Innovative Refining Technologies for Sb Recovery

Antimony has many applications including grid for lead-acid batteries, flame retardants, solders, catalyst and so on. However, the supply is at increasing risk. The technology for refining antimony from primary mining or the recovery from less complex secondary sources is well developed so far. However, the knowledge and technology for recovering Antimony from complex feeds with multi-metal are rare.

The objectives of the project were: (1) Screen potential technologies aiming at generating marketable antimony products starting from secondary sources; (2) Develop technologies, which can be implemented in current, predominantly Lead based refining flow sheets; and (3) Develop fundamental understanding of Sb behavior, such as Sb phase separation and impact on relating metals, throughout flow sheets.

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