

Introduction

Heraeus Deutschland GmbH, headquartered in Hanau, Germany, is a global, leading technology group. Founded in 1851, it is a family-owned portfolio company. Its roots trace back to a pharmacy opened by the Heraeus-family in 1660. Heraeus combines businesses in the environmental, energy electronics, health, mobility, and industrial applications sectors. More information is found under: www.heraeus.com

In the 2021 financial year, the FORTUNE Global 500 listed group generated revenues of €29.5 billion with approximately 16,200 employees in 40 countries. Heraeus is one of the top 10 family-owned companies in Germany and holds a leading position in its global markets. Heraeus currently operates 3 good delivery refiners under the LBMA scheme in the following countries: Germany, Hong Kong, and Switzerland. The latter, “Argor-Heraeus” - 100% owned by Heraeus – publishes its LBMA/LPPM compliance reports under: https://www.heraeus.com/en/group/about_heraeus/corporate_responsibility/conflict_minerals.html

Heraeus ensures that all precious metals, Gold, Iridium, Palladium, Platinum, Rhenium, Rhodium, Ruthenium, Silver, and Osmium, are transformed into a 99.99 percent pure and determinable form with the highest precision and a multitude of precisely coordinated melting, chemical and mechanical work steps. Heraeus produces a wide variety of different products like conductive inks, precious metals containing pastes, active pharmaceutical ingredients and much more.

A uniform compliance system applies to the sites, which process precious metal containing material and are operated by Heraeus worldwide. They are supplemented by overarching guidelines through local guidelines. For this reason, only the name Heraeus is written for the sake of simplicity. In the conceit in this report, we refer to the site:

Heraeus Deutschland GmbH & Co. KG.

Furthermore, the guidelines are applied to all precious metals mentioned above, so that only silver will be mentioned in the course of the report. No difference will be made between the Responsible guidance of the LBMA or LPPM or Iridium, Rhodium, Ruthenium and Osmium. It should be emphasized that all regulations apply without restriction to all precious metals processed. Heraeus products and services include the refining of Silver, as well as the production of (investment) bars for banks, traders, and a wide variety of different products like conductive inks, precious metals containing pastes, active pharmaceutical ingredients and much more.

Heraeus processes precious metals that come from three different sources:

- from material already certified as “Good Delivery”
 - from material out of Platinum Group Metals (PGM)-mines as side stream
- and
- from recycling material, such as return material from industrial activity or old jewelry.

About 23.000 tons of fine Silver are mined annually, by a recycled share of around 5 tons.

Highly industrial mines are Heraeus’s main cooperation partners.

Since the annual demand for Silver exceeds the capacity of primary silver production, recycling is an important alternative source.

The sources of recycled material are of most varied nature: in addition to industrial return material and old jewelry, the so called “post-consumer Silver” for recycling can also come from other sources like spent catalysator, alloys and other Silver containing products.

Heraeus is continuously committed to creating sustainable and transparent value for all players along the entire value chain.

National governments, international organizations and industry associations are working on rules and regulations to ensure that the chain from the extraction of the raw material to the final customer is sustainable, compliant with all legal requirements and in accordance with ethical standards. The mixture of “soft” and “hard” laws, in which developments Heraeus participated and contributed, has evolved significantly in the past years, and continue to do so in future within the scope of continuous improvement.

LBMA Responsible Gold and Silver Guidance as well as the LPPM Responsible Platinum and Palladium Guidance, applicable to the all the Good Delivery Refiners, in addition to the measures to combat money laundering, terrorist financing and human rights abuses globally, have extended their scope to Environmental, Social and Governance (ESG) responsibilities.

Heraeus’s commitments, including ESG aspects, are reflected in our policies published on the website:

https://www.heraeus.com/en/group/about_heraeus/corporate_responsibility/corporate_responsibility.html.

