

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM SD
Specialized Disclosure Report

Ingersoll-Rand plc

(Exact name of registrant as specified in its charter)

Ireland	001-34400	98-0062632
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(IRS Employer Identification No.)

170/175 Lakeview Dr. Airside Business Park Swords, Co. Dublin Ireland	N/A
(Address of principal executive offices)	(Zip Code)

Keith Sultana
Senior Vice President - Global Operations and Integrated Supply Chain
Ingersoll-Rand plc
170/175 Lakeview Dr.
Airside Business Park
Swords, Co. Dublin
Ireland
+(353) (0) 18707400

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

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

Conflict Minerals Disclosure

Ingersoll-Rand plc (the “Company”) has conducted a reasonable country of origin inquiry regarding the minerals specified by Rule 13p-1 of the Securities Exchange Act of 1934, as amended (the “conflict minerals”) necessary to the functionality or production of products manufactured or contracted to manufacture by the Company for the fiscal year ended December 31, 2018. The Company exercised due diligence on the source and chain of custody of its conflict minerals using the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. A copy of the Company’s Conflict Minerals Report is provided as Exhibit 1.01 to this Form SD and is publicly available at <https://company.ingersollrand.com/company/doing-business-with-us/conflict-minerals.html>.

Item 1.02 Exhibit

The exhibit required by this specialized disclosure report is attached hereto as exhibit 1.01.

Section 2 - Exhibits

Item 2.01 Exhibits

<u>Exhibit</u>	<u>Description</u>
1.01	Conflict Minerals Report

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.

INGERSOLL-RAND PUBLIC LIMITED COMPANY
(Registrant)

/s/ Keith Sultana

Keith Sultana
Senior Vice President, Global Operations and Integrated Supply Chain

May 31, 2019

(Date)

Conflict Minerals Disclosure

Introduction

Ingersoll-Rand plc (the “Company”) has conducted a reasonable country of origin inquiry (“RCOI”) regarding the minerals specified by Rule 13p-1 of the Securities Exchange Act of 1934, as amended (the “conflict minerals”) necessary to the functionality or production of products manufactured by the Company for the fiscal year ended December 31, 2018. The Company exercised due diligence on the source and chain of custody of its conflict minerals using the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the “OECD Framework”).

Company Overview

The Company is a diversified, global company that provides products, services and solutions to enhance the quality, energy efficiency and comfort of air in homes and buildings, transport and protect food and perishables and increase industrial productivity and efficiency. Our business segments consist of Climate and Industrial, both with strong brands and highly differentiated products within their respective markets.

Product Overview

Our principal products by business segment as of December 31, 2018 included the following:

Climate	
Aftermarket and OEM parts and supplies	Ice energy storage solutions
Air conditioners	Indoor air quality
Air exchangers	Industrial refrigeration
Air handlers	Installation contracting
Airside and terminal devices	Large commercial unitary
Auxiliary power units	Light commercial unitary
Building management systems	Motor replacements
Bus and rail HVAC systems	Multi-pipe HVAC systems
Chillers	Package heating and cooling systems
Coils and condensers	Performance contracting
Container refrigeration systems and gensets	Rail refrigeration systems
Control systems	Refrigerant reclamation
Cryogenic refrigeration systems	Repair and maintenance services
Diesel-powered refrigeration systems	Rental services
Ductless systems	Self-powered truck refrigeration systems
Energy management services	Service agreements
Facility management services	Temporary heating and cooling systems
Furnaces	Thermostats/controls
Geothermal systems	Trailer refrigeration systems
Heat pumps	Transport heater products
Home automation	Unitary systems (light and large)
Humidifiers	Vehicle-powered truck refrigeration systems
Hybrid and non-diesel transport refrigeration solutions	Water source heat pumps

Industrial	
Air treatment and air separation systems	Fluid power components
Aftermarket and OEM parts and supplies	Installation contracting
Aftermarket controls, parts, accessories and consumables	Power tools (air, cordless and electric)
Airends	Precision fastening systems
Blowers	Pumps (diaphragm and piston)
Compressors (centrifugal, reciprocating, and rotary)	Rental services
Dryers	Rough terrain (AWD) vehicles
Engine starting systems	Service agreements
Ergonomic material handling systems	Service break/fix
Filters	Utility and consumer low-speed vehicles
Fluid handling systems	Visage® mobile golf information systems
Golf vehicles	Winches (air, electric and hydraulic)
Hoists (air, electric and manual)	

These products are sold primarily under our name and other names including American Standard, ARO, Club Car, Nexia, Thermo King and Trane.

