

EnviroBlend[®] has extensive knowledge of the fate and transport of heavy metal contamination, as well as remedial action experience. Our scientists have spent years developing cost-effective chemistries for rendering lead, cadmium, arsenic, hexavalent chromium, zinc and other heavy metal contaminants non-hazardous. This research has resulted in a number of patented products that have been widely applied for heavy metal remediation sites across the country.

East Penn Manufacturing – Pennsylvania

EnviroBlend managed construction activities, including excavation, stabilization, placement, and structural compaction of over 30,000 tons of lead-contaminated soil and battery casings at an acid battery manufacturing plant. Also managed remedial closure of two solid waste units. Placed stabilized soil and battery casings into the former ore pit and structurally compacted the material to accommodate future upgrades to the facility. This saved the expense and liability of disposing of these materials off-site.



Callahan Mine Superfund – Maine

Charter Contracting completed OU1 Callahan Mine Superfund site remedial action in Brooksville, Maine. The Callahan Mine Superfund Site is the location of a 150-acre former zinc/copper open-pit mine adjacent to a residential neighborhood. Charter executed remediation of OU1 to address mine contamination (lead, arsenic, and PCBs) present in the residential use area. Lead, arsenic, and PCBs were discovered to exceed acceptable levels for human contact and long-term exposure. The mine ore pad was the source of significant groundwater contamination.

Project Highlights

- On-site treatment with EnviroBlend of 3,000 tons of TCLP-failed lead mine waste prior to off-site disposal
- Excavate and relocate metal-impacted soils from residential properties: 5,000 cy of lead and arsenic-contaminated soil removed
- Excavate, stockpile, characterize and dispose of PCB contamination: 15,000 tons of PCB impacted soils
- Total of 65,000 tons of contaminated soil excavated and staged
- 22,000 cubic yards of ore material relocated and installed as a multi-layer soil and geotextile cap to cover <10ppm PCBs
- Site improvements to minimize discharge runoff

Lemac Foundry – Pennsylvania

Rendered over 350 tons of lead-affected soil non-hazardous using EnviroBlend. Transported and disposed of the treated soil at a Subtitle D landfill, which provided significant savings over disposing at a hazardous waste landfill.



Brownfield Site – New Jersey

The untreated soil contained lead totals ranging from 2,000 mg/kg to 40,000 mg/kg in characterization testing. Composite sample 3 resulted in 4,100 mg/kg arsenic, leaching at 10.2 mg/L in TCLP prior to treatment. A dosage rate of 1% wt./wt. EnviroBlend HX reduced arsenic leachability to 0.40 mg/L. SPLP testing was conducted for leaving some materials on-site, with a target of 1.0 mg/L or less and coupled with acceptable TCLP results. 5% wt./wt. dosage of EnviroBlend 50/50 HX met both criteria.

Former Firing Range – Pennsylvania

Treated over 500 tons of lead-affected soil from a former police pistol range with EnviroBlend and rendered soil non-hazardous. Placed treated soil on-site under the direction of the PaDEP under the new progressive Act II guidelines. Placed soil 20 feet below the parking lot of the new Home Depot constructed at the property, which saved transportation and disposal costs.



Former ABSCO Scrap Yard – Pennsylvania

The site had been utilized as a scrap yard for 40 years, and previous to that had been used as a rail yard. As a result of its long history of industrial use, site soils were contaminated with polychlorinated biphenyls (PCBs), petroleum, lead, and other metals. The site was designated as a Superfund site and the former owner was under a consent order agreement with the United States Environmental Protection Agency (USEPA) and the Pennsylvania Department of Environmental Protection (PADEP) to remediate the property. Once sold, the remediation became the responsibility of the new owner prior to plans for redevelopment. The untreated soil was found to be hazardous for lead, containing total lead concentrations in excess of 3,000 parts per million. EnviroBlend was added at 1%-3% by weight of the soil.

Post-treatment, the soil was transported off-site and disposed of at a non-hazardous subtitle D landfill. This work was conducted in close contact with the USEPA, and the agency approved the remediation and disposal option upon its completion. The client found the use of EnviroBlend to be a technically sound, environmentally acceptable, and cost-effective solution.

Former Mill – Massachusetts

The untreated soil sample contained total lead of 190,000 mg/kg leaching at 651 mg/L. A dosage rate (wt./wt.) of 4% EnviroMag Coarse reduced lead leachability to 0.71 mg/L (UTS TCLP standard of 0.75 mg/L). Sample 02 contained the highest total and leachable lead in the bench-scale study. It was utilized to design the upper limit of treatment chemistry and dosage rate. Dosage rate was then scaled back where appropriate in further bench and pilot testing, as soil impacts were delineated on-site to optimize dosage and costs. After treatment, soils were disposed of off-site. Township purchased the reclaimed property from the responsible party for Greenspace and nature path.

Leaching Results							
Sample Name	Lab ID	EnviroBlend® Dosage		Screening Leaching Test Results			
		Chemical	Percentage	Pretest pH	Solution	Final pH	Lead mg/L
02	10-09006	Untreated	-	-	TCLP 1	4.96	651
		EnviroMag® Coarse	3.0%	-	TCLP 1	6.75	8.77
			4.0%	-	TCLP 1	9.04	0.71

Former Ashepoo Fertilizer Works - Pennsylvania

Spills at this former fertilizer plant contaminated the soil and groundwater with acid, arsenic, and lead. Sampling found arsenic as high as 220 mg/L. Over 45,000 cubic yards of saturated affected soil were effectively treated *in-situ* with EnviroBlend to below-drinking water standards. The site was located in a tidally influenced coastal environment, and the project was hailed as a success by both the USEPA and the client.

Leave-in-Place Saves \$2 Million – Connecticut

Approximately 12,000 cubic yards of soil contaminated with lead and arsenic was leaching above hazardous levels in the TCLP test. The soil was treated with EnviroBlend at a 3% mix ratio by weight and left on site to be compacted and capped. Total savings by using EnviroBlend over alternative opt-ins was \$2 million. Once remediated, this Connecticut-restricted-use site has the potential to have a second life as a commercial development.

Wausau Battery Site – Wisconsin

Remediated 55,000 cubic yards of battery reclaiming residue *in-situ*. Used conventional construction equipment to mix materials, including some material below the water table. Monitoring has confirmed that treatment chemicals have not affected the groundwater. Reduced costs by approximately 55% by utilizing the approved field screening method and a mobile lab for determining lead and treatment additive concentrations. Avoided RCRA hazardous waste permitting requirements. Reduced overall remediation costs by \$10-15 million compared to traditional (dig and haul) alternatives.