Refiner's details	
Refiner's name	Heraeus Deutschland GmbH & Co. Kg.
Location	Heraeusstraße 12-14; D-63450 Hanau
Reporting year-end	01.01. - 31.12.2022
Date of Report	31.03.2023
Senior management responsible for this report	Andre Christl (andre.christl@heraeus.com)

Summary of activities undertaken to demonstrate compliance

The scope of this report focuses on the Heraeus’s site in Hanau, Germany. However, all systems measures, and statements refer to and encompass all Heraeus Precious Metals (HPM) sites and their precious metals sourcing principles. Hence, the report also includes references to HPM officers and committees, which provides an additional layer of compliance management systems.

This report represents a summary of measures/actions/processes in place at Heraeus to comply with the LBMA Responsible Gold and Silver Guidance.

Step 1: Company management systems

We have fully complied with Step 1: Established strong company management systems.

Has the Refiner adopted a supply chain policy regarding due diligence for supply chains of Gold and/or Silver?

Compliance Statement with Requirement:

Heraeus has adopted a strong policy regarding due diligence for supply chains of Precious Metals.

In 2004, we completed and started applying the Precious Metals Supply Chain Due Diligence Policy based on our company Policy of Compliance and Ethics. The Supply Chain Due Diligence Policy is fully compliant with Annex II of the OECD Due Diligence Guidance as well as with the LBMA Responsible Gold and Silver Guidance, as well as the LPPM Responsible Palladium and Platinum Guidance. The document includes requirements on prevention of money-laundering and terrorist financing.

Regarding the latter, the policy sets out our full commitment to:

- fight human rights abuses associated with extraction, transportation, and trade of precious metals
- fight money laundering and terrorism financing
- responsibility to conduct systematic risk-based due diligence over the entire supply chain
- screen and monitor the transactions and governance structures in place to maintain adequate records of Due Diligence documents and supply chain traceability
- ensure ongoing training for the staff involved in the supply chain.

The Policy also includes Environmental, Social and Governance (ESG) factors as per the LBMA guidance.

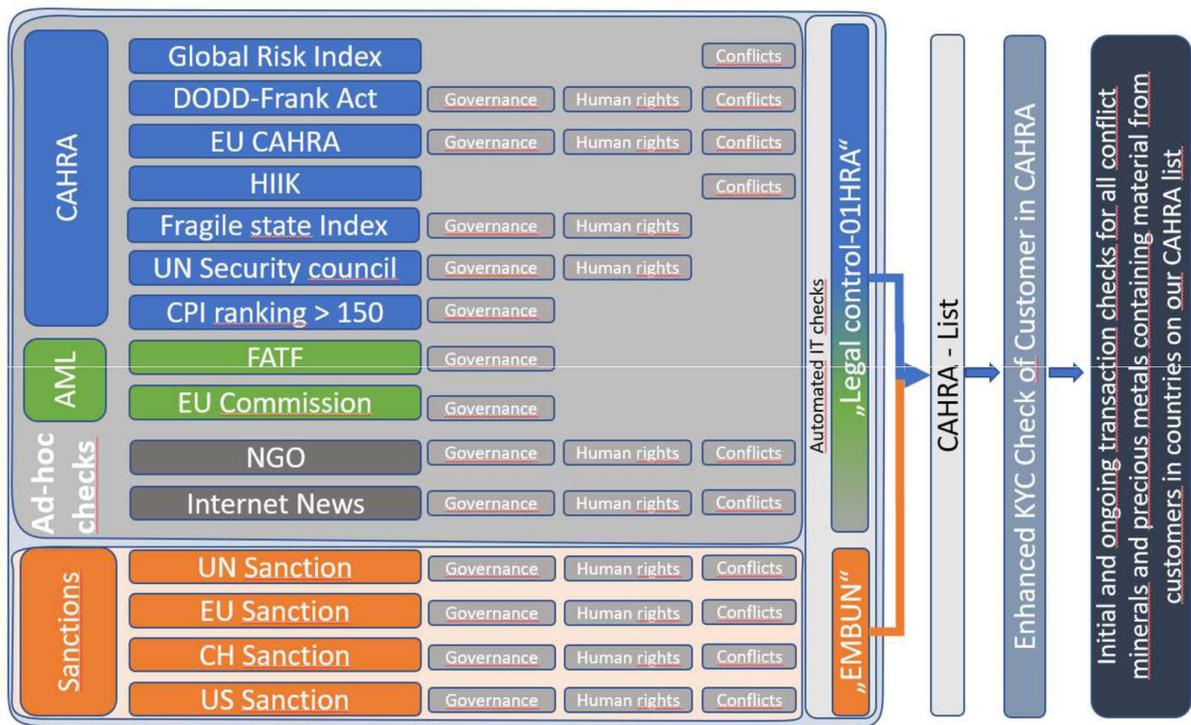
Supply Chain Due Diligence Policy as well as other relevant Policies and processes, are approved, regularly reviewed, and updated, when required, by the Heraeus's senior Management as well as by the Heraeus Precious Metals (Group) senior management and the respective committees. Policies on local and group level are made available on the respective websites:

- <https://www.herae.us/conflictminerals>
- https://www.heraeus.com/en/group/about_heraeus/corporate_responsibility/corporate_responsibility.html#sr_compliance

With that policy, Heraeus emphasizes to reasonably ensure that the precious metals in its supply chain originate from legal and ethical sources, that the precious metals are not associated with

“illegal actions like” crimes, armed conflicts, or human rights abuses and that they will not be used for money laundering, financing terrorism, tax evasion, fraud, or any other crime.

The following graphics summarizes the various sources and criteria (Governance, Human Rights and Conflicts) we use to define our own CAHRA list, also following the OECD guideline. “Legal-control-01HRA” and “EMBUN” are the tools called which we implemented in our SAP system to automatically block all transactions with partners on our CAHRA list. Then enhanced KYC check is necessary. “EMBUN” blocks all transactions with countries, sanctioned by the UN and/or EU, US, JP, UK, and CH governments “Legal-control-01HRA” locks all transactions with our precious metals supplying business partners if material is coming from a country on our CAHRA.



Has the Refiner set up an internal management structure to support supply chain due diligence?

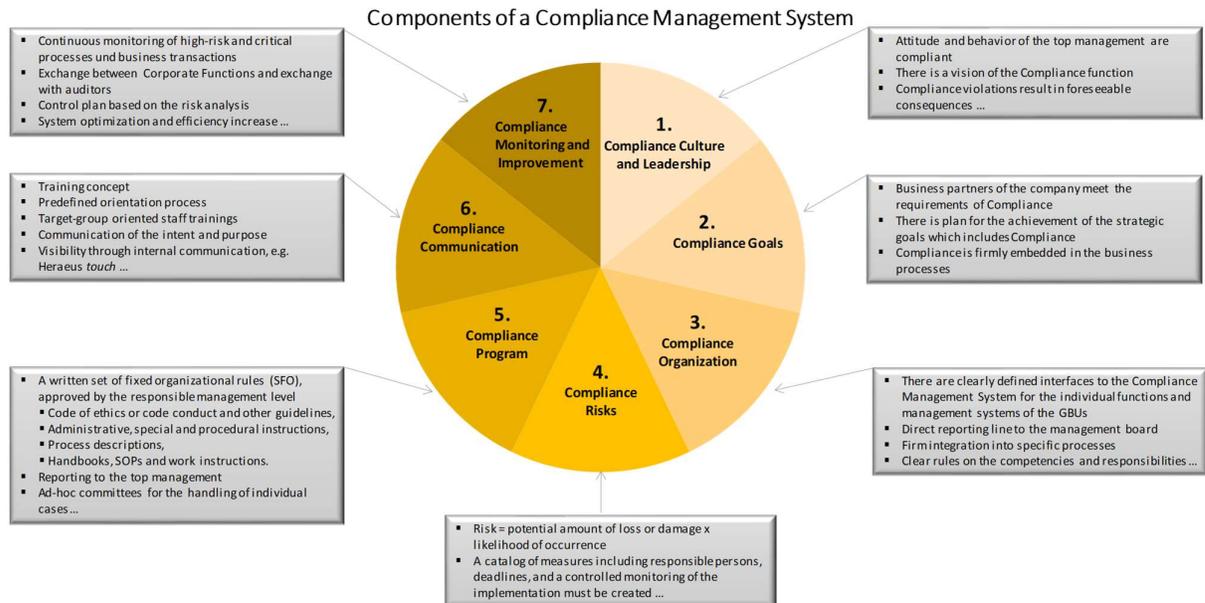
Heraeus has set up an internal management structure to support supply chain due diligence.

