



**Conflict Minerals Report  
For the Year Ended December 31, 2015**

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*We have made statements in this conflict minerals report that may constitute forward-looking statements about our plans to take additional actions or to implement additional policies or procedures with respect to our due diligence efforts to determine the origin of conflict minerals contained in our products. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. Our reporting obligations under the conflict minerals rules may change in the future and our ability to implement certain processes or obtain information from our suppliers may differ materially from those anticipated or implied in this report.*

## Introduction

Pursuant to Rule 13p-1 of the Securities Exchange Act of 1934, as amended (the “Rule”), Sierra Wireless, Inc. (“Sierra Wireless,” the “Company,” “we,” “us” and “our”) conducted a reasonable country of origin inquiry (“RCOI”) on its supply chain and undertook due diligence measures to determine whether the “conflict minerals” contained in and necessary to the functionality or production of its products originated from the Democratic Republic of the Congo or an adjoining country (collectively, the “Covered Countries”). As used in this report, the term “conflict minerals” includes gold, cassiterite, columbite-tantalite, wolframite and their derivatives tin, tantalum and tungsten (along with gold, “3TG”).

A copy of this Conflict Minerals Report is publicly available on our website at [www.sierrawireless.com/company/corporate-social-responsibility/](http://www.sierrawireless.com/company/corporate-social-responsibility/).

## Business Overview

Sierra Wireless, founded in 1993, is headquartered in Richmond, British Columbia, Canada and services a global market for its products. The Company is building the Internet of Things (“IoT”) with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry’s most comprehensive portfolio of second generation (“2G”), third generation (“3G”) and fourth generation (“4G”) embedded wireless modules and gateways, seamlessly integrated with our secure cloud and connectivity services. Original equipment manufacturers (“OEM”) and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster. Our devices operate on more than 80 networks globally, and the Company has shipped more than 120 million machine-to-machine (“M2M”) devices worldwide.

In 2015, we completed three business acquisitions to advance our device-to-cloud strategy and a reorganization to drive focus and growth in our key lines of business. As a result we operate under three reportable segments: (i) OEM Solutions; (ii) Enterprise Solutions; and (iii) Cloud and Connectivity Services.

Our OEM Solutions segment includes cellular embedded modules, software and tools for OEM customers to integrate wireless cellular connectivity into products and solutions across a broad range of industries, including automotive, transportation, energy, enterprise networking, sales and payment, mobile computing, security, industrial monitoring, field services, residential, healthcare and others. Within our OEM Solutions segment, our embedded wireless module portfolio spans 2G, 3G, and 4G cellular technologies. This product portfolio also includes cloud-based remote device management capability and support for on-board embedded applications using our open source, Linux-based application framework, called Legato and MangOh, a low cost customizable product development platform to accelerate prototypes and simplify the industrialization of IoT solutions.

Our Enterprise Solutions segment includes a range of intelligent routers and gateways along with management tools and applications that enable cellular connectivity for mobile, industrial and enterprise customers. Our 2G, 3G and 4G LTE intelligent cellular routers and gateways are designed for use where reliability and security are essential, and are used in transportation, public safety, field services, energy, industrial, and enterprise networking applications worldwide. Our routers and gateways can be easily configured for specific customer applications and also support on-board embedded applications using our ALEOS application framework.

The Cloud and Connectivity Services business segment comprises three main areas of operation: (i) our cloud services business, which provides a secure and scalable cloud based platform for deploying and managing IoT applications; (ii) our connectivity services, which includes our Smart SIMs and core network platforms; and (iii) our managed wireless broadband services business. The Cloud and Connectivity services support our fully integrated device-to-cloud strategy and are designed to enable worldwide IoT deployments by our customers.

## Supply Chain Overview and RCOI

While we perform certain supply chain related functions in-house, we outsource our manufacturing, including procurement of certain parts, kitting, logistics, assembly, testing and repair. We use several contract manufacturers and logistics partners to provide an end-to-end supply chain solution that covers procurement, manufacturing, repair and logistics services. We also use manufacturing partners to support regional manufacturing requirements and

certain select products including more complex, lower volume devices. By using the fully integrated supply chain services provided by these manufacturing partners, we expect to optimize product costs, improve alignment with our international customer base and achieve increased operating efficiencies and scalability. Many of our supplier relationships are entered into through our manufacturing partners and therefore, as part of our RCOI procedures, we were able to leverage our manufacturing partners to contact our suppliers in order to obtain conflict minerals data.

After conducting an internal assessment of our hardware products and the components within our products, we determined that the majority of our embedded wireless modules, intelligent gateways and modems contain 3TG. We therefore considered those products as part of our conflict minerals assessment. Although many of our hardware products contain 3TG, we are many steps removed from the mining and processing of the 3TG in the supply chain. We purchase the materials used in our products from a large network of suppliers and thus rely on our suppliers to assist us with our RCOI and due diligence efforts.

