

## Hazardous Disposal vs. In-Situ Treatment

Historically, hazardous disposal of impacted site soil was commonplace, readily accepted, and simple to implement. It satisfied most all entities proximal to the impacted area or project, regulatory criteria too. Nevertheless, hazardous disposal costs remain the largest single cost associated with a remedial environmental treatment projects.

Consultants and contractors have considered treatment methodologies that remove and recover metal pieces or fragments from the soil or waste matrix. More mechanical processes are automated, efficient, and less labor-intensive. Separation and mixing equipment has become portable and reliable. However, these processes are time consuming, require expensive machinery and maintenance, and are costly to operate.

Physical separation of metal from soil is still a large cost to undertake when treating soil for disposal or onsite reuse. By eliminating or reducing physical separation prior to disposal or chemical stabilization, costs and onsite time can be reduced significantly. Amendment dosage rates have declined with improvements in reactivity and purity, and also allow for waste to be disposed with metal inclusions, taken as a monolith. This has significantly reduced off-site disposal costs.

Compared to hazardous disposal and separation/disposal, in-situ treatment with non-hazardous disposal typically saves somewhere between 30% and 50%, respectively. Depending on throughput and final off-site destination location, some consultants realize even further savings versus other disposal methodologies.

**Treatment Savings** – The savings of EnviroBlend treatment over hazardous waste disposal is 51% in this scenario.

Scenario	Excavation	Seperation	Metal Recovery	Mixing	Soil Amendment	Transport	Haz Disposal	Non-Haz Disposal	Cost per Ton of Soil
Soil Disposal	\$25	-	-	-	-	\$75	\$300	-	\$400
Separation & Disposal of Soil	\$25	\$125	(\$2)	-	-	\$75	-	50	\$273
EnviroBlend Treatment & Disposal of Soil	\$25	-	-	\$35	\$10	\$75	-	\$50	\$195

### Savings:

29% Savings with separation & Disposal of Soil

**51% SAVINGS** with EnviroBlend Treatment & Disposal of Soil