Molycorp Minerals

The Rare Earths Company

XSORBX® pure solutions

Arsenic Removal – Aqueous Streams

Molycorp Minerals has developed and patented a unique and proprietary technology: XSORBX® ASP, or Arsenic Sequestration Process. This technology provides greater control and flexibility over the management of your operations arsenic-laden materials. In many instances this technology also outperforms conventional arsenic removal processes on a cost basis. In addition, XSORBX® ASP provides the ability to enhance management of your environmentally sensitive by-products.

If you are limited by the presence of arsenic in your feed stocks, effluents, or storage areas, our technology is one in which you will want to employ now.

The XSORBX® ASP process can be employed over a breadth of temperatures and pH ranges from 0.8 to 13 thus allowing for maximum flexibility. The reaction kinetics are near instantaneous and the sorbent capacity of the Molycorp Minerals ASM™ 100 Arsenic Sorbent Media is vastly superior to anything else currently available. It allows the removal of arsenic by converting it to a concentrated and extremely stable compound for ease of disposal.

The following is a brief overview of the benefits to a nickel smelter or refiner from this ground-breaking new technology.

First and foremost, XSORBX® ASP technology can significantly improve your profitability because:

- The costs can be less than conventional sequestration methods
- It can enable you to use lower cost feed stocks in your process
- You can recover valuable metals that may otherwise be wasted
- You can choose the most cost-effective spot in your operation to install the technology because of the extremely wide range of operating conditions where it is effective

Secondly, XSORBX® ASP technology enables the ability to better manage your environmental liability exposure because:

- Arsenic-laden waste is extremely concentrated and easy to separate from aqueous streams
- Arsenic-laden waste is extremely stable even in an acidic environment
- Toxicity Characteristic Leaching Procedure, or TCLP, studies indicate the stable compound might be classified as a non hazardous material
- Our process produces one third of the waste volume of conventional methods
- Our technology can be applied to help remediate some of your environmental legacy issues

The technology is quite flexible and we believe it has utility to sequester many other potentially deleterious elements such as bismuth and antimony which means it may be used in other industries such as copper.