Former Broadway Commons - Ohio

Independence Excavating (IX) recently completed the stabilization of on-site soils and remediation of approximately 12,500 tons of soil at the former Broadway Commons property in Cincinnati, Ohio. Soil stabilization parallels the mechanical processes utilized for soil solidification. The differences inherently are the end product; soil solidification is a process to ultimately provide a dryer material that meets certain geotechnical criteria; soil stabilization renders a material that would otherwise require management as hazardous for metal(s) as non-hazardous. IX saved the customer nearly a million dollars by rendering stabilizing site soils and thereby allowing the soil to be disposed of as non-hazardous.

Soil stabilization is accomplished by introducing chemicals, also known as stabilizing reagents, into the soil via an excavator or through a spreader. IX heavily relied on the fast application processes of their specialized equipment, including a computerized truck-mounted spreader and a Wirtgen 2500 recycler operated through their affiliated company Flex-Tech Resources. For this project IX elected to team with Premier Magnesia, LLC, the sole manufacturer of EnviroBlend heavy metal treatment products. EnviroBlend products are blended and manufactured to address waste-specific chemistry needs.

The main contaminants of concern at the Broadway Commons site were lead and arsenic along with elevated soil pH. EnviroBlend Independence was utilized effectively to stabilize the lead (made it non-hazardous) without adversely affecting the arsenic and at the same time controlled the soil pH. Controlling the pH is essential in metal treatment, specifically with lead, as lead leaches at both high and low pH values. IX saved the customer nearly \$1 million by stabilizing site soils and thereby allowing soil to be

disposed of as non-hazardous.

Former Steel Mill – Illinois

Treatability study confirmed the cost-effectiveness of EnviroBlend when compared to competing chemistries and mechanical disposal alternatives. A total of 20,000 tons of lead-contaminated soil was treated on-site.

Confidential Site – Indiana

The untreated soil contained lead totals of 3,740 mg/kg that were leaching at 5.63 mg/L, and a total zinc concentration of 8,570 mg/kg leaching at 49.8 mg/L. A dosage rate of 2% EnviroMag Coarse reduced the lead leachability to 0.90 mg/L (TCLP standard of 5.0 mg/L for lead, cleanup criteria of 5.0 mg/L for zinc). This was a 28% reduction in leachable lead and a 26% reduction in leachable zinc.

Leaching Results									
Sample Name	Lab ID	EnviroBlend® Dosage		Screening TCLP Test Results					
		Chemical	Percentage	Pretest pH	Solution	Final pH	Cadmium mg/L	Lead mg/L	Zinc mg/L
090310	10-09008	Untreated	-	2.20	TCLP-1	6.04	<0.24	5.63	49.8
		EnviroMag® Coarse	2.0%	-	TCLP-1	6.92	<0.024	0.20	1.95

Fairmont Battery Site – Riley County, Kansas

Conducted a time-critical removal action to clean up a site purchased as part of a residential relocation program. Provided construction management for *in-situ* treatment and stabilization of 3,700 cubic yards of soil impacted with lead from crushed batteries. Removed impacted soil to an off-site landfill and backfilled excavations with general fill. Completed the project within 1 month of authorization, and the client met the regulatory deadline.



GNB Technologies, Inc. – Illinois

Remediated 30,000 tons of soil, initially, *ex-situ* with a pugmill, with subsequent phases treated *in-situ*. Used the treated material to construct a surface water diversion berm, saving the time and expense of hauling the treated material to a Subtitle D landfill. After the Illinois DOT identified impacted soil at another area of the facility due to a right-of-way expansion project, it also treated this area *in-situ* with IEPA and IDOT approval. Saved the client approximately \$600,000.



Marina Cliffs Barrel Site – Illinois

Reduced TCLP-chromium from hazardous limits to near the detection limits. 11,600 tons of stockpiled waste pit soil pre-treated to address other metals of concern. Additionally, treated 1,000 tons of this segregated stockpile soil *ex-situ* for chromium.

Railroad Company - Minnesota

On-site stabilization with EnviroBlend recently saved a large railroad company over \$8 million in hazardous waste transportation and disposal costs. Historical sandblasting operations had generated a stockpile of over 90,000 tons of hazardous lead-impacted soil. The site had been included on both the Superfund National Priorities List (NPL) and the Minnesota Permanent List of Priorities.

EnviroBlend treatment additives were mixed with the stockpile of lead-impacted soil to stabilize the hazardous material on-site. The stabilized soil was then disposed of at an off-site Subtitle D non-hazardous landfill.



By using EnviroBlend, this railroad company realized a number of benefits in addition to substantial cost savings, including:

- EnviroBlend was mixed with the contaminated material using conventional construction equipment.
- Soil treated with EnviroBlend is stable over a wide pH range and will not leach in the environment. This translates into long-term liability protection as supported by the USEPA's National Risk Management Laboratory.
- EnviroBlend has been used on over 50 remediation sites across the country and is widely accepted by regulatory agencies.

Former Vacuum Cleaner Plant – Tennessee

Treatment of the privately-owned vacuum cleaner plant in Springfield, TN, was completed in order to expand the plant. EnviroBlend CS Super Sacks was used at a dosage rate of 5% to treat 5,000 tons of soil contaminated with lead. The soil was mixed by an excavator and once treated, was removed off-site.

With the use of EnviroBlend, the site owner saved roughly 67% compared to the average alternative waste disposal.

Former Incinerator Site – Midwest

Untreated, Soil 1 sample contained a total lead of 14,800 mg/kg leaching at 1,900 mg/L; slag fragments were present in the soil unit and sample. A 3% dosage of EnviroBlend CS reduced lead leachability to 0.21 mg/L (TCLP standard of 5.0 mg/L for lead). A 2% dosage of EnviroBlend FG reduced the leachable lead to 0.20 mg/L.

Leaching Results								
Sample Name	Lab ID	EnviroBlend® Dosage		Screening Leaching Test Results				
		Chemical	Percentage	Pretest pH	Solution	Final pH	Arsenic mg/L	Lead mg/L
Soil 1	13-02001	Untreated	-	2.20	TCLP 1	5.77	<0.030	1,900
		EnviroBlend® FG	1.5%	-	TCLP 1	7.29	<0.030	161
			2.0%	-	TCLP 1	9.62	<0.030	0.20
		EnviroBlend® CS	2.0%	-	TCLP 1	7.46	<0.030	100
			3.0%	-	TCLP 1	9.85	<0.030	0.21

Army Ammunitions Plant – EPA Region V

In-situ remediation at Army Ammunitions Plant treated approximately 5,000 tons of soil contaminated with lead, arsenic, and barium.