Based on the results of our RCOI, we had reason to believe that certain of the 3TG contained in our products may have originated in the Covered Countries and may not have come from recycled or scrap sources. We therefore exercised due diligence to determine the source and chain of custody of those conflict minerals.

## Statement of Purpose

Sierra Wireless has determined that we are subject to the Rule because certain products that we manufacture or contract to manufacture contain 3TG. As a result, we have adopted a Conflict Minerals Policy (available on our website at [www.sierrawireless.com/company/corporate-social-responsibility/](http://www.sierrawireless.com/company/corporate-social-responsibility/)) and implemented a due diligence program to conform, in all material respects, with the internationally recognized Organisation for Economic Co-operation and Development ("OECD") Due Diligence Guidance for Responsible Supply Chains from Conflict-Affected and High-Risk Areas (the "OECD Guidance").

The OECD Guidance outlines a five step due diligence framework:

- Step 1: Establish strong company management systems
- Step 2: Identify and assess risk in the supply chain
- Step 3: Design and implement a strategy to respond to identified risks
- Step 4: Carry out independent third-party audit due diligence practices in the supply chain
- Step 5: Report on supply chain due diligence

This report provides information on the due diligence measures undertaken for 2015.

## Determination of Scope

Sierra Wireless does not own manufacturing facilities for its products and as a result contracts external manufacturers to produce its products. In order to determine which products fall within scope for our RCOI and due diligence, the Company conducted a review of its products manufactured during 2015.

Our Global Supply Chain Group then requested that our contract manufacturers provide an updated list of the suppliers of components used in our products which contain 3TG. Upon receipt of this list, our Conflict Minerals Working Group (the "Working Group") engaged in the following activities to determine the appropriate scope of suppliers subject to our due diligence efforts:

1. Excluded products from recently-acquired companies not yet covered by the Rule.
2. Analyzed our Bill of Materials ("BOM") data to extract the list of known suppliers that are engaged in the manufacturing of products containing 3TG.

3. Where contract manufacturers were requested to provide a list of suppliers, we compared the list of suppliers submitted by our contract manufacturers against our BOM data to ensure consistent and comprehensive information.
4. Reviewed the remaining list of suppliers to eliminate products not covered by the Rule (e.g., no 3TG contained in product).

## OECD Step 1: Establish Strong Company Management Systems

The Sierra Wireless conflict minerals compliance program is managed by the Working Group, a cross-functional team whose members represent the Company's Operations, Purchasing, Quality Management and Finance functions. The Working Group is assisted in its efforts by third party consultants. The working group is led by a Project Manager who coordinates conflict minerals program activities and reports to senior management and the program's Steering Committee.

Our conflict minerals compliance program does not operate as a standalone program but rather is integrated into the Company's existing policies, processes and procedures to ensure effective management, oversight and implementation. Relevant aspects of conflict minerals compliance are also documented in the following:

- Sierra Wireless Conflict Minerals Policy
- Master Quality Agreement (2015)  
*The Master Quality Agreement stipulates the quality standards we expect of our suppliers in the provision of goods to be incorporated into Company products.*
- Global Supply Agreement (2015)  
*The Global Supply Agreement is a standard form contract that governs the relationship between the Company and its suppliers.*
- Sierra Wireless Conflict Minerals Due Diligence Implementation Handbook
- Sierra Wireless Corporate Website, [www.sierrawireless.com](http://www.sierrawireless.com)

As recommended in the OECD Guidance, Sierra Wireless supports the Conflict Free Sourcing Initiative ("CFSI"), an industry initiative that audits due diligence activities of smelters and refiners. As part of our due diligence, we rely on data obtained through our membership in the CFSI.

## OECD Step 2: Identify and Assess Risk in the Supply Chain

We have designed our conflict minerals compliance program around the data provided in the CFSI's Conflict Minerals Reporting Template (CMRT), a globally recognized, industry wide, 3TG reporting standard for purposes of complying with the Rule. All suppliers subject to our due diligence efforts are requested to submit the most recently available version of the CMRT. Given our position in the 3TG supply chain, we rely on our suppliers to identify smelters and refineries through the CMRT. In order to gather the smelter and refiner information, we engage suppliers either directly or indirectly through our contract manufacturers. In addition, further in-depth validation of the information provided was conducted using a third party consultant (RCS Global) and a software tool (Green Status Pro).

Our risk analysis is based on two main factors: supplier responsiveness and the existence of identified risks (or so-called "red flags"). Suppliers identified with red flags have at least one of the following deficiencies: no conflict minerals policy; have received less than 75% of conflict minerals data or information for each metal from their 3TG suppliers; have provided a smelter list in which less than 90% (less than 100% for Tantalum) of the reported smelters are recognized as "active" smelters by the CFSI, based on the smelter list included in the CMRT template; and/or have provided a smelter list in which less than 75% (less than 100% for Tantalum) of the reported smelters are certified compliant by the CFSI.