Internal Compliance Management System

An efficient internal Compliance Management System (CMS) is an integral part of Heraeus’s world-wide overall management system. CMS’s main effort is to embed the supply chain due diligence into every single structure and process and to define the governance, roles, responsibilities, internal audit, and communication.

Within Heraeus, the CMS has the task of identifying, evaluating, managing, and removing inherent compliance risks within the company. In principle, various internal risk categories can be defined as follows:

- Risk regarding legal and regulatory requirements
- Risk regarding regulations of trade and industry associations, professional and association rules, and guidelines
- Litigation risk
- Risk of financial losses (country risk, counterparty risk, business, and transaction risk).
- Reputational Risk



The CMS is therefore effective within Heraeus-Group, Argor-Heraeus, as well as Ravindra- and Choksi-Heraeus.

Structure of the Heraeus's Internal CMS

A central component of the CMS is the “Know your customer” approach, which is continuously used to check the legitimacy of potential and existing business partners based on legal and sector specific requirements.

The Human Rights Impact Assessment also ensures that human rights issues are a decisive part of risk management.

The ESG Impact Assessment also covers the protection of biodiversity in the supply chain.

To this end Heraeus continuously collaborates with the competent stakeholders on elaboration and application of the best applicable standards on responsible sourcing.

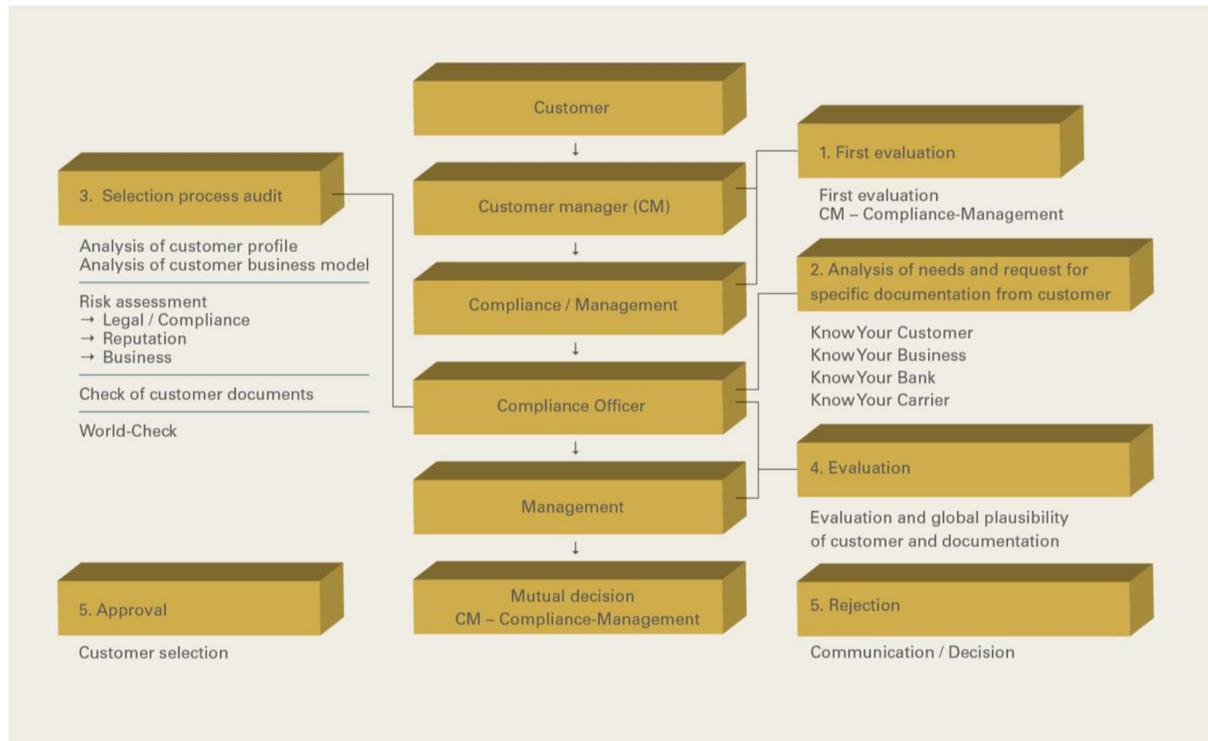
Compliance Function

The management of the due diligence process is clearly defined. The Compliance Officer is assigned with the right competence and knowledge to take responsibility for the implementation of the supply chain due diligence processes and to report to the general management.

