## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

### FORM SD

**Specialized Disclosure Report** 



# **ON Semiconductor Corporation**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-39317 (Commission File Number)

5005 E. McDowell Road, Phoenix, Arizona (Address of principal executive offices) 36-3840979 (IRS Employer Identification No.)

> 85008 (Zip Code)

Pamela L. Tondreau (602) 244-6600

(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, 2021.

#### SECTION 1. CONFLICT MINERALS DISCLOSURE

#### Item 1.01. Conflict Minerals Disclosure and Report

Pursuant to Section 13(p) of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"), and Rule 13p-1 thereunder, which implements Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Section 13(p) of the Exchange Act, Rule 13p-1 thereunder and Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act collectively, the "*Conflict Minerals Regulations*"), ON Semiconductor Corporation (the "*Company*") is required to make certain inquiries and perform certain due diligence with respect to any "conflict minerals" (as defined in the Conflict Minerals Regulations) that are necessary to the functionality or production of a product manufactured (or contracted to be manufactured) by the Company or any of its subsidiaries.

Conflict minerals are necessary to the functionality of certain of the Company's products. As required by the Conflict Minerals Regulations, the Company has conducted a reasonable country of origin inquiry ("*RCOI*") designed to determine whether any of the conflict minerals contained in its products originated in the Democratic Republic of the Congo or an adjoining country or are from recycled or scrap sources. Based on its RCOI, the Company was unable to reasonably conclude that all of the conflict minerals contained in its products did not originate in the Democratic Republic of the Congo or an adjoining country or come from recycled or scrap sources. Therefore, the Company was required to exercise due diligence on the source and chain of custody of its conflict minerals in accordance with the Conflict Minerals Regulations and to file a conflict minerals report.

#### **Conflict Minerals Disclosure**

The Company's conflict minerals report for the year ended December 31, 2021 (the "*CMR*") is attached to this Specialized Disclosure Report on Securities and Exchange Commission Form SD (this "*Form SD*") as Exhibit 1.01 and is incorporated into this Form SD by reference. The CMR is also publicly available on the Company's website at <u>https://www.onsemi.com/company/people-planet/social-responsibility</u>. The reference to the Company's website is provided for convenience only, and its contents are not incorporated by reference into this Form SD or into the CMR, nor are they deemed "filed" with the U.S. Securities and Exchange Commission pursuant to the Exchange Act or the Securities Act of 1933, as amended.

#### Item 1.02. Exhibit

Information concerning conflict minerals required by the Conflict Minerals Regulations is included in Exhibit 1.01 to this Form SD.

#### **SECTION 2. EXHIBITS**

| Item 2.01. | Exhibits |
|------------|----------|
|------------|----------|

 Exhibit No.
 Description

 1.01
 Conflict Minerals Report for the year ended December 31, 2021 as required by Items 1.01 and 1.02 of this Form.

#### 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.

#### ON SEMICONDUCTOR CORPORATION (Registrant)

Date: May 27, 2022

By: /s/ PAMELA L. TONDREAU

Name: Pamela L. Tondreau

Title: Executive Vice President, Chief Legal Officer, Chief Compliance Officer and Secretary

# onsemi

This unaudited Conflict Minerals Report (this "*CMR*") of ON Semiconductor Corporation (the "*Company*," "*onsemi*," "*we*" or "*us*") for the year ended December 31, 2021 is attached as Exhibit 1.01 to the Company's Specialized Disclosure Report on Securities and Exchange Commission Form SD (the "*Form SD*"). This CMR is also publicly available on the Company's website: <u>https://www.onsemi.com/company/people-planet/social-responsibility</u> (the "*Social Responsibility Webpage*"). The content of any website referred to in this CMR is included for general information only and is not incorporated by reference in this CMR.

Pursuant to Section 13(p) of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"), and Rule 13p-1 thereunder, which implements Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Section 13(p) of the Exchange Act, Rule 13p-1 thereunder and Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act collectively, the "*Conflict Minerals Regulations*"), the Company is required to make certain inquiries and perform certain due diligence with respect to any "conflict minerals" (as defined in the Conflict Minerals Regulations) that are necessary to the functionality or production of a product manufactured (or contracted to be manufactured) by the Company or any of its subsidiaries.

