



ESS AFRICA
ASSET RISK CONSULTANTS

Environmental Services



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Who we are

ESS Africa is a leading provider of environmental consulting services based in Haute-Katanga Province, Democratic Republic of Congo (DRC). Positioned in the heart of the DRC's thriving copper mining region, ESS Africa delivers innovative and practical environmental solutions tailored to the needs of the extractive industry. Our mission is to support mining operations in minimizing their environmental impact while meeting both local and international sustainability standards. With a team of experienced professionals, we offer integrated services in sustainability, governance, environmental monitoring, and regulatory compliance.

Proactive environmental planning saves money. What are the issues and regulations? How do you minimise your liabilities? With our professional staff we have the specific experience you need to satisfy the regulations and apply cost effective, technically sound solutions to your environmental challenges.



What's the problem?

There are many ways to look at your situation.

Each affected party will see a project differently. How do you involve each group and balance their input to ensure a project's success?

Where do you transport material for disposal – or do you?

On-site treatment is often a fraction of the cost. Perhaps you need careful monitoring rather than aggressive treatment. You benefit from our insight with problems large and small, and our experience with solutions everywhere in the world



Get it right the first time!

The key element of any successful project is identifying the issues up front. Will you recognise a fatal flaw when you see it? ESS's practical experience with some of the world's largest heap leach, waste and tailings disposal facilities, helps you identify the critical issues in design and management so facilities

can ultimately be safely and properly closed.

Our foresight at the outset of a project means you can avoid costly remediation down the road.



Benefit from the solution

We pride ourselves on solutions that sustain commercial interests and a healthy environment. We work with mines looking for economical, effective compliance; with small businesses and industrial giants that all need to solve a legacy of problems; with financial institutions that need to assess and manage risk; and with environmental protection agencies looking for assurances and solutions. ESS teams include world recognised experts and specialists with experience in practical, cost-effective applications.



Expert services offered

ESS Africa is proud to be a trusted partner to the copper mining industry in Haute-Katanga. With deep local knowledge and technical expertise, we deliver environmental solutions that are both practical and forward-looking. Through our commitment to sustainability, governance, monitoring, and compliance, we help shape a mining industry that is resilient, responsible, and aligned with the environmental and social expectations of the region and the world.



Sustainability

Sustainability is the foundation of our approach to environmental management. At ESS, we assist mining companies in embedding sustainability into every aspect of their operations. Our services include sustainability planning, ESG strategy development, carbon and resource efficiency assessments, and support for circular economy practices within mining processes. We work with our clients to promote responsible resource use, reduce emissions, and ensure long-term environmental and social value for communities across the region.



Monitoring

ESS offers comprehensive environmental monitoring services designed for the unique challenges of the copper mining sector. Our capabilities include air and water quality monitoring, soil and sediment analysis, noise and vibration assessments, and biodiversity impact evaluations. By leveraging advanced tools and technologies, we provide mining operations with accurate, real-time data to support compliance, risk management, and continuous improvement.



Governance

Effective environmental governance is critical in today's mining landscape. ESS helps clients develop and strengthen their environmental management systems (EMS), internal governance frameworks, and compliance policies. We ensure alignment with DRC environmental regulations and international standards such as IFC Performance Standards and ISO 14001. Our services also include policy development, training, and stakeholder engagement strategies, ensuring that companies maintain transparency, accountability, and environmental leadership.



Water & TSF Management



Water management

Scarce, plentiful, wasted, coveted – water is fast becoming the world’s most precious commodity. Too much in the wrong place at the wrong time and this valuable resource becomes an unwanted hazard. We’ve helped clients manage water in all its forms everywhere in the world.

Water moves continuously through the environment. Seldom is it the right quantity or quality to suit your ever-increasing needs. Ground water contaminated by industrial developments and waste disposal can be treated by facilities engineered by ESS and rivers polluted by acid mine drainage from abandoned operations can be restored to healthy condition with inexpensive passive treatment systems.

You can take advantage of an integrated water management system designed to cut your costs, using ESS’s combined surface and ground water resource evaluation expertise to assess and supply your needs.



TSF management and compliance

With recent environmental catastrophes linked to tailings storage facilities failing the global focus has shifted to the importance of tailings infrastructure, structural integrity and management.

We provide comprehensive TSF assessments and deliver operational & management plans that ensure safe, compliant, and sustainable tailings storage:

Our approach includes:

- ☐ Risk assessment & mitigation strategies to prevent environmental hazards.
- ☐ Monitoring & inspection protocols for structural integrity and compliance.
- ☐ Closure & rehabilitation planning to minimize long-term environmental and financial impact.
- ☐ Water monitoring and modelling
- ☐ Facilitation of independent third-party reviews to ensure compliance with international standards and best practices
- ☐ Technical audits of TSF design and operations.
- ☐ Regulatory compliance assessments aligned with GISTM & DRC mining laws.
- ☐ Recommendations for improvements based on other industry benchmarks.
- ☐ Dam Break Study / TSF Design
- ☐ Hydrological & geotechnical assessments for TSF integrity.
- ☐ Failure scenario modelling to predict potential dam break impacts.
- ☐ Engineering solutions to enhance TSF resilience and environmental.



Compliance Consulting

Navigating the evolving landscape of environmental regulation in the DRC requires in-depth knowledge and experience. Our compliance consulting services ensure that mining companies understand and adhere to national legal requirements as well as international environmental benchmarks. ESS Africa supports clients in obtaining environmental permits, conducting environmental impact assessments (EIAs), audits, and developing corrective action plans. Our goal is to help clients maintain regulatory compliance, avoid penalties, and uphold their license to operate.

ISO Systems Development, Implementation, and Certification

As part of our comprehensive environmental and operational support, ESS Africa specializes in the development, implementation, and preparation for certification of internationally recognized ISO management systems. We help mining and industrial clients establish robust systems that enhance performance, ensure compliance, and demonstrate a commitment to excellence. Our ISO services include:



ISO 9001

Quality Management Systems: We assist companies in streamlining operations and improving product and service quality through the implementation of ISO 9001 standards.



ISO 14001

Environmental Management Systems (EMS): We guide clients in creating and implementing EMS frameworks that align with ISO 14001 standards, helping them manage environmental impacts, set sustainability goals, and comply with legal obligations.



ISO 45001

Occupational Health and Safety Management Systems: We support the mining sector in creating safe working environments by developing systems that identify, control, and reduce health and safety risks.

Our approach includes:

- ☐ Gap analyses to assess current practices against ISO requirements
- ☐ Customized system design based on client operations
- ☐ Employee training and capacity building
- ☐ Internal audits and corrective actions
- ☐ Pre-certification readiness support

We work closely with accredited certification bodies, ensuring our clients are well-prepared for successful audits and certification. By adopting ISO standards, clients not only improve internal processes but also gain a competitive edge in national and international markets.

Our contact details



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