

Media Disposal Guidelines

Sorbster® Deployed Media

Sorbster® adsorbent medias are utilized to remove unwanted and often hazardous contaminants from industrial waters. Typically these contaminants are heavy metals present at trace levels (parts per billion). Multiple trace metals will be removed simultaneously by Sorbster® media as water flows through the media. Sorbster® media functions by covalently bonding the metals throughout its high porosity and surface area. Once bonded, the metals are permanently attached and do not leach back off (see TCLP and California WET test results for Sorbster® media, which show no release of adsorbed toxic metals and compounds.)

Media Disposal After Test:

Perform TCLP test if concerned about metals release to confirm non-hazardous disposal

- Media components are stable so even if the media is pulverized by removal procedure, i.e. a vacuum truck, the fragments should still pass the TCLP.

Wet used Sorbster® media poses no heating exotherm, no odor release, or contaminant release risks.

Sorbster® Medias (MM, MM-1, MM-12, 5e-1 Si-1, F-1, Cu-1) Can Be Expected to Pass TCLP Following Use Applications								
	Arsenic mg/L	Barium mg/L	Cadmium mg/L	Chromium mg/L	Lead mg/L	Mercury µg/L	Selenium mg/L	Silver mg/L
RCRA TCLP Limit Value	5.0	100.0	1.0	5.0	5.0	200.0	1.0	5.0
20 x TCLP Limit (Rule of 20)	100	2000	20	100	100	4000	20	100
Midwestern Power Plant FGD Water	<0.05	0.132	<0.05	0.019	<0.05	0.27	0.057	<0.05
Eastern Coal Mine Pond, 5e-1 Media	<0.05	0.044	<0.05	<0.05	<0.05	0.26	<0.05	<0.05
Eastern Coal Mine Pond, Si-1 Media	<0.05	0.570	0.010	0.011	<0.05	0.29	0.022	<0.05
Western Truck Stop Wastewater	0.018	0.378	<0.05	<0.05	<0.05	<1.5	<0.05	<0.05
Midwestern Iron Mine Wastewater	0.021	0.025	<0.05	<0.05	<0.05	0.24	<0.05	<0.05
Midwestern Chemical Plant	<0.05	0.034	<0.05	0.033	<0.05	<3.0	<0.05	<0.05

Summary: Sorbster® Medias can be expected to pass the TCLP following use applications.

WET Results for Sorbster® Medias			
<small>metals tested by EPA 8460/8720114 and mercury by EPA 1631/10521 method</small>			
Metal	STC Limit, mg/L	Sorbster® 5e-1/MM-1, mg/L	Sorbster® Si-1, mg/L
Antimony	15	<0.05	<0.05
Arsenic	5	<0.05	<0.05
Barium	300	0.052	0.689
Beryllium	0.75	0.006	0.025
Cadmium	1	<0.05	0.042
Chromium	5	0.075	0.067
Cobalt	80	0.032	1.76
Copper	25	0.090	0.702
Lead	5	<0.05	<0.05
Mercury	0.2	<0.075	<0.075
Molybdenum	350	0.022	0.038
Nickel	20	0.066	2.38
Selenium	1	<0.05	0.066
Silver	5	0.022	0.012
Thallium	7	<0.05	0.109
Vanadium	24	<0.05	<0.05
Zinc	250	0.54	12.3

Summary

Sorbster® Medias can be expected to pass the California WET extraction test protocol following use applications.