Twin Cities Army Ammunition Plant – Arden Hills, Minnesota

The former Twin Cities Army Ammunition Plant (TCAAP) is a 4-square mile site located in New Brighton/Arden Hills, Minnesota. The extent of the contamination covers a 25-square mile area. Land use in the area consists of residential, commercial, and industrial with on-site wetlands and woodlands surrounding Rice Creek watershed. From 1941 to 1981, the site was used to manufacture, store, and test small arms ammunition and related equipment. Waste materials such as VOCs, heavy metals, corrosive materials, and explosives were disposed of at 14 source areas, several of the source areas impacted by test-firing activities were targeted for remediation to remove metals and reduce the toxicity characteristics concentrations of the soil.

The remedial objective for this work included on-site stabilization of contaminated soil to below the Toxicity Characteristics Leaching Procedure (TCLP) criteria for lead and antimony and off-site disposal.

Phytoremediation and lead-extraction processes were implemented in earlier remediation phases of the TCAAP project. In 1998 EnviroBlend was selected in a competitive bid process to stabilize additional soil. Total lead concentrations in the soil were between 113,000 and 330,000 mg/kg. Stabilization with EnviroBlend achieved results below the TCLP criteria of 5.0 mg/L for lead.

Contaminated soil at the TCAAP site was characterized, excavated, and stockpiled. A coarse granular EnviroBlend was thoroughly mixed in the stockpiles using conventional construction equipment at a recommended dosage rate of 3%. The EnviroBlend stabilization process does not require the use of water or a curing period. The treated material was then analyzed using the TCLP test. All stabilized material passed the TCLP criteria and was disposed of in a Subtitle D landfill. Ethylenediamine tetra-acetic (EDTA) acid was found in soil at a portion of the site, potentially leftover from former lead-extraction processes implemented at the site. EDTA complexes lead and other heavy metals and increase their leachability. Through a quick-turnaround treatability study in a chemistry laboratory, it demonstrated treatment effectiveness using EnviroBlend on a representative sample of soil contaminated with lead and EDTA.

EnviroBlend was used for the stabilization of 47,000 tons of soil. The total project cost was \$777,000 for soil stabilization assistance, including treatability studies, technical assistance, pilot studies, and reagent supply.

Golf Course Reclamation - Midwest

The suburban golf club was constructed on a former firing range. Site soil was mainly impacted with handgun and rifle rounds. During course construction, urban fill and firing range soils were introduced to native site soils for ground leveling and physical improvement.

For reclamation, soils were not screened to remove bullets or urban fill inclusions. Untreated soil composite sample Bulk 2 contained 37,100 mg/kg of total lead leaching at 1,900 mg/L. A dosage rate of 4% EnviroMag Coarse reduced lead leachability to 0.47 mg/L (TCLP standard of 5.0 mg/L). The soil was disposed of off-site in a Subtitle D landfill.

Leaching Results							
Sample Name	Lab ID	EnviroBlend [®] Dosage		Screening Leaching Test Results			
		Chemical	Percentage	Pretest pH	Solution	Final pH	Lead mg/L
Bulk 2	10-07025	Untreated	-	1.82	TCLP 1	4.77	1,900
		EnviroMag [®] Coarse	3.0%	-	TCLP 1	7.82	1.77
			4.0%	-	TCLP 1	9.25	0.47

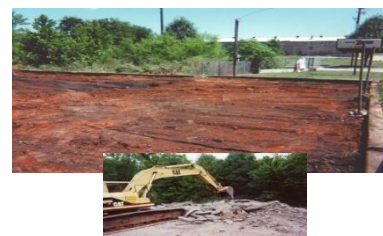
Former Manufacturing Facility – Southeastern U.S.

Provided construction management for the treatment and off-site disposal of over 3,000 tons of foreign materials and adjacent soil that were impacted by total concentrations of lead that averaged over 48,000 ppm. Determined that a reasonably low dosage would be effective, which resulted in treatment bulking of less than 8% additional weight. Treatment, confirmation sampling, site restoration, and disposal of the treated material at a Subtitle D permitted landfill was performed in less than 4 weeks. Performed work in accordance with the governing agency's Voluntary Cleanup program with limited agency involvement. Total treatment and non-hazardous disposal cost were less than half of the cost of hazardous waste disposal.



Columbia Development Corporation – South Carolina

Remediated over 500 tons of lead-impacted soil at a potential brownfield redevelopment site. Rendered the soil non-hazardous without additional treatment. Met the client's 2-week time frame, completing the project prior to implementation of UTS standards. Performed the project at one-half the cost of the alternative—disposing of in a hazardous waste landfill.



Philotechnics - Tennessee

We treated approximately 300 tons of low-level radionuclide and heavy metal impacted electric arc furnace dust in containers in this nuclear weapons manufacturing plant.

Former U.S. Army Firing Range/Basic Training – Alabama

Treatment at the former Fort McClellan Range 30 site in Anniston, AL was completed in July 2021. Treatment was provided for 3,000 tons of lead-contaminated soil, up to 8,200 ppm total Pb. The soil was treated *in-situ*. EnviroBlend was used at a dosage rate of 2% to 3% by weight. Prior to EnviroBlend treatment, TCLP levels were >5 mg/L to 28 mg/L. The soil was disposed of off-site after treatment. The estimated total savings for this project was roughly \$350,000 between transporting materials to landfills and disposal costs. With treatment of the soil completed, this space will now be home to an industrial conservation district and open space wildlife habitat.

C&R Battery Superfund Site – Virginia

EnviroBlend was used to remediate 38,000 cubic yards of soil with a pugmill. Treated material was disposed of off-site at a Subtitle D landfill. The project averaged throughput of 1,000 tons per day and reduced bulking of treated material by over 7,500 tons compared to treatment with Portland cement. In total, the client saved \$300,000 compared to alternative technologies.



Diamond State Salvage Superfund Site – Delaware

Treated over 11,000 tons of lead-hazardous soil *ex-situ* using EnviroBlend at a former salvage yard. Low dosage rate resulted in reduced cost for transportation and disposal of treated soil. Treated material was disposed of off-site in Subtitle D and TSCA landfill. The project was completed in less than 7 working days.