Description of Reasonable Country of Origin Inquiry

We conducted an RCOI regarding the conflict minerals by utilizing the conflict minerals reporting template (“CMRT”) developed by the Electronic Industry Citizenship Coalition (“EICC”) and Global e-Sustainability Initiative (“GeSI”). We also performed due diligence work on the source and chain of custody of our conflict minerals using the OECD Framework, an internationally recognized due diligence framework. We primarily rely on the conflict-free smelter program designed and managed by the Responsible Minerals Initiative (“RMI”) (formerly known as the Conflict-Free Sourcing Initiative) to conduct our risk assessment.

Determination

We were unable to determine that all of the conflict minerals contained in our products do not originate from the Covered Countries due to, among other things, the following:

- Many of our suppliers submitted responses that were declared on a company-wide basis (*i.e.*, representing the smelters and refiners associated with all product offerings of the supplier that contained conflict minerals) and not specific to the materials supplied to the Company. Therefore, in combination with multiple layers in our supply chain, we believe that these declarations might include smelters and refiners that do not provide the conflict minerals that are in our products.
- A number of our suppliers identified smelters/refiners that do not participate in the Responsible Minerals Assurance Process (“RMAP”) or a similar program and other suppliers failed to identify any smelter/refiner in their responses to us. Furthermore, we were unable to obtain responses from all of our suppliers and other suppliers provided incomplete or inconsistent data.

As a result, we do not have sufficient information to conclusively determine the country of origin of all of the conflict minerals in our products and, if such conflict minerals did originate in the Covered Countries, whether such conflict minerals were from recycled or scrap sources or were from other conflict free sources. Accordingly, the Company conducted the due diligence measures described below.

Due Diligence

In accordance with Rule 13p-1, the Company performed due diligence to determine the source and chain of custody necessary to determine the presence of conflict minerals in the Company’s products. The Company designed its due diligence measures to conform in all material respects with the OECD Framework and related supplements for each of the conflict minerals.

The Company, as a purchaser, is many steps removed from the mining of conflict minerals and does not purchase raw ore or unrefined conflict minerals. Identifying the presence and origin of 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. Although the smelters and refiners are consolidating points for raw ore and are in the best position in the supply chain to know the origin of the ores, the Company focused its efforts on its suppliers in an effort to build conflict minerals

awareness and assess the transparency of its supply chain and make initial identification, where possible, of the smelters/refiners in its supply chain.

The discussion below provides the applicable OECD Framework recommendation (in *bold/italics*) followed by a summary of the Company's activities in line with the OECD Framework.

1. *Management Systems.*

The Company adopted a Conflict Minerals Policy in 2013. The policy requires suppliers to perform due diligence and outlines the Company's expectation of suppliers. During 2014, the Company revised and strengthened the policy. During 2018, the Company continued to communicate the policy to suppliers and the public through its website, letters sent to suppliers and customers and telephone calls.

Internal Management Systems.

The Company's conflict minerals compliance program for the fiscal year ended December 31, 2018 was managed by a cross-functional team lead by procurement and including representatives from procurement, legal and finance. This team discussed conflict minerals compliance issues and reviewed the status of the diligence process. During 2018, the global procurement team implemented self-paced training modules for the Company's commodities team.

Control System and Supply Chain Transparency

The Company implemented a process to evaluate commodities and suppliers in the supply chain for potential conflict minerals risk and an internal process map for the conflict minerals process that is subject to periodic reviews. Supplier agreement templates require suppliers and licensees to provide information on their use and source of conflict minerals. Given the size and complexity of the Company's global supply chain, the Company focused on its largest suppliers, ranked by the amount the Company spends with each such supplier, and suppliers that had the highest probability of supplying the Company with materials or components containing conflict minerals (the "Targeted Suppliers"). For 2018, this group represented, greater than 93% of the Company's in-scope suppliers by spend. The Company requested supply chain information from Targeted Suppliers utilizing templates developed by the EICC and GeSI. During 2018, the Company distributed the CMRT to Targeted Suppliers, tracked responses and followed up with unresponsive suppliers. The Company maintains records relating to its annual supplier survey.