For the efficient implementation of the CMS at Heraeus, clear decision-making powers and reporting channels were defined. The system is based on three elements:

- Clear allocation of responsibilities
- Strict separation of competencies in compliance with the dual control principle
- A clear set of rules and transparent processes.

Reporting channels and accountability for control and decision-making:



The Compliance Officer is responsible for dealing with non-high-risk business relationships.

The decision-making power over high-risk partners, in turn, lies with general management.

The general management and its associated boards both locally (Risk Committee) and on Group level (Sourcing Committee) review major decisions. At the same time the global Compliance Officer oversees local decisions continuously. Part of the committee meetings is also transparency and training to foster transparency for all senior committee members.

At least annually, Heraeus conducts internal training to all the relevant employees on Anti-Money Laundering, Responsible Sourcing, and other pertinent topics.

Regarding the Annual Training 2022, 288 employees (for the whole group) have participated, and the focus was on the following topics:

1. Anti-Money Laundering Legislation: current and new requirements
2. Responsible sourcing: Requirements and implementation of the LBMA Responsible Gold Guidance v. 9
3. Experience of Heraeus regarding the supply chain
4. Compliance requirements on the Heraeus Group level.

The Internal Compliance Management System is continuously subject to updates as per applicable legislation, regulations, and internal standards within the scope of continuous improvement. In 2022 no breaches of the internal due diligence processes triggering internal sanctions have been noted.

Cash payments are generally forbidden, and no exceptions are made.

Has the Refiner established a strong internal system of due diligence, controls, and transparency over silver supply chain, including traceability and identification of other supply chain actors?

Heraeus has established a strong internal system of due diligence, controls, and transparency over Precious Metal supply chain, including traceability and identification of other supply chain actors.

Heraeus's Compliance Function responsibility includes evaluation, monitoring and plausibility checks of existing and potential business relationships upstream and downstream, as well as checking the economic background of its business activities and, if necessary, also their partners along the value chain and to assess them.

Central elements of the evaluation process are:

- Identification and verification of the business partner, the acting persons, their partners, and suppliers (operating licenses, tax compliance, etc.)
- Determination and examination of the economic grounds as well as the shareholder and controlling person/s
- Determination and plausibility check of the intended business activity (assessment of economic sense, volume check)
- Determination and assessment of the origin of the material including respect of human rights, ESG factors and other relevant criteria as per the LBMA and other relevant standards
- On site visits: ideally before or within the first six months after start of a business relationship.

New suppliers must sign our "CODE OF CONDUCT MATERIAL QUESTIONNAIRE FOR PRECIOUS METAL SUPPLIERS OF HERAEUS" before we are entering into a new business relationship or provide their own Code of Conduct covering the same messages as ours. That questionnaire will be updated when our CAHRA list is updated. We further sharpened-up our documentation requirements in our updated business partner check SOP (Doc# 4.03.05) and have addressed that for the rating of new or existing customers. The Material Questionnaire is thereby fully aligned with the LBMA Questionnaires.

We are renewing our due diligence checks for all our suppliers in one, two- or three-years intervals based on the risk assessment we conducted in our KYC workflow and the results are archived in a database. We maintain many long-standing relationships with most of our supplying partners which are typically industry heavy weight organizations with similar due diligence requirements as Heraeus.

In the reporting year, we continued to be actively engaged in various business organizations like IPA (International Platinum organization), EPMF (European Precious Metals Federation, FVEM (Fachvereinigung Edelmetalle) as well as engaging with our government agencies in expert hearings. We also participated in a training seminar of the LBMA.

As per the above summary, we have established a strong internal system of due diligence, controls, and transparency over Precious Metal supply chain, including traceability and identification of other supply chain actors.

