19		
Total Organic Carbon	%	0.01	Walkley-black method	0.07	0.03	0.03	0.06	0.01		

BTEX

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
Benzene[1]	µg/kg	0.52	USEPA 8260C	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	110	2.5E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	<1.14	17 (mixed isomers)	2.40E+03
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55		2.8E+03
BTEX[1]	µg/kg	3.19		<3.19	<3.19	<3.19	<3.19	<3.19	<3.19	-	

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
Benzene[1]	µg/kg	0.52	USEPA 8260C	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	110	2.5E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	<1.14	17 (mixed isomers)	2.40E+03
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55		2.8E+03
BTEX[1]	µg/kg	3.19		<3.19	<3.19	<3.19	<3.19	<3.19	<3.19	-	

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
Benzene[1]	µg/kg	0.52	USEPA 8260C	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	110	2.5E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	<1.14	17 (mixed isomers)	2.40E+03
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55		2.8E+03
BTEX[1]	µg/kg	3.19		<3.19	<3.19	<3.19	<3.19	<3.19	<3.19	-	

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-15	TP-16	TP-17	TP-18	TP-19		
Benzene[1]	µg/kg	0.52	USEPA 8260C	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	110	2.5E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	17 (mixed isomers)	2.40E+03
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55		2.8E+03
BTEX[1]	µg/kg	3.19		<3.19	<3.19	<3.19	<3.19	<3.19	-	-

TOTAL PETROLEUM HYDROCARBONS (TPHCWG)

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
TPH C8-C38 ALIPHATIC	mg/kg	0.1	USEPA 8015D	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5000.00	3500000
TPH C6-C8 AROMATIC[1]	mg/kg	0.1	USPA 8260C	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		4.20E+02
TPH C10-C22 AROMATIC	mg/kg	0.1	USEPA 8270D	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		6.00E+02

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
TPH C8-C38 ALIPHATIC	mg/kg	0.1	USEPA 8015D	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5000.00	3500000
TPH C6-C8 AROMATIC[1]	mg/kg	0.1	USPA 8260C	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		4.20E+02
TPH C10-C22 AROMATIC	mg/kg	0.1	USEPA 8270D	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		6.00E+02

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
TPH C8-C38 ALIPHATIC	mg/kg	0.1	USEPA 8015D	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5000.00	3500000
TPH C6-C8 AROMATIC[1]	mg/kg	0.1	USPA 8260C	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		4.20E+02
TPH C10-C22 AROMATIC	mg/kg	0.1	USEPA 8270D	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		6.00E+02

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-15	TP-16	TP-17	TP-18	TP-19		
TPH C8-C38 ALIPHATIC	mg/kg	0.1	USEPA 8015D	<0.1	<0.1	<0.1	<0.1	<0.1	5000.00	3500000
TPH C6-C8 AROMATIC[1]	mg/kg	0.1	USPA 8260C	<0.1	<0.1	<0.1	<0.1	<0.1		4.20E+02
TPH C10-C22 AROMATIC	mg/kg	0.1	USEPA 8270D	<0.1	<0.1	<0.1	<0.1	<0.1		6.00E+02

POLYNUCLEAR AROMATIC HYDROCARBONS

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
Naphthalene	mg/kg	0.05	USEPA 8270D	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	1.7E+01
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	Not defined
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.5E+04
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	3.0E+04
Phenanthrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.3E+05

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
Fluoranthene	mg/kg	0.05	USEPA 8270D	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	3.0E+04
Pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.3E+04
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+01
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+03
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+00
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Polynuclear Aromatic Hydrocarbons (PAHs)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40	-

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
Naphthalene	mg/kg	0.05	USEPA 8270D	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	1.7E+01
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	Not defined
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.5E+04
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	3.0E+04
Phenanthrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.3E+05
Fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	3.0E+04
Pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.3E+04
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+01
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+03
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+00
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Polynuclear Aromatic Hydrocarbons (PAHs)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40	-

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
Naphthalene	mg/kg	0.05	USEPA 8270D	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	1.7E+01
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	Not defined
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.5E+04
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	3.0E+04
Phenanthrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.3E+05
Fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	3.0E+04
Pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.3E+04
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+01
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+03
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+00

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
Indeno(1,2,3-cd)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+00
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Polynuclear Aromatic Hydrocarbons (PAHs)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	40	

Test Parameter	Unit	MDL	Test Method	Test Results						
				TP-15	TP-16	TP-17	TP-18	TP-19	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
Naphthalene	mg/kg	0.05	USEPA 8270D	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	1.7E+01
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	Not defined
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.5E+04
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	3.0E+04
Phenanthrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.3E+05
Fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	3.0E+04
Pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.3E+04
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+01
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+03
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+00
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Polynuclear Aromatic Hydrocarbons (PAHs)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40	

POLYCHLORINATED BIPHENYLS

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.16
3,4,4',5-Tetrachlorobiphenyl (PCB81)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.05
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	mg/kg	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.0002
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.51
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.001
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.52
Total PCBs	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.00	Not defined

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.16
3,4,4',5-Tetrachlorobiphenyl (PCB81)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.05
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	mg/kg	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	mg/kg	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.0002
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.51
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.001
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.52
Total PCBs	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.00	Not defined

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	mg/kg	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.16
3,4,4',5-Tetrachlorobiphenyl (PCB81)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.05
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.0002
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.51
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.001
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.52
Total PCBs	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.00	Not defined

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-15	TP-16	TP-17	TP-18	TP-19		
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	mg/kg	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.16
3,4,4',5-Tetrachlorobiphenyl (PCB81)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.05
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.0002
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.51
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.001
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.52
Total PCBs	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	1.00	Not defined

VOLATILE ORGANIC COMPOUNDS (VOCs) + TIC's

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
Dichlorodifluoromethane[1]	µg/kg	0.60	USEPA 8260C	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	Not defined
Chloromethane[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	Not defined	4.6E+02
Vinyl chloride[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	0.1	1.7E+00
Bromomethane[1]	µg/kg	0.67		<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	Not defined	8.6E+01
Chloroethane[1]	µg/kg	0.28		<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	Not defined	5.7E+04
Trichlorofluoromethane[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	3.5E+05
Acetonitrile[1]	µg/kg	1.81		<1.81	<1.81	<1.81	<1.81	<1.81	<1.81	Not defined	3.4E+03
Acetone[1]	µg/kg	2.75		<2.75	<2.75	<2.75	<2.75	<2.75	<2.75	Not defined	6.7E+05
Diethyl ether[1]	µg/kg	1.03		<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	Not defined	Not defined
1,1-Dichloroethene[1]	µg/kg	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	<0.91	0.3	Not defined
Iodomethane[1]	µg/kg	0.87		<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	Not defined	Not defined
Propionitrile[1]	µg/kg	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	Not defined	Not defined
Acrylonitrile[1]	µg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	Not defined	1.1E+00
Methylene chloride[1]	µg/kg	1.21		<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	Not defined	1.0E+03
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/kg	0.98		<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	Not defined	2.8E+04
Allyl chloride[1]	µg/kg	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	Not defined	3.2E+00
Carbon disulfide[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.9E+00
trans-1,2-Dichloroethene[1]	µg/kg	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	1 (aggr)	Not defined
MTBE[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	100	2.1E+02
1,1-Dichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	0.3	Not defined
Chloroprene[1]	µg/kg	3.11		<3.11	<3.11	<3.11	<3.11	<3.11	<3.11	Not defined	Not defined
2-Butanone (MEK)[1]	µg/kg	6.81		<6.81	<6.81	<6.81	<6.81	<6.81	<6.81	Not defined	1.9E+05
Methacrylonitrile[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	Not defined	1.0E+02
cis-1,2-Dichloroethene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1	Not defined
Bromochloromethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.3E+00
Chloroform[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	5.6	1.4E+00
Methyl acrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	6.1E+02
2,2-Dichloropropane[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	2 (aggr)	Not defined
Tetrahydrofuran[1]	µg/kg	1.64		<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	7	9.4E+04
1,2-Dichlorethane[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	2.0E+00
1,1,1-Trichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	15	3.6E+04
1,1-Dichloropropene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	Not defined	Not defined
Carbon Tetrachloride[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	2.9E+00
Benzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Dibromomethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	9.9E+01
1,2-Dichloropropane[1]	µg/kg	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	2 (aggr)	1.2E+00
Trichloroethene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	2.5	Not defined
Bromodichloromethane[1]	µg/kg	0.74		<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	Not defined	Not defined
Methyl methacrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.9E+04
cis-1,3-Dichloropropene[1]	µg/kg	0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	Not defined	Not defined
4-Methyl-2-pentanone (MIBK)[1]	µg/kg	2.57		<2.57	<2.57	<2.57	<2.57	<2.57	<2.57	Not defined	1.4E+05
trans-1,3-Dichloropropene[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	Not defined
1,1,2-Trichloroethane[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	10	5.0E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
1,3-Dichloropropane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	2 (aggr)	2.3E+04
Ethyl methacrylate[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	Not defined	7.6E+03
2-Hexanone[1]	µg/kg	3.40		<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	Not defined	1.3E+03