Kerr-McGee Cleveland Refinery

AES Certified did extensive work in Cleveland, OK, in 2012, remediating waste from a former refinery that occupied roughly 170 acres of land, plus adjacent impacted areas. Operations from the former Kerr-McGee Cleveland Refinery produced fuel products and operated between 1912 and 1972; crude oil tanks and pipelines were in use until 1995. Portions of the facility were also used to make hydrocarbon products by blending imported hydrocarbons.

Activities at the site included remediation of 86,000 tons of lead and hydrocarbon impacted soils, backfill operations, and site restoration. AES Certified was successful in treating 30,000 cubic yards of hazardous lead-impacted soil with EnviroBlend to render it non-hazardous for transport and disposal to a local non-hazardous landfill.

Ultimately providing a significant cost savings of \$2,820,000 for the client. The project was completed on time and within budget.

Speakman Company Foundry Sand Site – Delaware

Remediated over 5,000 tons of lead-impacted soil *in-situ* at an operating manufacturing facility. Performed work under the voluntary cleanup program (VCP) in Delaware, which required the preparation of a remedial action work plan and documentation report subject to public comment and review. Work was completed on a 0.5-acre site in a mixed residential and commercial area without affecting neighboring properties. The total project cost was over 60% less than the cost of hazardous waste disposal.



GNB Technologies, Inc. – Georgia

Stabilized 10,000 cubic yards of contaminated soil *ex-situ* at a former battery manufacturing facility. Property has been redeveloped, now an operating chemical plant.

Winston-Salem Police Firing Range – North Carolina

The project consisted of remediating 2,400 tons of lead-contaminated soil from the municipal firing range by stabilizing the soil with the use of EnviroBlend and transporting stabilized soils to a local landfill. The stabilized lead-contaminated soil was required to pass a series of tests, TCLP, MEP, and SPLP Metals prior to removal. Working in the different areas and concentrations of lead contamination, CST teamed with Premier Chemical to evaluate and pretest the soil to best determine the proper mixing of EnviroBlend. This enabled CST to provide a competitive bid and win the award of the job. Working as a team with the city and Premier Chemical, CST was able to complete work under budget and ahead of schedule. The finished product not only met but exceeded the city's expectations allowing the city to continue to use the site for future training rather than abandoning the site.

Confidential Site – North Carolina

Untreated soil contained lead totals of 3,740 mg/kg and antimony totals of 187 mg/kg. Lead was leaching at 1,660 mg/L and antimony at a concentration of 1.71 mg/L. TCLP site standards for antimony and lead were 0.5 mg/L and 5 mg/L, respectively. Dosage rates of 4% to 5% EnviroBlend 80/20 Coarse reduced antimony to acceptable leachable levels.

Confidential Client – Florida

The untreated soil contained lead totals of 31,300 mg/kg that were leaching at 368 mg/L. A dosage rate of 4% EnviroMag Coarse reduced the lead leachability to 0.90 mg/L (TCLP standard of 5.0 mg/L). This was a 409% reduction in the leachable lead. The client selected a 3% dosage rate for this site.

Leaching Results							
Sample Name	Lab ID	EnviroBlend [®] Dosage		Screening Leaching Test Results			
		Chemical	Percentage	Pretest pH	Solution	Final pH	Lead, mg/L
Sludge	09-01016	Untreated	-	2.16	TCLP 1	5.11	368
		EnviroMag [®] Coarse	2.0%	-	TCLP 1	6.07	89.4
			3.0%	-	TCLP 1	8.86	2.22
			4.0%	4.54	TCLP 1	9.78	0.90

Seymour Johnson AFB

In the summer of 2011, A&D Environmental Services, Inc. (A&D Environmental) was contracted by the engineering firm MMG to remediate this former small arms firing range in Goldsboro, NC. In addition to small arms bullets and debris, the site was screened for munitions and explosives of concern (MEC) including unexploded ordnance (UXO). MMG managed the site and supplied UXO technicians throughout the project duration. A&D Environmental has completed many similar sites and while the base initially assumed that all materials would be managed as RCRA Hazardous Waste for TCLP lead levels, the state regulators agreed that an on-site treatment step would be allowable.

A&D Environmental excavated and screened over 4,000 tons of lead-impacted soils. The soils were mixed *in-situ* in 100-ton batches utilizing a 3% admix of EnviroBlend 90/10 Coarse. Samples were collected for every 200 cubic yards generated. 100% of the soils were rendered RCRA non-hazardous on the first treatment pass.

The resulting effect to the project's bottom line was a savings of over \$600,000 to the customer by eliminating the RCRA hazardous characteristic. Following removal of the impacted soils, A&D demolished the range concrete retaining walls and graded the former soil mound to match surrounding grades.

Jacksonville Shipyard - Florida

Remediation action is required for lead contamination in soil. The project was conducted by Moran Environmental. EnviroBlend 20/80 coarse was used to stabilize lead to TCLP standards.

Battery Manufacturing Site – Alabama

Treated approximately 200,000 tons of soil *ex-situ* at significant savings over alternative remediation technologies. Site management allowed different areas to be treated at different dosage rates resulting in a very cost-effective approach.

Atlantic Beach - Florida

Remediation action was required for lead contamination in the soil. The project was conducted by Moran Environmental. EnviroBlend 20/80 coarse was used to stabilize lead to TCLP standards.

U.S. Army Small Arms Range – Alabama

Stabilized 12,500 tons of lead-contaminated soil from military firing range with EnviroMag Coarse.

Former Battery Manufacturer – Florida

Stabilized more than 40,000 tons of soil, sludge, and sediment with EnviroMag Coarse.

Guyton Battery Casings – North Carolina

Treated approximately 8,000 tons of soil *ex-situ*.

Confidential Client – Alabama

The untreated soil contained lead totals of 6,270 mg/kg that were leaching at 88.2 mg/L. A dosage rate of 3% EnviroMag Coarse reduced the lead leachability to 0.26 mg/L (TCLP standard of 5.0 mg/L). This was a 339% reduction in the leachable lead.

Leaching Results							
Sample Name	Lab ID	EnviroBlend® Dosage		Screening Leaching Test Results			
		Chemical	Percentage	Pretest pH	Solution	Final pH	Lead mg/L
XX0315	09-09003	Untreated	-	1.76	TCLP 1	4.92	88.2
		EnviroMag® Coarse	2.0%	-	TCLP 1	6.51	10.98
			3.0%	-	TCLP 1	9.10	0.26

Old Industrial Facility – Georgia

Lead-contaminated soil was treated at this old industrial site at a 6% dosage of EnviroBlend.