We have adopted a robust Precious Metals incoming receipts process: specific documents must be received, and transactional details entered before we process the precious metal-bearing material.

Particularly, within our traceability system, for each lot, based on the type of the material, we collect the following information/documents:

- Confirmation of the mining origin of the material
- Type of the material received
- Weight and assay
- Shipping and transportation documents
- A unique reference number assigned to each input and output order
- Date of arrival and date of assay finalization.

Each lot received is accurately registered in our transactional system. Specific controls are carried out before processing the material as outlined in our internal guidelines. All transactions are monitored within the EPR-System.

Heraeus organizes regular training for the employees involved in the process to make sure the guidelines are followed and respected.

Any form of non-conformity is unacceptable and must be reported to the Compliance Officer, which proceeds with internal clarifications, and application of the respective processes. In 2022 no instances of incidents relating to the counterparty's identification, origin, and traceability of precious metals have been identified.

[Has the Refiner strengthened company engagement with silver supplying counterparties, and where possible, assisted precious metals supplying counterparties in building due diligence capabilities?](#)

Heraeus has strengthened its engagement with precious metals supplying counterparties, and where possible, assisted precious metals supplying counterparties in building due diligence capabilities.

We have also modified our supplier agreements to stay fully compliant with the OECD guidelines where-ever possible.

On a regular basis, we conduct audits of our mining partners which are used to share Heraeus's values and standards and to assess their alignment with the requirements stated in our supply chain guidelines, with special focus on Child labor, Human rights and ESG issues. Proposals for possible optimizations of processes and documentations are discussed and document with our partners during on-site visits and are followed up upon in future visits.

In principle, we expect all counterparties to adhere to OECD standards and submit respective assurance. Where visits are conducted by Heraeus, documentation and agenda are at a minimum followed along the most recent versions of the LBMA questionnaires.

Has the Refiner established a company-wide confidential grievance mechanism?

Heraeus has established a company-wide communication mechanism to promote broad-based employee participation and risk identification to management.

We have implemented the Grievance Policy, which is accessible to any interested party, in person or anonymously, to voice concerns regarding the circumstances of precious metals extraction, trade, handling and export in a conflict-affected or high-risk area:

Reports can be made via different methods: by phone, e-mail, by post and face to face.

In addition to the measures already in place such as trainings, portal posts and presentations during management meetings, we constantly enhance our processes and organization. In 2022, we focused on a stronger engagement with our affiliate companies to profit from all staff experience. Furthermore, management oversight was strengthened beyond the legal entity CEOs to a Heraeus Precious Metals (HPM) Group level. Here, quarterly meetings of the sourcing committee with HPM-CEO, CFO, Compliance, Business Line Heads, and local CEOs foster discussions, decisions and awareness of risk assessments, processes, and organization.

In 2022 Heraeus did not receive grievances through the proposed reporting channels.

Step 2: Identify and assess risks in the supply chain

Compliance Statement with Requirement:

We have fully complied with Step 2: identify and assess risks in the supply chain.

Does the Refiner have a process to identify risks in the supply chain?

Heraeus has a process to identify risks in the supply chain.

We identify and assess risks in the supply chain. For every supplier, we have established a client database and allocated a risk profile according to our risk profile criteria. The process is a formal requirement before entering any business relationship with a supplying counterparty. Our due diligence process is carried out on a risk-oriented approach.

In particular, the time interval between checks on existing upstream business partners depends on whether the business partner is classified as high-risk or a low-high risk. The frequency of the reviews is once a year for high-risk customers, two years for medium-risk and every three years for low-risk ones.

We use proper modelling techniques to map our KYC (Know Your Customer) process which are used as a reference to identify possible risks in our supply chain and are also ideal training tools. The Compliance Officer takes care of the risk assessments and continuous monitoring based on the information received internally or from the relevant tools. KYC screening tools include Orbis, Factiva and other open sources.

How does the Refiner classify identified risks in light of the standards of its due diligence system?

Comments and Demonstrations of Compliance:

Heraeus does assess risks in light of the standards of their due diligence system.