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
Dibromochloromethane[1]	µg/kg	0.35	USEPA 8260C	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	3.90E+01
1,2-Dibromoethane-EDB[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	Not defined	1.60E-01
Tetrachloroethene[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	8.8	Not defined
1,1,1,2-Tetrachloroethane[1]	µg/kg	0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	Not defined	8.80E+00
Chlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	Not defined	1.30E+03
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	110	2.50E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	<1.14	17	2.40E+03
Bromoform[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	75	8.60E+01
cis-1,4-Dichloro-2-butene[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	9.40E-03
Styrene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	86	3.50E+04
1,1,2,2-Tetrachloroethane[1]	µg/kg	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	Not defined	8.80E+00
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	17	2.8E+03
1,2,3-Trichloropropane[1]	µg/kg	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	1.10E-01
trans-1,4-Dichloro-2-butene[1]	µg/kg	1.43		<1.43	<1.43	<1.43	<1.43	<1.43	<1.43	Not defined	3.20E-02
Isopropylbenzene[1]	µg/kg	0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	Not defined	Not defined
Bromobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	Not defined	1.80E+03
n-Propylbenzene[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	2.40E+04
2-Chlorotoluene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	Not defined
4-Chlorotoluene[1]	µg/kg	0.72		<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/kg	0.43		<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	Not defined	1.50E+03
Pentachloroethane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	Not defined	3.60E+01
tert-Butylbenzene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	Not defined	1.20E+05
1,2,4-Trimethylbenzene[1]	µg/kg	0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	Not defined	1.80E+03
sec-Butylbenzene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	Not defined	1.20E+05
1,3-Dichlorobenzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	19 (aggr)	Not defined
1,4-Dichlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	19 (aggr)	1.10E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/kg	0.73		<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	19 (aggr)	9.30E+03
n-Butylbenzene[1]	µg/kg	0.65		<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	Not defined	5.80E+04
1,2-Dibromo-3-Chloropropane[1]	µg/kg	1.25		<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	Not defined	6.40E-02
1,2,4-Trichlorobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	11 (aggr)	1.10E+02
Naphthalene[1]	µg/kg	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	1.70E+01
Hexachlorobutadiene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	Not defined	5.30E+00
1,2,3-Trichlorobenzene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	9.30E+02
TIC's	µg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	ND		

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
Dichlorodifluoromethane[1]	µg/kg	0.60	USEPA 8260C	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	Not defined
Chloromethane[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	Not defined	4.6E+02
Vinyl chloride[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	0.1	1.7E+00
Bromomethane[1]	µg/kg	0.67		<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	Not defined	8.6E+01
Chloroethane[1]	µg/kg	0.28		<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	Not defined	5.7E+04
Trichlorofluoromethane[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	3.5E+05
Acetonitrile[1]	µg/kg	1.81		<1.81	<1.81	<1.81	<1.81	<1.81	<1.81	Not defined	3.4E+03
Acetone[1]	µg/kg	2.75		<2.75	<2.75	<2.75	<2.75	<2.75	<2.75	Not defined	6.7E+05
Diethyl ether[1]	µg/kg	1.03		<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	Not defined	Not defined
1,1-Dichloroethene[1]	µg/kg	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	<0.91	0.3	Not defined
Iodomethane[1]	µg/kg	0.87		<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	Not defined	Not defined
Propionitrile[1]	µg/kg	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	Not defined	Not defined
Acrylonitrile[1]	µg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	Not defined	1.1E+00

Test Parameter	Unit	MDL		Test Results							
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/kg	0.98		<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	Not defined	2.8E+04
Allyl chloride[1]	µg/kg	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	Not defined	3.2E+00
Carbon disulfide[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.9E+00
trans-1,2-Dichloroethene[1]	µg/kg	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	1 (aggr)	Not defined
MTBE[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	100	2.1E+02
1,1-Dichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	0.3	Not defined
Chloroprene[1]	µg/kg	3.11		<3.11	<3.11	<3.11	<3.11	<3.11	<3.11	Not defined	Not defined
2-Butanone (MEK)[1]	µg/kg	6.81		<6.81	<6.81	<6.81	<6.81	<6.81	<6.81	Not defined	1.9E+05
Methacrylonitrile[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	Not defined	1.0E+02
cis-1,2-Dichloroethene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1	Not defined
Bromochloromethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.3E+00
Chloroform[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	5.6	1.4E+00
Methyl acrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	6.1E+02
2,2-Dichloropropane[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	2 (aggr)	Not defined
Tetrahydrofuran[1]	µg/kg	1.64		<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	7	9.4E+04
1,2-Dichlorethane[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	2.0E+00
1,1,1-Trichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	15	3.6E+04
1,1-Dichloropropene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	Not defined	Not defined
Carbon Tetrachloride[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	2.9E+00
Benzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Dibromomethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	9.9E+01
1,2-Dichloropropane[1]	µg/kg	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	2 (aggr)	1.2E+00
Trichloroethene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	2.5	Not defined
Bromodichloromethane[1]	µg/kg	0.74	USEPA 8260C	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	Not defined	Not defined
Methyl methacrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.9E+04
cis-1,3-Dichloropropene[1]	µg/kg	0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	Not defined	Not defined
4-Methyl-2-pentanone (MIBK)[1]	µg/kg	2.57		<2.57	<2.57	<2.57	<2.57	<2.57	<2.57	Not defined	1.4E+05
trans-1,3-Dichloropropene[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	Not defined
1,1,2-Trichloroethane[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	10	5.0E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
1,3-Dichloropropane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	2 (aggr)	2.3E+04
Ethyl methacrylate[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	Not defined	7.6E+03
2-Hexanone[1]	µg/kg	3.40		<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	Not defined	1.3E+03
Dibromochloromethane[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	3.90E+01
1,2-Dibromoethane-EDB[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	Not defined	1.60E-01
Tetrachloroethene[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	8.8	Not defined
1,1,1,2-Tetrachloroethane[1]	µg/kg	0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	Not defined	8.80E+00
Chlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	Not defined	1.30E+03
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	110	2.50E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	<1.14	17	2.40E+03
Bromoform[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	75	8.60E+01
cis-1,4-Dichloro-2-butene[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	9.40E-03
Styrene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	86	3.50E+04
1,1,2,2-Tetrachloroethane[1]	µg/kg	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	Not defined	8.80E+00
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	17	2.8E+03
1,2,3-Trichloropropane[1]	µg/kg	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	1.10E-01
trans-1,4-Dichloro-2-butene[1]	µg/kg	1.43		<1.43	<1.43	<1.43	<1.43	<1.43	<1.43	Not defined	3.20E-02
Isopropylbenzene[1]	µg/kg	0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	Not defined	Not defined
Bromobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	Not defined	1.80E+03

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E		
n-Propylbenzene[1]	µg/kg	0.60	USEPA 8260C	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	2.40E+04
2-Chlorotoluene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	Not defined
4-Chlorotoluene[1]	µg/kg	0.72		<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/kg	0.43		<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	Not defined	1.50E+03
Pentachloroethane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	Not defined	3.60E+01
tert-Butylbenzene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	Not defined	1.20E+05
1,2,4-Trimethylbenzene[1]	µg/kg	0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	Not defined	1.80E+03
sec-Butylbenzene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	Not defined	1.20E+05
1,3-Dichlorobenzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	19 (aggr)	Not defined
1,4-Dichlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	19 (aggr)	1.10E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/kg	0.73		<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	19 (aggr)	9.30E+03
n-Butylbenzene[1]	µg/kg	0.65		<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	Not defined	5.80E+04
1,2-Dibromo-3-Chloropropane[1]	µg/kg	1.25		<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	Not defined	6.40E-02
1,2,4-Trichlorobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	11 (aggr)	1.10E+02
Naphthalene[1]	µg/kg	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	1.70E+01
Hexachlorobutadiene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	Not defined	5.30E+00
1,2,3-Trichlorobenzene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	9.30E+02
TIC's	µg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	ND	-	-

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
Dichlorodifluoromethane[1]	µg/kg	0.60	USEPA 8260C	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	Not defined
Chloromethane[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	Not defined	4.6E+02
Vinyl chloride[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	0.1	1.7E+00
Bromomethane[1]	µg/kg	0.67		<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	Not defined	8.6E+01
Chloroethane[1]	µg/kg	0.28		<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	Not defined	5.7E+04
Trichlorofluoromethane[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	3.5E+05
Acetonitrile[1]	µg/kg	1.81		<1.81	<1.81	<1.81	<1.81	<1.81	<1.81	Not defined	3.4E+03
Acetone[1]	µg/kg	2.75		<2.75	<2.75	<2.75	<2.75	<2.75	<2.75	Not defined	6.7E+05
Diethyl ether[1]	µg/kg	1.03		<1.03	<1.03	<1.03	<1.03	<1.03	<1.03	Not defined	Not defined
1,1-Dichloroethene[1]	µg/kg	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	<0.91	0.3	Not defined
Iodomethane[1]	µg/kg	0.87		<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	Not defined	Not defined
Propionitrile[1]	µg/kg	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	Not defined	Not defined
Acrylonitrile[1]	µg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	Not defined	1.1E+00
Methylene chloride[1]	µg/kg	1.21		<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	Not defined	1.0E+03
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/kg	0.98		<0.98	<0.98	<0.98	<0.98	<0.98	<0.98	Not defined	2.8E+04
Allyl chloride[1]	µg/kg	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	Not defined	3.2E+00
Carbon disulfide[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.9E+00
trans-1,2-Dichloroethene[1]	µg/kg	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	1 (aggr)	Not defined
MTBE[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	100	2.1E+02
1,1-Dichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	0.3	Not defined
Chloroprene[1]	µg/kg	3.11		<3.11	<3.11	<3.11	<3.11	<3.11	<3.11	Not defined	Not defined
2-Butanone (MEK)[1]	µg/kg	6.81		<6.81	<6.81	<6.81	<6.81	<6.81	<6.81	Not defined	1.9E+05
Methacrylonitrile[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	Not defined	1.0E+02
cis-1,2-Dichloroethene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1	Not defined
Bromochloromethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.3E+00
Chloroform[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	5.6	1.4E+00
Methyl acrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	6.1E+02
2,2-Dichloropropane[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	<0.79	2 (aggr)	Not defined
Tetrahydrofuran[1]	µg/kg	1.64		<1.64	<1.64	<1.64	<1.64	<1.64	<1.64	7	9.4E+04

