
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM SD

Specialized disclosure report

FREQUENCY ELECTRONICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

1-8061

Commission File No.

11-1986657

(I.R.S. Employer Identification No.)

55 CHARLES LINDBERGH BLVD., MITCHEL FIELD, N.Y.

(Address of principal executive offices)

11553

(Zip Code)

Steven Bernstein

(Name and telephone number, including area code, of the person to contact in connection with this report)

516-794-4500

Check the appropriate box to indicate the rule pursuant to which this form is being filed, and provide the period to which the information in this form applies:

Rule 13p-1 under the Securities Exchange Act (17 CFR 240.13p-1) for the reporting period from January 1 to December 31, 2018.

Section 1. Conflict Minerals Disclosure

Item 1.01 Conflict Minerals Disclosure and Report

(c) Conflict Minerals Report

Frequency Electronics, Inc. (the “Company”) evaluated its current product lines and determined that certain products we manufacture contain tin, tungsten, tantalum and/or gold (3TG) necessary to the production or functionality of such products.

In accordance with Rule 13p-1 under the Securities Exchange Act of 1934, as amended, the instructions to Form SD, and the Public Statement on the Effect of the Recent Court of Appeals Decision on the Conflict Minerals Rule issued by the Director of the Division of Corporation Finance of the Securities and Exchange Commission on April 29, 2014, the Company is filing herewith a Conflict Minerals Report, which is attached as Exhibit 1.01 and incorporated herein by reference.

The Company’s Conflict Minerals Policy and this Form SD, including the Company’s Conflict Minerals Report provided as Exhibit 1.01 hereto, is publicly available at the Company’s website: www.frequelec.com under Investor Relations/Financial/SEC Filings. The content of our website as referred to in this Form SD is included for general information only and is not incorporated by reference into this Form SD.

Item 1.02 Exhibits

Exhibit 1.01 [Conflict Minerals Report](#)

Section 2. Exhibits

Item 2.01 Exhibits

Exhibit 1.01 – [Conflict Minerals Report as required by Items 1.01 and 1.02 of Form SD.](#)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the duly authorized undersigned.

FREQUENCY ELECTRONICS, INC.
(Registrant)

Date: May 30, 2019

By: /s/ Steven Bernstein
Steven Bernstein
Chief Financial Officer

Frequency Electronics, Inc.
Conflict Minerals Report
For the Year Ended December 31, 2018

This Conflict Minerals Report for the year ended December 31, 2018 has been prepared by Frequency Electronics, Inc. (“Frequency” or the “Company,” “we,” “us,” or “our”) and is filed with the Securities and Exchange Commission (“SEC”) pursuant to Rule 13p-1 under the Securities Exchange Act of 1934, as amended (the “Rule”), on a consolidated basis, in accordance with the instructions to Form SD, as modified by the Public Statement on the Effect of the Recent Court of Appeals Decision on the Conflict Minerals Rule issued by the Director of the Division of Corporation Finance of the SEC on April 29, 2014 (the “SEC Statement”).

The Rule was adopted by the SEC to implement reporting and disclosure requirements related to conflict minerals as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act). The Rule imposes certain reporting obligations on SEC registrants whose manufactured products contain conflict minerals which are necessary to the functionality or production of their products. Conflict Minerals are defined as cassiterite, columbite-tantalite, gold, wolframite, and their derivatives, which are limited to tin, tantalum, tungsten, and gold (3TGs) for the purposes of this assessment. These requirements apply to registrants whatever the geographic origin of the conflict minerals and whether or not they fund armed conflict in the Democratic Republic of Congo or an adjoining country (collectively, the “Covered Countries”).

In accordance with the instructions to Form SD, as modified by the SEC Statement, this Report outlines the diligence measures undertaken by the Company to assess the source and chain of custody of necessary Conflict Minerals in its supply chain. This Report is not subject to an independent private sector audit in accordance with the instructions to Form SD and the guidance set forth in the SEC Statement.

1. Company Overview

Frequency designs, develops and manufactures high precision timing, frequency control and synchronization products for space and terrestrial applications. Frequency’s products are used in satellite payloads and in other commercial, government and military systems including C4ISR (“Command, Control, Communication, Computer, Intelligence, Security and Reconnaissance”), missiles, aircraft, GPS, secure radios, energy exploration and wireline and wireless communication networks. Frequency has received over 100 awards of excellence for achievements in providing high performance electronic assemblies for over 150 space and Department of Defense programs. The Company invests significant resources in research and development and strategic acquisitions world-wide to expand its capabilities and markets.

2. Products Overview

The Company’s largest business area is satellite payloads. We provide master timing systems, power converters, and frequency generation, synthesis and distribution systems. Frequency’s products are also incorporated into a variety of C5ISR, secure communications and electronic warfare systems, on ground-based, sea-borne and air-borne platforms.

Our commercial markets also include network infrastructure and other industrial uses. The Company’s products provide precise time distribution for communication networks. Based upon Frequency’s internal assessment, most of the electronic system and subsystem products that we manufacture contain one or more of the 3TGs that are necessary to their functionality or production (“Covered Products”).

3. Conflict Minerals Program & Policy

The Company has actively engaged with our customers and suppliers for several years with respect to the use of conflict minerals.

We adopted a Conflict Minerals Policy articulating our conflict minerals supply chain due diligence process and our commitment to our reporting obligations regarding conflict minerals. Our policy is available on our website <https://frequelec.com/vendors/>.

Reasonable Country of Origin Inquiry

To determine whether necessary 3TGs in our products originated in Covered Countries, we retained Assent Compliance (“Assent”), our third party service provider, to assist us in reviewing our supply chain. We provided a list composed of suppliers associated with the Covered Products to Assent for upload to the Assent Compliance Manager tool (“ACM”). We deemed it impractical to filter this list further to exclude some possibly irrelevant suppliers because we could not determine definitively the presence or absence of conflict minerals in all parts supplied to Frequency for our products.