For 2015 we surveyed 238 of our suppliers and received 206 responses. Of those responses, 30 triggered one or more red flags. We followed up with two suppliers and obtained revised/updated CMRTs, thereby resolving the issues. We intend to communicate with suppliers over the course of 2016 in order to improve response rates.

### OECD Step 3: Design and Implement a Strategy to Respond to Identified Risks

Due to our position in the supply chain, our due diligence relies upon information provided by suppliers, as well as data from industry wide initiatives. As such, the Company's risk management strategy includes the following:

- Ongoing membership, support and promotion of the CFSI as an industry-wide initiative to ensure 3TG smelters worldwide only source conflict free material. As a member Sierra Wireless remains committed to the CFSI programs. Our CFSI membership helps to promote and fund incorporation of smelters into the CFSI smelter database and also supports the adoption of responsible sourcing procedures by smelters and refiners;
- Promoting of the use of CFSI compliant smelters with our supplier group through our policy and purchasing requirements;
- Increased use of contractual terms with conflict minerals requirements in our supplier agreements;
- Ongoing development activities related to our Working Group and our policies and procedures governing conflict minerals compliance, including consultations with subject matter experts and workshops to provide continuing education to Working Group members;
- As described above, actions to respond to red flags identified during the annual review of supplier CMRTs and further due diligence efforts through supplier inquiries or audits as required; and
- Smelter and refiner information reviews during our analysis of CMRT responses and identification of potentially problematic smelters or refiners for action in the forthcoming year.

### OECD Step 4: Carry out Independent Third-Party Audit of Due Diligence Practices in the Supply Chain

The OECD Guidance recommends an independent third party audit of smelters and refiners in 3TG supply chains and we support a recognized and industry-wide program of third-party audits through our CFSI membership. Other industry-wide efforts include those of the the London Bullion Market Association ("LBMA") and the Responsible Jewelry Council ("RJC").

In 2015 we engaged a third party to conduct audits of two of our suppliers that were assessed as higher risk in order to validate CMRT information and to assess the status of their conflict minerals programs. In both cases the results of the audit was satisfactory.

Pursuant to the Rule, this report is not subject to an independent private sector audit for 2015.

### OECD Step 5: Report on Supply Chain Due Diligence

#### Results of Due Diligence

Based on the Working Group's analysis of the information provided by our suppliers, we identified 292 smelters that may have been used to process the 3TG in our products. Those smelters are listed in Annex 1 hereto.

Based on information provided by the CFSI, we identified the country of origin of the 3TG for 159 smelters. Of these smelters for which we identified the 3TG country of origin, 23 were determined to have sourced from the Covered Countries and all of them were certified as compliant by the CFSI as part of its Conflict Free Smelter Program. We have been unable to identify the country of origin of the 3TG for the remaining 133 smelters; however, this number includes 63 gold smelters and refiners audited by the LBMA and/or the RJC which are certified as CFSI compliant even though the country of origin data is not supplied.

Based on the information received from our due diligence efforts from suppliers or other sources, we have been unable to determine the origin of all 3TG in our products. Nevertheless, we are not aware of any instance where 3TG in our supply chain directly or indirectly financed or benefited armed groups in the Covered Countries.

### Improvement Measures

For reporting year 2016, We intend to continue improving our due diligence program and risk mitigation efforts through the following:

- Continued support of the CFSI third party supplier audit process and, as necessary, supplier audits to validate CMRT data and supplier conflict minerals processes;
- Informing the CFSI of high risk smelters where identified as a result of our due diligence activities;
- Continued engagement with the Company's strategic suppliers including informing suppliers of high risk smelters identified during our 2015 risk analysis;
- Improved data collection processes through the continued use of a third party service provider; and
- Continued improvement of our communication and understanding of conflict free sourcing criteria.