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
1,2-Dichlorethane[1]	µg/kg	0.86	USEPA 8260C	<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	2.0E+00
1,1,1-Trichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	15	3.6E+04
1,1-Dichloropropene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	Not defined	Not defined
Carbon Tetrachloride[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	2.9E+00
Benzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Dibromomethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	9.9E+01
1,2-Dichloropropane[1]	µg/kg	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	<0.51	2 (aggr)	1.2E+00
Trichloroethene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	2.5	Not defined
Bromodichloromethane[1]	µg/kg	0.74		<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	Not defined	Not defined
Methyl methacrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.9E+04
cis-1,3-Dichloropropene[1]	µg/kg	0.39		<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	Not defined	Not defined
4-Methyl-2-pentanone (MIBK)[1]	µg/kg	2.57		<2.57	<2.57	<2.57	<2.57	<2.57	<2.57	Not defined	1.4E+05
trans-1,3-Dichloropropene[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	Not defined
1,1,2-Trichloroethane[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	10	5.0E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
1,3-Dichloropropane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	2 (aggr)	2.3E+04
Ethyl methacrylate[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	Not defined	7.6E+03
2-Hexanone[1]	µg/kg	3.40		<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	Not defined	1.3E+03
Dibromochloromethane[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	3.90E+01
1,2-Dibromoethane-EDB[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	Not defined	1.60E-01
Tetrachloroethene[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	8.8	Not defined
1,1,1,2-Tetrachloroethane[1]	µg/kg	0.34		<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	Not defined	8.80E+00
Chlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	Not defined	1.30E+03
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	110	2.50E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	<1.14	17	2.40E+03
Bromoform[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	75	8.60E+01
cis-1,4-Dichloro-2-butene[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	9.40E-03
Styrene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	86	3.50E+04
1,1,2,2-Tetrachloroethane[1]	µg/kg	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	Not defined	8.80E+00
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	17	2.8E+03
1,2,3-Trichloropropane[1]	µg/kg	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	1.10E-01
trans-1,4-Dichloro-2-butene[1]	µg/kg	1.43		<1.43	<1.43	<1.43	<1.43	<1.43	<1.43	Not defined	3.20E-02
Isopropylbenzene[1]	µg/kg	0.38		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	Not defined	Not defined
Bromobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	Not defined	1.80E+03
n-Propylbenzene[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	2.40E+04
2-Chlorotoluene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	Not defined
4-Chlorotoluene[1]	µg/kg	0.72		<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/kg	0.43		<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	Not defined	1.50E+03
Pentachloroethane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	Not defined	3.60E+01
tert-Butylbenzene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	Not defined	1.20E+05
1,2,4-Trimethylbenzene[1]	µg/kg	0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	Not defined	1.80E+03
sec-Butylbenzene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	<0.55	Not defined	1.20E+05
1,3-Dichlorobenzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	19 (aggr)	Not defined
1,4-Dichlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	19 (aggr)	1.10E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/kg	0.73		<0.73	<0.73	<0.73	<0.73	<0.73	<0.73	19 (aggr)	9.30E+03
n-Butylbenzene[1]	µg/kg	0.65		<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	Not defined	5.80E+04
1,2-Dibromo-3-Chloropropane[1]	µg/kg	1.25		<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	Not defined	6.40E-02
1,2,4-Trichlorobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	11 (aggr)	1.10E+02
Naphthalene[1]	µg/kg	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	1.70E+01
Hexachlorobutadiene[1]	µg/kg	0.76	USEPA 8260C	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	Not defined	5.30E+00
1,2,3-Trichlorobenzene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	9.30E+02
TIC's	µg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	ND		

Test Parameter	Unit	MDL	Test Method	Test Results						
				TP-15	TP-16	TP-17	TP-18	TP-19	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
Dichlorodifluoromethane[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	Not defined
Chloromethane[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	Not defined	4.6E+02
Vinyl chloride[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	0.1	1.7E+00
Bromomethane[1]	µg/kg	0.67		<0.67	<0.67	<0.67	<0.67	<0.67	Not defined	8.6E+01
Chloroethane[1]	µg/kg	0.28		<0.28	<0.28	<0.28	<0.28	<0.28	Not defined	5.7E+04
Trichlorofluoromethane[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	3.5E+05
Acetonitrile[1]	µg/kg	1.81		<1.81	<1.81	<1.81	<1.81	<1.81	Not defined	3.4E+03
Acetone[1]	µg/kg	2.75		<2.75	<2.75	<2.75	<2.75	<2.75	Not defined	6.7E+05
Diethyl ether[1]	µg/kg	1.03		<1.03	<1.03	<1.03	<1.03	<1.03	Not defined	Not defined
1,1-Dichloroethene[1]	µg/kg	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	0.3	Not defined
Iodomethane[1]	µg/kg	0.87		<0.87	<0.87	<0.87	<0.87	<0.87	Not defined	Not defined
Propionitrile[1]	µg/kg	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	Not defined	Not defined
Acrylonitrile[1]	µg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	Not defined	1.1E+00
Methylene chloride[1]	µg/kg	1.21		<1.21	<1.21	<1.21	<1.21	<1.21	Not defined	1.0E+03
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/kg	0.98		<0.98	<0.98	<0.98	<0.98	<0.98	Not defined	2.8E+04
Allyl chloride[1]	µg/kg	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	Not defined	3.2E+00
Carbon disulfide[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.9E+00
trans-1,2-Dichloroethene[1]	µg/kg	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	1 (aggr)	Not defined
MTBE[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	100	2.1E+02
1,1-Dichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	0.3	Not defined
Chloroprene[1]	µg/kg	3.11	USEPA 8260C	<3.11	<3.11	<3.11	<3.11	<3.11	Not defined	Not defined
2-Butanone (MEK)[1]	µg/kg	6.81		<6.81	<6.81	<6.81	<6.81	<6.81	Not defined	1.9E+05
Methacrylonitrile[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	Not defined	1.0E+02
cis-1,2-Dichloroethene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	1	Not defined
Bromochloromethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.3E+00
Chloroform[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	5.6	1.4E+00
Methyl acrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	6.1E+02
2,2-Dichloropropane[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	2 (aggr)	Not defined
Tetrahydrofuran[1]	µg/kg	1.64		<1.64	<1.64	<1.64	<1.64	<1.64	7	9.4E+04
1,2-Dichlorethane[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	2.0E+00
1,1,1-Trichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	15	3.6E+04
1,1-Dichloropropene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	Not defined	Not defined
Carbon Tetrachloride[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	2.9E+00
Benzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Dibromomethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	9.9E+01
1,2-Dichloropropane[1]	µg/kg	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	2 (aggr)	1.2E+00
Trichloroethene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	2.5	Not defined
Bromodichloromethane[1]	µg/kg	0.74		<0.74	<0.74	<0.74	<0.74	<0.74	Not defined	Not defined
Methyl methacrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.9E+04
cis-1,3-Dichloropropene[1]	µg/kg	0.39		<0.39	<0.39	<0.39	<0.39	<0.39	Not defined	Not defined
4-Methyl-2-pentanone (MIBK)[1]	µg/kg	2.57		<2.57	<2.57	<2.57	<2.57	<2.57	Not defined	1.4E+05
trans-1,3-Dichloropropene[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	Not defined
1,1,2-Trichloroethane[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	10	5.0E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
1,3-Dichloropropane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	2 (aggr)	2.3E+04