Supplier Engagement

The Company's standard global terms and conditions include a conflict minerals clause. The Company's standard procurement contracts also contain a conflict minerals clause. In 2018, the Company continued implementation of a preferred supplier program. In order to be designated as a preferred supplier of the Company, a supplier must supply any required conflict minerals information to the Company and comply with other required criteria.

Grievance Mechanism

The Company has an e-mail address for receiving conflict minerals communications internally and an external e-mail mechanism through the Company's public website. The Company intends to treat grievances as red flags for purposes of the due diligence process.

2. *Identify and assess risk in the supply chain.*

The Company works with its commodity team and engineering team as appropriate to review the commodities necessary for the manufacture of its products to determine the associated level of risk of containing conflict minerals focusing its due diligence efforts on commodities at the highest risk.

Following the identification of the commodities, the Company requires Targeted Suppliers to complete a survey using the EICC-GeSI template at a company and parts level. The Company reviews survey responses for completeness and compiles aggregate survey responses. The Company follows up with suppliers when responses are incomplete or other questions are raised by the responses. The Company tracks response rates and red flags as part of its conflict minerals reporting process.

3. *Design and implement a strategy to respond to identified risks.*

The Company developed a strategy to systematically reduce the extent of exposure to certain risk and the likelihood of its occurrence. Steps taken include communicating a policy to Targeted Suppliers noting that suppliers must thoroughly document their efforts to determine the source of any conflict minerals or derivatives and be prepared to provide the Company with evidence of the origin of any conflict minerals contained in products supplied to the Company. The strategy uses a documented escalation process for suppliers who fail to respond, which may result in termination of the supplier's relationship with the Company and/or failure to be considered for future projects with the Company.

The Company has created a standard due diligence process, has engaged in a gap analysis regarding its conflict minerals process, and has monitored and tracked responses to its conflict minerals requests as well as its escalation efforts. Senior management is updated as needed. Additional fact finding, risk assessments and evaluations of changes in circumstances take place as part of the Company's annual review of processes and procedures.

4. *Carry out independent third-party audit of supply chain due diligence at identified points in the supply chain. Companies at identified points in the supply chain should have their due diligence practices audited by independent third parties.*

In 2014, the Company engaged an independent third party to provide a review of the Company's conflict minerals compliance program including review of its existing conflict minerals policy and due diligence process. The Company implemented enhancements to the program in 2014 and 2015 as a result of this review. In 2018, the Company continued its membership in the RMI. The Company continued to implement steps using information from the RMI to conduct a review of summary smelter information to determine if the smelter is certified as conflict free or presents a "red flag" as defined by the OECD Guidance as part of its diligence related to 2018 supplier survey responses.

5. *Report on supply chain due diligence.*

The Company has complied with its SEC filing requirement regarding its conflict minerals program and due diligence by the filing of this report. The Company has made this report available on its external website at <https://company.ingersollrand.com/company/doing-business-with-us/conflict-minerals.html> and has included its conflict minerals policy and other resources at that web address. The Company continues to refine and improve its conflict minerals policy, questionnaire and processes, and to expand awareness regarding its conflict minerals policies.

Results of Due Diligence

After performing the due diligence described above, we are unable to determine that all of the conflict minerals contained in the products described above did not originate from the Covered Countries. For the reasons stated in this report, we also do not have sufficient information to conclusively determine the country of origin of all of the conflict minerals in our products described below and, if such conflict minerals did originate in the Covered Countries, whether such conflict minerals were from recycled or scrap sources or were from other conflict free sources.

We have provided this information as of the date of this report. Subsequent events, such as the inability or unwillingness of any suppliers, smelters or refiners to provide us with complete information, may affect our future determinations under the Rule.