## Annex 1: Sierra Wireless Smelter List

| Metal | Name  | Country            | CFSI ID   |
|-------|---|--------------------|-----------|
| Gold  | Advanced Chemical Company                                       | UNITED STATES      | CID000015 |
| Gold  | Aida Chemical Industries Co., Ltd.                              | JAPAN              | CID000019 |
| 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  | Asaka Riken Co., Ltd.   | JAPAN              | CID000090 |
| Gold  | Atasay Kuyumculuk Sanayi Ve Ticaret A.S.                        | TURKEY             | CID000103 |
| Gold  | Aurubis AG  | GERMANY            | CID000113 |
| 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  | Yunnan Copper Industry Co., Ltd.                                | CHINA              | CID000197 |
| 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  | DSC (Do Sung Corporation)                                       | KOREA, REPUBLIC OF | CID000359 |
| Gold  | DODUCO GmbH   | GERMANY            | CID000362 |
| Gold  | Dowa  | JAPAN              | CID000401 |
| Gold  | Eco-System Recycling Co., Ltd.                                  | JAPAN              | CID000425 |
| Gold  | OJSC Novosibirsk Refinery                                       | RUSSIAN FEDERATION | CID000493 |
| Gold  | Gansu Seemine Material Hi-Tech Co., Ltd.                        | CHINA              | CID000522 |
| Gold  | Guoda Safina High-Tech Environmental Refinery Co., Ltd.         | CHINA              | CID000651 |
| Gold  | Hangzhou Fuchunjiang Smelting Co., Ltd.                         | CHINA              | CID000671 |
| Gold  | Heimerle + Meule GmbH   | GERMANY            | CID000694 |
| Gold  | Heraeus Ltd. Hong Kong  | CHINA              | CID000707 |
| Gold  | Heraeus Precious Metals GmbH & Co. KG                           | GERMANY            | CID000711 |
| Gold  | Hunan Chenzhou Mining Co., Ltd.                                 | CHINA              | CID000767 |
| 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  | Japan Mint  | JAPAN              | CID000823 |
| Gold  | Jiangxi Copper Co., Ltd.  | CHINA              | CID000855 |
| Gold  | Asahi Refining USA Inc.   | UNITED STATES      | CID000920 |
| Gold  | Asahi Refining Canada Ltd.                                      | CANADA             | CID000924 |
| 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  | Kazakhmys Smelting LLC  | KAZAKHSTAN         | CID000956 |
| Gold  | Kazzinc   | KAZAKHSTAN         | CID000957 |
| Gold  | Kennecott Utah Copper LLC                                       | UNITED STATES      | CID000969 |

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|------|---|--------------------|-----------|
| Gold | Kojima Chemicals Co., Ltd.  | JAPAN              | CID000981 |
| Gold | Korea Metal Co., Ltd.   | KOREA, REPUBLIC OF | CID000988 |
| Gold | Kyrgyzaltyn JSC   | KYRGYZSTAN         | CID001029 |
| 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 | LS-NIKKO Copper Inc.  | KOREA, REPUBLIC OF | CID001078 |
| Gold | Luoyang Zijin Yinhui Gold Refinery Co., Ltd.                                | CHINA              | CID001093 |
| Gold | Materion  | UNITED STATES      | CID001113 |
| Gold | Matsuda Sangyo Co., Ltd.  | JAPAN              | CID001119 |
| Gold | Metalor Technologies (Suzhou) Ltd.  | CHINA              | CID001147 |
| Gold | Metalor Technologies (Hong Kong) Ltd.                                       | CHINA              | CID001149 |
| Gold | Metalor Technologies (Singapore) Pte., Ltd.                                 | SINGAPORE          | CID001152 |
| 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 | Moscow Special Alloys Processing Plant                                      | RUSSIAN FEDERATION | CID001204 |
| Gold | Nadir Metal Rafineri San. Ve Tic. A.Ş.                                      | TURKEY             | CID001220 |
| Gold | Navoi Mining and Metallurgical Combinat                                     | UZBEKISTAN         | CID001236 |
| Gold | Nihon Material Co., Ltd.  | JAPAN              | CID001259 |
| Gold | Elemetal Refining, LLC  | UNITED STATES      | CID001322 |
| Gold | Ohura Precious Metal Industry Co., Ltd.                                     | JAPAN              | CID001325 |
| Gold | OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet) | RUSSIAN FEDERATION | CID001326 |
| Gold | PAMP S.A.   | SWITZERLAND        | CID001352 |
| Gold | Penglai Penggang Gold Industry Co., Ltd.                                    | CHINA              | CID001362 |
| Gold | Prioksky Plant of Non-Ferrous Metals  | RUSSIAN FEDERATION | CID001386 |
| Gold | PT Aneka Tambang (Persero) Tbk  | INDONESIA          | CID001397 |
| Gold | PX Précinox S.A.  | SWITZERLAND        | CID001498 |
| Gold | Rand Refinery (Pty) Ltd.  | SOUTH AFRICA       | CID001512 |
| Gold | Royal Canadian Mint   | CANADA             | CID001534 |
| Gold | Sabin Metal Corp.   | UNITED STATES      | CID001546 |
| Gold | Samduck Precious Metals   | KOREA, REPUBLIC OF | CID001555 |
| Gold | SAMWON Metals Corp.   | KOREA, REPUBLIC OF | CID001562 |
| Gold | Schone Edelmetaal B.V.  | NETHERLANDS        | CID001573 |
| Gold | SEMPSA Joyería Platería S.A.  | SPAIN              | CID001585 |
| Gold | Shandong Tiancheng 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 | So Accurate Group, Inc.   | UNITED STATES      | CID001754 |
| Gold | SOE Shyolkovsky Factory of Secondary Precious Metals                        | RUSSIAN FEDERATION | CID001756 |
| Gold | Solar Applied Materials Technology Corp.                                    | TAIWAN             | CID001761 |
| Gold | Sumitomo Metal Mining Co., Ltd.   | JAPAN              | CID001798 |
| Gold | Tanaka Kikinzoku Kogyo K.K.   | JAPAN              | CID001875 |
| Gold | Great Wall Precious Metals Co., Ltd. of CBPM                                | CHINA              | CID001909 |
| 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 |