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-15	TP-16	TP-17	TP-18	TP-19		
Ethyl methacrylate[1]	µg/kg	0.78	USEPA 8260C	<0.78	<0.78	<0.78	<0.78	<0.78	Not defined	7.6E+03
2-Hexanone[1]	µg/kg	3.40		<3.40	<3.40	<3.40	<3.40	<3.40	Not defined	1.3E+03
Dibromochloromethane[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	3.90E+01
1,2-Dibromoethane-EDB[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	Not defined	1.60E-01
Tetrachloroethene[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	8.8	Not defined
1,1,1,2-Tetrachloroethane[1]	µg/kg	0.34		<0.34	<0.34	<0.34	<0.34	<0.34	Not defined	8.80E+00
Chlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	Not defined	1.30E+03
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	110	2.50E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	17	2.40E+03
Bromoform[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	75	8.60E+01
cis-1,4-Dichloro-2-butene[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	9.40E-03
Styrene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	86	3.50E+04
1,1,2,2-Tetrachloroethane[1]	µg/kg	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	Not defined	8.80E+00
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	17	2.8E+03
1,2,3-Trichloropropane[1]	µg/kg	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	1.10E-01
trans-1,4-Dichloro-2-butene[1]	µg/kg	1.43		<1.43	<1.43	<1.43	<1.43	<1.43	Not defined	3.20E-02
Isopropylbenzene[1]	µg/kg	0.38		<0.38	<0.38	<0.38	<0.38	<0.38	Not defined	Not defined
Bromobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	Not defined	1.80E+03
n-Propylbenzene[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	2.40E+04
2-Chlorotoluene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	Not defined
4-Chlorotoluene[1]	µg/kg	0.72		<0.72	<0.72	<0.72	<0.72	<0.72	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/kg	0.43		<0.43	<0.43	<0.43	<0.43	<0.43	Not defined	1.50E+03
Pentachloroethane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	Not defined	3.60E+01
tert-Butylbenzene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	Not defined	1.20E+05
1,2,4-Trimethylbenzene[1]	µg/kg	0.40		<0.40	<0.40	<0.40	<0.40	<0.40	Not defined	1.80E+03
sec-Butylbenzene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	Not defined	1.20E+05
1,3-Dichlorobenzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	19 (aggr)	Not defined
1,4-Dichlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	19 (aggr)	1.10E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/kg	0.73		<0.73	<0.73	<0.73	<0.73	<0.73	19 (aggr)	9.30E+03
n-Butylbenzene[1]	µg/kg	0.65		<0.65	<0.65	<0.65	<0.65	<0.65	Not defined	5.80E+04
1,2-Dibromo-3-Chloropropane[1]	µg/kg	1.25		<1.25	<1.25	<1.25	<1.25	<1.25	Not defined	6.40E-02
1,2,4-Trichlorobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	11 (aggr)	1.10E+02
Naphthalene[1]	µg/kg	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	1.70E+01
Hexachlorobutadiene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	Not defined	5.30E+00
1,2,3-Trichlorobenzene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	9.30E+02
TIC's	µg/kg	-	NIST Library Search	ND	ND	ND	ND	ND		

SEMI-VOLATILE ORGANIC COMPOUNDS + TIC's

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E		
N-Nitrosodimethylamine	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.4E-02
Pyridine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	11	1.2E+03
Phenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	14	2.5E+05
Aniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.0E+02
Bis(2-chhloroethyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+00
2-Chlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.8E+03
1,3-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,4-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+01
Benzyl alcohol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
1,2-Dichlorobenzene	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	9.3E+03
Bis(2-chloroisopropyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Methylphenol/3-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
N-Nitrosodi-n-propylamine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.3E-01
Hexachloroethane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+00
Nitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.2E+01
Isophorone	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.4E+03
2,4-Dimethylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+04
2-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Bis(2-chloroethoxy)methane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
2,4-Dichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
1,2,4-Trichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
Naphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.70E+01
4-Chloroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	30	Not defined
Hexachlorobutadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.3E+00
4-Chloro-3-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+03
1-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.3E+01
Hexachlorocyclopentadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.5E+00
2,4,6-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+02
2,4,5-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Chloronaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+03
1,4-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Dimethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	82	Not defined
1,3-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
2,6-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.5E+00
1,2-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Acenaphthylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
3-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Acenaphthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.5E+04
2,4-Dinitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+03
4-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,4-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.4E+00
Dibenzofuran	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+03
2,3,5,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,3,4,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+04
Diethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	53	6.60E+05
4-Chlrophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
4,6-Dinitro-2-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Fluorene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
N-nitrosodiphenylamine (diphenylamine)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
1,2-Diphenylhydrazine (as azobenzene)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.6E+01
4-Bromophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Hexachlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2	9.6E-01
Pentachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Phenanthrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	12	4.0E+00
Anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+05
Carbazole	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E	TP-6E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
Di-n-butyl phthalate	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	36	8.20E+04
Fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
Benzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E-02
3,3'-Dimethylbenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.1E+00
Pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+04
Butyl benzyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.20E+03
Bis(2-ethylhexyl) adipate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.90E+03
Bis(2-ethylhexyl) phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.60E+02
3,3'-Dichlorobenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.10E+00
Benz(a)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Chrysene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH	2.1E+03
Di-n-octyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+03
Benzo(b)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+00
Benzo(g,hi)perylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH	Not defined
TIC's	mg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	ND	-	-

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
N-Nitrosodimethylamine	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.4E-02
Pyridine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	11	1.2E+03
Phenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	14	2.5E+05
Aniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.0E+02
Bis(2-chhloroethyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+00
2-Chlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.8E+03
1,3-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,4-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+01
Benzyl alcohol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,2-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	9.3E+03
Bis(2-chloroisopropyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Methylphenol/3-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
N-Nitrosodi-n-propylamine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.3E-01
Hexachloroethane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+00
Nitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.2E+01
Isophorone	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.4E+03
2,4-Dimethylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+04
2-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Bis(2-chloroethoxy)methane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
2,4-Dichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
1,2,4-Trichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
Naphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.70E+01
4-Chloroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	30	Not defined
Hexachlorobutadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.3E+00
4-Chloro-3-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+03
1-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.3E+01
Hexachlorocyclopentadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.5E+00
2,4,6-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+02

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-7E	TP-8E	TP-9E	TP-10E	TP-11E	TP-12E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
2,4,5-Trichlorophenol	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Chloronaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+03
1,4-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Dimethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	82	Not defined
1,3-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
2,6-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.5E+00
1,2-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Acenaphthylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
3-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Acenaphthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.5E+04
2,4-Dinitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+03
4-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,4-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.4E+00
Dibenzofuran	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+03
2,3,5,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,3,4,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+04
Diethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	53	6.60E+05
4-Chlrophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
4,6-Dinitro-2-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Fluorene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
N-nitrosodiphenylamine (diphenylamine)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
1,2-Diphenylhydrazine (as azobenzene)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.6E+01
4-Bromophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Hexachlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2	9.6E-01
Pentachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Phenanthrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	12	4.0E+00
Anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+05
Carbazole	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Di-n-butyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	36	8.20E+04
Fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
Benzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E-02
3,3'-Dimethylbenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.1E+00
Pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+04
Butyl benzyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.20E+03
Bis(2-ethylhexyl) adipate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.90E+03
Bis(2-ethylhexyl) phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.60E+02
3,3'-Dichlorobenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.10E+00
Benz(a)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Chrysene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	41 (total of 10 PAH	2.1E+03
Di-n-octyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+03
Benzo(b)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+00
Benzo(g,hi)perylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	Not defined
TIC's	mg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	ND	-	-

Test Parameter	Unit	MDL	Test Method	Test Results							
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
N-Nitrosodimethylamine	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.4E-02
Pyridine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	11	1.2E+03
Phenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	14	2.5E+05
Aniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.0E+02
Bis(2-chhloroethyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+00
2-Chlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.8E+03
1,3-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,4-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+01
Benzyl alcohol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,2-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	9.3E+03
Bis(2-chloroisopropyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Methylphenol/3-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
N-Nitrosodi-n-propylamine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.3E-01
Hexachloroethane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+00
Nitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.2E+01
Isophorone	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.4E+03
2,4-Dimethylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+04
2-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Bis(2-chloroethoxy)methane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
2,4-Dichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
1,2,4-Trichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
Naphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.70E+01
4-Chloroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	30	Not defined
Hexachlorobutadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.3E+00
4-Chloro-3-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+03
1-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.3E+01
Hexachlorocyclopentadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.5E+00
2,4,6-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+02
2,4,5-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Chloronaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+03
1,4-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Dimethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	82	Not defined
1,3-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
2,6-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.5E+00
1,2-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Acenaphthylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
3-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Acenaphthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.5E+04
2,4-Dinitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+03
4-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,4-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.4E+00
Dibenzofuran	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+03
2,3,5,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,3,4,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+04
Diethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	53	6.60E+05
4-Chlrophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02

Test Parameter	Unit	MDL	Test Method	Test Results						Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-14E	TP-15E	TP-16E	TP-20E	TP-21E	TP-22E		
4,6-Dinitro-2-methylphenol	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Fluorene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
N-nitrosodiphenylamine (diphenylamine)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
1,2-Diphenylhydrazine (as azobenzene)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.6E+01
4-Bromophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Hexachlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2	9.6E-01
Pentachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Phenanthrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	12	4.0E+00
Anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+05
Carbazole	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Di-n-butyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	36	8.20E+04
Fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
Benzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E-02
3,3'-Dimethylbenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.1E+00
Pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+04
Butyl benzyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.20E+03
Bis(2-ethylhexyl) adipate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.90E+03
Bis(2-ethylhexyl) phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.60E+02
3,3'-Dichlorobenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.10E+00
Benz(a)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Chrysene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	41 (total of 10 PAH	2.1E+03
Di-n-octyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+03
Benzo(b)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+00
Benzo(g,hi)perylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH	Not defined
TIC's	mg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	ND	-	

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-15	TP-16	TP-17	TP-18	TP-19		
N-Nitrosodimethylamine	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.4E-02
Pyridine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	11	1.2E+03
Phenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	14	2.5E+05
Aniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.0E+02
Bis(2-chhloroethyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+00
2-Chlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.8E+03
1,3-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,4-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+01
Benzyl alcohol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,2-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	9.3E+03
Bis(2-chloroisopropyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Methylphenol/3-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
N-Nitrosodi-n-propylamine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.3E-01
Hexachloroethane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+00
Nitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.2E+01
Isophorone	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.4E+03
2,4-Dimethylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+04
2-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Bis(2-chloroethoxy)methane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03