**onsemi** is driving disruptive innovations to help build a better future. With a focus on automotive and industrial end-markets, the company is accelerating change in megatrends such as vehicle electrification and safety, sustainable energy grids, industrial automation, and 5G and cloud infrastructure. With a highly differentiated and innovative product portfolio, **onsemi** creates intelligent power and sensing technologies that solve the world's most complex challenges and leads the way in creating a safer, cleaner and smarter world.

As a purchaser of products containing the minerals tantalum, tin, tungsten or gold (collectively, "*3TG*") from suppliers for use in our manufacturing process, the Company continues to be concerned about the reports of violence and human rights violations resulting from the sourcing of such minerals from the Democratic Republic of the Congo and adjoining countries ("*Covered Countries*"). The Company's Sustainability Report (to be released in June 2022, known as the "Corporate Social Responsibility Report" in prior years), which addresses these concerns and other actions the Company is taking in the area of social responsibility, is available at the Social Responsibility Webpage.

For purposes of this CMR, the term "products" is used to describe products manufactured (or contracted to be manufactured) by the Company or any of its subsidiaries. As a result, when conducting its conflict minerals analysis as required by the Conflict Minerals Regulations, the Company has considered its sole product to be semiconductor components.

This CMR describes the process undertaken for products that were manufactured, or contracted to be manufactured, during calendar year 2021 and that contain conflict minerals. This CMR is unaudited, as an independent private sector audit is not required pursuant to guidance provided by the Securities and Exchange Commission (the "SEC").

As a result of its inquiry, the Company determined that conflict minerals are necessary to the functionality of the Company's products. In particular, these minerals provide internal electrically conductive connections to the various circuit elements required to manufacture a working semiconductor device and/or provide an electrically conductive path to connect the semiconductor device to the electronic application in which it is utilized.

Conflict minerals are obtained from multiple sources worldwide, and the Company does not desire to eliminate those originating in Covered Countries. However, the Company is committed to pursuing conflict-free sourcing of minerals from our supply chain through collaboration with our suppliers, including through our activities as a member of the Responsible Business Alliance (the "*RBA*") and a full member of the Responsible Minerals Initiative (the "*RMI*"), which began as a joint effort between the RBA and the Global e-Sustainability Initiative. As a member of the RMI, we are required to engage in reasonable due diligence with respect to our supply chain to ensure such minerals are not being sourced from entities supporting armed conflict within the Covered Countries. The Company also recognizes the importance of supporting responsible mineral sourcing from the Covered Countries so as not to negatively impact the economies of those countries.

#### Due Diligence

In accordance with the Conflict Minerals Regulations, the Company conducted a reasonable country of origin inquiry ("*RCOI*") designed to determine whether any of the conflict minerals in its products originated in a Covered Country or are from recycled or scrap sources. Based on its RCOI, the Company was unable to reasonably conclude that all its conflict minerals did not originate in a Covered Country or come from recycled or scrap sources, and the Company continues its due diligence on the source and chain of custody of its conflict minerals. In connection with this supply chain due diligence, the Company, in accordance with the Organisation for Economic Co-operation and Development ("*OECD*") Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (Third Edition, OECD 2016) and the related Supplements on 3TG (collectively, the "*OECD Guidance*"), executed the following steps:

#### OECD Guidance Step 1: Establish a strong company management system

- The Company continually reviews and updates policies, as appropriate, to reflect the procedures by which the Company and its suppliers should conduct due diligence related to conflict minerals. Ethics & Compliance and global supply chain teams review any changes to the conflict minerals policy or governing documents.
- The Company established an internal management team to support supply chain due diligence and institute a systematic process. The internal management team includes appropriate employees within the Company's quality, purchasing and legal departments. The sustaining management team consists of quality, ethics, supply chain and legal representatives. Additionally, the Governance and Sustainability Committee of the Board of Directors of the Company reviews the program on a quarterly basis to track the progress towards the program's goals.
- The Company is a member of the RBA and is a full member of the RMI. Our participation in these organizations allows us to learn from our peer companies in the electronics industry and provides us with additional insight regarding their conflict minerals plans, programs and processes.
- The Company utilized the form conflict minerals reporting template ("*CMRT*"), standardized by the RMI, to collect sourcing information from its suppliers in order to identify whether: (i) conflict minerals sourced by such suppliers originated in Covered Countries; and (ii) smelters and refiners (collectively, "*smelters*") in our supply chain have been validated as conformant in accordance with the Responsible Minerals Assurance Process ("*RMAP*") and cross-recognized certification programs, which include the London Bullion Metal Association ("*LBMA*") Responsible Gold Certification and the Responsible Jewelry Council ("*RJC*") Responsible Jewelry Program Chain-of-Custody Certification.
- In addition, a summary of country of origin information for minerals used in **onsemi** products that we collected in connection with our RCOI and due diligence efforts is attached hereto as <u>Appendix A</u>.
- The RMI developed an audit protocol for verification of entities as conformant with the RMAP in accordance with the OECD Guidance and in conjunction with complementary traceability schemes in the Covered Countries. The Conformant Smelter List is composed of entities that were determined to be conformant with the RMAP and that have been subject to an independent third-party audit to assess whether each such entity employed policies, practices and procedures to source conflict-free minerals. **onsemi** uses the Conformant Smelter List and any other lists that have been recognized by the RMI, including the LBMA and RJC lists for gold, for making conflict minerals determinations with respect to conflict minerals sourced by the Company. We are a member of the RMI and have access to the RMI country of origin information for entities on the Conformant Smelter List.
- The Company utilizes an internal compliance audit to assess and confirm that the due diligence approach followed by the Company is in accordance with OECD Guidance.
- The Company established communication channels with customers and suppliers to inquire about conflict minerals and alert such entities about the risk of using non-conformant smelters as grievance mechanisms under our conflict minerals compliance program.

#### OECD Guidance Step 2: Identify and assess risk in the supply chain

- The Company believes that it has identified 100% of the suppliers that provide it with 3TG through its supply chain diligence. The Company sends an outreach campaign letter requesting the latest CMRT from each of its suppliers every year.
- The Company employs a third-party web-based software platform to collect, manage, aggregate and review the completeness of the CMRT declarations received from its suppliers. This software ensures the Company has an auditable "chain of custody" regarding receipt of declarations and information received from suppliers.
- The Company uses the RMI's RCOI report to identify suppliers using smelters that are conformant to a third-party audit program to
  assess related supply chain risks. The Company also utilizes the RMI's RCOI report to perform due diligence and confirm certain
  information from its suppliers.
- The Company's conflict minerals team reviews all CMRT responses for completeness and consistency with the latest CMRT revision. As of December 31, 2021, the Company had received and reviewed CMRT submissions from 100% of its suppliers.

#### OECD Guidance Step 3: Design and implement a strategy to respond to identified risks

- The Company's conflict minerals team reviews and updates its own company-level CMRT monthly to identify risk in the supply chain for non-RMAP conformant smelters reported by suppliers in their submitted CMRTs.
  - Outreach or encouragement letters are sent to suppliers to remove or replace non-conformant smelters. The Company contacts suppliers and regularly sends out reminder emails to request responses or updates.
  - As a member of the RMI, the Company has access to outreach or encouragement letters, which are also sent directly by the Company's conflict minerals team to non-conformant smelters.
- The Company conducts a risk assessment of all suppliers, and suppliers are rated using a risk matrix system based on the CMRT submitted. Each supplier is assigned a risk rating ranging from "Low Risk" to "Critical Risk," as further described below:
  - "Low Risk" means that a supplier is using 100% RMAP conformant smelters with a conflict minerals policy.
  - "Medium Risk" means that a supplier is using an active or non-conformant smelter but one which is identified as eligible to participate in the RMAP (or otherwise does not meet the criteria for Low Risk above).
  - "High Risk" or "Critical Risk" means that a supplier either has no conflict minerals policy or is using an ineligible entity.
  - As of December 31, 2021, 75% of our suppliers were assigned a "Low Risk" rating while 25% received a "Medium Risk" rating for having active tin smelters and/or non-conformant gold refiners declared in their CMRTs, as further described in the "Due Diligence Results" section of this CMR.
- At least once per year, or whenever there is a major CMRT revision release, all suppliers receive a letter through a third-party solution provider for the Company's conflict-free minerals campaign requesting them to:
  - continue to source *only* from RMAP conformant smelters;
  - remove or replace non-conformant smelters;
  - immediately report any risk: (i) contributing to, or associated with, any violations of the Company's conflict-free minerals campaign, or (ii) that may give rise to a significant adverse impact on the Company's conflict-free minerals campaign;