Information on Smelters or Refiners

The CMRT requested that the Targeted Suppliers provide the Company with information on the smelters or refiners that the Targeted Suppliers and its suppliers use to supply conflict minerals to the Company. Because the Company does not typically have a direct relationship with the facilities used to process conflict minerals, we must rely on information provided by the Targeted Suppliers. Some responses from the Targeted Suppliers indicated that they were unable to provide smelter or refiner information at this time. Other Targeted Suppliers provided information on all smelters or refiners used by the Targeted Supplier but could not provide information linking specific smelters or refiners used to process conflict minerals with products provided to the Company. Some Targeted Suppliers provided names that the suppliers described as "smelters" but such names could not be linked to smelters on the RMI list, and may not, in fact, be smelters. Based on the information provided by the Targeted Suppliers, the Company has identified 339 smelters from the RMI list, of which 290 have been validated as audited and found conformant with the relevant RMAP standard. These smelters are included in the list attached as Annex 1 to this report.

Steps to Improve Due Diligence

The Company continues to identify opportunities to improve its due diligence and mitigate risk relating to conflict minerals. Below are some of the steps that the Company is considering taking:

- Continuation of supplier engagement;
- Continuation of company membership in RMI;
- Continuation of our supplier engagement and training and encouraging suppliers to use training resources available through industry associations and the RMI; and
- Encouraging supplier and other company membership and participation in RMI.

Cautionary Statement about Forward-Looking Statements

Certain statements in this report, other than purely historical information, are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “forecast,” “outlook,” “intend,” “strategy,” “plan,” “may,” “should,” “will,” “could,” “would,” “will be,” “will continue,” “will likely result,” or the negative thereof or variations thereon or similar terminology generally intended to identify forward-looking statements.

Forward-looking statements are based on currently available information and our current assumptions, expectations and projections about future events. While we believe that our assumptions, expectations and projections are reasonable in view of the currently available information, you are cautioned not to place undue reliance on our forward-looking statements. You are advised to review any further disclosures we make on related subjects in materials we file with or furnish to the SEC. Forward-looking statements speak only as of the date they are made and are not guarantees of future performance. They are subject to future events, risks and uncertainties - many of which are beyond our control - as well as potentially inaccurate assumptions, that could cause actual results to differ materially from our expectations and projections. We do not undertake to update any forward-looking statements.

Annex 1

Metal	Smelter Name	Smelter Country
Gold	Advanced Chemical Company	UNITED STATES OF AMERICA
Gold	Aida Chemical Industries Co., Ltd.	JAPAN
Gold	Al Etihad Gold Refinery DMCC	UNITED ARAB EMIRATES
Gold	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	UZBEKISTAN
Gold	AngloGold Ashanti Corrego do Sitio Mineracao	BRAZIL
Gold	ANHUI XINKE NEW MATERIALS CO.,LTD	CHINA
Gold	Argor-Heraeus S.A.	SWITZERLAND
Gold	Asahi Pretec Corp.	JAPAN
Gold	Asahi Refining Canada Ltd.	CANADA
Gold	Asahi Refining USA Inc.	UNITED STATES OF AMERICA
Gold	Asaka Riken Co., Ltd.	JAPAN
Gold	AU Traders and Refiners	SOUTH AFRICA
Gold	AURA-II	UNITED STATES OF AMERICA
Gold	Aurubis AG	GERMANY
Gold	Bangalore Refinery	INDIA
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES
Gold	Boliden AB	SWEDEN
Gold	CCR Refinery - Glencore Canada Corporation	CANADA
Gold	Cendres + Metaux S.A.	SWITZERLAND
Gold	Chimet S.p.A.	ITALY
Gold	Chugai Mining	JAPAN
Gold	Daejin Indus Co., Ltd.	KOREA, REPUBLIC OF
Gold	Daye Non-Ferrous Metals Mining Ltd.	CHINA
Gold	DODUCO Contacts and Refining GmbH	GERMANY
Gold	Dowa	JAPAN
Gold	DS PRETECH Co., Ltd.	KOREA, REPUBLIC OF
Gold	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF
Gold	Eco-System Recycling Co., Ltd.	JAPAN
Gold	Elemental Refining, LLC	UNITED STATES OF AMERICA
Gold	Emirates Gold DMCC	UNITED ARAB EMIRATES
Gold	Faggi Enrico S.p.A.	ITALY
Gold	Geib Refining Corporation	UNITED STATES OF AMERICA
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CHINA
Gold	HeeSung Metal Ltd.	KOREA, REPUBLIC OF
Gold	Heimerle + Meule GmbH	GERMANY
Gold	Heraeus Metals Hong Kong Ltd.	CHINA
Gold	Heraeus Precious Metals GmbH & Co. KG	GERMANY
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CHINA
Gold	Ishifuku Metal Industry Co., Ltd.	JAPAN
Gold	Istanbul Gold Refinery	TURKEY
Gold	Italpreziosi	ITALY
Gold	Japan Mint	JAPAN
Gold	Jiangxi Copper Co., Ltd.	CHINA
Gold	JSC Uralelectromed	RUSSIAN FEDERATION