Frequency utilized the Responsible Minerals Initiative’s Conflict Minerals Reporting Template (“CMRT”) to conduct a survey of all in scope suppliers. During the supplier survey, we contacted suppliers via the ACM. Assent requested that all suppliers complete a CMRT and included training and education to guide suppliers on best practices and the use of this template. Assent monitored and tracked all communications in the ACM for future reporting and transparency. Frequency directly contacted suppliers that were unresponsive to Assent’s communications during the diligence process and requested such suppliers to complete the CMRT form and submit such form to Assent. The use of the CMRT allowed for some elimination of irrelevant suppliers. We also periodically reviewed the supplier list to ensure that irrelevant or “out of scope” suppliers were removed from the survey process.

Our program continues to include automated data validation on all submitted CMRTs. The goal of data validation is to increase the accuracy of submissions and identify any contradictory answers in the CMRT. This data validation is based on:

- Questions 1 and 2 are minimum requirements for the CMRT
 - If suppliers state (via Q1 and Q2) that their products do not contain 3TGs necessary to the function or production of said products, then no further information is required and no further data validation is completed.
- Question 3 – Do any of your 3TGs originate from the covered countries?
 - Any supplier that has any 3TGs from the covered countries, even 1 positive response from their supply chain must answer yes.
- Question 4 – Is 100% of the 3TGs in question from a recycled source?
- Question 5 – Have you received info from all relevant 3TGs Suppliers?
 - If you are not at 100%, then you cannot make definitive statements for Questions 3, 4 and 6
- Question 6 – Have you identified all your Smelters and refiners?
 - If the answer here is yes, then question 5 must be yes. This also impacts question 3.

All submitted forms are accepted and classified as valid or invalid so that data is still retained. Suppliers are contacted in regards to invalid forms and are encouraged to submit a valid form. Suppliers are also provided with guidance on how to correct these validation errors. As of May 13th, there were 8(eight) invalid supplier submissions that could not be corrected.

Assent compared the list of smelters and refiners provided in our suppliers’ responses to the lists of smelters maintained by the Responsible Minerals Initiative (“RMI”) and, if a supplier indicated that a facility was certified as conflict-free, confirmed that the facility was listed on RMI’s list of validated conflict-free smelters and refiners of 3TGs. Our suppliers identified a total of 317 smelters and refiners that appear on the lists maintained by RMI. Of these 317 smelters and refiners, 254 are validated as conflict-free by RMI or a cross-recognized initiative, and, based on information provided by RMI, a further 5 have agreed to undergo or are currently undergoing a third-party audit. Most of the CMRTs we received were made on a company or division level basis which did not allow us to identify which smelters or refiners listed by our suppliers actually processed the 3TGs contained in our products.

Based on the reasonable country of origin inquiry (“RCOP”), we had reason to believe that some of the 3TGs may have originated from the Covered Countries, therefore, in accordance with the Rule, we performed due diligence on the source and chain of custody of the conflict minerals in question.

4. Design of Our Due Diligence and Description of the Due Diligence Process

We designed our due diligence measures to conform, in all material respects, with the framework in The Organization for Economic Co-operation and Development (“OECD”) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the “Guidance”) and the related supplement on gold, and supplement on tin, tantalum and tungsten. The Guidance identifies five steps for due diligence that should be implemented and provides guidance as to how to achieve each step. We developed our due diligence process to address each of these five steps, namely:

1. Establishing strong company management systems;
2. Identifying and assessing risks in our supply chain;
3. Designing and implementing a strategy to respond to identified risks in our supply chain;
4. Utilizing independent third-party audits of supply chain diligence; and
5. Publicly reporting on our supply chain due diligence

We are a downstream supplier, many steps removed from the mining of 3TGs. A large number of suppliers, through multiple tiers of distribution, supply the components and materials integrated into our products. Furthermore, Frequency does not purchase raw ore or unrefined conflict minerals or make purchases from the Covered Countries. The origin of the conflict minerals cannot be determined with any certainty once the raw ores are smelted, refined and converted to ingots, bullion or other conflict mineral containing derivatives. The smelters and refiners consolidate raw ore and represent the best actors in the total supply chain to possess knowledge of the origin of the ores they procure.

The OECD Guidance specifies that the requirements for compliance should reflect a company’s position in the supply chain. In particular, the OECD Guidance states that the implementation of due diligence should be tailored to a company’s activities and relationships and that the nature and extent of due diligence may vary based on a company’s size, products, relationships with suppliers and other factors. Due to practical difficulties associated with supply chain complexities, the OECD Guidance advises that downstream companies exercise due diligence primarily by establishing controls over their immediate suppliers. Accordingly, we rely primarily on our “tier 1” (direct) suppliers to provide information with respect to the origin of the conflict minerals contained in the components and materials supplied to us.

Due Diligence Performed

1) Establish Strong Company Management Systems

Internal Compliance Team

Frequency established a cross-functional Conflict Minerals Compliance Team led by John Caufield, Vice President of Manufacturing, also comprising representatives from our purchasing, contracts, and finance teams. Subject matter experts from relevant functions such as purchasing, subcontracts, and engineering support this team. The Conflict Minerals Compliance Team is responsible for implementing our conflict minerals compliance strategy and briefing senior management about the results of our due diligence efforts.

The Company also uses Assent to assist us with evaluating supply chain information regarding 3TGs, identifying potential risks, and in the development and implementation of additional due diligence steps that we undertake with suppliers in regards to conflict minerals.