Alamonte Shooting Range – Florida

Remediation action was required to treat lead-impacted backstop soil. EnviroBlend 20/80 coarse was used to stabilize lead to TCLP standards.

Former Conoco Fertilizer Manufacturing Facility – South Carolina

Received approval for in-place treatment and on-site disposal of approximately 90,000 cubic yards of soil and groundwater from a former fertilizer manufacturing facility to depths of 30 feet.

Warner Robbins – Georgia

Treatability study, sampling, supplied chemical for lead treatment.

Former Manufacturing Facility – Alabama

Provided treatment for 30,000 tons of slag-affected soil. Treated over 60 x 500-ton batches in 5 weeks using EnviroBlend. Performed treatment at less than 90% of the budget estimate.

NPL Industrial Waste Disposal – South Carolina

Stabilized more than 57,000 cubic yards of contaminated soil.

Former Shooting Range – North Carolina

Stabilized 2,500 tons of lead-contaminated soil from firing range with EnviroBlend 90/10 Coarse. The soil had to meet SPLP and MEP testing requirements.

Crescent City – Florida

Remediation action was required for lead contamination in soil. The project was conducted by Aerostar. EnviroBlend 20/80 coarse was used to stabilize lead to TCLP standards.

Babcock Ranch/Shooting Range – Florida

Remediation action was required for lead contamination at this shooting range. The project was conducted by WRS. EnviroBlend 20/80 coarse was used to stabilize lead to TCLP standards.

Firing Range – Denver, Colorado

The untreated soil contained lead totals of 9,900 mg/kg that was leaching at 71.3 mg/L with bullets remaining in the soil. A dosage rate of 3% EnviroBlend 90/10 Coarse reduced lead leachability to 0.20 mg/L (TCLP standard of 5.0 mg/L for lead).

Leaching Results							
Sample Name	Lab ID	EnviroBlend® Dosage		Screening Leaching Test Results			
		Chemical	Percentage	Pretest pH	Solution	Final pH	Lead mg/L
XXXXXXXXX X-2TS	10-06033	Untreated	-	2.14	TCLP 1	5.67	71.3
		EnviroBlend® 90/10 Coarse	3.0%	-	TCLP 1	7.75	0.20

Former Mill - Montana

EnviroBlend was used to treat 3,000 tons of mill tailings *ex-situ* at a former mill. Waste was contaminated with lead, arsenic, and cadmium. The remediated soil was leave-in-place at the site.

Former Skeet and Trap Shooting Range – California

20,000 tons of lead-contaminated soil was remediated to below TCLP treatment standards using EnviroBlend CS. The soil was excavated into stockpiles and batch treated. The remediated soil was removed offsite to a non-hazardous landfill.

Former Oil Refinery – Wyoming

Approximately 6,000 tons of lead-contaminated soil and sludge were remediated at a former oil refinery and moved offsite. Prior to treatment, the TCLP levels were 6.5 mg/L to 736 mg/L. To remediate the waste, a custom EnviroBlend product was used at a dosage rate of 2% to 7% by weight. This site is now being used as open space available for commercial/industrial use.

Cleanup Site Remediates Over 50,000 Tons of Soil – Washington

Over 50,000 tons of soil contaminated with lead and arsenic was remediated with a custom EnviroBlend chemistry at a Washington cleanup site, clearing the way for future use as a commercial or industrial development.

NYSDEC Erie Canal Frankfort Section – New York

The New York State Department of Environmental Conservation (NYSDEC) used EnviroBlend to remediate soil contaminated with cadmium and remove it offsite. TCLP levels prior to treatment were leaching above the TCLP standards. The use of EnviroBlend helped NYSDEC save \$30,000 while working to restore the Erie Canal Frankfort Section in New York.

The Erie Canal – Town of Frankfort Section site is part of New York’s Inactive Hazardous Waste Disposal Site (NYHWDS) Program, also known as the State Superfund Program. Contaminants of concern in the sediment and wetland soils were polychlorinated biphenyls (PCBs), cadmium, chromium, copper, lead, and mercury. Key components of the cleanup included: dredging and off-site disposal of approximately 24,000 cubic yards of canal sediments; restoration of the excavated canal bed to promote the re-establishment of the ecological environment; imported soil fill and native plantings; and monitoring the restored areas for erosion, settlement, and growth of plantings.

Airport Firing Range - Ohio

Environmental Remediation Contractor remediated a former firing range which sat on a seven-acre area in the middle of the taxiways and runways of an active airport. The site's constituents of concern were hazardous and non-hazardous lead (Pb), arsenic (As), and PAH-contaminated soils.

- Worked closely with city officials, onsite consultants, and airport management to maintain compliance with all regulatory and FAA rules
- Performed *in-situ* treatment and soil fixation of over 11,000 tons of hazardous lead-contaminated soil using Enviromag dosages ranging from 1% to 3% weight to weight
- Excavated and loaded over 20,000 tons of treated and non-treated non-hazardous, contaminated soils to an approved off-site disposal facility

Services:

- Dig and Haul
- Soil Treatment and Stabilization
- Landfill/Earthmoving

Cedar Rapids Firing Range – Iowa

The site is an active firing range in Cedar Rapids, IA for police officer training. The backstop berm area was reconstructed to address environmental concerns with high-lead concentrations in the soil and to provide additional protection for neighboring properties.

The remedial objectives at this site were to stabilize the lead-impacted soil to meet the Toxicity Characteristic Leaching Procedure (TCLP) criteria for lead, recycle lead bullets, and restore the berm for future use.

Prior to screening lead from the berm soil at the gun range, the soil was stabilized using EnviroBlend®, a dry, coarse chemical delivered to the site in dump trucks. EnviroBlend was applied superficially to site areas requiring treatment, then mechanically blended into the soil using a tracked excavator. The soil was blended until a homogenous mixture was achieved. *In-situ* treatment of the soil prior to excavation allowed the material to be rendered non-hazardous prior to further management, avoiding generation of an unpermitted hazardous waste pile. Following treatment of the soil, two samples were collected for Toxicity Characteristic Leaching Procedure (TCLP) – lead analysis. The TCLP results demonstrated lead concentrations below 5 mg/L in the stabilized material.