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|----------|---|----------------------|-----------|
| Gold     | Torecom   | KOREA, REPUBLIC OF   | CID001955 |
| Gold     | Umicore Brasil Ltda.  | BRAZIL               | CID001977 |
| Gold     | Umicore S.A. Business Unit Precious Metals Refining         | BELGIUM              | CID001980 |
| Gold     | United Precious Metal Refining, Inc.                        | UNITED STATES        | CID001993 |
| Gold     | Valcambi S.A.   | SWITZERLAND          | CID002003 |
| Gold     | Western Australian Mint trading as The Perth Mint           | AUSTRALIA            | CID002030 |
| Gold     | Yamamoto Precious Metal Co., Ltd.                           | JAPAN                | CID002100 |
| Gold     | Yokohama Metal Co., Ltd.                                    | JAPAN                | CID002129 |
| Gold     | Zhongyuan Gold Smelter of Zhongjin Gold Corporation         | CHINA                | CID002224 |
| Gold     | Zijin Mining Group Co., Ltd. Gold Refinery                  | CHINA                | CID002243 |
| Gold     | Morris and Watson   | NEW ZEALAND          | CID002282 |
| Gold     | Guangdong Jinding Gold Limited                              | CHINA                | CID002312 |
| Gold     | Umicore Precious Metals Thailand                            | THAILAND             | CID002314 |
| Gold     | Faggi Enrico S.p.A.   | ITALY                | CID002355 |
| Gold     | Geib Refining Corporation                                   | UNITED STATES        | CID002459 |
| Gold     | MMTC-PAMP India Pvt., Ltd.                                  | INDIA                | CID002509 |
| Gold     | Republic Metals Corporation                                 | UNITED STATES        | CID002510 |
| Gold     | KGHM Polska Miedz Spółka Akcyjna                            | POLAND               | CID002511 |
| Gold     | Singway Technology Co., Ltd.                                | TAIWAN               | CID002516 |
| Gold     | Al Etihad Gold Refinery DMCC                                | UNITED ARAB EMIRATES | CID002560 |
| Gold     | T.C.A S.p.A   | ITALY                | CID002580 |
| Gold     | SAXONIA Edelmetalle GmbH                                    | GERMANY              | CID002777 |
| Gold     | WIELAND Edelmetalle GmbH                                    | GERMANY              | CID002778 |
| Gold     | Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH | AUSTRIA              | CID002779 |
| Tantalum | Changsha South Tantalum Niobium Co., Ltd.                   | CHINA                | CID000211 |
| Tantalum | Conghua Tantalum and Niobium Smeltry                        | CHINA                | CID000291 |
| Tantalum | Duoluoshan  | CHINA                | CID000410 |
| Tantalum | Exotech Inc.  | UNITED STATES        | CID000456 |
| Tantalum | F&X Electro-Materials Ltd.                                  | CHINA                | CID000460 |
| Tantalum | Guangdong Zhiyuan New Material Co., Ltd.                    | CHINA                | CID000616 |
| Tantalum | Hi-Temp Specialty Metals, Inc.                              | UNITED STATES        | CID000731 |
| Tantalum | Jiujiang JinXin Nonferrous Metals Co., Ltd.                 | CHINA                | CID000914 |
| Tantalum | Jiujiang Tanbre Co., Ltd.                                   | CHINA                | CID000917 |
| Tantalum | King-Tan Tantalum Industry Ltd.                             | CHINA                | CID000973 |
| Tantalum | LSM Brasil S.A.   | BRAZIL               | CID001076 |
| Tantalum | Metallurgical Products India Pvt., Ltd.                     | INDIA                | CID001163 |
| Tantalum | Mineração Taboca S.A.                                       | BRAZIL               | CID001175 |
| Tantalum | Mitsui Mining & Smelting                                    | JAPAN                | CID001192 |
| Tantalum | Molycorp Silmet A.S.  | ESTONIA              | CID001200 |
| Tantalum | Ningxia Orient Tantalum Industry Co., Ltd.                  | CHINA                | CID001277 |
| Tantalum | QuantumClean  | UNITED STATES        | CID001508 |
| 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 | Zhuzhou Cemented Carbide                                    | CHINA                | CID002232 |
| Tantalum | Yichun Jin Yang Rare Metal Co., Ltd.                        | CHINA                | CID002307 |