Test Parameter	Unit	MDL	Test Method	Test Results						
				TP-15	TP-16	TP-17	TP-18	TP-19	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
2,4-Dichlorophenol	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
1,2,4-Trichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
Naphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.70E+01
4-Chloroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	30	Not defined
Hexachlorobutadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.3E+00
4-Chloro-3-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+03
1-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.3E+01
Hexachlorocyclopentadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.5E+00
2,4,6-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+02
2,4,5-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Chloronaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+03
1,4-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Dimethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	82	Not defined
1,3-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
2,6-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.5E+00
1,2-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Acenaphthylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
3-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Acenaphthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.5E+04
2,4-Dinitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+03
4-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,4-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.4E+00
Dibenzofuran	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+03
2,3,5,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,3,4,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+04
Diethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	53	6.60E+05
4-Chlrophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
4,6-Dinitro-2-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Fluorene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
N-nitrosodiphenylamine (diphenylamine)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
1,2-Diphenylhydrazine (as azobenzene)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.6E+01
4-Bromophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Hexachlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	2	9.6E-01
Pentachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Phenanthrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	12	4.0E+00
Anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+05
Carbazole	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Di-n-butyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	36	8.20E+04
Fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
Benzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E-02
3,3'-Dimethylbenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.1E+00
Pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+04
Butyl benzyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.20E+03
Bis(2-ethylhexyl) adipate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.90E+03
Bis(2-ethylhexyl) phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.60E+02
3,3'-Dichlorobenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.10E+00
Benz(a)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Chrysene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	(total of 10 PA	2.1E+03
Di-n-octyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+03

Test Parameter	Unit	MDL	Test Method	Test Results						
				TP-15	TP-16	TP-17	TP-18	TP-19	Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
Benzo(b)fluoranthene	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+00
Benzo(g,hi)perylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH	Not defined
TIC's	mg/kg	-	NIST Library Search	ND	ND	ND	ND	ND		

Notes: 1. The results relate only to the items tested.

2. Tests marked with [1] are ENAS accredited in compliance with ISO/IEC 17025-2005 Standard.
3. **MDL**: Method Detection Limit. **ND**: Not Detected
4. Aggregate: For the composition of the aggregate parameters, see Annex N of the Dutch Soil Quality Regulation.

ANALYSIS OF SOIL ADDITIONAL WORKS

TEST REPORT ON ANALYSIS OF SOIL

Owner	ACES - Dubai	**Report No.**	HMR18006048
Contractor	Not Provided	**Date Reported**	15/07/18
Consultant	Not Provided	**Sample No.**	HMS18004020
Project No.	Not Provided	**Request No.**	HMQ18004020
Project Name	Not Provided	**Client Reference**	Request Dated 08/07/2018 (SC18-096 and SD18000031)
Sample Description	Soil	**Sample Size**	5 Samples
Source	BH TP-01E, TP-02E, TP-03E, TP-04E, TP-05E, Depth 1.0m	**Sampling Date**	08/07/18
Sample Location	Site	**Sampling Cert. No.**	Not Provided
Lot No.	Not Provided	**Sampling Method**	Not Provided
Lot Size	Not Provided	**Sampled By**	Client's Rep.
Test Method	See below	**Sample Brt. In By**	Client's Rep.
Test Method Var.	None	**Date Received**	08/07/18
Tested By:	Hans, Winelen	**Date Tested**	10 - 14/07/2018

II. CHEMICAL ANALYSIS:

TOTAL ORGANIC CARBON :

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
Total Organic Carbon	%	0.01	Walkley-black method	0.01	0.03	0.02	0.02	0.03	-	-

II. ORGANICS:

BTEX

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
Benzene[1]	µg/kg	0.52	USEPA 8260 C	<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	110	2.5E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	17 (mixed isomers)	2.40E+03
o- Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55		2.8E+03
BTEX[1]	µg/kg	3.19		<3.19	<3.19	<3.19	<3.19	<3.19	-	

VOLATILE ORGANIC COMPOUNDS (VOCs) + TIC's

Tests	Unit	MDL	Test Method	Test Results					Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
Dichlorodifluoromethane[1]	µg/kg	0.60	USEPA 8260C	<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	Not defined
Chloromethane[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	Not defined	4.6E+02
Vinyl chloride[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88	0.1	1.7E+00
Bromomethane[1]	µg/kg	0.67		<0.67	<0.67	<0.67	<0.67	<0.67	Not defined	8.6E+01
Chloroethane[1]	µg/kg	0.28		<0.28	<0.28	<0.28	<0.28	<0.28	Not defined	5.7E+04
Trichlorofluoromethane[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	3.5E+05
Acetonitrile[1]	µg/kg	1.81		<1.81	<1.81	<1.81	<1.81	<1.81	Not defined	3.4E+03
Acetone[1]	µg/kg	2.75		<2.75	<2.75	<2.75	<2.75	<2.75	Not defined	6.7E+05
Diethyl ether[1]	µg/kg	1.03		<1.03	<1.03	<1.03	<1.03	<1.03	Not defined	Not defined

1,1-Dichloroethene[1]	µg/kg	0.91		<0.91	<0.91	<0.91	<0.91	<0.91	0.3	Not defined
Iodomethane[1]	µg/kg	0.87		<0.87	<0.87	<0.87	<0.87	<0.87	Not defined	Not defined
Propionitrile[1]	µg/kg	0.77		<0.77	<0.77	<0.77	<0.77	<0.77	Not defined	Not defined
Acrylonitrile[1]	µg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	Not defined	1.1E+00
Methylene chloride[1]	µg/kg	1.21		<1.21	<1.21	<1.21	<1.21	<1.21	Not defined	1.0E+03
1,1,2-Trichlorotrifluoroethane (CFC-113)[1]	µg/kg	0.98		<0.98	<0.98	<0.98	<0.98	<0.98	Not defined	2.8E+04
Allyl chloride[1]	µg/kg	0.57		<0.57	<0.57	<0.57	<0.57	<0.57	Not defined	3.2E+00
Carbon disulfide[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35	Not defined	2.9E+00
trans-1,2-Dichloroethene[1]	µg/kg	0.96		<0.96	<0.96	<0.96	<0.96	<0.96	1 (aggr)	Not defined
MTBE[1]	µg/kg	0.81		<0.81	<0.81	<0.81	<0.81	<0.81	100	2.1E+02
1,1-Dichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	0.3	Not defined
Chloroprene[1]	µg/kg	3.11		<3.11	<3.11	<3.11	<3.11	<3.11	Not defined	Not defined
2-Butanone (MEK)[1]	µg/kg	6.81		<6.81	<6.81	<6.81	<6.81	<6.81	Not defined	1.9E+05
Methacrylonitrile[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	Not defined	1.0E+02
cis-1,2-Dichloroethene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	1	Not defined
Bromochloromethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.3E+00
Chloroform[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	5.6	1.4E+00
Methyl acrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	6.1E+02
2,2-Dichloropropane[1]	µg/kg	0.79		<0.79	<0.79	<0.79	<0.79	<0.79	2 (aggr)	Not defined
Tetrahydrofuran[1]	µg/kg	1.64		<1.64	<1.64	<1.64	<1.64	<1.64	7	9.4E+04
1,2-Dichlorethane[1]	µg/kg	0.86	USEPA 8260C	<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	2.0E+00
1,1,1-Trichloroethane[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	15	3.6E+04
1,1-Dichloropropene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	Not defined	Not defined
Carbon Tetrachloride[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	2.9E+00
Benzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	1.1	5.1E+00
Dibromomethane[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	9.9E+01
1,2-Dichloropropane[1]	µg/kg	0.51		<0.51	<0.51	<0.51	<0.51	<0.51	2 (aggr)	1.2E+00
Trichloroethene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	2.5	Not defined
Bromodichloromethane[1]	µg/kg	0.74		<0.74	<0.74	<0.74	<0.74	<0.74	Not defined	Not defined
Methyl methacrylate[1]	µg/kg	0.90		<0.90	<0.90	<0.90	<0.90	<0.90	Not defined	1.9E+04
cis-1,3-Dichloropropene[1]	µg/kg	0.39		<0.39	<0.39	<0.39	<0.39	<0.39	Not defined	Not defined
4-Methyl-2-pentanone (MIBK)[1]	µg/kg	2.57		<2.57	<2.57	<2.57	<2.57	<2.57	Not defined	1.4E+05
trans-1,3-Dichloropropene[1]	µg/kg	0.61		<0.61	<0.61	<0.61	<0.61	<0.61	Not defined	Not defined
1,1,2-Trichloroethane[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	10	5.0E+00
Toluene[1]	µg/kg	0.54		<0.54	<0.54	<0.54	<0.54	<0.54	32	4.7E+04
1,3-Dichloropropane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	2 (aggr)	2.3E+04
Ethyl methacrylate[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78	Not defined	7.6E+03
2-Hexanone[1]	µg/kg	3.40		<3.40	<3.40	<3.40	<3.40	<3.40	Not defined	1.3E+03
Dibromochloromethane[1]	µg/kg	0.35		<0.35	<0.35	<0.35	<0.35	<0.35		
1,2-Dibromoethane-EDB[1]	µg/kg	0.88		<0.88	<0.88	<0.88	<0.88	<0.88		
Tetrachloroethene[1]	µg/kg	0.78		<0.78	<0.78	<0.78	<0.78	<0.78		

