

Technical Guidelines on Mercury Management in ASM



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Background:

- **ASM is active in more than 50 countries**
- **More than 100 million people are affected**
- **Mercury amalgamation is the most common method used with an estimated 650 to 1,000 tonnes used annually**
- **Current practices result in the discharge of most of the Mercury used directly into the environment.**
- **the effects are far reaching and long term**
- **Environmental regulations are generally not adapted to ASM and consequently, mercury is generally unaddressed**

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Aims:

Assist governments in the development of legislation and regulation to:

- (1) reduce ASM-related mercury emissions into the environment
- (2) reduce occupational and second-hand exposure to mercury
- (3) eliminate the major inefficient and unsafe practices of mercury use
- (4) reduce unsafe storage and disposal of mercury

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Technical Measures:

1. Responsibility of employers of mining/processing plants/gold shop operations
2. License to work with mercury
3. No whole ore mercury amalgamation



Photos Bernd Klein, Global Mercury Project, UNIDO

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Technical Measures:

4. Mercury amalgam burning
5. No mercury / cyanide interaction
6. Amalgam barrel



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Technical Measures:

7. Centralised amalgamation sites
8. Protection of water bodies
9. Protection of residential areas



Tanzania, 2000



Indonesia, 2006 (photo Kevin Telmer)

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Technical Measures:

10. Disposal of mercury contaminated tailings
11. Extracting residual gold from such tailings
12. Condensers for gold shops



Zimbabwe, 2001



Brazil, 2007
US EPA fume hood for gold shops

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Technical Measures:

13. Storage of mercury

14. Protection of pregnant women and children

15. Mercury-free methods



Laos



Tanzania, 2000

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Thank you !