Control Systems

The Company expects all of its suppliers to have policies and procedures in place to ensure that any 3TGs used in the production of the products sold to Frequency are Democratic Republic of Congo (“DRC”) conflict-free. This means that the products must not contain 3TGs that directly or indirectly finance or benefit armed groups in the Covered Countries. We rely on our direct suppliers to provide information on the origin of the 3TGs contained in components and materials supplied to us – including sources of 3TGs that are supplied to them from lower tier suppliers.

Our supplier Code of Conduct applies to all direct suppliers and outlines certain expected behaviors and practices. This Code of Conduct is based on industry and internationally accepted principles such as the United Nations Guiding Principles on Business and Human Rights and the OECD Due Diligence Guidance. The Code of Conduct is provided to all direct suppliers and if a supplier does not meet the Company's requirements, the relationship with this supplier will be evaluated. Our Code of Conduct is reviewed annually to ensure it continues to align with industry best practices.

Supplier Engagement

The Company engages with suppliers directly to request that they complete a valid CMRT for the products that they supply to the Company. With respect to the OECD requirement to strengthen engagement with suppliers, the Company has developed an internal procedure that includes steps of supplier engagement escalation such as in-person meetings and corrective actions. Feedback from this engagement has allowed the Company to oversee improvements in supplier responses and supplier compliance for this initiative.

The Company believes that the combination of the Code of Conduct, our Conflict Minerals Policy, and direct engagement with suppliers for 3TGs training and requests constitute a strong program when it comes to supplier engagement.

Maintain Records

The Company has adopted a policy to retain relevant documentation for a period of 5 years. We implemented a document retention policy through Assent to retain conflict minerals related documents, including supplier responses to CMRTs. We store all of the information and findings from this process in a database that can be audited by internal or external parties

2) Identifying and Assessing Risk in the Supply Chain

Due to our size, the complexity of our products, and the depth, breadth, and constant evolution of our supply chain, it is difficult to identify actors upstream from our direct suppliers. Risks are identified automatically in the ACM system based on criteria established for supplier responses in the system. These risks are addressed by Assent staff and members of our Conflict Minerals Compliance Team who contact the supplier, gather pertinent data and perform an assessment of the supplier's conflict minerals status.

One risk we identified with respect to the reporting period ended December 31st, 2018 related to the nature of the responses received. A large number of the responses received provided data at a company or divisional level or were unable to specify the smelters or refiners used for 3TGs in the components supplied to Frequency. Additionally, some suppliers indicated that they received information regarding their supply chains from fewer than 75% of their suppliers and, therefore, they could not provide a comprehensive list of all smelters or refiners in their supply chains.

In accordance with OECD Guidelines, it is important to identify and assess risks associated with conflict minerals in the supply chain. Risks were identified by assessing the due diligence practices of smelters and refiners identified in the supply chain by upstream suppliers that listed mineral processing facilities on their CMRT declarations. Assent compared these facilities listed in the responses to the list of smelters and refiners maintained by the RMI to ensure that the facilities met the RMI definition of a 3TGs processing facility that was operational during the 2018 calendar year.

In order to assess the risk that any of these smelters posed to our supply chain, Assent determined if the smelter had been audited against a standard in conformance with the OECD Guidance, such as the Responsible Minerals Assurance Process ("RMAP"). We do not typically have a direct relationship with 3TGs smelters and refiners and do not perform or direct audits of these entities within our supply chain. In cases where the smelter's due diligence practices have not been audited against the RMAP standard, a potential supply chain risk exists.

As of May 27, 2019, we have validated 317 smelters or refiners and are working to validate the additional smelter/refiner entries from the submitted CMRTs. Due to the provision of primarily supplier-level CMRTs, we cannot definitely determine their connection to the Covered Products.

Each facility that meets the RMI definition of a smelter or refiner of a 3TGs mineral is assessed according to red flag indicators defined in the OECD Guidance. Assent uses numerous factors to determine the level of risk that each smelter poses to the supply chain by identifying red flags. These factors include:

- Geographic proximity to the DRC and covered countries;
- Known mineral source country of origin;
- RMAP audit status;
- Credible evidence of unethical or conflict sourcing;
- Peer assessments conducted by credible third-party sources.

As part of our risk management plan under the OECD Guidance, when facilities with red flags were reported on a CMRT by one of the suppliers surveyed, risk mitigation activities are initiated. Through Assent, submissions that include any red flag facilities immediately produce a receipt instructing the supplier to take their own risk mitigation actions, including submission of a product specific CMRT to better identify the connection to products that they supply to Frequency, and escalating up to removal of these red flag smelters from the supply chain.

As per the OECD Guidance, risk mitigation will depend on the supplier's specific context. Suppliers are given clear performance objectives within reasonable timeframes with the ultimate goal of progressive elimination of these red flags from the supply chain. In addition, suppliers are guided to the Assent University learning platform to engage in educational materials on mitigating the risk of smelters or refiners on the supply chain.

Additionally, suppliers are evaluated on program strength (further assisting in identifying risk in the supply chain). The criteria used to evaluate the strength of the program are based on these four questions in the CMRT:

Have you established a conflict minerals sourcing policy?

Have you implemented due diligence measures for conflict-free sourcing?

Do you review due diligence information received from your suppliers against your company's expectations?

Does your review process include corrective action management?

When suppliers meet or exceed those criteria, they are deemed to have a strong program. When suppliers do not meet those criteria, they are deemed to have a weak program. At this time, 17 of our responsive suppliers have been identified as having a weak program.

3) Design and Implement a Strategy to Respond to Risks

Together with Assent, we developed processes to assess and respond to the risks identified in our supply chain. In response to this risk assessment, Frequency has a risk management plan, through which the conflict minerals program is implemented, managed, and monitored. As the program progresses, escalations are sent to non-responsive suppliers to outline the importance of a response via CMRTs and to outline the required cooperation for compliance with the Rule.