- identify any smelters that the supplier has confirmed to be non-conformant to RMAP; and
- identify all conflict minerals smelters in their supply chain and report back to the Company a completed and updated CMRT.

#### • OECD Guidance Step 4: Carry out an independent third-party audit of smelters' due diligence practices

- As an active RMI member, we benefit from the RMAP, which uses an independent third-party assessment of smelter or refiner management systems and sourcing practices to validate compliance with RMAP standards. We have relied on RMI due diligence and RMAP audit results posted on the RMI website, including the RMI RCOI report.
- One employee on the Company's conflict minerals compliance team is a member of the RMI workgroups that continue to develop improvements to the RMI programs. To that end, the Company approaches, through direct communication and smelter outreach, both the smelters and their customers (i.e., the Company's suppliers) in our supply chain. The Company also contributes to thought leadership and participates in the relevant workgroups along with peer companies within industry organizations.
- OECD Guidance Step 5: Report annually on supply chain due diligence
  - The Company is an indirect purchaser of conflict minerals, and its due diligence measures provide reasonable, not absolute, assurance regarding the source and chain of custody of conflict minerals. The Company's due diligence processes seek data from its direct suppliers and those suppliers seek similar information within their supply chains to identify the original sources of the conflict minerals. We also rely to a large extent on information collected and provided by RMI's independent third-party audit programs. Such sources of information may produce inaccurate or incomplete information and may be subject to fraud. As required, a CMRT is requested from all 3TG suppliers annually to promote a reliable and consistent due diligence process. If we determine that a supplier has not complied with the Company's conflict minerals policy, the Company will employ an escalation process to determine appropriate remedial measures, which may include removing the supplier from our supply chain.
  - The Company prepares and files a conflict minerals report as an exhibit to its Specialized Disclosure Report on Securities and Exchange Commission Form SD with the SEC on an annual basis. The conflict minerals report is made available to the public and posted on the Company's website at <a href="https://www.onsemi.com/site/pdf/Annual-Conflict-Minerals-Report.pdf">https://www.onsemi.com/site/pdf/Annual-Conflict-Minerals-Report.pdf</a>.
  - The Company publicly posts and regularly updates its own company-level CMRT on its website at <a href="https://www.onsemi.com/pub/Collateral/CMRTRM.XLSX">https://www.onsemi.com/pub/Collateral/CMRTRM.XLSX</a>.
  - Conflict minerals due diligence is also available in our annual Sustainability Report posted at the Social Responsibility Webpage.

#### Due Diligence Results

<u>Appendix B</u> sets forth a list of smelters, as provided by the Company's suppliers, from which the Company obtains certain of its products, including mineral type and standard smelter names. As described below, as of December 31, 2021, 98% of such smelters were on the RMAP Conformant Smelter List. Although most of our suppliers provide us with product-level declarations, some of our suppliers continue to provide information at the company level. Declarations at the company level do not limit the information provided on smelters to those specific to the products that the supplier provides to us. As a result of the Company's continuous due diligence with suppliers and smelters, information provided by its suppliers and other information available indicates that all the smelters used were 100% RMAP conformant at the end of the 2018 and 2019 calendar years, 99.6% for 2020 and 98% as of December 31, 2021, as described in the chart below.