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|----------|---|---------------|-----------|
| Tantalum | Hengyang King Xing Lifeng New Materials Co., Ltd. | CHINA         | CID002492 |
| Tantalum | D Block Metals, LLC                               | UNITED STATES | CID002504 |
| Tantalum | FIR Metals & Resource Ltd.                        | CHINA         | CID002505 |
| Tantalum | Jiujiang Zhongao Tantalum & Niobium Co., Ltd.     | CHINA         | CID002506 |
| Tantalum | XinXing HaoRong Electronic Material Co., Ltd.     | CHINA         | CID002508 |
| Tantalum | Jiangxi Dinghai Tantalum & Niobium Co., Ltd.      | CHINA         | CID002512 |
| Tantalum | KEMET Blue Metals                                 | MEXICO        | CID002539 |
| Tantalum | Plansee SE Liezen                                 | AUSTRIA       | CID002540 |
| Tantalum | H.C. Starck Co., Ltd.                             | THAILAND      | CID002544 |
| Tantalum | H.C. Starck GmbH Goslar                           | GERMANY       | CID002545 |
| Tantalum | H.C. Starck GmbH Laufenburg                       | GERMANY       | CID002546 |
| 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 | Plansee SE Reutte                                 | AUSTRIA       | CID002556 |
| Tantalum | Global Advanced Metals Boyertown                  | UNITED STATES | CID002557 |
| Tantalum | Global Advanced Metals Aizu                       | JAPAN         | CID002558 |
| Tantalum | KEMET Blue Powder                                 | UNITED STATES | CID002568 |
| Tantalum | Tranzact, Inc.                                    | UNITED STATES | CID002571 |
| Tantalum | Resind Indústria e Comércio Ltda.                 | BRAZIL        | CID002707 |
| Tin      | Chenzhou Yunxiang Mining and Metallurgy Co., Ltd. | CHINA         | CID000228 |
| Tin      | Jiangxi Ketai Advanced Material Co., Ltd.         | CHINA         | CID000244 |
| Tin      | CNMC (Guangxi) PGMA Co., Ltd.                     | CHINA         | CID000278 |
| Tin      | Alpha   | UNITED STATES | CID000292 |
| Tin      | Cooperativa Metalurgica de Rondônia Ltda.         | BRAZIL        | CID000295 |
| Tin      | CV Gita Pesona                                    | INDONESIA     | CID000306 |
| Tin      | PT Justindo                                       | INDONESIA     | CID000307 |
| Tin      | PT Aries Kencana Sejahtera                        | INDONESIA     | CID000309 |
| Tin      | CV Serumpun Sebalai                               | INDONESIA     | CID000313 |
| Tin      | CV United Smelting                                | INDONESIA     | CID000315 |
| Tin      | Dowa  | JAPAN         | CID000402 |
| Tin      | EM Vinto  | BOLIVIA       | CID000438 |
| Tin      | Estanho de Rondônia S.A.                          | BRAZIL        | CID000448 |
| Tin      | Feinhütte Halsbrücke GmbH                         | GERMANY       | CID000466 |
| Tin      | Fenix Metals                                      | POLAND        | CID000468 |
| Tin      | Gejiu Non-Ferrous Metal Processing Co., Ltd.      | CHINA         | CID000538 |
| Tin      | Gejiu Zili Mining And Metallurgy Co., Ltd.        | CHINA         | CID000555 |
| Tin      | Huichang Jinshunda Tin Co., Ltd.                  | CHINA         | CID000760 |
| Tin      | Gejiu Kai Meng Industry and Trade LLC             | CHINA         | CID000942 |
| Tin      | Linwu Xianggui Ore Smelting Co., Ltd.             | CHINA         | CID001063 |
| Tin      | China Tin Group Co., Ltd.                         | CHINA         | CID001070 |
| Tin      | Malaysia Smelting Corporation (MSC)               | MALAYSIA      | CID001105 |
| Tin      | Metallic Resources, Inc.                          | UNITED STATES | CID001142 |
| Tin      | Mineração Taboca S.A.                             | BRAZIL        | CID001173 |
| Tin      | Minsur  | PERU          | CID001182 |
| Tin      | Mitsubishi Materials Corporation                  | JAPAN         | CID001191 |
| Tin      | Nankang Nanshan Tin Manufactory Co., Ltd.         | CHINA         | CID001231 |
| Tin      | O.M. Manufacturing (Thailand) Co., Ltd.           | THAILAND      | CID001314 |
| Tin      | Operaciones Metalurgical S.A.                     | BOLIVIA       | CID001337 |

