Molecular Bonding System (MBS)

MBS is a proprietary, patented reagent that cost-effectively reacts with and renders most metals into an insoluble and non-leachable form so that wastes will pass EPA TCLP requirements. Proven and highly effective on Chromium (+6), Cadmium, Mercury and Lead as well as on Copper, Nickel, Zinc and many others. Since 1996, MBS has been successfully applied to Metal Plating Waste and other solid & liquid waste forms to pass EPA Toxic Characteristic Leachate Procedure (TCLP) test requirements for landfill disposal.

MBS is a patented blend of Sulfides, Phosphates & Carbonates that, when mixed with waste contained soluble metals and RCRA Heavy Metals, aggressively binds those metals and coverts them into non-leachable, insoluble forms so that waste passes the EPA TCLP test. It offers a ***permanent solution*** to Heavy Metal pollution problems.

Benefits of MBS are:

- Permanently stabilizes Heavy Metal contaminants so they are non-leachable
- Significant cost savings on transportation & disposal of soil since, after MBS treatment, it is no longer considered hazardous waste.
- Passes the Multiple Extraction Procedure (MEP) which measures 1,000 years of advanced weathering.
- Treats **ALL** RCRA Heavy Metals and most other soluble metals
- MBS treats multiple metals concurrently
- Can be applied as a powder or a slurry using ex-situ on in-situ techniques.
- Treated soil material can be beneficially reused on site as cover, fill, contour or road bed base construction material.

Examples of successful projects:

Waste Matrix	Contaminant	Pre-TCLP (mg/l)	Post TCLP (mg/l) After MBS Treatment
Furnace Slag	Lead	263.0	< 0.05
Mine Sludge	Arsenic	24.4	0.93
Bag House Dust	Lead Cadmium	187.0 13.3	0.12 < 0.03
Clay-Based Soil	Hexavalent Cr	210.0	< 0.20
Sandy Soil	Mercury	11	< 0.005
Silty Soil	Lead Cadmium Zinc	34 2.4 512	< 0.03 < 0.01 0.09

Contact us for samples or additional information:

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