| 2021                   |                   | 2020           | 2019                 |                    | 2018          |
|------------------------|-------------------|----------------|----------------------|--------------------|---------------|
| 90%                    |                   | 33.0%          | 100%                 |                    |               |
| REPORTING YEAR         | CONFORMANT        | ACTIVE         | NON-CONFORMANT       | NOT ELIGIBLE       | TOTAL         |
|                        | CONFORMANT<br>98% |                |                      | NOT ELIGIBLE<br>0% |               |
| REPORTING YEAR         |                   | ACTIVE         | NON-CONFORMANT       |                    | TOTAL         |
| REPORTING YEAR<br>2021 | 98%               | АСТІVЕ<br>1.0% | NON-CONFORMANT<br>1% | 0%                 | TOTAL<br>100% |

The smelter or refiner statuses utilized in the chart have the following definitions:

- "Conformant" means that a smelter has been independently assessed and found conformant with the relevant RMAP standard and is included in the Standard Smelter List.
- "Active" means that a smelter has been engaged in the RMAP program but has not yet been determined to be conformant and is included in the Standard Smelter List.
- "Non-conformant" means that a smelter meets the definition of a smelter or refiner, is identified as an eligible smelter, has been independently assessed and found non-conformant with the relevant RMAP standards and is included in the Standard Smelter List.
- "Not eligible" means that an entity does not meet the definition of a smelter or refiner or is otherwise ineligible for the RMAP program and is not included in the Standard Smelter List. This includes any alleged or unknown smelter that requires more research for its RMAP eligibility.

For the year ended December 31, 2021, there were two "active" tin smelters and two "non-conformant" gold refiners reported. All tantalum and tungsten smelters were reported to be 100% RMAP conformant as shown in the table below:

| 2021 REPORTING YEAR | CONFORMANT | ACTIVE | NON-CONFORMANT | NOT ELIGIBLE | TOTAL SMELTER |
|---------------------|------------|--------|----------------|--------------|---------------|
| GOLD                | 105        | 0      | 2              | 0            | 107           |
| TANTALUM            | 25         | 0      | 0              | 0            | 25            |
| TIN                 | 50         | 2      | 0              | 0            | 52            |
| TUNGSTEN            | 24         | 0      | 0              | 0            | 24            |
| Total               | 204        | 2      | 2              | 0            | 208           |

#### Mitigation of Risk Related to Benefiting Armed Groups

The Company continues to improve its processes and procedures to mitigate the risk that the conflict minerals that it sources benefit armed groups. In particular, the Company has taken a number of steps to improve its due diligence processes, including, but not limited to, the following:

• The Company has incorporated conflict minerals compliance requirements into its supplier handbook for all key suppliers.

- The Company has incorporated conflict minerals compliance requirements and checkpoints into its business processes for new product introduction, new supplier qualification and change management.
- The Company reviews and evaluates supplier data that it receives, including by comparison with the RMI's RCOI report and other available data, with a view to increasing the reliability of its information and processes and the completeness and accuracy of such information.
- If a smelter becomes non-conformant at any time, the Company will send an outreach letter directly to such smelter.

#### APPENDIX A

Below is a summary of the country of origin information for minerals used in **onsemi** products, collected as a result of the Company's RCOI and due diligence from all suppliers based on information available to the Company as of December 31, 2021.

| Andorra                           | Ghana              | Singapore  |
|-----------------------------------|--------------------|--|
| Australia                         | India              | South Africa   |
| Austria                           | Indonesia          | Spain  |
| Belgium                           | Italy              | Sweden   |
| Bolivia (Plurinational State of)  | Japan              | Switzerland  |
| Brazil                            | Kazakhstan         | Taiwan, Province of China                            |
| Burundi                           | Korea, Republic of | Tanzania   |
| Canada                            | Kyrgyzstan         | Thailand   |
| Chile                             | Malaysia           | Turkey   |
| China                             | Mexico             | Uganda   |
| Colombia                          | Myanmar            | United Arab Emirates                                 |
| Congo, Democratic Republic of the | Netherlands        | United Kingdom of Great Britain and Northern Ireland |
| Czechia                           | Peru               | United States of America                             |
| Estonia                           | Philippines        | Uzbekistan   |
| Ethiopia                          | Poland             | Venezuela  |
| France                            | Russian Federation | Vietnam  |
| Germany                           | Rwanda             |  |