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| Tin | PT Alam Lestari Kencana   | INDONESIA   | CID001393 |
| Tin | PT Artha Cipta Langgeng   | INDONESIA   | CID001399 |
| Tin | PT Babel Inti Perkasa   | INDONESIA   | CID001402 |
| Tin | PT Bangka Kudai Tin   | INDONESIA   | CID001409 |
| Tin | PT Bangka Timah Utama Sejahtera   | INDONESIA   | CID001416 |
| Tin | PT Bangka Tin Industry  | INDONESIA   | CID001419 |
| Tin | PT Belitung Industri Sejahtera  | INDONESIA   | CID001421 |
| Tin | PT BilliTin Makmur Lestari  | INDONESIA   | CID001424 |
| Tin | PT Bukit Timah  | INDONESIA   | CID001428 |
| Tin | PT DS Jaya Abadi  | INDONESIA   | CID001434 |
| Tin | PT Eunindo Usaha Mandiri  | INDONESIA   | CID001438 |
| Tin | PT Fang Di MulTindo   | INDONESIA   | CID001442 |
| Tin | PT Karimun Mining   | INDONESIA   | CID001448 |
| Tin | PT Mitra Stania Prima   | INDONESIA   | CID001453 |
| Tin | PT Panca Mega Persada   | INDONESIA   | CID001457 |
| Tin | PT Prima Timah Utama  | INDONESIA   | CID001458 |
| Tin | PT Refined Bangka Tin   | INDONESIA   | CID001460 |
| Tin | PT Sariwiguna Binasentosa   | INDONESIA   | CID001463 |
| Tin | PT Seirama Tin Investment   | INDONESIA   | CID001466 |
| Tin | PT Stanindo Inti Perkasa  | INDONESIA   | CID001468 |
| 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 Pelat Timah Nusantara Tbk  | INDONESIA   | CID001486 |
| Tin | PT Tinindo Inter Nusa   | INDONESIA   | CID001490 |
| Tin | PT Tommy Utama  | INDONESIA   | CID001493 |
| Tin | Rui Da Hung   | TAIWAN      | CID001539 |
| Tin | Soft Metais Ltda.   | BRAZIL      | CID001758 |
| Tin | Thaisarco   | THAILAND    | CID001898 |
| Tin | Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.  | CHINA       | CID001908 |
| Tin | VQB Mineral and Trading Group JSC   | VIETNAM     | CID002015 |
| Tin | White Solder Metalurgia e Mineração Ltda.   | BRAZIL      | CID002036 |
| Tin | Yunnan Chengfeng Non-ferrous Metals Co., Ltd.   | CHINA       | CID002158 |
| Tin | Yunnan Tin Company Limited  | CHINA       | CID002180 |
| Tin | CV Venus Inti Perkasa   | INDONESIA   | CID002455 |
| Tin | Magnu's Minerais Metais e Ligas Ltda.   | BRAZIL      | CID002468 |
| Tin | PT Tirus Putra Mandiri  | INDONESIA   | CID002478 |
| Tin | PT Wahana Perkit Jaya   | INDONESIA   | CID002479 |
| Tin | Melt Metais e Ligas S.A.  | BRAZIL      | CID002500 |
| Tin | PT ATD Makmur Mandiri Jaya  | INDONESIA   | CID002503 |
| Tin | Phoenix Metal Ltd.  | RWANDA      | CID002507 |
| Tin | O.M. Manufacturing Philippines, Inc.  | PHILIPPINES | CID002517 |
| Tin | PT Inti Stania Prima  | INDONESIA   | CID002530 |
| Tin | CV Ayi Jaya   | INDONESIA   | CID002570 |
| Tin | Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company | VIETNAM     | CID002572 |
| Tin | Nghe Tinh Non-Ferrous Metals Joint Stock Company                                      | VIETNAM     | CID002573 |
| Tin | Tuyen Quang Non-Ferrous Metals Joint Stock Company                                    | VIETNAM     | CID002574 |
| Tin | PT Cipta Persada Mulia  | INDONESIA   | CID002696 |
| Tin | An Vinh Joint Stock Mineral Processing Company  | VIETNAM     | CID002703 |