1,1,1,2-Tetrachloroethane[1]	µg/kg	0.34	USEPA 8260C	<0.34	<0.34	<0.34	<0.34	<0.34	Not defined	8.80E+00
Chlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	Not defined	1.30E+03
Ethylbenzene[1]	µg/kg	0.44		<0.44	<0.44	<0.44	<0.44	<0.44	110	2.50E+01
m & p- Xylene[1]	µg/kg	1.14		<1.14	<1.14	<1.14	<1.14	<1.14	17	2.40E+03
Bromoform[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	75	8.60E+01
cis-1,4-Dichloro-2-butene[1]	µg/kg	0.63		<0.63	<0.63	<0.63	<0.63	<0.63	Not defined	9.40E-03
Styrene[1]	µg/kg	0.64		<0.64	<0.64	<0.64	<0.64	<0.64	86	3.50E+04
1,1,2,2-Tetrachloroethane[1]	µg/kg	0.95		<0.95	<0.95	<0.95	<0.95	<0.95	Not defined	8.80E+00
o-Xylene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	17	2.8E+03
1,2,3-Trichloropropane[1]	µg/kg	0.92		<0.92	<0.92	<0.92	<0.92	<0.92	Not defined	1.10E-01
trans-1,4-Dichloro-2-butene[1]	µg/kg	1.43		<1.43	<1.43	<1.43	<1.43	<1.43	Not defined	3.20E-02
Isopropylbenzene[1]	µg/kg	0.38		<0.38	<0.38	<0.38	<0.38	<0.38	Not defined	Not defined
Bromobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	Not defined	1.80E+03
n-Propylbenzene[1]	µg/kg	0.60		<0.60	<0.60	<0.60	<0.60	<0.60	Not defined	2.40E+04
2-Chlorotoluene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	Not defined
4-Chlorotoluene[1]	µg/kg	0.72		<0.72	<0.72	<0.72	<0.72	<0.72	Not defined	Not defined
1,3,5-Trimethylbenzene[1]	µg/kg	0.43		<0.43	<0.43	<0.43	<0.43	<0.43	Not defined	1.50E+03
Pentachloroethane[1]	µg/kg	0.89		<0.89	<0.89	<0.89	<0.89	<0.89	Not defined	3.60E+01
tert-Butylbenzene[1]	µg/kg	0.50		<0.50	<0.50	<0.50	<0.50	<0.50	Not defined	1.20E+05
1,2,4-Trimethylbenzene[1]	µg/kg	0.40		<0.40	<0.40	<0.40	<0.40	<0.40	Not defined	1.80E+03
sec-Butylbenzene[1]	µg/kg	0.55		<0.55	<0.55	<0.55	<0.55	<0.55	Not defined	1.20E+05
1,3-Dichlorobenzene[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	19 (aggr)	Not defined
1,4-Dichlorobenzene[1]	µg/kg	0.59		<0.59	<0.59	<0.59	<0.59	<0.59	19 (aggr)	1.10E+01
p-Isopropyltoluene (p-Cymene)[1]	µg/kg	0.52		<0.52	<0.52	<0.52	<0.52	<0.52	Not defined	Not defined
1,2-Dichlorbenzene[1]	µg/kg	0.73		<0.73	<0.73	<0.73	<0.73	<0.73	19 (aggr)	9.30E+03
n-Butylbenzene[1]	µg/kg	0.65		<0.65	<0.65	<0.65	<0.65	<0.65	Not defined	5.80E+04
1,2-Dibromo-3-Chloropropane[1]	µg/kg	1.25		<1.25	<1.25	<1.25	<1.25	<1.25	Not defined	6.40E-02
1,2,4-Trichlorobenzene[1]	µg/kg	0.69		<0.69	<0.69	<0.69	<0.69	<0.69	11 (aggr)	1.10E+02
Naphthalene[1]	µg/kg	1.29		<1.29	<1.29	<1.29	<1.29	<1.29	Not defined	1.70E+01
Hexachlorobutadiene[1]	µg/kg	0.76		<0.76	<0.76	<0.76	<0.76	<0.76	Not defined	5.30E+00
1,2,3-Trichlorobenzene[1]	µg/kg	0.86		<0.86	<0.86	<0.86	<0.86	<0.86	Not defined	9.30E+02
TIC's	µg/kg	-		ND	ND	ND	ND	ND		

TOTAL PETROLEUM HYDROCARBONS (TPHCWG)

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
TPH C8-C38 ALIPHATIC	mg/kg	0.1	USEPA 8015D	<0.1	<0.1	<0.1	<0.1	<0.1	5000.00	3500000
TPH C6-C8 AROMATIC[1]	mg/kg	0.1	USPA 8260C	<0.1	<0.1	<0.1	<0.1	<0.1		4.20E+02
TPH C10-C22 AROMATIC	mg/kg	0.1	USEPA 8270D	<0.1	<0.1	<0.1	<0.1	<0.1		6.00E+02

POLYCHLORINATED BIPHENYLS

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
3,3',4,4'-Tetrachlorobiphenyl (PCB77)	mg/kg	0.01	USEPA 8270D	<0.01	<0.01	<0.01	<0.01	<0.01	-	0.16
3,4,4',5-Tetrachlorobiphenyl (PCB81)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.05
2,3,3',4,4'-Pentachlorobiphenyl (PCB105)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2,3,4,4',5-Pentachlorobiphenyl (PCB114)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5-Pentachlorobiphenyl (PCB118)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
2',3,4,4',5-Pentachlorobiphenyl (PCB123)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.49
3,3',4,4',5-Pentachlorobiphenyl (PCB126)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.0002
2,3,3',4,4',5-Hexachlorobiphenyl (PCB156)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3,3',4,4',5'-Hexachlorobiphenyl (PCB157)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.50
2,3',4,4',5,5'-Hexachlorobiphenyl (PCB167)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.51
3,3',4,4',5,5'-Hexachlorobiphenyl (PCB169)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.001
2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB189)	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	-	0.52
Total PCBs	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	1.00	Not defined

POLYNUCLEAR AROMATIC HYDROCARBONS

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
Naphthalene	mg/kg	0.05	USEPA 8270D	<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	1.7E+01
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	Not defined
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	4.5E+04
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	3.0E+04
Phenanthrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.3E+05
Fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	3.0E+04
Pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.3E+04
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+01
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH	2.1E+03
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	Not defined	2.1E+00
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40 (total of 10 PAH)	Not defined
Polynuclear Aromatic Hydrocarbons (PAHs)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	40	-

SEMI-VOLATILE ORGANIC COMPOUNDS + TIC's

Test Parameter	Unit	MDL	Test Method	Test Results					Dutch Intervention Value mg/kg	US EPA (2017) Industrial Soil mg/kg
				TP-1E	TP-2E	TP-3E	TP-4E	TP-5E		
N-Nitrosodimethylamine	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.4E-02
Pyridine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	11	1.2E+03
Phenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	14	2.5E+05
Aniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.0E+02
Bis(2-chhloroethyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+00
2-Chlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.8E+03
1,3-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,4-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+01
Benzyl alcohol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
1,2-Dichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	9.3E+03
Bis(2-chloroisopropyl) ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Methylphenol/3-Methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
N-Nitrosodi-n-propylamine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.3E-01
Hexachloroethane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+00
Nitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.2E+01
Isophorone	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.4E+03
2,4-Dimethylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+04
2-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Bis(2-chloroethoxy)methane	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
2,4-Dichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+03
1,2,4-Trichlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
Naphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.70E+01
4-Chloroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	30	Not defined
Hexachlorobutadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.3E+00
4-Chloro-3-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+03
1-Methylnaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.3E+01
Hexachlorocyclopentadiene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.5E+00
2,4,6-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+02
2,4,5-Trichlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
2-Chloronaphthalene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.0E+03
1,4-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
Dimethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	82	Not defined
1,3-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01
2,6-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.5E+00
1,2-Dinitrobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+01

Acenaphthylene	mg/kg	0.02	USEPA 8270D	<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
3-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Acenaphthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	4.5E+04
2,4-Dinitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.6E+03
4-Nitrophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,4-Dinitrotoluene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	7.4E+00
Dibenzofuran	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E+03
2,3,5,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
2,3,4,6-Tetrachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.5E+04
Diethyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	53	6.60E+05
4-Chlrophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
4-Nitroaniline	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.1E+02
4,6-Dinitro-2-methylphenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Fluorene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
N-nitrosodiphenylamine (diphenylamine)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+04
1,2-Diphenylhydrazine (as azobenzene)	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.6E+01
4-Bromophenyl phenyl ether	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Hexachlorobenzene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	2	9.6E-01
Pentachlorophenol	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Phenanthrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	12	4.0E+00
Anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+05
Carbazole	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	Not defined
Di-n-butyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	36	8.20E+04
Fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	3.0E+04
Benzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.0E-02
3,3'-Dimethylbenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.1E+00
Pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.3E+04
Butyl benzyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.20E+03
Bis(2-ethylhexyl) adipate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.90E+03
Bis(2-ethylhexyl) phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	1.60E+02
3,3'-Dichlorobenzidine	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	5.10E+00
Benz(a)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Chrysene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	1 (total of 10 PAH	2.1E+03
Di-n-octyl phthalate	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	8.2E+03
Benzo(b)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+01
Benzo(k)fluoranthene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.10E+02
Benzo(a)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	2.1E+00
Indeno(1,2,3-cd)pyrene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02		2.1E+01
Dibenz(a,h)anthracene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	Not defined	2.1E+00
Benzo(g,hi)perylene	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	40 (total of 10 PAH)	Not defined
TIC's	mg/kg	-	NIST Library Search	ND	ND	ND	ND	ND	-	-

Notes:

1. ISO/IEC 17025-2005 Accredited Test: [1]-ENAS
2. The test results relate only to the item(s) tested. This report shall not be reproduced except in full, without written approval of
3. 22nd Edition of APHA Methods is used.