We engage each of our suppliers that we have reason to believe are supplying us with 3TGs from sources that may support conflict in the Covered Countries to establish an alternative source of 3TGs that does not support such conflict, as provided in the OECD Guidance.

4) Carry out Independent Third Party Audit of Supply Chain Due Diligence at Identified Points in the Supply Chain

We do not have a direct relationship with any 3TGs smelters or refiners and do not perform or direct audits of these entities within our supply chain. Instead, we rely on third-party audits of smelters and refiners conducted as part of the RMAP, which uses independent private sector auditors to audit the source, including the mines of origin, and the chain of custody of the conflict minerals used by smelters and refiners that agree to participate in the program.

Assent also directly contacts smelters and refiners that are not currently enrolled in the RMAP to encourage their participation and gather information regarding each facilities' sourcing practices on behalf of its compliance partners. Frequency is a signatory of this communication in accordance with the requirements of downstream companies detailed in the OECD Guidance.

5) Public Reporting on Supply Chain Due Diligence

We have published our Form SD for the year ended December 31, 2018 and this report is in the Investor Relations section of our website at <https://fregelec.com/vendors/>. Information found on or accessed through our website is not considered part of this report and is not incorporated by reference herein. We have also publicly filed our Form SD and this report with the SEC.

Due Diligence Results

Survey Results

For the 2018 reporting year, Frequency received CMRT forms from 63.25% of the suppliers surveyed. All final CMRT submissions were reviewed and validated to ensure no inaccuracies or gaps in data were found. Eight of the suppliers were unable to correct their CMRT and as such, are still listed as invalid submissions.

Smelters and Refiners

Attached as Appendix A is a list of all of the smelters and refiners listed by our suppliers in their completed CMRTs that appear on the lists of smelters maintained by the RMI. Since many of the CMRTs we received from our suppliers were made on a company or division level basis, rather than on a product-level basis, we are not able to identify which smelters or refiners listed on Appendix A actually processed the 3TGs contained in our products. Therefore, our list of processing smelters and refiners disclosed in Appendix A may contain more facilities than those that actually processed the 3TGs contained in the Covered Products.

From the responses that we received, we identified 66 smelters that potentially posed a risk due to the presence of some red flag indicators. For suppliers that identified these specific smelters of concern on their CMRT, we created a new escalation plan. These suppliers were contacted by Assent and Frequency to evaluate whether or not these smelters could be connected to Frequency products. The suppliers were asked to complete a product-level CMRT, rather than a company-level CMRT, to better identify the connection to products that they supply to Frequency. Other suppliers were evaluated internally to determine if they were in fact still active suppliers. If not, they were removed from the scope of data collection.

Countries of Origin

Appendix B includes an aggregated list of the countries of origin from which the reported facilities collectively source conflict minerals, based on information provided by suppliers and the RMI. As mentioned in the above section, many responses were provided at the company level, therefore, Appendix B may contain more countries than those that are actually the sources of the 3TGs in the Covered Products.

Steps to be Taken to Mitigate Risk

We have taken or intend to take the following steps to improve the due diligence conducted to further mitigate any risk that the necessary 3TGs in the Covered Products could benefit armed groups in the Covered Countries:

- Work more closely with Assent to obtain CMRTs on a product-specific basis to enable us to determine which smelters and refiners actually process 3TGs contained in our products.
 - Engage with our suppliers more closely and provide suppliers with more information and training resources regarding responsible sourcing of 3TGs.
 - Encourage our suppliers to have due diligence procedures in place for their supply chains to improve the content of the responses from such suppliers.
 - Continue to include a conflict minerals flow-down clause in new or renewed supplier contracts as well as included in the terms and conditions of each purchase order issued.
 - Increase the emphasis on clean and validated smelter and refiner information from our supply chain as the list of conflict-free smelters and refiners grows and more smelters and refiners declare their intent to enroll in the program.
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Appendix A - Smelter list

