

Remedial Coal Solutions Fact Sheet 570-682-8742

www.cbaenvironmental.com

US EnviroPur's Remedial Coal Solutions (RCS) technology applies remediation techniques to improve product quality and reduce the environmental pollution problems related to the burning of coal. A unique feature of the USEP coal technology is that it is based on a chemical change of the treated substance, not just a wash or additive process like most of our competition. The change in chemical composition of the substance is accomplished through the use of proprietary reagents.

The process reduces ash content, pyretic, organic, & sulfate sulfur, and eliminates arsenic and mercury from anthracite, bituminous and lignite run of mine coal as well as various waste coals. The process will produce a high-value product that, will qualify for favorable tax and environmental credits.





The USEP technology is an economical "pre-combustion" method for treating ROM and processed or waste coal that substantially reduces NoX, SO_2 , & SO_3 and reduces mercury, chlorine and arsenic to low or non-detect levels. Moreover, the same process has significantly increased the BTU value of the coal. In fact, in some cases, the technology has converted "gob" coal into a regulatory compliant product with the energy content of ROM (i.e., BTU's of 12,500 or greater).

Mid-Western bituminous waste coal was recently treated using the USEP process. Total sulfur and mercury was reduced by greater than 20%, which qualified the coal under IRS Code Section 45. Additionally, the ash was reduced and the BTU increased to meet the ASTM Proximate Analysis parameters for saleable coal. The waste coal increased in economic value by 52%.

Refined Coal Solutions Market Opportunity - Powder River Basin

| RCS Market Opportunity - PRB | \$ 8,642,919,600 | |
|---------------------------------------------------------|-----------------------------------|---|
| Post-Process Annual Market Value | \$ 12,899,880,000 | |
| # Short Tons Produced Spot Coal Price - Post-Process | \$ 429,996,000 30.00 | |
| Annual Market Value | \$ 4,256,960,400 | |
| # Short Tons Produced Spot Coal Price | \$ 429,996,000 9.90 | _ |

In the case of Powder River Basin Coal, the business model is simple: process PRB coal that sells for around \$10 a ton into a higher quality coal with a value of no less than \$30 per ton. The increased value qualifies PRB ROM coal for Section 45 Tax Credits, provides reduction in Alkaline Oxides and reduced SCR maintenance.



Reduction in Mercury, Chlorine and Arsenic are becoming a major issue, especially in the Appalachian coal region. In most cases the USEP technology completely eliminates Mercury & Arsenic.

Individual states are passing legislation, earmarking funds for clean technology, and developing renewable portfolio standards (RPS). Pennsylvania RPS includes waste coal.



USEP's process is a simple addition to any coal processing line that provides for an inexpensive "retrofit" rather than the capital intensive alternatives of the competition.

Mobile & modular treatment units are sized according to reserve & production requirements on a site by site basis.

In addition to the environmental benefits the process will simultaneously increase BTU's on either Run of the Mine ("ROM") or waste coal, and improves the economics for coal producers, handlers and processors, coal brokers, power plants, energy companies, and industrial users.