METALS IN SOIL

Test Report on Metals in Soil									Permissible Reference Values	
Client	M/S. TECNICAS REUNIDAS			Request No.	SD18000031					
Project	Proposed SEWA Hamriyah Power Plant			Date Received	09/06/2018					
Sample Description	Soil			Date Tested	13-18/06/2018					
Elements	Unit	Test Method	MDL mg/kg	Results						
				TP-1E Depth 1.50m	TP-2E Depth 1.50m	TP-3E Depth 1.50m	TP-4E Depth 1.50m	TP-5E Depth 1.50m	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil (mg/kg)
Arsenic As	mg/kg	APHA3120B	0.12	0.754	0.657	0.989	0.727	0.694	76	3.0E+00 (inorganic)
Barium Ba	mg/kg	APHA3120B	0.12	36.13	35.56	40.53	33.89	40.54	Not defined	2.2E+05
Beryllium Be	mg/kg	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	2.3E+03
Boron B	mg/kg	APHA3120B	0.09	15.46	14.23	15.60	13.21	15.70	Not defined	2.3E+05
Cadmium Cd	mg/kg	APHA3120B	0.02	0.411	0.403	0.419	0.398	0.409	13	9.8E+02 (DIET)
Chromium (Total) Cr	mg/kg	APHA3120B	0.01	24.45	23.62	25.83	23.60	24.56	180 (Cr-III)	
Copper Cu	mg/kg	APHA3120B	0.01	3.693	3.750	4.081	32.97	3.894	190	4.7E+04
Iron (Total) Fe	mg/kg	APHA3120B	0.09	5432	5310	5632	5240	5516	Not defined	8.2E+05
Lead Pb	mg/kg	APHA3120B	0.01	1.932	1.986	2.003	3.326	2.033	530	8.0 E+02
Manganese Mn	mg/kg	APHA3120B	0.02	206.3	201.9	192.7	196.5	201.2	Not defined	2.6E+04 (non diet)
Molybdneum Mo	mg/kg	APHA3120B	0.01	0.388	0.402	0.406	0.359	0.355	190	5.8E+03
Nickel Ni	mg/kg	APHA3120B	0.02	27.56	22.83	33.99	28.99	31.77	100	
Selenium Se	mg/kg	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100[1]	5.8E+03
Vanadium V	mg/kg	APHA3120B	0.01	15.47	14.84	15.06	13.80	15.55	250[1]	5.8E+03
Zinc Zn	mg/kg	APHA3120B	0.02	13.94	13.18	14.38	33.52	14.01	720	3.5E+05
Mercury Hg	mg/kg	APHA3120B	0.003	0.074	0.152	<0.003	<0.003	0.022	36	4.6E+01
pH*		BS1377 P.3 CL 9		9.1	8.6	8.8	8.8	8.9		

Note: * DAC Accredited

Note 1: Indicative Level for severe contamination

Test Report on Metals in Soil									Permissible Reference Values	
Client	M/S. TECNICAS REUNIDAS			Request No.	SD18000031					
Project	Proposed SEWA Hamriyah Power Plant			Date Received	09/06/2018					
Sample Description	Soil			Date Tested	13-18/06/2018					
Elements	Unit	Test Method	MDL mg/kg	Results					Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil (mg/kg)
				TP-6E Depth 1.50m	TP-7E Depth 1.50m	TP-8E Depth 1.50m	TP-9E Depth 1.50m	TP-10E Depth 1.50m		
Arsenic As	mg/kg	APHA3120B	0.12	0.624	0.850	0.836	0.836	0.555	76	3.0E+00 (inorganic)
Barium Ba	mg/kg	APHA3120B	0.12	40.04	73.59	35.14	32.80	34.44	Not defined	2.2E+05
Beryllium Be	mg/kg	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	2.3E+03
Boron B	mg/kg	APHA3120B	0.09	17.64	17.34	32.86	17.19	43.97	Not defined	2.3E+05
Cadmium Cd	mg/kg	APHA3120B	0.02	0.432	0.422	0.468	0.437	0.438	13	9.8E+02 (DIET)
Chromium (Total) Cr	mg/kg	APHA3120B	0.01	27.30	26.03	24.78	22.01	24.26	180 (Cr-III)	
Copper Cu	mg/kg	APHA3120B	0.01	3.704	3.744	4.207	3.814	5.018	190	4.7E+04
Iron (Total) Fe	mg/kg	APHA3120B	0.09	5698	5451	5671	5167	5561	Not defined	8.2E+05
Lead Pb	mg/kg	APHA3120B	0.01	2.049	1.984	2.732	2.560	2.035	530	8.0 E+02
Manganese Mn	mg/kg	APHA3120B	0.02	199.1	179.9	218.4	208.7	221.0	Not defined	2.6E+04 (non diet)
Molybdneum Mo	mg/kg	APHA3120B	0.01	0.366	0.374	0.392	0.361	0.358	190	5.8E+03
Nickel Ni	mg/kg	APHA3120B	0.02	34.77	36.98	24.31	22.97	26.11	100	
Selenium Se	mg/kg	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100[1]	5.8E+03
Vanadium V	mg/kg	APHA3120B	0.01	15.70	15.13	16.74	15.46	16.76	250[1]	5.8E+03
Zinc Zn	mg/kg	APHA3120B	0.02	14.47	13.42	14.27	12.99	14.90	720	3.5E+05
Mercury Hg	mg/kg	APHA3120B	0.003	<0.003	0.096	0.034	0.042	<0.003	36	4.6E+01
pH*		BS1377 P.3 CL 9		8.6	8.9	8.8	8.5	8.8		

Note: * DAC Accredited

Note 1: Indicative Level for severe contamination

Test Report on Metals in Soil									Permissible Reference Values	
Client	M/S. TECNICAS REUNIDAS			Request No.	SD18000031					
Project	Proposed SEWA Hamriyah Power Plant			Date Received	09/06/2018					
Sample Description	Soil			Date Tested	13-18/06/2018					
Elements	Unit	Test Method	MDL mg/kg	Results						
				TP-11E Depth 1.50m	TP-12E Depth 1.50m	TP-14E Depth 1.50m	TP-15E Depth 1.50m	TP-15 Stock Pile Depth 0.50m	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil (mg/kg)
Arsenic As	mg/kg	APHA3120B	0.12	1.040	0.892	1.032	0.678	1.015	76	3.0E+00 (inorganic)
Barium Ba	mg/kg	APHA3120B	0.12	37.55	36.17	37.01	36.75	35.22	Not defined	2.2E+05
Beryllium Be	mg/kg	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	2.3E+03
Boron B	mg/kg	APHA3120B	0.09	16.43	28.67	14.60	15.13	15.71	Not defined	2.3E+05
Cadmium Cd	mg/kg	APHA3120B	0.02	0.389	0.407	0.408	0.390	0.399	13	9.8E+02 (DIET)
Chromium (Total) Cr	mg/kg	APHA3120B	0.01	22.77	23.14	22.80	22.35	23.26	180 (Cr-III)	
Copper Cu	mg/kg	APHA3120B	0.01	3.741	3.836	3.771	3.730	3.793	190	4.7E+04
Iron (Total) Fe	mg/kg	APHA3120B	0.09	5152	5507	5308	5232	5142	Not defined	8.2E+05
Lead Pb	mg/kg	APHA3120B	0.01	1.887	1.894	1.680	1.838	1.609	530	8.0 E+02
Manganese Mn	mg/kg	APHA3120B	0.02	194.1	210.3	200.7	202.1	197.2	Not defined	2.6E+04 (non diet)
Molybdneum Mo	mg/kg	APHA3120B	0.01	0.379	0.359	0.313	0.327	0.281	190	5.8E+03
Nickel Ni	mg/kg	APHA3120B	0.02	26.40	26.05	16.56	24.97	25.91	100	
Selenium Se	mg/kg	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100[1]	5.8E+03
Vanadium V	mg/kg	APHA3120B	0.01	15.00	15.81	15.36	14.62	14.47	250[1]	5.8E+03
Zinc Zn	mg/kg	APHA3120B	0.02	12.14	13.28	11.92	12.39	11.77	720	3.5E+05
Mercury Hg	mg/kg	APHA3120B	0.003	<0.003	0.056	<0.003	<0.003	<0.003	36	4.6E+01
pH*		BS1377 P.3 CL 9		8.7	8.6	8.6	8.5	9.0		