Heraeus performs its Supply Chain Due Diligence in line with all measures required by the LBMA and other applicable standards before entering into a business relationship with any precious metal counterparties. We constantly monitor all transactions which take place through the course of the entire business relationship, and we conduct appropriate scrutiny and monitoring of the counterparts on a regular basis. Identified risks that require further investigation are managed by applying a strong risk-based approach.

The criteria for high-risk business relationships and transactions are regularly reviewed and updated, when required. These are based mainly on the LBMA Responsible Gold and Silver Guidance.

Supply chain Due Diligence risk-based approach includes the risk categories based on the identification of the customer, on the origin of the material and on the country of origin. These include (non-exhaustive list): Politically Exposed Persons; nationality, domicile of the customer, banking details, ultimate beneficial owner, legal representatives in high-risk countries; complex structures; presence in international sanctions lists; location of the operations in the high-risk area;

origin of the material from high-risk country, World Heritage Site, protected area; transportation of precious metals via high-risk area; human rights and ESG negative impacts including mercury use (which is not tolerated); artisanal small-scale mining; money-laundering and terrorism financing risks and others.

High-risk assessment is performed by Compliance Officer with the use of external reliable sources and indexes such as Heidelberg barometer, FATF lists, SECO and International Sanctions lists, UNICEF workplace Index; EU CAHRA List, Dodd Frank's 1502, NGO Reports, others. Supporting instruments are also platforms like Orbis and Factiva.

For existing customers, in case of identification of risks as per internal management strategies and processes, internal clarifications are performed. Based on their results, the business relationship will be terminated, suspended, continued with improvement plan, or continued regularly, if potential risks are not confirmed or are mitigated. In cases of known instances and founded suspicion it is mandatory to proceed with communication to the relevant authorities and LBMA.

Has the Refiner undertaken EDD measures for identified high-risk supply chains?

Heraeus undertakes the EDD (extended due diligence) measures based on the type of the precious metals bearing material. These include (non-exhaustive list): identification of all the participants of high-risk supply chain until the origin of the material, understanding of the risk of human rights violations, compliance with environmental standards, nature of security services provided in the mine, support to illegitimate non-state armed groups, compliance with tax requirements, assessment of due diligence processes for the recycling customer supply chain.

One of our EDD measures for high-risk customers is the on-site visit. For such a visit our main guidance regarding documentation and some help to set the agenda is the LBMA questionnaire. Visits are undertaken by experienced inhouse staff from Heraeus or from our subsidiary ARGOR-Heraeus, trained on the job over time by other experts. Results are checked via four eye principle and documented as described. Additionally, external consultants can be engaged due to capacity reasons, travel restrictions or specific expertise. Basic visit contents and documentation expectance does not change though. Furthermore, external visits shall not be conducted by the same external entity twice one after the other and external visits shall always be followed by internal staff visits where possible. Furthermore, we aim to achieve a maximum of 5 years between visits with much shorter periods as needed.

Deviations from the standard (e.g., Covid travel restrictions) are mitigated by a constant transparency note to the Sourcing Committee about outstanding visits, priorities, and the scheduled roadmap to full policy compliance.

In our partnership with intermediate refiners, in addition to our internal due diligence requirements and the independent assurance report on compliance with the OECD aligned responsible standard, we require additional information/documents which help us to understand and identify red flags on the Intermediate refiner supply chain. These additional requirements can be represented by, but not limited to, policies and procedures and work with our partners on roadmaps to receive independent assurance reports on the communicated policies. This process - where needed – is currently ongoing and progress is reported to the management.

In 2022 Heraeus-Group conducted programmed on-site visits to its mining and recycled material suppliers. Regarding mining customers, there were completed 9 on-site visits, two of which were conducted by external assessors..

In addition to the areas of assessment as per the LBMA on-site visit report template, additional focus during most of the mining on-site visits has been put on the artisanal mining near the customers mining concessions and the connected risks, community relationships and environmental impact.

Does the Refiner report risk assessment to the designated manager?

Heraeus reports risk assessment to general management.

