



**ZVI**  
ZERO VALENT IRON

# Micro 50 ZVI Water Treatment

**Benefits Include**

- Proven remediation technology since 1970's
- Applicable in soil piles and insitu applications for groundwater treatment
- Economical solution compared to other available products
- Can combine with MTS for mixed contaminant plumes with metals and organics

**Proven Field Applications**

- Permeable reactive barriers (PRBs) and Funnel and Gate
- Direct Push Injection of micron scale particles into groundwater zone
- Trenching and aggregate scale particles PRB design
- Deep Soil Mixing
- Hydraulic Fracturing

**Applicable to Treatment of many contaminants including:**

- Chlorinated Solvents**  
PCE, TCE, DCE  
And degradation products  
Other chlorinated compounds

**Heavy Metals**

- Arsenic
- Selenium
- Hexavalent Chromium (CrVI)
- And other heavy metals

**Other COCs**

- Cyanide
- Nitrate
- Uranium
- Technetium
- Pesticides (DDT, DDD, and DDE)

C.E.R.E.S. Zero Valent Iron (ZVI) Micro 50 originates from a controlled atomization process for steel shot production from molten iron. The steel shot is then pulverized and sorted to achieve specific particle size distributions. Many soil and groundwater remediation projects have been successfully completed after single injection events with this product. Experience and results matter most!



<u>Material</u>	<u>% Composition</u>	<u>Physical Properties</u>
Iron	94-98%	Form: Granular
Silicon	<2 %	Density: approx. 3.1 g/cm <sup>3</sup>
Oxygen	<2 %	Odor: Odorless
Carbon	<1 %	Color: Gray
Manganese	<1 %	

**ZVI Particle Size Distribution**

Micro 50 Typical Size Distribution		
U.S. Mesh	Micron	% Retained
35	500	<1%
40	425	2-6%
45	354	50-60%
50	295	20-30%
60	250	5-10%
80	177	2-5%
100	149	2-4%
120	125	<2%

D10 = 235 micron  
D50 = 310 micron  
D90 = 345 micron