Assent

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Guidance

Responsible Minerals

Guidance on Artisanal & Small Scale Mining



Complex manufacturers have an important role to play when it comes to driving responsible minerals sourcing throughout their supply chains. They have an obligation to stakeholders, customers, and regulatory bodies to support responsible minerals sourcing wherever they source their minerals, including small-scale artisanal mines. Failing to meet these obligations could mean losing access to key markets, as well as fines and the possibility of serious public backlash tarnishing their brands. However, there are opportunities to drive meaningful improvements when a company's sustainability policies drive its corporate decision making.

What Is Artisanal & Small-Scale Mining?

Artisanal and small-scale mining (ASM) operations are found in impoverished regions rich in mineral deposits. The term generally refers to the extraction of ore using manual or primitive methods. Miners accept these working conditions in exchange for high-grade ore; lower-grade ore is not worth the effort or risk. Most valued natural resources are still recovered artisanally somewhere in the world.

Resources Commonly Recovered Through ASM Methods

- Gold
- Silver
- Tin
- Tungsten
- Tantalum
- Copper
- Cobalt
- Coal
- Oil
- Diamonds
- Gems
- Mica
- Sand
- Clay/Kaolin
- Stone
- Salt
- Sulfur
- Coral
- Mercury
- Rare Earths
- Amber
- Mammoth Tusk



Labor & Health Issues in ASM Operations

Artisanal and small-scale mining sources provide high-quality minerals, deep in hue and rich in composition, but working conditions are often characterized by human rights and safety issues. This is a broad problem that's hidden deep in global supply chains, given that the most recognizable brands depend on these very resource streams.

If global supply chains stop carrying independent ore altogether, some of the poorest areas in the world will lose access to core income sources, leading to further issues such as:

- Poverty
- Civil unrest
- Violence
- More dangerous sources of income

This is not an effective solution to the issue, and instead threatens to exacerbate the challenges in these environments. Miners will likely still be risking their lives to recover ore, but it will be harder to sell. Further, companies not purchasing from ASM sources would still face reputation damage for withdrawing their support from these communities. Any move away from artisanal ore must include viable development opportunities.



In the DRC, the world's leading supplier of cobalt, the impact would be severe.

All manufacturers, whether or not they purchase minerals from ASMs, must focus on supporting viable opportunities for improving the standard of living for communities dependent on the artisanal mining sector.

"The Congolese themselves, the Congolese government, the Congolese economic actors, want the same things that international downstream users need: clean minerals, know where it comes from, know the chain of traceability, so we can conduct due diligence as needed." said Robinson. "It's not a 'yes' or 'no,' it's 'How do we make improvements?' And that's the benefit of the due diligence approach in responsible mining."

> *"There are 3 or 4 million Congolese that earn some kind of wage by working in the artisanal sector. Twenty to thirty percent of the DRC's population relies on artisanal mining," explains Richard Robinson, advisor for Global Risk Assessment and Solutions, who was born in the Katanga Region of the DRC."*

A Glimpse Into Artisanal Mining in the DRC

Assent recently had boots on the ground to investigate artisanal cobalt mines in the Democratic Republic of the Congo (DRC), and their tangible impact on manufacturers' supply chains. Our documentary miniseries, featuring expert interviews and rare footage from mines in the DRC, aims to show how manufacturers can proactively move toward responsible sourcing.



Watch Now

Responsible Minerals & Supply Chain Disruption

Global supply chains rely on artisanal ore. If these materials were removed, the market would change drastically and face disruptions, influencing your production costs and creating new human rights issues in other conflict-affected regions. As a result, you may feel the best way to work with those areas is to formalize and develop worksites in a manner that provides value, resources, and operational logistics to the region.

Artisanal and small-scale mining contributes a significant portion of the world's resource pool, including:

- Au — Gold: 20%
- Ta — Tantalum: 26%
- Co — Cobalt: 25%
- Sapphire: 80%
- Sn — Tin: 25%
- Rare Earths: 20%

Some of these minerals share a role in a green, technology-driven economy. Most electric vehicles (EVs) and smartphones use batteries that contain nickel, manganese, and, critically, cobalt in addition to other rare earth metals. Manufacturers try to minimize cobalt content, but struggle to find lower-cost alternatives.

Responsible Minerals & ASM: Where Do You Stand?

There are three approaches your company can take to source minerals effectively in your supply chain. One method is to only source materials from developed, formalized supply chains. While this ensures supply, it cuts off valuable ASM sources and does not reduce risk as much as a responsible supply chain.

The second approach, value chain development, entails the long-term strategy of formalizing ASM sources to improve labor conditions and enable independent miners to receive fair value for their work. While sourcing from these areas is considered high risk right now, in the long run, this approach may provide your company with reliable high-quality ore sources. However, you will still need to perform due diligence.

The third approach is to monitor and report responsible minerals sourcing through your supply chain in collaboration with your suppliers. Right now, this is the most reliable, risk-averse means of acquiring valuable materials such as conflict minerals and cobalt. It encompasses supplier data acquisition to determine the origin of all conflict minerals and outline conflict-affected regions in your supply chain, as well as auditing frameworks and assessments.

Regardless of the approach you take or your company's position, you need supply chain data to understand which suppliers fit into your procurement strategy.