A-1

#### APPENDIX B

#### CONFLICT MINERALS SOURCING INFORMATION\* (as of December 31, 2021)

| SN | METAL | CID       | STANDARD SMELTER NAME   | SMELTER COUNTRY          |
|----|-------|-----------|---|--------------------------|
| 1  | Gold  | CID002763 | 8853 S.p.A.   | Italy                    |
| 2  | Gold  | CID000015 | Advanced Chemical Company                                       | United States of America |
| 3  | Gold  | CID000035 | Agosi AG  | Germany                  |
| 4  | Gold  | CID000019 | Aida Chemical Industries Co., Ltd.                              | Japan                    |
| 5  | Gold  | CID002560 | Al Etihad Gold Refinery DMCC                                    | United Arab Emirates     |
| 6  | Gold  | CID000041 | Almalyk Mining and Metallurgical Complex (AMMC)                 | Uzbekistan               |
| 7  | Gold  | CID000058 | AngloGold Ashanti Corrego do Sitio Mineracao                    | Brazil                   |
| 8  | Gold  | CID000077 | Argor-Heraeus S.A.  | Switzerland              |
| 9  | Gold  | CID000082 | Asahi Pretec Corp.  | Japan                    |
| 10 | Gold  | CID000924 | Asahi Refining Canada Ltd.                                      | Canada                   |
| 11 | Gold  | CID000920 | Asahi Refining USA Inc.   | United States of America |
| 12 | Gold  | CID000090 | Asaka Riken Co., Ltd.   | Japan                    |
| 13 | Gold  | CID002850 | AU Traders and Refiners   | South Africa             |
| 14 | Gold  | CID000113 | Aurubis AG  | Germany                  |
| 15 | Gold  | CID002863 | Bangalore Refinery  | India                    |
| 16 | Gold  | CID000128 | Bangko Sentral ng Pilipinas (Central Bank of the Philippines)   | Philippines              |
| 17 | Gold  | CID000157 | Boliden AB  | Sweden                   |
| 18 | Gold  | CID000176 | C. Hafner GmbH + Co. KG   | Germany                  |
| 19 | Gold  | CID000185 | CCR Refinery - Glencore Canada Corporation                      | Canada                   |
| 20 | Gold  | CID000189 | Cendres + Metaux S.A.   | Switzerland              |
| 21 | Gold  | CID000233 | Chimet S.p.A.   | Italy                    |
| 22 | Gold  | CID000264 | Chugai Mining   | Japan                    |
| 23 | Gold  | CID000362 | DODUCO Contacts and Refining GmbH                               | Germany                  |
| 24 | Gold  | CID000401 | Dowa  | Japan                    |
| 25 | Gold  | CID000359 | DSC (Do Sung Corporation)                                       | Korea, Republic Of       |
| 26 | Gold  | CID000425 | Eco-System Recycling Co., Ltd. East Plant                       | Japan                    |
| 27 | Gold  | CID003424 | Eco-System Recycling Co., Ltd. North Plant                      | Japan                    |
| 28 | Gold  | CID003425 | Eco-System Recycling Co., Ltd. West Plant                       | Japan                    |
| 29 | Gold  | CID002561 | Emirates Gold DMCC  | United Arab Emirates     |
| 30 | Gold  | CID002459 | Geib Refining Corporation                                       | United States of America |
| 31 | Gold  | CID002243 | Gold Refinery of Zijin Mining Group Co., Ltd.                   | China                    |
| 32 | Gold  | CID000694 | Heimerle + Meule GmbH   | Germany                  |
| 33 | Gold  | CID000711 | Heraeus Germany GmbH Co. KG                                     | Germany                  |
| 34 | Gold  | CID000707 | Heraeus Metals Hong Kong Ltd.                                   | China                    |
| 35 | Gold  | CID000801 | Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd. | China                    |
| 36 | Gold  | CID000807 | Ishifuku Metal Industry Co., Ltd.                               | Japan                    |
| 37 | Gold  | CID000814 | Istanbul Gold Refinery  | Turkey                   |
| 38 | Gold  | CID002765 | Italpreziosi  | Italy                    |
| 39 | Gold  | CID000823 | Japan Mint  | Japan                    |
| 40 | Gold  | CID000855 | Jiangxi Copper Co., Ltd.  | China                    |
| 41 | Gold  | CID000493 | JSC Novosibirsk Refinery  | Russian Federation       |