Gold	JX Nippon Mining & Metals Co., Ltd.	JAPAN
Gold	Kazakhmys Smelting LLC	KAZAKHSTAN
Gold	Kazzinc	KAZAKHSTAN
Gold	Kennecott Utah Copper LLC	UNITED STATES OF AMERICA
Gold	KGHM Polska Miedz Spolka Akcyjna	POLAND
Gold	Kojima Chemicals Co., Ltd.	JAPAN
Gold	Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF
Gold	Kyrgyzaltyn JSC	KYRGYZSTAN
Gold	L'Orfebre S.A.	ANDORRA
Gold	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF
Gold	Marsam Metals	BRAZIL
Gold	Materion	UNITED STATES OF AMERICA
Gold	Matsuda Sangyo Co., Ltd.	JAPAN
Gold	Metalor Technologies (Hong Kong) Ltd.	CHINA
Gold	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE
Gold	Metalor Technologies (Suzhou) Ltd.	CHINA
Gold	Metalor Technologies S.A.	SWITZERLAND
Gold	Metalor USA Refining Corporation	UNITED STATES OF AMERICA
Gold	Metalurgica Met-Mex Penoles S.A. De C.V.	MEXICO
Gold	Mitsubishi Materials Corporation	JAPAN
Gold	Mitsui Mining and Smelting Co., Ltd.	JAPAN
Gold	MMTC-PAMP India Pvt., Ltd.	INDIA
Gold	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION
Gold	Nadir Metal Rafineri San. Ve Tic. A.S.	TURKEY
Gold	NH Recytech Company	KOREA, REPUBLIC OF
Gold	Nihon Material Co., Ltd.	JAPAN
Gold	Ogussa Osterreichische Gold- und Silber- Scheideanstalt GmbH	AUSTRIA
Gold	Ohura Precious Metal Industry Co., Ltd.	JAPAN
Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	RUSSIAN FEDERATION
Gold	OJSC Novosibirsk Refinery	RUSSIAN FEDERATION
Gold	PAMP S.A.	SWITZERLAND
Gold	Planta Recuperadora de Metales SpA	CHILE
Gold	PT Aneka Tambang (Persero) Tbk	INDONESIA
Gold	PX Precinox S.A.	SWITZERLAND
Gold	Rand Refinery (Pty) Ltd.	SOUTH AFRICA
Gold	REMONDIS PMR B.V.	NETHERLANDS
Gold	Republic Metals Corporation	UNITED STATES OF AMERICA
Gold	Royal Canadian Mint	CANADA
Gold	SAAMP	FRANCE
Gold	Safimet S.p.A	ITALY
Gold	Samduck Precious Metals	KOREA, REPUBLIC OF
Gold	SAXONIA Edelmetalle GmbH	GERMANY
Gold	Schone Edelmetaal B.V.	NETHERLANDS
Gold	SEMPSA Joyeria Plateria S.A.	SPAIN
Gold	Shandong Guoda Gold Co., Ltd.	CHINA
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CHINA
Gold	Singway Technology Co., Ltd.	TAIWAN, PROVINCE OF CHINA

Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION
Gold	Solar Applied Materials Technology Corp.	TAIWAN, PROVINCE OF CHINA
Gold	Sumitomo Metal Mining Co., Ltd.	JAPAN
Gold	SungEel HiMetal Co., Ltd.	KOREA, REPUBLIC OF
Gold	T.C.A S.p.A	ITALY
Gold	Tanaka Kikinzoku Kogyo K.K.	JAPAN
Gold	The Refinery of Shandong Gold Mining Co., Ltd.	CHINA
Gold	Tokuriki Honten Co., Ltd.	JAPAN
Gold	TOO Tau-Ken-Altyn	KAZAKHSTAN
Gold	Torecom	KOREA, REPUBLIC OF
Gold	Umicore Brasil Ltda.	BRAZIL
Gold	Umicore Precious Metals Thailand	THAILAND
Gold	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM
Gold	United Precious Metal Refining, Inc.	UNITED STATES OF AMERICA
Gold	Valcambi S.A.	SWITZERLAND
Gold	Western Australian Mint (T/a The Perth Mint)	AUSTRALIA
Gold	WIELAND Edelmetalle GmbH	GERMANY
Gold	Yamakin Co., Ltd.	JAPAN
Gold	Yamato Denki Ind. Co., Ltd.	Unknown
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA
Tantalum	Asaka Riken Co., Ltd.	JAPAN
Tantalum	Changsha South Tantalum Niobium Co., Ltd.	CHINA
Tantalum	D Block Metals, LLC	UNITED STATES OF AMERICA
Tantalum	Duoluoshan	CHINA
Tantalum	E.S.R. Electronics	UNITED STATES OF AMERICA
Tantalum	Exotech Inc.	UNITED STATES OF AMERICA
Tantalum	F&X Electro-Materials Ltd.	CHINA
Tantalum	FIR Metals & Resource Ltd.	CHINA
Tantalum	Global Advanced Metals Aizu	JAPAN
Tantalum	Global Advanced Metals Boyertown	UNITED STATES OF AMERICA
Tantalum	Guangdong Rising Rare Metals-EO Materials Ltd.	CHINA
Tantalum	Guangdong Zhiyuan New Material Co., Ltd.	CHINA
Tantalum	H.C. Starck Co., Ltd.	THAILAND
Tantalum	H.C. Starck GmbH	GERMANY
Tantalum	H.C. Starck Hermsdorf GmbH	GERMANY
Tantalum	H.C. Starck Inc.	UNITED STATES OF AMERICA
Tantalum	H.C. Starck Smelting GmbH & Co. KG	GERMANY
Tantalum	H.C. Starck Tantalum and Niobium GmbH	GERMANY
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA
Tantalum	Hi-Temp Specialty Metals, Inc.	UNITED STATES OF AMERICA
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	Jiangxi Tuohong New Raw Material	CHINA
Tantalum	Jiujiang Janny New Material Co., Ltd.	CHINA
Tantalum	JiuJiang JinXin Nonferrous Metals Co., Ltd.	CHINA
Tantalum	Jiujiang Tanbre Co., Ltd.	CHINA
Tantalum	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	KEMET Blue Metals	MEXICO