- Includes: metal, smelter/refinery name, facility, location, smelter ID

Metal	Smelter Name	Smelter Facility Location	Smelter ID
Gold	Abington Reldan Metals, LLC	UNITED STATES	CID002708
Gold	Advanced Chemical Company	UNITED STATES	CID000015
Gold	African Gold Refinery	UGANDA	CID003185
Gold	Aida Chemical Industries Co., Ltd.	JAPAN	CID000019
Gold	Al Etihad Gold LLC	UNITED ARAB EMIRATES	CID002560
Gold	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY	CID000035
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	UZBEKISTAN	CID000041
Gold	AngloGold Ashanti Córrego do Sítio Mineração	BRAZIL	CID000058
Gold	Argor-Heraeus S.A.	SWITZERLAND	CID000077
Gold	Asahi Pretec Corp.	JAPAN	CID000082
Gold	Asahi Refining Canada Ltd.	CANADA	CID000924
Gold	Asahi Refining USA Inc.	UNITED STATES	CID000920
Gold	Asaka Riken Co., Ltd.	JAPAN	CID000090
Gold	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	TURKEY	CID000103
Gold	AU Traders and Refiners	SOUTH AFRICA	CID002850
Gold	Aurubis AG	GERMANY	CID000113
Gold	Bangalore Refinery	INDIA	CID002863
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES	CID000128
Gold	Boliden AB	SWEDEN	CID000157
Gold	C. Hafner GmbH + Co. KG	GERMANY	CID000176
Gold	Caridad	MEXICO	CID000180
Gold	CCR Refinery - Glencore Canada Corporation	CANADA	CID000185
Gold	Cendres + Métaux S.A.	SWITZERLAND	CID000189
Gold	CGR Metalloys Pvt Ltd.	INDIA	CID000382
Gold	Chimet S.p.A.	ITALY	CID000233
Gold	Chugai Mining	JAPAN	CID000264
Gold	Daejin Indus Co., Ltd.	KOREA, REPUBLIC OF	CID000328
Gold	Daye Non-Ferrous Metals Mining Ltd.	CHINA	CID000343
Gold	Degussa Sonne / Mond Goldhandel GmbH	GERMANY	CID002867
Gold	Dijllah Gold Refinery FZC	UNITED ARAB EMIRATES	CID003348
Gold	DODUCO Contacts and Refining GmbH	GERMANY	CID000362
Gold	Dowa	JAPAN	CID000401
Gold	DS PRETECH Co., Ltd.	KOREA, REPUBLIC OF	CID003195
Gold	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF	CID000359
Gold	Eco-System Recycling Co., Ltd.	JAPAN	CID000425
Gold	Emirates Gold DMCC	UNITED ARAB EMIRATES	CID002561
Gold	Fidelity Printers and Refiners Ltd.	ZIMBABWE	CID002515
Gold	GCC Gujrat Gold Centre Pvt. Ltd.	INDIA	CID002852
Gold	Geib Refining Corporation	UNITED STATES	CID002459
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CHINA	CID002243
Gold	Great Wall Precious Metals Co., Ltd. of CBPM	CHINA	CID001909
Gold	Guangdong Jinding Gold Limited	CHINA	CID002312
Gold	Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CHINA	CID000651
Gold	Hangzhou Fuchunjiang Smelting Co., Ltd.	CHINA	CID000671
Gold	HeeSung	KOREA, REPUBLIC OF	CID000689
Gold	Heimerle + Meule GmbH	GERMANY	CID000694
Gold	Heraeus Metals Hong Kong Ltd.	CHINA	CID000707
Gold	Heraeus Precious Metals GmbH & Co. KG	GERMANY	CID000711
Gold	Hunan Chenzhou Mining Co., Ltd.	CHINA	CID000767
Gold	Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd.	CHINA	CID000773
Gold	Hwasung CJ Co., Ltd.	KOREA, REPUBLIC OF	CID000778
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CHINA	CID000801
Gold	Ishifuku Metal Industry Co., Ltd.	JAPAN	CID000807
Gold	Istanbul Gold Refinery	TURKEY	CID000814
Gold	Italpreziosi	ITALY	CID002765
Gold	Japan Mint	JAPAN	CID000823
Gold	Jiangxi Copper Co., Ltd.	CHINA	CID000855
Gold	JSC Ekaterinburg Non-Ferrous Metal Processing Plant	RUSSIAN FEDERATION	CID000927
Gold	JSC Uralelectromed	RUSSIAN FEDERATION	CID000929

Gold	JX Nippon Mining & Metals Co., Ltd.	JAPAN	CID000937
Gold	Kaloti Precious Metals	UNITED ARAB EMIRATES	CID002563
Gold	Kazakhmys Smelting LLC	KAZAKHSTAN	CID000956
Gold	Kazzinc	KAZAKHSTAN	CID000957
Gold	Kennecott Utah Copper LLC	UNITED STATES	CID000969
Gold	KGHM Polska Miedz Spolka Akcyjna	POLAND	CID002511
Gold	Kojima Chemicals Co., Ltd.	JAPAN	CID000981
Gold	Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF	CID002605
Gold	Kyrgyzaltyn JSC	KYRGYZSTAN	CID001029
Gold	Kyshtym Copper-Electrolytic Plant ZAO	RUSSIAN FEDERATION	CID002865
Gold	L'azurde Company For Jewelry	SAUDI ARABIA	CID001032
Gold	Lingbao Gold Co., Ltd.	CHINA	CID001056
Gold	Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CHINA	CID001058
Gold	L'Orfebvre S.A.	ANDORRA	CID002762
Gold	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF	CID001078
Gold	Luoyang Zijin Yinhuai Gold Refinery Co., Ltd.	CHINA	CID001093
Gold	Marsam Metals	BRAZIL	CID002606
Gold	Materion	UNITED STATES	CID001113
Gold	Matsuda Sangyo Co., Ltd.	JAPAN	CID001119
Gold	Metalor Technologies (Hong Kong) Ltd.	CHINA	CID001149
Gold	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE	CID001152
Gold	Metalor Technologies (Suzhou) Ltd.	CHINA	CID001147
Gold	Metalor Technologies S.A.	SWITZERLAND	CID001153
Gold	Metalor USA Refining Corporation	UNITED STATES	CID001157
Gold	Metalúrgica Met-Mex Peñoles S.A. De C.V.	MEXICO	CID001161
Gold	Mitsubishi Materials Corporation	JAPAN	CID001188
Gold	Mitsui Mining and Smelting Co., Ltd.	JAPAN	CID001193
Gold	MMTC-PAMP India Pvt., Ltd.	INDIA	CID002509
Gold	Modeltech Sdn Bhd	MALAYSIA	CID002857
Gold	Morris and Watson	NEW ZEALAND	CID002282
Gold	Morris and Watson Gold Coast	AUSTRALIA	CID002866
Gold	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION	CID001204
Gold	Nadir Metal Rafineri San. Ve Tic. A.ª.	TURKEY	CID001220
Gold	Navoi Mining and Metallurgical Combinat	UZBEKISTAN	CID001236
Gold	NH Recytech Company	KOREA, REPUBLIC OF	CID003189
Gold	Nihon Material Co., Ltd.	JAPAN	CID001259
Gold	Ngussa sterreichische Gold- und Silber-Scheideanstalt GmbH	AUSTRIA	CID002779
Gold	Ohura Precious Metal Industry Co., Ltd.	JAPAN	CID001325
Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	RUSSIAN FEDERATION	CID001326
Gold	OJSC Novosibirsk Refinery	RUSSIAN FEDERATION	CID000493
Gold	PAMP S.A.	SWITZERLAND	CID001352
Gold	Pease & Curren	UNITED STATES	CID002872
Gold	Penglai Penggang Gold Industry Co., Ltd.	CHINA	CID001362
Gold	Planta Recuperadora de Metales SpA	CHILE	CID002919
Gold	Prioksky Plant of Non-Ferrous Metals	RUSSIAN FEDERATION	CID001386
Gold	PT Aneka Tambang (Persero) Tbk	INDONESIA	CID001397
Gold	PX Prcinox S.A.	SWITZERLAND	CID001498
Gold	QG Refining, LLC	UNITED STATES OF AMERICA	CID003324
Gold	Rand Refinery (Pty) Ltd.	SOUTH AFRICA	CID001512
Gold	Refinery of Seemine Gold Co., Ltd.	CHINA	CID000522
Gold	Remondis Argentia B.V.	NETHERLANDS	CID002582
Gold	Republic Metals Corporation	UNITED STATES	CID002510
Gold	Royal Canadian Mint	CANADA	CID001534
Gold	SAAMP	FRANCE	CID002761
Gold	Sabin Metal Corp.	UNITED STATES	CID001546
Gold	Safimet S.p.A	Italy	CID002973
Gold	SAFINA A.S.	CZECH REPUBLIC	CID002290
Gold	Sai Refinery	INDIA	CID002853
Gold	Samduck Precious Metals	KOREA, REPUBLIC OF	CID001555
Gold	SAMWON Metals Corp.	KOREA, REPUBLIC OF	CID001562
Gold	SAXONIA Edelmetalle GmbH	GERMANY	CID002777
Gold	SEMPSA Joyería Platería S.A.	SPAIN	CID001585
Gold	Shandong Tiacheng Biological Gold Industrial Co., Ltd.	CHINA	CID001619
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA	CID001622
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CHINA	CID001736