| SN | METAL | CID       | STANDARD SMELTER NAME                                       | SMELTER COUNTRY          |
|----|-------|-----------|---|--------------------------|
| 42 | Gold  | CID000929 | JSC Uralelectromed  | Russian Federation       |
| 43 | Gold  | CID000937 | JX Nippon Mining & Metals Co., Ltd.                         | Japan                    |
| 44 | Gold  | CID000957 | Kazzinc   | Kazakhstan               |
| 45 | Gold  | CID000969 | Kennecott Utah Copper LLC                                   | United States of America |
| 46 | Gold  | CID002511 | KGHM Polska Miedz Spolka Akcyjna                            | Poland                   |
| 47 | Gold  | CID000981 | Kojima Chemicals Co., Ltd.                                  | Japan                    |
| 48 | Gold  | CID002605 | Korea Zinc Co., Ltd.  | Korea, Republic Of       |
| 49 | Gold  | CID001029 | Kyrgyzaltyn JSC   | Kyrgyztan                |
| 50 | Gold  | CID002762 | L'Orfebre S.A.  | Andorra                  |
| 51 | Gold  | CID001078 | LS-NIKKO Copper Inc.  | Korea, Republic Of       |
| 52 | Gold  | CID000689 | LT Metal Ltd.   | Korea, Republic Of       |
| 53 | Gold  | CID002606 | Marsam Metals   | Brazil                   |
| 54 | Gold  | CID001113 | Materion  | United States of America |
| 55 | Gold  | CID001119 | Matsuda Sangyo Co., Ltd.                                    | Japan                    |
| 56 | Gold  | CID001149 | Metalor Technologies (Hong Kong) Ltd.                       | China                    |
| 57 | Gold  | CID001152 | Metalor Technologies (Singapore) Pte., Ltd.                 | SINGAPORE                |
| 58 | Gold  | CID001147 | Metalor Technologies (Suzhou) Ltd.                          | China                    |
| 59 | Gold  | CID001153 | Metalor Technologies S.A.                                   | Switzerland              |
| 60 | Gold  | CID001157 | Metalor USA Refining Corporation                            | United States of America |
| 61 | Gold  | CID001161 | Metalurgica Met-Mex Penoles S.A. De C.V.                    | MEXICO                   |
| 62 | Gold  | CID001188 | Mitsubishi Materials Corporation                            | Japan                    |
| 63 | Gold  | CID001100 | Mitsui Mining and Smelting Co., Ltd.                        | Japan                    |
| 64 | Gold  | CID002509 | MMTC-PAMP India Pvt., Ltd.                                  | India                    |
| 65 | Gold  | CID002303 | Moscow Special Alloys Processing Plant                      | Russian Federation       |
| 66 | Gold  | CID001220 | Nadir Metal Rafineri San. Ve Tic. A.S.                      | Turkey                   |
| 67 | Gold  | CID001236 | Navoi Mining and Metallurgical Combinat                     | Uzbekistan               |
| 68 | Gold  | CID001259 | Nihon Material Co., Ltd.                                    | Japan                    |
| 69 | Gold  | CID001233 | Ogussa Osterreichische Gold- und Silber-Scheideanstalt GmbH | Austria                  |
| 70 | Gold  | CID002775 | Ohura Precious Metal Industry Co., Ltd.                     | Japan                    |
| 70 | Gold  | CID001323 | OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant"     | Japan                    |
| 71 | Gold  | CID001326 | (OJSC Krastsvetmet)   | Russian Federation       |
| 72 | Gold  | CID001352 | PAMP S.A.   | Switzerland              |
| 73 | Gold  | CID002919 | Planta Recuperadora de Metales SpA                          | Chile                    |
| 74 | Gold  | CID001386 | Prioksky Plant of Non-Ferrous Metals                        | Russian Federation       |
| 75 | Gold  | CID001397 | PT Aneka Tambang (Persero) Tbk                              | Indonesia                |
| 76 | Gold  | CID001498 | PX Precinox S.A.  | Switzerland              |
| 77 | Gold  | CID001512 | Rand Refinery (Pty) Ltd.                                    | South Africa             |
| 78 | Gold  | CID002582 | REMONDIS PMR B.V.   | Netherlands              |
| 79 | Gold  | CID001534 | Royal Canadian Mint   | Canada                   |
| 80 | Gold  | CID002761 | SAAMP   | France                   |
| 81 | Gold  | CID002973 | Safimet S.p.A   | Italy                    |
| 82 | Gold  | CID002290 | SAFINA A.S.   | Czechia                  |
| 83 | Gold  | CID001555 | Samduck Precious Metals                                     | Korea, Republic Of       |
| 84 | Gold  | CID002777 | SAXONIA Edelmetalle GmbH                                    | Germany                  |
| 85 | Gold  | CID001585 | SEMPSA Joyeria Plateria S.A.                                | Spain                    |
| 86 | Gold  | CID001916 | Shandong Gold Smelting Co., Ltd.                            | China                    |