Note: * DAC Accredited

Note 1: Indicative Level for severe contamination

Test Report on Metals in Soil									Permissible Reference Value	
Client	M/S. TECNICAS REUNIDAS			Request No.	SD18000031					
Project	Proposed SEWA Hamriyah Power Plant			Date Received	09/06/2018					
Sample Description	Soil			Date Tested	13-18/06/2018					
Elements	Unit	Test Method	MDL mg/kg	Results						
				TP-16E Depth 1.50m	TP-16 Stock Pile Depth 0.50m	TP-17 Stock Pile Depth 0.50m	TP-18 Stock Pile Depth 0.50m	TP-19 Stock Pile Depth 0.50m	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil (mg/kg)
Arsenic As	mg/kg	APHA3120B	0.12	0.896	0.927	1.131	1.012	0.662	76	3.0E+00 (inorganic)
Barium Ba	mg/kg	APHA3120B	0.12	32.09	40.56	33.71	28.77	33.80	Not defined	2.2E+05
Beryllium Be	mg/kg	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	2.3E+03
Boron B	mg/kg	APHA3120B	0.09	14.50	15.72	12.25	15.04	26.11	Not defined	2.3E+05
Cadmium Cd	mg/kg	APHA3120B	0.02	0.385	0.397	0.364	0.348	0.395	13	9.8E+02 (DIET)
Chromium (Total) Cr	mg/kg	APHA3120B	0.01	21.54	23.51	20.72	20.28	24.27	180 (Cr-III)	
Copper Cu	mg/kg	APHA3120B	0.01	3.819	3.505	3.391	3.339	3.647	190	4.7E+04
Iron (Total) Fe	mg/kg	APHA3120B	0.09	5064	5374	4667	4522	5296	Not defined	8.2E+05
Lead Pb	mg/kg	APHA3120B	0.01	1.499	1.661	1.894	1.542	2.031	530	8.0 E+02
Manganese Mn	mg/kg	APHA3120B	0.02	206.0	199.2	179.1	180.8	196.0	Not defined	2.6E+04 (non diet)
Molybdneum Mo	mg/kg	APHA3120B	0.01	0.278	0.326	0.304	0.328	0.376	190	5.8E+03
Nickel Ni	mg/kg	APHA3120B	0.02	21.23	26.75	16.92	19.99	26.69	100	
Selenium Se	mg/kg	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100[1]	5.8E+03
Vanadium V	mg/kg	APHA3120B	0.01	14.07	15.86	12.75	12.98	15.55	250[1]	5.8E+03
Zinc Zn	mg/kg	APHA3120B	0.02	12.17	12.02	10.98	10.84	13.78	720	3.5E+05
Mercury Hg	mg/kg	APHA3120B	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	36	4.6E+01
pH*		BS1377 P.3 CL 9		8.5	9.1	8.6	8.7	8.4		

Note: * DAC Accredited

Note 1: Indicative Level for severe contamination

Test Report on Metals in Soil								Permissible Reference Values
Client	M/S. TECNICAS REUNIDAS				Request No.	SD18000031		
Project	Proposed SEWA Hamriyah Power Plant				Date Received	09/06/2018		
Sample Description	Soil				Date Tested	13-18/06/2018		
Elements	Unit	Test Method	MDL mg/kg	Results				
				TP-20E Depth 1.50m	TP-21E Depth 1.50m	TP-22E Depth 1.50m	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil (mg/kg)
Arsenic As	mg/kg	APHA3120B	0.12	0.795	0.717	0.741	76	3.0E+00 (inorganic)
Barium Ba	mg/kg	APHA3120B	0.12	34.80	40.55	36.92	Not defined	2.2E+05
Beryllium Be	mg/kg	APHA3120B	0.01	<0.01	<0.01	<0.01	30	2.3E+03
Boron B	mg/kg	APHA3120B	0.09	13.84	19.57	17.00	Not defined	2.3E+05
Cadmium Cd	mg/kg	APHA3120B	0.02	0.399	0.409	0.412	13	9.8E+02 (DIET)
Chromium (Total) Cr	mg/kg	APHA3120B	0.01	23.04	26.07	24.43	180 (Cr-III)	
Copper Cu	mg/kg	APHA3120B	0.01	3.582	3.365	3.481	190	4.7E+04
Iron (Total) Fe	mg/kg	APHA3120B	0.09	5273	5483	5358	Not defined	8.2E+05
Lead Pb	mg/kg	APHA3120B	0.01	2.219	2.377	2.064	530	8.0 E+02
Manganese Mn	mg/kg	APHA3120B	0.02	207.1	178.0	191.4	Not defined	2.6E+04 (non diet)
Molybdneum Mo	mg/kg	APHA3120B	0.01	0.322	0.305	0.323	190	5.8E+03
Nickel Ni	mg/kg	APHA3120B	0.02	24.07	23.84	22.79	100	
Selenium Se	mg/kg	APHA3120B	0.10	<0.10	<0.10	<0.10	100[1]	5.8E+03
Vanadium V	mg/kg	APHA3120B	0.01	14.19	15.40	15.38	250[1]	5.8E+03
Zinc Zn	mg/kg	APHA3120B	0.02	13.27	11.93	12.13	720	3.5E+05
Mercury Hg	mg/kg	APHA3120B	0.003	<0.003	<0.003	<0.003	36	4.6E+01
pH*		BS1377 P.3 CL 9		8.4	8.8	9.3		

Note: * DAC Accredited

Note 1: Indicative Level for severe contamination

METALS IN SOIL ADDITIONAL WORKS

Test Report on Metals in Soil									Permissible Reference Values	
Client	M/S. TECNICAS REUNIDAS				Request No.	SD18000031				
Project	Proposed SEWA Hamriyah Power Plant				Date Received	07/07/2018				
Sample Description	Soil				Date Tested	09-14/07/2018				
Elements	Unit	Test Method	MDL mg/kg	Results						
				BH-01E Depth 1.50m	BH-02E Depth 1.50m	BH-03E Depth 1.50m	BH-04E Depth 1.50m	BH-05E Depth 1.50m	Dutch Intervention values (2013) mg/kg	US EPA (2017) Industrial Soil (mg/kg)
Arsenic As	mg/kg	APHA3120B	0.12	0.931	0.923	1.024	1.036	1.171	76	3.0E+00 (inorganic)
Barium Ba	mg/kg	APHA3120B	0.12	25.79	30.43	29.51	31.07	26.96	Not defined	2.2E+05
Beryllium Be	mg/kg	APHA3120B	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	30	2.3E+03
Boron B	mg/kg	APHA3120B	0.09	13.23	13.13	11.25	11.48	11.11	Not defined	2.3E+05
Cadmium Cd	mg/kg	APHA3120B	0.02	0.379	0.373	0.366	0.344	0.326	13	9.8E+02 (DIET)
Chromium (Total) Cr	mg/kg	APHA3120B	0.01	21.64	23.04	22.51	21.76	21.16	180 (Cr-III)	
Copper Cu	mg/kg	APHA3120B	0.01	3.989	3.973	3.869	4.007	3.467	190	4.7E+04
Iron (Total) Fe	mg/kg	APHA3120B	0.09	5146	5148	5056	5020	4671	Not defined	8.2E+05
Lead Pb	mg/kg	APHA3120B	0.01	1.474	1.590	1.611	1.457	1.510	530	8.0 E+02
Manganese Mn	mg/kg	APHA3120B	0.02	188.5	175.8	152.6	174.7	140.0	Not defined	2.6E+04 (non diet)
Molybdneum Mo	mg/kg	APHA3120B	0.01	0.214	0.182	0.181	0.218	0.177	190	5.8E+03
Nickel Ni	mg/kg	APHA3120B	0.02	14.58	20.42	26.02	14.34	21.10	100	
Selenium Se	mg/kg	APHA3120B	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100[1]	5.8E+03
Vanadium V	mg/kg	APHA3120B	0.01	13.41	13.34	12.50	12.76	11.02	250[1]	5.8E+03
Zinc Zn	mg/kg	APHA3120B	0.02	13.12	14.76	12.17	11.80	11.64	720	3.5E+05
Mercury Hg	mg/kg	APHA3120B	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	36	4.6E+01
pH*		BS1377 P.3 CL 9		8.8	8.9	9.3	9.7	9.4		

Note: * DAC Accredited

Note 1: Indicative Level for severe contamination

APPENDIX D3

CHEMICAL TEST RESULTS OF ASBESTOS

CHEMICAL ANALYSIS OF SOIL

Client	M/S. TECNICAS REUNIDAS	**Report No.**	SD18000031
Contractor	N.P.	**Date Reported**	18/07/2018
Consultant	N.P.	**Sample No.**	See below
Project No.	N.P.	**Request No.**	SD18000031
Project Name	Proposed SEWA Hamriyah Power Plant	**Client Reference**	N.P.
Sample Desc.	Soil	**Sampled By**	ACES
Date Received	03/07/2018	**Sample Brt in by.**	ACES
Date Tested	03-16/07/2018	**Tested by**	SC
Remarks	The material does not contain any of the 6 regulated asbestos minerals.		

TP No.	Test	Method	Unit	Result
TP-03E	Asbestos Content	USEPA 600/R-93/116	-	Absent
TP-04E	Asbestos Content	USEPA 600/R-93/116	-	Absent
TP-05E	Asbestos Content	USEPA 600/R-93/116	-	Absent
TP-06E	Asbestos Content	USEPA 600/R-93/116	-	Absent
TP-07E	Asbestos Content	USEPA 600/R-93/116	-	Absent
TP-15E	Asbestos Content	USEPA 600/R-93/116	-	Absent