Gold	Singway Technology Co., Ltd.	TAIWAN	CID002516
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION	CID001756
Gold	Solar Applied Materials Technology Corp.	TAIWAN	CID001761
Gold	Sovereign Metals	INDIA	CID003383
Gold	State Research Institute Center for Physical Sciences and Technology	LITHUANIA	CID003153
Gold	Sudan Gold Refinery	SUDAN	CID002567
Gold	Sumitomo Metal Mining Co., Ltd.	JAPAN	CID001798
Gold	SungEel HiTech	KOREA, REPUBLIC OF	CID002918
Gold	T.C.A S.p.A	ITALY	CID002580
Gold	Tanaka Kikinzoku Kogyo K.K.	JAPAN	CID001875
Gold	The Refinery of Shandong Gold Mining Co., Ltd.	CHINA	CID001916
Gold	Tokuriki Honten Co., Ltd.	JAPAN	CID001938
Gold	Tongling Nonferrous Metals Group Co., Ltd.	CHINA	CID001947
Gold	Tony Goetz NV	BELGIUM	CID002587
Gold	TOO Tau-Ken-Altyn	KAZAKHSTAN	CID002615
Gold	Torecom	KOREA, REPUBLIC OF	CID001955
Gold	Umicore Brasil Ltda.	BRAZIL	CID001977
Gold	Umicore Precious Metals Thailand	THAILAND	CID002314
Gold	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM	CID001980
Gold	United Precious Metal Refining, Inc.	UNITED STATES	CID001993
Gold	Universal Precious Metals Refining Zambia	ZAMBIA	CID002854
Gold	Valcambi S.A.	SWITZERLAND	CID002003
Gold	Western Australian Mint trading as The Perth Mint	AUSTRALIA	CID002030
Gold	WIELAND Edelmetalle GmbH	GERMANY	CID002778
Gold	Yamamoto Precious Metal Co., Ltd.	JAPAN	CID002100
Gold	Yokohama Metal Co., Ltd.	JAPAN	CID002129
Gold	Yunnan Copper Industry Co., Ltd.	CHINA	CID000197
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA	CID002224
Tantalum	Asaka Riken Co., Ltd.	JAPAN	CID000092
Tantalum	Changsha South Tantalum Niobium Co., Ltd.	CHINA	CID000211
Tantalum	CP Metals Inc.	UNITED STATES OF AMERICA	CID003402
Tantalum	D Block Metals, LLC	UNITED STATES	CID002504
Tantalum	Exotech Inc.	UNITED STATES	CID000456
Tantalum	F&X Electro-Materials Ltd.	CHINA	CID000460
Tantalum	FIR Metals & Resource Ltd.	CHINA	CID002505
Tantalum	Global Advanced Metals Aizu	JAPAN	CID002558
Tantalum	Global Advanced Metals Boyertown	UNITED STATES	CID002557
Tantalum	Guangdong Rising Rare Metals-EO Materials Ltd.	CHINA	CID000291
Tantalum	Guangdong Zhiyuan New Material Co., Ltd.	CHINA	CID000616
Tantalum	H.C. Starck Co., Ltd.	THAILAND	CID002544
Tantalum	H.C. Starck Hermsdorf GmbH	GERMANY	CID002547
Tantalum	H.C. Starck Inc.	UNITED STATES	CID002548
Tantalum	H.C. Starck Ltd.	JAPAN	CID002549
Tantalum	H.C. Starck Smelting GmbH & Co. KG	GERMANY	CID002550
Tantalum	H.C. Starck Tantalum and Niobium GmbH	GERMANY	CID002545
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA	CID002492
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA	CID002512
Tantalum	Jiangxi Tuohong New Raw Material	CHINA	CID002842
Tantalum	Jiujiang Janny New Material Co., Ltd.	CHINA	CID003191
Tantalum	JiuJiang JinXin Nonferrous Metals Co., Ltd.	CHINA	CID000914
Tantalum	Jiujiang Tanbre Co., Ltd.	CHINA	CID000917
Tantalum	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CHINA	CID002506
Tantalum	KEMET Blue Metals	MEXICO	CID002539
Tantalum	KEMET Blue Powder	UNITED STATES	CID002568
Tantalum	LSM Brasil S.A.	BRAZIL	CID001076
Tantalum	Metallurgical Products India Pvt., Ltd.	INDIA	CID001163
Tantalum	Mineracao Taboca S.A.	BRAZIL	CID001175
Tantalum	Mitsui Mining and Smelting Co., Ltd.	JAPAN	CID001192
Tantalum	Ningxia Orient Tantalum Industry Co., Ltd.	CHINA	CID001277
Tantalum	NPM Silmet AS	ESTONIA	CID001200
Tantalum	Power Resources Ltd.	MACEDONIA	CID002847
Tantalum	QuantumClean	UNITED STATES	CID001508
Tantalum	Resind Industria e Comercio Ltda.	BRAZIL	CID002707
Tantalum	RFH Tantalum Smeltry Co., Ltd.	CHINA	CID001522
Tantalum	Solikamsk Magnesium Works OAO	RUSSIAN FEDERATION	CID001769
Tantalum	Taki Chemicals	JAPAN	CID001869