Table 1.0: Three Approaches to Minerals Sourcing

Approach	Benefits	Drawbacks
▶ Developed supply chains	▶ Reliable ▶ Low-risk	▶ No ASM sources
▶ Responsible minerals	▶ Most reliable ▶ Lowest risk	▶ Some ASM sources
▶ Value chain development	▶ High-quality ASM sources ▶ Modern labor standards	▶ High-risk right now ▶ Long-term plan ▶ Still need to perform due diligence

How to Build a Responsible Minerals Program

Formalizing ASM worksites is a long road, and even if you have a footprint in those communities, you still need access to other, reliable sources of responsible minerals during the interim. A service provider can help you acquire data to maintain a low-risk responsible minerals strategy, and also enhance your long-term plan to leverage and participate in developing ASM operations, should that be your company's direction.

The immediate next steps are to:

1. Gather detailed Reasonable Country of Origin Inquiry (RCOI) data for all minerals sources
2. Acquire missing data from your supply chain, including declarations and audits

Responsible Minerals Compliance in 2022

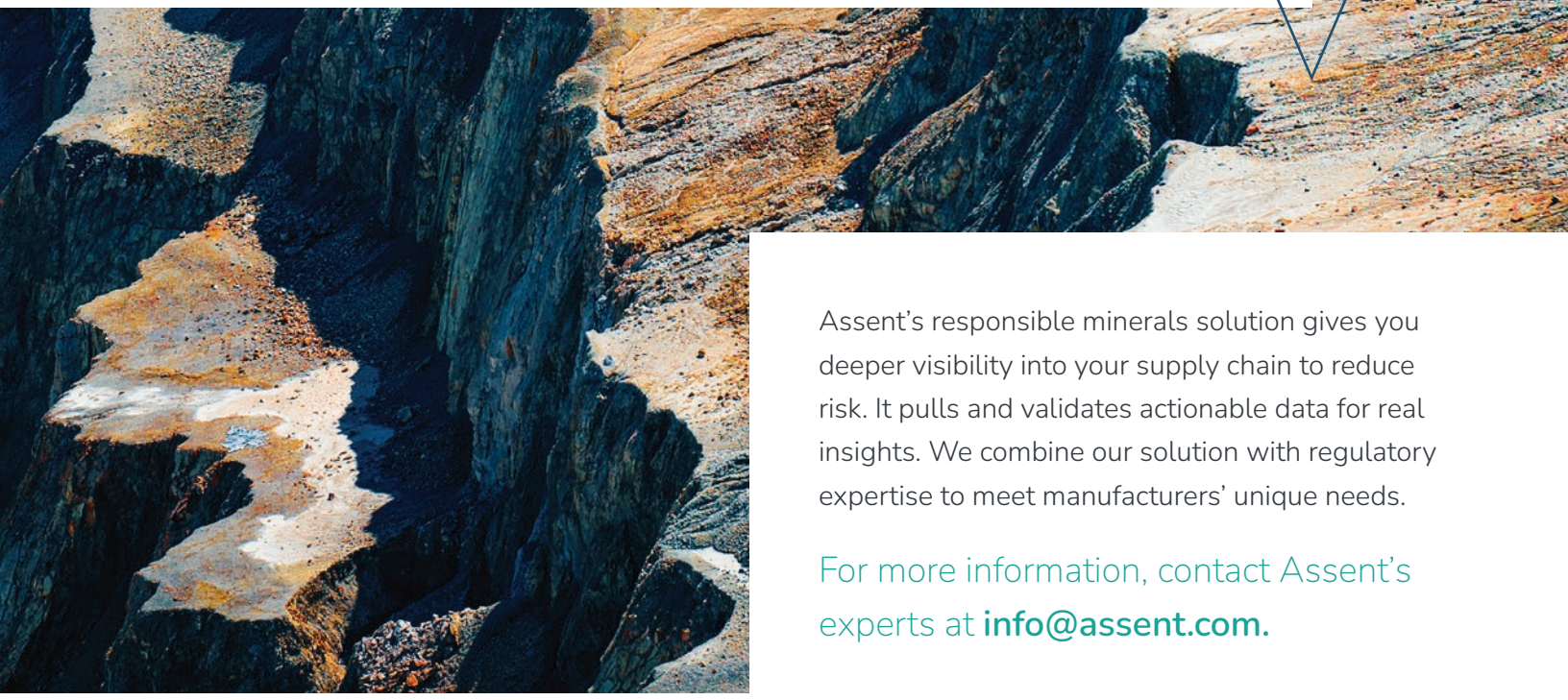
- Section 1502 of the Dodd-Frank Act
- EU Conflict Minerals Regulation
- Cobalt (consumer expectations)



A Better Approach to Responsible Minerals

- We go beyond a simple data collection exercise to identify, address, and improve risks in your supply chains in alignment with the OECD Due Diligence Guidance for Minerals.
- We offer the largest Conflict Minerals Reporting Template (CMRT) repository and country of origin library in the market, giving you complete supplier and smelter data to mitigate risk.
- We look at a more complete risk profile beyond just audit results, including geography risks, audit status, sourcing risks, and verifiable evidence from public mentions to identify bad actors with our own Enhanced Supplier Screening tool (e.g., sanctions and ESG risks).
- Ongoing training and 24/7 support for you and your suppliers as questions arise. 250+ global employees speaking 14 languages to help manage your programs and meet suppliers' needs in their preferred time zone.
- You can make better strategic decisions by informing suppliers of smelter risks and helping them complete the necessary due diligence steps to improve performance within their program.
- We support you with due diligence inquiries with the help of our regulatory experts team to educate and communicate the right expectations and show how your responsible minerals program aligns with the OECD Due Diligence Guidance for Minerals.





Assent's responsible minerals solution gives you deeper visibility into your supply chain to reduce risk. It pulls and validates actionable data for real insights. We combine our solution with regulatory expertise to meet manufacturers' unique needs.

For more information, contact Assent's experts at **info@assent.com.**

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