Tantalum	KEMET Blue Powder	UNITED STATES OF AMERICA
Tantalum	King-Tan Tantalum Industry Ltd.	CHINA
Tantalum	LSM Brasil S.A.	BRAZIL
Tantalum	Metallurgical Products India Pvt., Ltd.	INDIA
Tantalum	Mineracao Taboca S.A.	BRAZIL
Tantalum	Mitsui Mining and Smelting Co., Ltd.	JAPAN
Tantalum	Ningxia Orient Tantalum Industry Co., Ltd.	CHINA
Tantalum	NPM Silmet AS	ESTONIA
Tantalum	Power Resources Ltd.	MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF
Tantalum	QuantumClean	UNITED STATES OF AMERICA
Tantalum	Resind Industria e Comercio Ltda.	BRAZIL
Tantalum	RFH Tantalum Smeltery Co., Ltd./Yanling Jincheng Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	Solikamsk Magnesium Works OAO	RUSSIAN FEDERATION
Tantalum	Taki Chemical Co., Ltd.	JAPAN
Tantalum	Telex Metals	UNITED STATES OF AMERICA
Tantalum	Ulba Metallurgical Plant JSC	KAZAKHSTAN
Tantalum	XinXing HaoRong Electronic Material Co., Ltd.	CHINA
Tantalum	Yichun Jin Yang Rare Metal Co., Ltd.	CHINA
Tantalum	Zhuzhou Cemented Carbide Group Co., Ltd.	CHINA
Tin	Alpha	UNITED STATES OF AMERICA
Tin	An Thai Minerals Co., Ltd.	VIET NAM
Tin	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CHINA
Tin	Chifeng Dajingzi Tin Industry Co., Ltd.	CHINA
Tin	China Tin Group Co., Ltd.	CHINA
Tin	CNMC (Guangxi) PGMA Co., Ltd.	CHINA
Tin	Cooperativa Metalurgica de Rondonia Ltda.	BRAZIL
Tin	CV Ayi Jaya	INDONESIA
Tin	CV Dua Sekawan	INDONESIA
Tin	CV Gita Pesona	INDONESIA
Tin	CV United Smelting	INDONESIA
Tin	CV Venus Inti Perkasa	INDONESIA
Tin	Dowa	JAPAN
Tin	EM Vinto	BOLIVIA (PLURINATIONAL STATE OF)
Tin	Feinhutte Halsbrucke GmbH	GERMANY
Tin	Gejiu Fengming Metallurgy Chemical Plant	CHINA
Tin	Gejiu Jinye Mineral Company	CHINA
Tin	Gejiu Kai Meng Industry and Trade LLC	CHINA
Tin	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA
Tin	Gejiu Zili Mining And Metallurgy Co., Ltd.	CHINA
Tin	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	CHINA
Tin	Guanyang Guida Nonferrous Metal Smelting Plant	CHINA
Tin	Huichang Jinshunda Tin Co., Ltd.	CHINA
Tin	Jiangxi Ketai Advanced Material Co., Ltd.	CHINA
Tin	Jiangxi New Nanshan Technology Ltd.	CHINA
Tin	Magnu's Minerai's Metais e Ligas Ltda.	BRAZIL
Tin	Malaysia Smelting Corporation (MSC)	MALAYSIA

Tin	Melt Metais e Ligas S.A.	BRAZIL
Tin	Metallic Resources, Inc.	UNITED STATES OF AMERICA
Tin	Metallo Belgium N.V.	BELGIUM
Tin	Metallo Spain S.L.U.	SPAIN
Tin	Mineracao Taboca S.A.	BRAZIL
Tin	Minsur	PERU
Tin	Mitsubishi Materials Corporation	JAPAN
Tin	Modeltech Sdn Bhd	MALAYSIA
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND
Tin	Operaciones Metalurgicas S.A.	BOLIVIA (PLURINATIONAL STATE OF)
Tin	PT Alam Lestari Kencana	INDONESIA
Tin	PT Aries Kencana Sejahtera	INDONESIA
Tin	PT ATD Makmur Mandiri Jaya	INDONESIA
Tin	PT Babel Inti Perkasa	INDONESIA
Tin	PT Babel Surya Alam Lestari	INDONESIA
Tin	PT Bangka Prima Tin	INDONESIA
Tin	PT Bangka Serumpun	INDONESIA
Tin	PT Bangka Tin Industry	INDONESIA
Tin	PT Belitung Industri Sejahtera	INDONESIA
Tin	PT BilliTin Makmur Lestari	INDONESIA
Tin	PT Bukit Timah	INDONESIA
Tin	PT Cipta Persada Mulia	INDONESIA
Tin	PT DS Jaya Abadi	INDONESIA
Tin	PT Eunindo Usaha Mandiri	INDONESIA
Tin	PT Fang Di MulTindo	INDONESIA
Tin	PT Inti Stania Prima	INDONESIA
Tin	PT Justindo	INDONESIA
Tin	PT Karimun Mining	INDONESIA
Tin	PT Kijang Jaya Mandiri	INDONESIA
Tin	PT Lautan Harmonis Sejahtera	INDONESIA
Tin	PT Menara Cipta Mulia	INDONESIA
Tin	PT Mitra Stania Prima	INDONESIA
Tin	PT O.M. Indonesia	INDONESIA
Tin	PT Panca Mega Persada	INDONESIA
Tin	PT Premium Tin Indonesia	INDONESIA
Tin	PT Prima Timah Utama	INDONESIA
Tin	PT Refined Bangka Tin	INDONESIA
Tin	PT Sariwiguna Binasentosa	INDONESIA
Tin	PT Seirama Tin Investment	INDONESIA
Tin	PT Stanindo Inti Perkasa	INDONESIA
Tin	PT Sukses Inti Makmur	INDONESIA
Tin	PT Sumber Jaya Indah	INDONESIA
Tin	PT Timah Tbk Kundur	INDONESIA
Tin	PT Timah Tbk Mentok	INDONESIA
Tin	PT Tirus Putra Mandiri	INDONESIA
Tin	PT Tommy Utama	INDONESIA
Tin	Resind Industria e Comercio Ltda.	BRAZIL
Tin	Rui Da Hung	TAIWAN, PROVINCE OF CHINA
Tin	Soft Metais Ltda.	BRAZIL

