

Attachment 14 - EvaporationPan sludge analysis

Mc Williams Hanwood

Sludge Analysis

Sludge sample is a composite from five bays
Clay sample is from one location, from clay layer
about 100mm below sludge

Parameter	Mc Williams Evap Lagoons		NEPM HILs		
	Sep-08	Sep-08	HIL A	HIL F	EIL Urban
	S1 Sludge	C1 Clay			
<u>Salts</u>					
Calcium	3000	1700			
Magnesium	3050	2630			
Sodium	1460	980			
Potassium	16000	12700			
Suphate	3800	2400			2000
Chloride	430	450			
SAR					
Total Solids	79.5%	78.5%			
<u>Heavy Metals</u>					
Arsenic	8.5	7.5	100	500	20
Boron	57	53			
Cadmium	<0.5	<0.5	20		100
Cobalt	12	12	100	500	
Chromium	71	73			
Copper	190	36	1000	5000	
Manganese	250	370	1500	7500	
Nickel	29	28	600	3000	
Lead	14	11	300	1500	
Zinc	98	43	7000	35000	
Mercury	<0.2	<0.2	10	50	
Chromium (3)	71	73	12%	60%	
Chromium (6)	<0.5	<0.5	100	500	
<u>Nutrients</u>					
Total Nitrogen	1400	330			
Total Phosphorous	4610	440			2000
<u>Phenols</u>	<2	<2	8500	34000	
<u>PAHs</u>			20	100	
Benzo a pyrene	<0.5	<0.5	1	5	
<u>PCBs</u>	<0.2	<0.2	10	50	
<u>OC Pesticides</u>	<0.02	<0.02			
Aldrin, Dieldrin	<0.02	<0.02	10	50	
Chlordane	<0.02	<0.02	50	250	
DDT,DDD,DDE	<0.02	<0.02	200	1000	
Heptachlor	<0.02	<0.02	10	50	
<u>Total Petroleum Hydrocarbons</u>					
C6-C9	<25	<25			
C10-C14	<50	<50			
C15-C28	<100	<100			
C29-C36	<100	<100			

Note : All in mg/kg DSB unless otherwise noted