

Remediation process

Innovative technologies for the permanent stabilization of heavy metals present in soil, mud, sediment and refuse of active and abandoned ore mines.

Why are metals a problem?

Untreated metals in soil and water can be carcinogenic or cause heavy metals poisoning. Metals are highly soluble and mobile in surface and groundwater, and can severely impact aquatic life and present a significant human health hazard.



Solution we propose

We use chemical treatment technologies:

- Form a chemical chain that binds with metal ions forming insoluble metal complexes.
- Have a strength and durability that has been verified by TCLP leaching parameters, MEP 1000-year simulated leaching test and bioavailability testing.
- Can be applied in wet or dry form, applied in-situ or ex-situ, stabilizes metals within 24 to 48 hours of application and increase the volume of the waste by only 1% to 5%.

Contexts of treatment

Waste Streams

- Soil
- Sludge
- Lead Battery Recycling Sites
- Firing Ranges
- Brownfield Sites
- Mine and Smelter Sites
- CERCLA/RCRA Sites
- Other Metal Process Wastes

Metals

The system treats a wide range of metals including:

- Arsenic
- Aluminium
- Antimony
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Radionuclids
- Zinc

