

5. SYSTEM REVIEW AND AUDITING

Regular reviews of environmentally hazardous materials managed at a mine or mineral processing facility are essential. Shortcomings in the management system are identified and corrective action taken. Clear responsibility for operating, reviewing and taking corrective action on the system must be designated. Some mining operations have specific environmental review committees to do this for all management plans and systems.

RELEASE OF

INDEPENDENT

AUDIT RESULTS

BUILDS UNDER-

STANDING

AND TRUST

BETWEEN

THE MINE

OPERATOR AND

COMMUNITY

GROUPS

Regular audits, internal or external, are one effective way to review management system efficiency.

Internal audits involve only personnel from within the organisation who typically do not have day-to-day responsibilities in the area or functions being audited. Internal audits should be frequent and regular. Many companies have routine facility inspections by staff before annual comprehensive internal audits. External audits are commonly less frequent, usually between two and three years, and are undertaken by an independent group. These provide a more objective view of how comprehensive and effective the management systems are, and are commonly accompanied by

recommendations for system improvements.

The actual mechanism used for a system review is not that important itself. The main concern is that regular review occurs and any resulting recommendations are implemented as quickly as possible.

Another benefit of external audits is that results are more readily accepted by stakeholder groups such as community/environmental organisations with a special interest in the potential hazards from the site. Publicly releasing independent audit results, and regular consultation with these stakeholders, are powerful ways to build understanding and trust between the mine operator and interested community groups.

Further information on environmental auditing can be obtained in the booklet of that title in this series.

CONCLUSION

Management, storage and disposal of hazardous materials at mining and mineral processing sites is a fundamental part of best practice environmental management. There are many benefits to operators who integrate hazardous materials management plans into their normal processes. These include cost savings, risk reduction, improved process control, improved community relations and an enhanced corporate image.

This booklet has identified some of the typical hazardous materials and wastes used or generated at mining operations. In the past, mining operations have been considered as sources of environmental contamination and therefore have attracted regulatory and community interest. It is therefore in the best interest of mining operators to incorporate the principles introduced in this booklet to demonstrate a high level of environmental responsibility in managing hazardous materials. Companies need to be aware that many waste materials may have a hazardous component; therefore identifying and characterising waste streams is an important component of waste management.

Incorporating hazardous materials management into other environmental management plans and systems reduces duplication and leads to the consolidation of all activities, functions, responsibilities and controls. In this way, waste management efforts are minimised while the benefits are maximised.

Mining and mineral process operators must consider the storage, bunding, containment and engineering requirements and controls for hazardous materials in developing these management plans. Site specific requirements must always be considered, and standard designs and procedures may need to be modified to include special precautions to protect sensitive environments.

When used in conjunction with other booklets in this series, the principles outlined in this booklet will enable mining and mineral processing operations to demonstrate best practice environmental management in mining.

WHAT IS HAZARDOUS MATERIALS BEST PRACTICE?

Another way of expressing the benefits and principles of best practice approaches to hazardous materials management can be summarised in the acronym OUTCROP. Application of the principles outlined in this booklet ensure that industry achieves:

- O**perations that provide maximum efficiency and safety for both workers and the environment;
- U**nderstanding of the materials, operating methods, storage, disposal, transport and monitoring methods to continually evaluate the situation and identify potential risks;
- T**raining to cover management, workers and contractors;
- C**ontingency planning for all emergency situations in liaison with outside emergency agencies;
- R**educe, reuse, recycle priorities;
- O**ptimum savings through the management of waste streams, especially hazardous materials;
- P**ublic Relations and image enhancement by maintaining a positive relationship with all stakeholders including employees, government bodies and community and environmental groups.

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