After the soil was treated and confirmed to be non-hazardous, the contractor screened lead bullets from the soil using a MKII PowerScreen with a 3-inch upper deck and a ¼ -inch lower deck. Soil was fed into the hopper on the screen, and three material piles were generated:

- Material retained on the 3-inch screen – typically large soil clods, debris, and rocks
- Material retained on the ¼ -inch screen – expected to be lead material
- Material passing through both screens – fine soil particles

Lead recovered from the soil was to be transported to the Doe Run Resource Recovery Facility in Boss, MO for recycling. Analysis of the lead-containing material screened from the soil indicated it was approximately 50% lead by weight and not suitable for recycling. EnviroBlend stabilizes soil, and the treated material is stable over a wide range of conditions and is protective of leaching to groundwater. Because of this quality, the screened and stabilized material could be used as a backfill for reconstructing the core of the backstop berm.

The total project cost for EnviroBlend stabilization and screening was \$45,000 which provided significant savings over hazardous waste disposal.

Confidential Site - Pennsylvania

Approximately 8,000 tons of soil and sediments were treated and removed off-site using EnviroBlend® CS.

The soil was remediated by bringing contaminated soil from a creek and applying 1 ton of EnviroBlend to every 300 tons of waste. After mixed, the soil was sampled and taken to a non-hazardous landfill.

Copper Smelting Facility - Australia

EnviroBlend® conducted treatability tests to determine field dosages for the treatment of arsenic, cadmium, copper, lead, selenium, and zinc. We designed a mapping plan that resulted in a 10% savings in treatment costs by identifying regions of the waste that required lower treatment dosages than would be required for a composite sample. Most parcels of material required only single dosing of chemicals. The overall percentage of batches passing the TCLP after a single treatment exceeded 95%. Total treatment cost was less than half of the cost of hazardous waste disposal.

Ductile Iron Foundry

A ductile iron foundry in Texas has been using EnviroBlend® CS to treat baghouse dust for the past 11 years. The metals treated annually are Lead, Arsenic, Barium, Beryllium, Boron, Cadmium, Hexavalent Chromium, Mercury, Selenium, and Silver. The baghouse dust pH levels are also of concern for the foundry and are treated with EnviroBlend. The foundry uses the baghouse injection method for application at a dosage rate of 2-3lbs per hour of baghouse run time.

While the initial Toxicity Characteristic Leaching Procedure (TCLP) levels were unknown, the waste did test as hazardous per an EPA inspection. After treatment, the TCLP levels for each metal were all below detection limits. Since the facility has had great success with EnviroBlend treating the baghouse dust, they recently started treating the baghouse filters prior to removal with a specialized EnviroBlend chemistry. Each filter has tested as non-hazardous since the use of EnviroBlend.

The site is regulated by the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency.

Evening Star and Compromise Mine RV - Montana

The Evening Star Mine in Neihart, MT, consists of mine process buildings, mill tailings and waste rock areas, an existing repository, and a discharge at the mine entrance. The entrance discharge water originally flowed downhill to a culvert under a highway and into a creek. The culvert was filled with silt, causing water to flow over the highway at times. Removal activities at the Evening Star Mine site included systematically demolishing two dilapidated historical mine processing buildings, excavating contaminated soils from the

demolished building footprints and hillslope, and excavating a catchment basin and drainage channel for routing of the mine entrance discharge water to a gulch adjacent to the site.

Approximately 3,000 cu. yds. of excavated soils were hauled into the existing repository. The EnviroBlend® CS product was selected as the treatment reagent for the lead-contaminated soils by the EPA On-Scene-Coordinator (OSC) after successful treatment was demonstrated in a bench-scale treatability study.

EnviroBlend® CS was applied by spreading supersacks around the repository area and mixing them with the soils via an excavator and bulldozer. A total of 43 cu. yds. of EnviroBlend® CS was mixed with the estimated 3,000 cu. yds. of excavated contaminated soils. Sample results from the contaminated soils in the repository prior to treatment and post-treatment indicate that EnviroBlend® CS showed a decrease in the leaching of lead as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Once the contaminated soils and EnviroBlend® CS were thoroughly mixed and sampled, the repository was graded to ensure there would not be water ponding on the repository, then backfill and restoration activities commenced.

Leaching Results													
Lab ID	EnviroBlend® Dosage		Screening Leaching Test Results										
	Treatment	Dosage Rate %	Pretest pH	Pre-test Solution	Final PH	Arsenic mg/L	Barium mg/L	Cadmium mg/L	Chromium mg/L	Lead mg/L	Mercury mg/L	Selenium mg/L	Silver mg/L
<i>TCLP Limit</i>	-	-	-	-	-	5	100	1	5	5	0.2	1	5
19-08015	Untreated	-	1.55	TCLP1	4.85	<0.030	0.32	0.047	<0.005	111	<0.005	<0.030	<0.005
	EnviroBlend®	2%	-	TCLP1	6.69	<0.030	0.20	0.025	<0.005	3.79	<0.005	<0.030	<0.005
	CS	3%	-	TCLP1	9.45	<0.030	0.15	<0.024	<0.005	0.12	<0.005	<0.030	<0.005
	CS	4%	-	TCLP1	9.89	<0.030	0.20	<0.024	<0.005	<0.067	<0.005	<0.030	<0.005

Former Fertilizer Manufacturing Site – New Jersey

This client needed to remediate 37,000 tons of soil in a tidal area impacted with lead (up to 136,000 mg/kg) and arsenic (54,000 mg/kg). The soil was in a low-pH environment and was located at depths of 8 to 16 feet. The project was performed during winter. The soil was rendered non-hazardous by the application of EnviroBlend® and was reused on the site, saving the client approximately \$1 million.

Former Foundry

Treated approximately 2,000 cubic yards of soil in stockpiles *ex-situ* with backhoes. Treated material disposed of at a Subtitle D permitted landfill. The total treatment and non-hazardous disposal costs were less than half of the cost of hazardous waste disposal.

Former Industrial Site – New Jersey

To treat a crushed brick and soil matrix, a 3% dosage of EnviroBlend® HX was used, reducing leachable chromium levels to below TCLP standard for off-site disposal.

Landfill Foundry – Utah

A landfill based in Utah has been using EnviroBlend® in a fixed mixing tank to treat waste at their facility for the past 20 years. EnviroBlend's product, Enviromag XL, is used to treat 32,400 tons of lead-contaminated soil, baghouse dust, sediments, and sludge annually.

Prior to EnviroBlend treatment, the Toxicity Characteristic Leaching Procedure (TCLP) levels average around 5mg/L to 110 mg/L. EnviroBlend XL successfully reduces the lead to non-detect. The site is regulated by the Utah Department of Environmental Quality.

