



# Auditing and Due Diligence for the Mining Sector

Prior to an acquisition, financing, insurance decision or as an operational safeguard, due diligence and auditing processes should be conducted to ensure compliance with protocols, permits, licenses and project conditions. Earth Systems has successfully and impartially delivered audits and due diligence assessments for international banks, financial institutions and mining companies.

Our expertise and experience in geochemical properties, water quality and risk assessment for mining operations and our knowledge of mine engineering, planning and applicable legislation provide the platform for the in-depth analyses required in auditing and due diligence assessments. Earth Systems' familiarity with IFC, World Bank and other related Performance Standards and Safeguards makes Earth Systems well placed to conduct due diligence assessments for large-scale and sensitive projects.

## SERVICES PROVIDED

- Audit teams staffed to address specifications of the operation being audited, its environmental setting and facilities. We develop site specific criteria and audit protocol.
- Environmental management audits that assess the adequacy of management systems and procedures in minimising impacts and achieving environmental goals, commitments and regulatory requirements.
- Environmental monitoring audits that assess the efficacy of monitoring programs and procedures, the ability of personnel to reliably identify and monitor environmental impacts and to demonstrate compliance with regulatory requirements, corporate policies and project commitments.
- Compliance audits that address the full spectrum of regional, State, Commonwealth or International regulatory requirements and project-specific commitments.
- Due diligence assessments that identify and quantify current and potential financial liabilities associated with the divestment or acquisition of an operation.
- Technical audits that assess current and potential impacts from constituents commonly associated with mining activity, including: acid and metalliferous drainage (AMD), acid sulphate soils and surface and groundwater contamination from heavy metals, process chemicals (e.g. cyanide), suspended sediment and nutrients loading.
- Risk assessment and design and implementation of site-specific

management strategies (including prevention, control, treatment and monitoring) that address short and long-term environmental liabilities, risks and hazards.

- Inspection of facilities, interviews with site personnel and review of documentation, monitoring protocol and quality control procedures.



## PROJECT EXPERIENCE

- Due Diligence Assessment of IFC environmental, social and community aspects of an undisclosed iron ore mine in Guinea.
- Conducted Hongsa Mine Mouth Power Project environmental and social due diligence assessment with respect to Equator Principles and International Finance Corporation Performance Standards.
- Audit of Spontaneous Combustion and Acid Rock Drainage Management Plan for a large mining operation in Western Australia. Conducted an independent review and provided recommendations to reduce ARD, control the risk of groundwater contamination from wallrock and incorporate staff responsibility under the SCARD Management Plan.
- Acid Rock Drainage audits for large-scale mining companies; developed templates for conducting AMD audits for all phases of mine construction, operations and closure/rehabilitation.
- Tailings Storage Facility groundwater seepage audits throughout Australia, Asia and the Pacific.
- Taiyuan Coal Mine and Wu Xian Mine Due Diligence Assessments Review.
- Auditing of Ok Tedi water quality data sets and review of water quality monitoring programme.
- Audit cyanide management practices, conduct cyanide risk assessments, and additional process water signature assessments.



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