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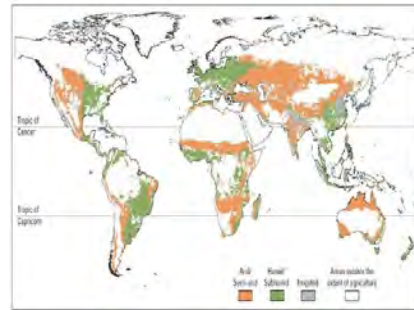
Guidelines for catchment management and mining impacts in arid and semi-arid regions of South America (CAMINAR Project)

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ARID AND SEMIARID REGIONS OF WORLD



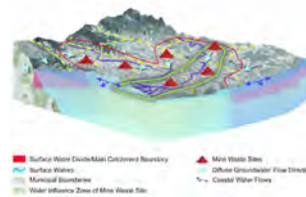
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Three main objectives



- To promote the conservation and equitable use of water resources in arid and semiarid areas.
- To promote proactive management both at the project and catchment levels.
- To promote the protection of water quality and the efficient use of water in mining operations.

CAMINAR PROJECT



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Main problems and lacks have been identified in arid and semi-arid regions. This is an origin of conflicts, specially with mining. Several technical guides with m...



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CAMINAR PROJECT




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Through local and national meetings and dialogue on the three pilot basins, it has been provided information related to the needs of the water users in the basin.

The guides have been structured into four sections including the complete life cycle of the mining project, and the concept of integral water management at the catchment level.

The draft of the guide has been object of discussion on the three countries in order to know the impressions and comments of the involved stakeholders.




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GUIDELINE INDEX

1. INTRODUCTION
2. WATER PLANNING FOR MINING OPERATIONS WITHIN A CATCHMENT CONTEXT
3. WATER MANAGEMENT FOR MEDIUM AND LARGESCALE MINING IN ARID AND SEMIARID AREAS
4. WATER MANAGEMENT IN ARTISANAL AND SMALL-SCALE MINING
5. HAZARDOUS ABANDONED MINING SITES
6. CONCLUSIONS




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Within each chapter the best management practice for each topic is discussed, as well as new practices under study with enough potential to become best management practices in the coming years, with special attention on prevention of impacts on water bodies.

A Management Plan is presented considering necessary policy and commitments, the relevant baseline data and periodic data collection, and the expectations and needs of the communities and other potential users. Impact minimisation and efficient use of water are main objectives of the Plan.

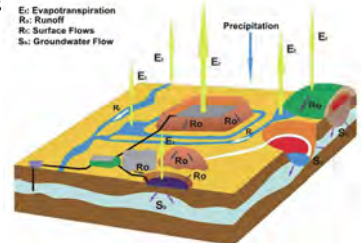



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WATER MANAGEMENT IN LARGE SCALE MINING

Exploration and planning
Construction
Operation
Closure
Post-closure






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HAZARDOUS ABANDONED MINING SITES

- Hazardous abandoned mining sites are the most negative aspect of mining
- Impacts of abandoned mining sites
- Key phase for the rehabilitation
 - Passive Treatment of Mine Water
 - Phytoremediation

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<http://www.unesco.org/uy>

<http://www.labor.org.pe>

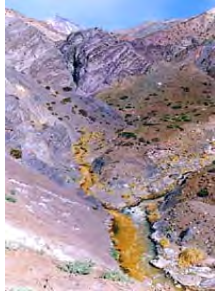




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CONCLUSIONS



- The Guides offer a plan for action without an extended research on the subject, since there are specific publications for each one of the items developed in the document.
- They have been made through a basin approach, participative and without exclusions, in order to legitimate the document and make it a base document for the treatment of problems on water resources between the mining industry and the involved stakeholders.



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- This participative approach has obtained the acceptance of the guide and a compromise to use it in the pilot study basins.
- In summary the document proposes a shared basis for water resource planning and management in mining operations in arid and semiarid areas considering the catchment and the stakeholders as management context.