The Compliance Officer verifies the potential risks in line with the internal codes of Heraeus as well as the OECD guidelines and the FATF-Rules. All new high-risk suppliers must be approved by Heraeus senior Management. Quarterly an internal risk review is conducted and it's outcome presented to the HPM Sourcing Committee.

Risk assessment results:

As a result of our due diligence management system, new business customers as well as existing business relationships are (re)evaluated and classified by the local and global compliance officers at intervals of 1, 2 or 3 years - depending on the assessed risk. In the case of a business relationship with a very high risk, an escalation to the HPM Sourcing Committee takes place. At management level, this committee decides on the further course of action for the business relationship.

Nothing Major or high risk was to report in the reporting period.

Step 3: Risk management

Compliance Statement with Requirement:

We have fully complied with Step 3: Design and implement a management system to respond to identified risks.

Does the Refiner have a process to respond to the identified risks by either (i) mitigating the risk while continuing to trade, (ii) mitigating the risk while suspending trade or (iii) disengagement from the risk?

Heraeus has adopted an automated screening of all business partners to identify risks in the supply chain. The screening allows us to manage risk through a rigorous risk assessment of all business partners and transactions through a regular re-assessment. In addition, identified risks are brought up from Compliance or business or any other stakeholder to the HPM Sourcing Committee, which after a careful analysis decides how to proceed and what kind of action/measures must be taken.

The results of the risk management strategy adopted are the following: to identify the risk by either (i) mitigation of the risk while continuing to trade, (ii) mitigation of the risk while suspending trade or (iii) disengagement from the risk, reporting accordingly.

Where a management strategy of risk mitigation is undertaken, it should include measurable steps to be taken and achieved, monitoring of performance, periodic reassessment of risk and regular reporting to designated senior management.

Corresponding procedures are in place and are applied accordingly. In case our risk assessment identifies high risk criteria, we actively approach our supplier to receive further information. If we cannot mitigate our risk assessment, the decision of closing the business relationship could be taken. Preferably, we engage our existing partners with requests for a long-term roadmap commitment, where short-term actions are not feasible. With this approach, we ensure ongoing and productive cooperation and retain measurable next steps. A clear commitment to specified steps and goals however is mandatory for a continuation of business.

Heraeus continuously cooperates with the relevant stakeholders including national, international authorities, associations, NGO's. Constructive and efficient cooperation is a necessary step to a transparent and responsible supply chain.

Step 4: Arrange for an independent third-party audit of the supply chain due diligence

Compliance Statement with Requirement:

We have fully complied with Step 4: Arrange for an independent third-party audit of the supply chain due diligence.

Comments and Demonstration of Compliance:

Heraeus engaged the services of the assurance provider PricewaterhouseCoopers GmbH, and their independent reasonable assurance report can be viewed as soon as available on www.herae.us/conflictminerals.

PwC has been chosen as a trusted, independent, and accredited global LBMA and LPPM partner.

Step 5: Report on supply chain due diligence

Compliance Statement with Requirement:

We have fully complied with Step 5: Report on supply chain due diligence.

Further information and specific details of how Heraeus systems, procedures, processes, and controls have been implemented to align to the specific requirements have been set out in our supply chain policy, which is available on our company website www.heraeus.com/conflictminerals.

Management conclusion

Is the Refiner in compliance with the requirements of the LBMA Responsible Gold and Silver Guidance for the reporting period?

Yes, Heraeus is in compliance with the requirements of the LBMA.

In conclusion, Heraeus implemented effective management systems, procedures, processes, and practices to conform to the requirements of the LBMA Responsible Gold and Silver Guidance, as explained above in the “Summary of the activities undertaken to demonstrate compliance”, for the reporting year ended 31 December 2022. Heraeus is committed to continuous improvement, and any corrective actions identified will be monitored internally on a regular basis.

Other report comments

If users of this report wish to provide any feedback to Heraeus with respect to this report, they can contact corporate relations on the compliance officer Dr. Patrick Henritzi.

patrick.henritzi@heraeus.com.



Dr. Patrick Henritzi

Heraeus
Heraeus Deutschland GmbH & Co. KG
Global Business Unit
Heraeus Precious Metals
Heraeusstr. 12-14
63450 Hanau, Germany

Compliance Officer / Head of PMCE