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| Tin      | Resind Indústria e Comércio Ltda.                             | BRAZIL             | CID002706 |
| Tin      | Metallo-Chimique N.V.   | BELGIUM            | CID002773 |
| Tin      | Elmet S.L.U.  | SPAIN              | CID002774 |
| Tin      | PT Bangka Prima Tin   | INDONESIA          | CID002776 |
| Tin      | PT Sukses Inti Makmur   | INDONESIA          | CID002816 |
| Tin      | An Thai Minerals Co., Ltd.                                    | VIETNAM            | CID002825 |
| Tungsten | A.L.M.T. TUNGSTEN Corp.                                       | JAPAN              | CID000004 |
| Tungsten | Kennametal Huntsville   | UNITED STATES      | CID000105 |
| Tungsten | Guangdong Xianglu Tungsten Co., Ltd.                          | CHINA              | CID000218 |
| Tungsten | Chongyi Zhangyuan Tungsten Co., Ltd.                          | CHINA              | CID000258 |
| Tungsten | Dayu Weiliang Tungsten Co., Ltd.                              | CHINA              | CID000345 |
| Tungsten | Fujian Jinxin Tungsten Co., Ltd.                              | CHINA              | CID000499 |
| Tungsten | Global Tungsten & Powders Corp.                               | UNITED STATES      | CID000568 |
| Tungsten | Hunan Chenzhou Mining Co., Ltd.                               | CHINA              | CID000766 |
| Tungsten | Hunan Chunchang Nonferrous Metals Co., Ltd.                   | CHINA              | CID000769 |
| Tungsten | Japan New Metals Co., Ltd.                                    | JAPAN              | CID000825 |
| Tungsten | Ganzhou Non-ferrous Metals Smelting Co., Ltd.                 | CHINA              | CID000868 |
| Tungsten | Ganzhou Huaxing Tungsten Products Co., Ltd.                   | CHINA              | CID000875 |
| Tungsten | Kennametal Fallon   | UNITED STATES      | CID000966 |
| Tungsten | Tejing (Vietnam) Tungsten Co., Ltd.                           | VIETNAM            | CID001889 |
| Tungsten | Vietnam Youngsun Tungsten Industry Co., Ltd.                  | VIETNAM            | CID002011 |
| Tungsten | Wolfram Bergbau und Hütten AG                                 | AUSTRIA            | CID002044 |
| Tungsten | Xiamen Tungsten Co., Ltd.                                     | CHINA              | CID002082 |
| Tungsten | Xinhai Rendan Shaoguan Tungsten Co., Ltd.                     | CHINA              | CID002095 |
| Tungsten | Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.         | CHINA              | CID002313 |
| Tungsten | Ganzhou Jiangwu Ferrotungsten Co., Ltd.                       | CHINA              | CID002315 |
| Tungsten | Jiangxi Yaosheng Tungsten Co., Ltd.                           | CHINA              | CID002316 |
| Tungsten | Jiangxi Xinsheng Tungsten Industry Co., Ltd.                  | CHINA              | CID002317 |
| Tungsten | Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd. | CHINA              | CID002318 |
| Tungsten | Malipo Haiyu Tungsten Co., Ltd.                               | CHINA              | CID002319 |
| Tungsten | Xiamen Tungsten (H.C.) Co., Ltd.                              | CHINA              | CID002320 |
| Tungsten | Jiangxi Gan Bei Tungsten Co., Ltd.                            | CHINA              | CID002321 |
| Tungsten | Ganzhou Seadragon W & Mo Co., Ltd.                            | CHINA              | CID002494 |
| Tungsten | Asia Tungsten Products Vietnam Ltd.                           | VIETNAM            | CID002502 |
| Tungsten | Chenzhou Diamond Tungsten Products Co., Ltd.                  | CHINA              | CID002513 |
| Tungsten | Dayu Jincheng Tungsten Industry Co., Ltd.                     | CHINA              | CID002518 |
| Tungsten | Ganxian Shirui New Material Co., Ltd.                         | CHINA              | CID002531 |
| Tungsten | Pobedit, JSC  | RUSSIAN FEDERATION | CID002532 |
| Tungsten | Jiangxi Xiushui Xianggan Nonferrous Metals Co., Ltd.          | CHINA              | CID002535 |
| Tungsten | Ganzhou Yatai Tungsten Co., Ltd.                              | CHINA              | CID002536 |
| Tungsten | Sanher Tungsten Vietnam Co., Ltd.                             | VIETNAM            | CID002538 |
| Tungsten | H.C. Starck GmbH  | GERMANY            | CID002541 |
| Tungsten | H.C. Starck Smelting GmbH & Co.KG                             | GERMANY            | CID002542 |
| Tungsten | Nui Phao H.C. Starck Tungsten Chemicals Manufacturing LLC     | VIETNAM            | CID002543 |
| Tungsten | Jiangwu H.C. Starck Tungsten Products Co., Ltd.               | CHINA              | CID002551 |
| Tungsten | Hunan Chuangda Vanadium Tungsten Co., Ltd. Yanglin            | CHINA              | CID002578 |
| Tungsten | Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji               | CHINA              | CID002579 |
| Tungsten | Niagara Refining LLC  | UNITED STATES      | CID002589 |
| Tungsten | Hydrometallurg, JSC   | RUSSIAN FEDERATION | CID002649 |