

SHANKS WASTE MANAGEMENT LTD, PONTYPOOL HTI FACILITY

Appendix 12a: Comparison of off-site measured concentrations with soil screening guidance values (SSGV) - Metals

Sample Identity	Shanks' monitoring data (1)						LoD/Units	Soil Screening Value	Source
	Sampling point 18	Sampling point 20A	Sampling point 20B	Sampling point 21	Sampling point 22	Sampling point 33			
METALS and TRADITIONALS									
Cadmium*	2.1	2.3	3.8	1.6	1.6	2.4	mg/kg	4	ORNL (plants)
Copper*	21.5	73.0	159.8	39.7	39.4	58.4	mg/kg	50	ORNL (earthworms)
Lead*	54.7	134.3	439.5	69.8	68.5	126.3	mg/kg	50	ORNL (plants)
Zinc*	111.2	217.5	496.0	161.8	162.2	247.0	mg/kg	50	ORNL (plants)

Notes: (1) Shanks' monitoring data (1998-2000)
na SSGV not available
measured concentration higher than SSGV general

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Appendix 12b: Comparison of off-site measured concentrations with soil screening guidance values (SSGV)

Sample Identity	Shanks' monitoring data (1)						LoD/Units	SSGV	Source
	Sampling point 18	Sampling point 20A	Sampling point 20B	Sampling point 21	Sampling point 22	Sampling point 33			
PCBs									
Total PCBs	50.4	206.7	238.8	253.5	498.3	103.2	<1 ug/kg	40000	ORNL (value for PCBs based on plants)

Notes:

- (1) Shanks' monitoring data (average 2000-2005)
- na SSGV not available
- measured concentration higher then SSGV general

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Appendix 12c: Comparison of off-site measured concentrations and background levels in UK with soil screening guidance values (SSGV) - dioxins and furans

	Shanks' monitoring data (1) (µg. TEQ 2378 TCDD/kg)						Background levels (2) (µg. TEQ 2378 TCDD/kg)				Screening Value Source	
	Sampling point 18	Sampling point 20A	Sampling point 20B	Sampling point 21	Sampling point 22	Sampling point 33	Rural (1)	Mixed (1)	Urban (1)	Industrial (1)		
TEQ (Nato)												
Average (TEQ1+TEQ2)/2	0.006	0.086	0.067	0.016	0.031	0.068	0.005	0.017	0.028	0.050	0.004	CCME 2004 (value for PCDD/Fs TEQ, based on 2378 TCDD)*

Notes

- (2) Shanks' monitoring data (average 2000-2005)
- (2) AEAT (1999)
- Concentration higher than SSGV general