MRI Superfund Site – Florida

The MRI Corp Superfund site is an area where a recycling facility operated from 1961 to 1968 leaving contaminated soil and groundwater as result from facility operations. Over 60,000 tons of lead-contaminated soil was treated with a 2% dosage rate specialty EnviroBlend reagent. The project took bulk pneumatic deliveries, stored material on-site in silos and used a pugmill for mixing. The treated soils were rendered non-hazardous as confirmed by TCLP testing.

Nahant Marsh – Iowa

The Nahant Marsh site in Davenport, Iowa is a former shooting range with lead-contaminated soil and sediment. Heavy-metal contamination consisting of lead, arsenic, silver, and antimony was found in soil and sediment surrounding the five shooting platforms on site. An additional shooting area was identified and appeared to have been used early in the history of the site. An estimated 9 tons of lead shot was deposited on the site annually for 27 years for a total of 243 tons of lead shot.

The source area was identified as the area impacted by the past shooting activities. The U.S. Fish and Wildlife Service conducted sampling of the marsh area and found up to 283 lead pellets per grab sample in sediment samples collected between 109 and 177 yards from the shooting platforms. Local waterflow was diagnosed with lead poisoning from lead shot. Since arsenic, silver, and antimony concentrations did not exceed RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits, lead was the only constituent of concern. The remedial objectives for the site included the development and implementation of a stabilization approach to meet the Toxicity Characteristic Leaching Procedure (TCLP) criteria of 5.0 mg/L for lead in the TCLP test, followed by off-site disposal of stabilized materials.

Through bench-scale treatability study analysis, it was determined that a 2% dosage rate by weight of EnviroBlend® CS would effectively reduce TCLP-lead concentrations in the soil to below 5.0 mg/L. EnviroBlend was applied to stockpiled materials, then thoroughly mixed using conventional construction equipment. After receiving conformational results from a certified laboratory, the stabilized material was disposed of at an off-site landfill.

The cost per treated ton on this project was \$6.75 using EnviroBlend.

Phosphate Fertilizer Plant

ENTACT performed a removal action to address arsenic and lead-impacted soils and sediments at a former phosphate fertilizer plant site.

Scope of work included:

- Sizing, removal, disposal, and/or recycling of 7,000 tons of concrete, asphalt, and debris
- Excavation of 80,000 cubic yards of impacted soils from an approximately 14-acre area
- Solidification/stabilization of 13,600 tons
- Removal, dewatering, and solidification of 1,600 cubic yards of sediment in a freshwater marsh situated in a tidally influenced area adjacent to a river
- Loading 121,757 tons of non-hazardous soils and 1,000 tons of ACM for off-site transportation and disposal by the client
- Removal and disposal of 1,132 linear feet of asbestos piping
- Amendment and placement of backfill in saturated zone areas for groundwater treatment
- Site restoration including uplands and marsh restoration

Pre-Regulatory Landfill Closure – North Carolina

A former unpermitted landfill had lead-contaminated soil caused by battery cracking and disposal. Prior to treatment, TCLP levels were >5.0 mg/l lead. The client utilized pre-staged stockpiles and an excavator to apply EnviroBlend® CS at a 3% dosage rate. Total cost savings of \$1.75 million were realized by being able to dispose of the material in a non-hazardous Subtitle D landfill versus a hazardous Subtitle C landfill.

“EnviroBlend has always been a reliable product. We have successfully treated many tens of thousand tons of soil through the years.” – Confidential Client

Railroad Company – Minnesota

On-site stabilization with EnviroBlend® recently saved a large railroad company over \$8 million in hazardous waste transportation and disposal costs. Historical sandblasting operations had generated a stockpile of over 90,000 tons of hazardous lead-impacted soil. The site had been included on both the Superfund National Priorities List (NPL) and the Minnesota Permanent List of Priorities. EnviroBlend treatment additives were mixed with the stockpile of lead-impacted soil to stabilize the hazardous material on-site. The stabilized soil was then disposed of at an off-site Subtitle D non-hazardous landfill.

By using EnviroBlend, this railroad company realized a number of benefits in addition to substantial cost savings, including:

- EnviroBlend was mixed with the contaminated material using conventional construction equipment.
- Soil treated with EnviroBlend is stable over a wide pH range and will not leach in the environment. This translates into long-term liability protection as supported by the USEPA’s National Risk Management Laboratory.
- EnviroBlend has been used on over 50 remediation sites across the country and is widely accepted by regulatory agencies.

Secondary Aluminum Smelter – California

A secondary aluminum smelter in California, makes use of an EnviroBlend multifaceted product allowing for both the acid gas and toxic heavy metals to be rendered environmentally safe for nonhazardous class disposal. The proprietary blend of mineral based EnviroBlend compounds is used inline via an EPA compliant Totally Enclosed Treatment System (TETS) to address the hydrochloric

acid and lead dust from the process.

The result has been the reduction of costs on both the reagents used and the disposal of the waste generated. It has also reduced the amount of capital expenditure on the equipment needed to stay in compliance with their regulatory requirements. The baghouse used for dust and reagent capture is now under less attack by the harmful gases and the efficiency of filtration system has much improved.

Northeast Primary Aluminum Smelter

An aluminum smelter facility manufacturing aluminum ingots has been using EnviroBlend AG20 for over 20 years. EnviroBlend helps treat the facility's rotary smelting furnace waste through baghouse duct injection at roughly 900 tons annually. The metals treated are lead and hydrogen chloride gas. This facility is regulated by the state.

Western Aluminum Smelter

An aluminum smelter facility in the Western US has been using EnviroBlend for the past five years to annually treat 500 tons of lead-contaminated dust on their smelting furnace. The EnviroBlend is added in-line as part of their process by using a duct injection method at a low dosage rate which renders their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). This facility manufactures aluminum ingots.

Aluminum Smelting Plant – Western U.S.

An aluminum smelting plant in the western US recently started using EnviroBlend Emag 33 to treat roughly forty-five annual tons of lead-contaminated dust and hydrogen chloride gas. EnviroBlend is applied via a duct injection method for acid gas and metals control. This facility manufactures aluminum ingots.

Aluminum Smelter – Southern U.S.

An aluminum smelter in the southern US uses EnviroBlend 90/10 CS to treat cadmium and lead-contaminated aluminum dust. EnviroBlend treats the 1500 tons of dust annually via a duct injection method at a rate of 200 lb./hr. This facility produces Aluminum ingots and is regulated by the state.