Tantalum	Telex Metals	UNITED STATES	CID001891
Tantalum	Ulba Metallurgical Plant JSC	KAZAKHSTAN	CID001969
Tantalum	XinXing HaoRong Electronic Material Co., Ltd.	CHINA	CID002508
Tin	Alpha	UNITED STATES	CID000292
Tin	An Vinh Joint Stock Mineral Processing Company	VIET NAM	CID002703
Tin	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CHINA	CID000228
Tin	Chifeng Dajingzi Tin Industry Co., Ltd.	CHINA	CID003190
Tin	China Tin Group Co., Ltd.	CHINA	CID001070
Tin	CV Ayi Jaya	INDONESIA	CID002570
Tin	CV Dua Sekawan	INDONESIA	CID002592
Tin	CV Gita Pesona	INDONESIA	CID000306
Tin	CV Tiga Sekawan	INDONESIA	CID002593
Tin	CV United Smelting	INDONESIA	CID000315
Tin	CV Venus Inti Perkasa	INDONESIA	CID002455
Tin	Dowa	JAPAN	CID000402
Tin	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company	VIET NAM	CID002572
Tin	EM Vinto	BOLIVIA	CID000438
Tin	Estanho de Rondônia S.A.	BRAZIL	CID000448
Tin	Fenix Metals	POLAND	CID000468
Tin	Gejiu Fengming Metallurgy Chemical Plant	CHINA	CID002848
Tin	Gejiu Kai Meng Industry and Trade LLC	CHINA	CID000942
Tin	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA	CID000538
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA	CID001908
Tin	Gejiu Zili Mining And Metallurgy Co., Ltd.	CHINA	CID000555
Tin	Guangdong Hanhe Non-ferrous Metal Limited Company	CHINA	CID003116
Tin	Guanyang Guida Nonferrous Metal Smelting Plant	CHINA	CID002849
Tin	HuiChang Hill Tin Industry Co., Ltd.	CHINA	CID002844
Tin	Huichang Jinshunda Tin Co., Ltd.	CHINA	CID000760
Tin	Jiangxi New Nanshan Technology Ltd.	CHINA	CID001231
Tin	Magnu's Minerai's Metais e Ligas Ltda.	BRAZIL	CID002468
Tin	Malaysia Smelting Corporation (MSC)	MALAYSIA	CID001105
Tin	Melt Metais e Ligas S.A.	BRAZIL	CID002500
Tin	Metallic Resources, Inc.	UNITED STATES	CID001142
Tin	Metallo Belgium N.V.	BELGIUM	CID002773
Tin	Metallo Spain S.L.U.	SPAIN	CID002774
Tin	Mineracao Taboca S.A.	BRAZIL	CID001173
Tin	Minsur	PERU	CID001182
Tin	Mitsubishi Materials Corporation	JAPAN	CID001191
Tin	Modeltech Sdn Bhd	MALAYSIA	CID002858
Tin	Nghe Tinh Non-Ferrous Metals Joint Stock Company	VIET NAM	CID002573
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND	CID001314
Tin	O.M. Manufacturing Philippines, Inc.	PHILIPPINES	CID002517
Tin	Operaciones Metalurgical S.A.	BOLIVIA	CID001337
Tin	Pongpipat Company Limited	MYANMAR	CID003208
Tin	PT Aries Kencana Sejahtera	INDONESIA	CID000309
Tin	PT Artha Cipta Langgeng	INDONESIA	CID001399
Tin	PT ATD Makmur Mandiri Jaya	INDONESIA	CID002503
Tin	PT Babel Inti Perkasa	INDONESIA	CID001402
Tin	PT Babel Surya Alam Lestari	INDONESIA	CID001406
Tin	PT Bangka Prima Tin	INDONESIA	CID002776
Tin	PT Bangka Serumpun	INDONESIA	CID003205
Tin	PT Bangka Tin Industry	INDONESIA	CID001419
Tin	PT Belitung Industri Sejahtera	INDONESIA	CID001421
Tin	PT Bukit Timah	INDONESIA	CID001428
Tin	PT DS Jaya Abadi	INDONESIA	CID001434
Tin	PT Inti Stania Prima	INDONESIA	CID002530
Tin	PT Kijang Jaya Mandiri	INDONESIA	CID002829
Tin	PT Menara Cipta Mulia	INDONESIA	CID002835
Tin	PT Mitra Stania Prima	INDONESIA	CID001453
Tin	PT Panca Mega Persada	INDONESIA	CID001457
Tin	PT Premium Tin Indonesia	INDONESIA	CID000313
Tin	PT Prima Timah Utama	INDONESIA	CID001458
Tin	PT Refined Bangka Tin	INDONESIA	CID001460
Tin	PT Sariwiguna Binasentosa	INDONESIA	CID001463
Tin	PT Stanindo Inti Perkasa	INDONESIA	CID001468

