Abstract

A system for the recovery of mercury in small-scale gold mining in Colombia has been designed and tested. Distillation of up to 300 g of gold amalgam takes ten to 20 minutes, and more than 90% of the mercury formerly lost in the atmosphere is recovered for recycling. The equipment pays for itself and may be locally built using available materials. It has been widely accepted by miners because of the improved safety to miners and their families. The furnace can be fueled either with gasoline or LP gas. It may also be used for smelting small amounts of gold, thus getting rid of the sponginess which detracts from marketability. The new system is popular in Colombia because of the improved safety to mine operators.

Keywords
Small-scale gold extraction, Colombia, amalgam method.