Tin	Thaisarco	THAILAND
Tin	VQB Mineral and Trading Group JSC	VIET NAM
Tin	White Solder Metalurgia e Mineracao Ltda.	BRAZIL
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA
Tin	Yunnan Tin Company Limited	CHINA
Tungsten	A.L.M.T. Corp.	JAPAN
Tungsten	ACL Metais Eireli	BRAZIL
Tungsten	Asia Tungsten Products Vietnam Ltd.	VIET NAM
Tungsten	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA
Tungsten	China National Nonferrous Metals Imp. & Exp. Jiangxi Co., Ltd.	CHINA
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA
Tungsten	Dayu Jincheng Tungsten Industry Co., Ltd.	CHINA
Tungsten	Dayu Weiliang Tungsten Co., Ltd.	CHINA
Tungsten	Fujian Jinxin Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Haichuang Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA
Tungsten	Ganzhou Yatai Tungsten Co., Ltd.	CHINA
Tungsten	Global Tungsten & Powders Corp.	UNITED STATES OF AMERICA
Tungsten	Guangdong Rising Rare Metals-EO Materials Ltd.	Unknown
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CHINA
Tungsten	H.C. Starck Smelting GmbH & Co. KG	GERMANY
Tungsten	H.C. Starck Tungsten GmbH	GERMANY
Tungsten	Hunan Chenzhou Mining Co., Ltd.	CHINA
Tungsten	Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji	CHINA
Tungsten	Hunan Chunchang Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Hunan Litian Tungsten Industry Co., Ltd.	CHINA
Tungsten	Hydrometallurg, JSC	RUSSIAN FEDERATION
Tungsten	Japan New Metals Co., Ltd.	JAPAN
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CHINA
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CHINA
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CHINA
Tungsten	Jiangxi Xiushui Xianggan Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA
Tungsten	Kennametal Fallon	UNITED STATES OF AMERICA
Tungsten	Kennametal Huntsville	UNITED STATES OF AMERICA
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CHINA
Tungsten	Metallo Chimique	BELGIUM
Tungsten	Moliren Ltd.	RUSSIAN FEDERATION
Tungsten	Niagara Refining LLC	UNITED STATES OF AMERICA
Tungsten	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES
Tungsten	Sanher Tungsten Vietnam Co., Ltd.	VIET NAM
Tungsten	South-East Nonferrous Metal Company Limited of Hengyang City	CHINA
Tungsten	Tejing (Vietnam) Tungsten Co., Ltd.	VIET NAM

Tungsten	Unecha Refractory metals plant	RUSSIAN FEDERATION
Tungsten	Vietnam Youngsun Tungsten Industry Co., Ltd.	VIET NAM
Tungsten	Wolfram Bergbau und Hutten AG	AUSTRIA
Tungsten	Woltech Korea Co., Ltd.	KOREA, REPUBLIC OF
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA
Tungsten	Xiamen Tungsten Co., Ltd.	CHINA
Tungsten	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	CHINA
Tungsten	Xinhai Rendan Shaoguan Tungsten Co., Ltd.	CHINA