

Table 3.1: Properties of deposited untreated dredged sediment from different lagoons (columns 4-6) and properties of deposited dredged sediment immediately after treatment and dewatering (columns 7-8).

Material:		DEPOSITED DREDGED SEDIMENT - REFUL						
Source:		Dredged from seabed (waterways) inside the port of Koper. Properties are mainly influenced by geological hinterland from flysch.						
Landfill:		Shallow lagoons (onshore)						
Condition:		Surface: dry crust, deeper: sediment with high water content (mud)						
Column:	1	2	3	4	5	6	7	8
Parameter	Expressed as	Test procedure	Proj. task. (FGG)	Lagoon 7A (FGG)	Lagoon 799/29 (FGG)	Internal control - Contractor (ZAG)	External control - Client (FGG)	
Properties of deposited dredged sediment (under dry crust)						Properties of treated and dewatered deposited dredged sediment**		
Natural water content	w ₀ (%)	SIST-TS CEN ISO/TS 17892-1:2004	>75	53.1-73.7	46.5 (0.3-0.6 m) 61.2 (0.6-0.7 m)	74.5	77.5-91.1	
USCS classification		ASTM D2487	CH	CH	CH	CH	CH	
Density	ρ (t/m³)	SIST-TS CEN ISO/TS 17892-2:2004	1.52-1.58	1.58-1.71*	1.63-1.74*	—	1.48-1.54*	
Dry density	ρ _d (t/m³)	SIST-TS CEN ISO/TS 17892-2:2004	0.80-0.90	0.91-1.12*	1.01-1.19*	—	0.781-0.880*	
Particle density	ρ _s (t/m³)	SIST-TS CEN ISO/TS 17892-3:2004	2.70-2.77	2.69-2.70		2.70-2.72	—	
Particle size distribution	< 0.063 mm	SIST-TS CEN ISO/TS 17892-4:2004	>90%	92%-97%	>98%	96.5%	—	
	< 0.002 mm	SIST-TS CEN ISO/TS 17892-4:2004	>35%	41%-42%	37%	36.8%	—	
Liquid limit	w _L (%)	SIST-TS CEN ISO/TS 17892-12:2004	63-76	63-65	57-62	63.1	73	
Plasticity index	I _p (%)	SIST-TS CEN ISO/TS 17892-12:2004	40-53	44-46	42-47	35.5	51	
Shrinkage limit	w _s (%)	ASTM D4943-08	19-20	—	—	22-26	—	
Water adsorption, Enslin- Neff	w _A (%)	DIN 18132:2012	76-84	73-79	78	—	76-80	
Methylene blue value	MB _f (g/kg)	SIST EN 933-9:2009+A1:2013	22	23	—	—	—	
Loss on ignition, 800 °C	%	JUS.U.B1.024	15-17	—	—	—	—	
Undrained shear strength	c _u (kPa)	ASTM D4648-00	<1 pri w>80%	1.09-3.34	6.75 (0.3-0.6 m) 2.37 (0.6-0.7 m)	—	1.7-3.1	
Standard Proctor test, SPP	w _{opt} (%)	DIN 18127	23-26	26.0	—	24.0	26.8***	
	ρ _{dmax} (t/m³)	DIN 18127	1.50	1.55	—	1.51	1.51***	
Properties of pore water								
pH		User manual	7.5-8.5	8.0	—	—	—	
Osmotic suction	π (kPa)	User manual	2200-2500	2260-2390	—	—	—	

* remoulded specimens

** isTech SEISS+ technology

***after 5 days of rest (covered temporary pile)