Tin	PT Sukses Inti Makmur	INDONESIA	CID002816
Tin	PT Sumber Jaya Indah	INDONESIA	CID001471
Tin	PT Timah (Persero) Tbk Kundur	INDONESIA	CID001477
Tin	PT Timah (Persero) Tbk Mentok	INDONESIA	CID001482
Tin	PT Tinindo Inter Nusa	INDONESIA	CID001490
Tin	PT Tirus Putra Mandiri	INDONESIA	CID002478
Tin	PT Tommy Utama	INDONESIA	CID001493
Tin	Resind Industria e Comercio Ltda.	BRAZIL	CID002706
Tin	Rui Da Hung	TAIWAN	CID001539
Tin	Soft Metais Ltda.	BRAZIL	CID001758
Tin	Super Ligas	Brazil	CID002756
Tin	Thaisarco	THAILAND	CID001898
Tin	Tin Technology & Refining	UNITED STATES OF AMERICA	CID003325
Tin	Tuyen Quang Non-Ferrous Metals Joint Stock Company	VIET NAM	CID002574
Tin	White Solder Metalurgia e Mineraçao Ltda.	BRAZIL	CID002036
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA	CID002158
Tin	Yunnan Tin Company Limited	CHINA	CID002180
Tungsten	A.L.M.T. TUNGSTEN Corp.	JAPAN	CID000004
Tungsten	ACL Metais Eireli	BRAZIL	CID002833
Tungsten	Asia Tungsten Products Vietnam Ltd.	VIET NAM	CID002502
Tungsten	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA	CID002513
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA	CID000258
Tungsten	CNMC (Guangxi) PGMA Co., Ltd.	CHINA	CID000281
Tungsten	Fujian Jinxin Tungsten Co., Ltd.	CHINA	CID000499
Tungsten	Ganzhou Haichuang Tungsten Co., Ltd.	CHINA	CID002645
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA	CID000875
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA	CID002315
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA	CID002494
Tungsten	Ganzhou Yatai Tungsten Co., Ltd.	CHINA	CID002536
Tungsten	Global Tungsten & Powders Corp.	UNITED STATES	CID000568
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CHINA	CID000218
Tungsten	H.C. Starck Smelting GmbH & Co.KG	GERMANY	CID002542
Tungsten	H.C. Starck Tungsten GmbH	GERMANY	CID002541
Tungsten	Hunan Chenzhou Mining Co., Ltd.	CHINA	CID000766
Tungsten	Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji	CHINA	CID002579
Tungsten	Hunan Chunchang Nonferrous Metals Co., Ltd.	CHINA	CID000769
Tungsten	Hunan Litian Tungsten Industry Co., Ltd.	CHINA	CID003182
Tungsten	Hydrometallurg, JSC	RUSSIAN FEDERATION	CID002649
Tungsten	Japan New Metals Co., Ltd.	JAPAN	CID000825
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CHINA	CID002551
Tungsten	Jiangxi Dayu Longxintai Tungsten Co., Ltd.	CHINA	CID002647
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA	CID002321
Tungsten	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.	CHINA	CID002313
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CHINA	CID002318
Tungsten	Jiangxi Xincheng Tungsten Industry Co., Ltd.	CHINA	CID002317
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA	CID002316
Tungsten	Kennametal Fallon	UNITED STATES	CID000966
Tungsten	Kennametal Huntsville	UNITED STATES	CID000105
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CHINA	CID002319
Tungsten	Moliren Ltd	RUSSIAN FEDERATION	CID002845
Tungsten	Niagara Refining LLC	UNITED STATES	CID002589
Tungsten	Nui Phao H.C. Starck Tungsten Chemicals Manufacturing LLC	VIET NAM	CID002543
Tungsten	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES	CID002827
Tungsten	South-East Nonferrous Metal Company Limited of Hengyang City	CHINA	CID002815
Tungsten	Tejing (Vietnam) Tungsten Co., Ltd.	VIET NAM	CID001889
Tungsten	Unecha Refractory metals plant	RUSSIAN FEDERATION	CID002724
Tungsten	Wolfram Bergbau und Hütten AG	AUSTRIA	CID002044
Tungsten	Woltech Korea Co., Ltd.	KOREA, REPUBLIC OF	CID002843
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA	CID002320
Tungsten	Xiamen Tungsten Co., Ltd.	CHINA	CID002082
Tungsten	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	CHINA	CID002830
Tungsten	Xinhai Rendan Shaoguan Tungsten Co., Ltd.	CHINA	CID002095

Appendix B - Countries of origin

- Includes: list of countries that declared smelters are known to source from

Argentina, Australia, Austria, Benin, Bolivia (Plurinational State of), Brazil, Burkina Faso, Burundi, Cambodia, Canada, Chile, China, Colombia, Democratic Republic of the Congo, Ecuador, Eritrea, Ethiopia, France, Germany, Ghana, Guatemala, Guinea, Guyana, Honduras, India, Indonesia, Japan, Kazakhstan, Laos, Madagascar, Malaysia, Mali, Mexico, Mongolia, Mozambique, Myanmar, Namibia, Nicaragua, Nigeria, Panama, Peru, Portugal, Russian Federation, Rwanda, Senegal, Sierra Leone, South Africa, Spain, Thailand, Togo, Uganda, United Kingdom of Great Britain and Northern Ireland, United States of America, Uzbekistan, Vietnam, and Zimbabwe