Deep South Bronze and Aluminum Castings Factory

A bronze and aluminum casting factory uses EnviroBlend CS bags to treat a mix of different types of dust within the facility. The main metals treated are lead and cadmium. A duct injection method is used to treat the metals at a slow dosage rate to render dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). This plant is regulated by the state.

Deep South Ferrous Foundry

A ferrous foundry located in the deep south has been using EnviroBlend 93 HR to treat lead and cadmium-contaminated baghouse filter bags since 2009. EnviroBlend is added in-line as part of their process by using a duct injection method at a low dosage rate which renders their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). The foundry produces DI pipe joints and couplings.

Ferrous Foundry – Midwest

A ferrous foundry, located in the Midwest, has been using EnviroBlend CS Bulk since 2017 to treat approximately 2800 annual tons of gray iron dust contaminated with lead and cadmium. To treat the dust EnviroBlend is added in-line as part of their process by using a duct injection method at a low dosage rate to render their dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). The foundry produces agriculture and automotive parts.

Ferrous Foundry – Midwest II

A ferrous foundry located in the Midwest has been using EnviroBlend CS Bulk to treat lead and cadmium-contaminated ferrous dust since 2007. EnviroBlend treats over one hundred tons annually by a duct injection method at a 6% dosage rate which renders ferrous dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). The foundry produces heavy truck parts and axle housings.

Ferrous Foundry – Midwest III

A ferrous foundry, located in the Midwest has been using EnviroBlend to treat their ferrous dust since 2009. Initially, EnviroBlend 80/20 was used and then they switched to our EPhos milled bags. The foundry treats the lead and cadmium-contaminated ferrous dust through baghouse duct injection at roughly 10 tons annually. Water valve castings are produced at this facility.

Ferrous Foundry – Northeast

A ferrous foundry located in the Northeast has been using EnviroBlend EMag XL for over a decade to treat ferrous dust contaminated with lead and cadmium. It is used to treat roughly 700 tons annually. The EnviroBlend is added in-line as part of their process by using a duct injection method at a low dosage rate of 4% which renders dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). This foundry manufactures pipe fittings.

Ferrous Foundry in the Mid Atlantic

A Spin Cast Ferrous Foundry located in the Mid Atlantic has been using EnviroBlend EMag XL for over 15 years to treat 1500 tons of cadmium and lead-contaminated dust annually. The EnviroBlend is added in-line as part of their process by using a duct injection method at a dosage rate of 15% which renders their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP).

Ferrous Foundry in the South

A ferrous foundry in the South uses EnviroBlend CS Bulk to treat lead, cadmium, and zinc-contaminated dust from their cupola furnace. EnviroBlend is used by way of dust injection at a dosage rate of 10% and treats 2200 tons annually. This facility is regulated by the state.

Ferrous Foundry in the West

A ferrous foundry located in the western US has been using EnviroBlend Emag XL to treat lead and cadmium-contaminated dust at their facility for over a decade. The EnviroBlend is added in-line as part of their process by using a duct injection method at low dosage rate of 8% which renders their dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP).

The foundry produces DI pipe.

Southern US Ferrous Foundry

A ferrous foundry located in the southern US switched its heavy-metal waste treatment reagents from Bantox to EnviroBlend CS. EnviroBlend now helps them annually treat over 500 tons of lead and cadmium-contaminated ferrous dust via a dust-injection method. A low dosage rate of 7% renders their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP).

Heartland Alloys Plant

An Aluminum Alloy Recycling plant in the US heartland uses EnviroBlend CS and AG20 to treat over 600 annual tons of dust contaminated with lead, cadmium. Hydrogen chloride gas is also treated. EnviroBlend is added as part of their duct injection process for metals and acid gas. This plant produces aluminum-based alloys.

Mid-West Foundry

A ferrous foundry in the Midwest has been using EnviroBlend to treat their cadmium and lead-contaminated dust for over 11 years. Using EnviroBlend CS sacks, they are applied via a dust injection process at a 20% dosage rate to render the dust non-hazardous. The foundry manufactures brake rotors and other auto parts.

Southeast Ferrous Foundry

A ferrous foundry, located in the Southeast, has been using EnviroBlend CS Bulk and super sacks to treat lead and cadmium-contaminated dust from the cupola furnace for over 15 years. EnviroBlend is added in-line as part of their process by using a duct injection method to render their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). EnviroBlend treats over 3000 tons annually at this foundry. The foundry produces DI pipes. This site is regulated by the state.

North-East Ferrous Foundry

A ferrous foundry located in the Northeast uses EnviroBlend 80/20 CS to treat dust contaminated with lead, cadmium, and zinc. EnviroBlend treats roughly 200 tons of dust annually by way of a duct injection method at a dosage rate of 12% to render dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). This foundry manufactures pipe fittings and couplings.

Mid-West Ferrous Foundry

A ferrous foundry located in the mid-west has been using EnviroBlend 90/10 to treat lead and cadmium-contaminated dust at their facility. The EnviroBlend is added in-line as part of their process by using a duct injection method at a low dosage rate which renders their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). The foundry produces custom core castings.

Mid-South Ferrous Foundry

A ferrous foundry, located in the Mid-South, that produces ball mill casting and crusher parts has been using EnviroBlend CS Sacks to treat cadmium and lead-contaminated dust for over 15 years. EnviroBlend helps treat the facility's ferrous dust through duct injection at a dosage rate of 20%. This foundry is regulated by the state.

Southeast Chrome Alloy Facility

A chrome alloy facility located in the Southeast has been using EnviroBlend CR50 to treat roughly 40 tons annually of lead, and cadmium-contaminated chrome dust. Prior to switching to EnviroBlend in 2014, the facility had been using Bantox to treat the dust. EnviroBlend is added in-line as part of their process by using a duct injection method to render their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP). The facility manufactures ingots.

Privately Held Firing Range – Minnesota

Treated approximately 2,000 cubic yards of lead-based soil in stockpiles ex-situ with backhoes. The material was left on-site.

Mid-West Ferrous Foundry Facility

A ferrous foundry located in the mid-west has been using EnviroBlend XL supersacks to treat lead and cadmium-contaminated dust at their facility for over a decade. The EnviroBlend is added in-line as part of their process by using a duct injection method at low dosage rate which renders their baghouse dust non-hazardous according to the EPA Toxicity Characteristic Leaching Procedure (TCLP).

The foundry produces pump housing and seat sides. This site is regulated by the state.