| SN  | METAL     | CID                    | STANDARD SMELTER NAME                                       | SMELTER COUNTRY           |
|-----|-----------|------------------------|---|---------------------------|
| 87  | Gold      | CID001622              | Shandong Zhaojin Gold & Silver Refinery Co., Ltd.           | China                     |
| 88  | Gold      | CID001736              | Sichuan Tianze Precious Metals Co., Ltd.                    | China                     |
| 89  | Gold      | CID002516              | Singway Technology Co., Ltd.                                | Taiwan, Province of China |
| 90  | Gold      | CID001756              | SOE Shyolkovsky Factory of Secondary Precious Metals        | Russian Federation        |
| 91  | Gold      | CID001761              | Solar Applied Materials Technology Corp.                    | Taiwan, Province of China |
| 92  | Gold      | CID001798              | Sumitomo Metal Mining Co., Ltd.                             | Japan                     |
| 93  | Gold      | CID002918              | SungEel HiMetal Co., Ltd.                                   | Korea, Republic Of        |
| 94  | Gold      | CID002580              | T.C.A S.p.A   | Italy                     |
| 95  | Gold      | CID001875              | Tanaka Kikinzoku Kogyo K.K.                                 | Japan                     |
| 96  | Gold      | CID001938              | Tokuriki Honten Co., Ltd.                                   | Japan                     |
| 97  | Gold      | CID002615              | TOO Tau-Ken-Altyn   | Kazakhstan                |
| 98  | Gold      | CID002015              | Torecom   | Korea, Republic Of        |
| 99  | Gold      | CID001333              | Umicore Precious Metals Thailand                            | Thailand                  |
| 100 | Gold      | CID002314<br>CID001980 | Umicore S.A. Business Unit Precious Metals Refining         | Belgium                   |
| 100 | Gold      | CID001900              | United Precious Metal Refining, Inc.                        | United States of America  |
| 101 | Gold      | CID001993              | Valcambi S.A.   | Switzerland               |
| 102 | Gold      | CID002003              | Western Australian Mint (T/a The Perth Mint)                | Australia                 |
| 103 | Gold      | CID002030              | WIELAND Edelmetalle GmbH                                    | Germany                   |
| 104 | Gold      | CID002778              | Yamakin Co., Ltd.   | Japan                     |
| 105 | Gold      | CID002100              | Yokohama Metal Co., Ltd.                                    | Japan                     |
| 100 | Gold      | CID002125              | Zhongyuan Gold Smelter of Zhongjin Gold Corporation         | China                     |
| 107 | Tantalum  | CID002224<br>CID000211 | Changsha South Tantalum Niobium Co., Ltd.                   | China                     |
| 100 | Tantalum  | CID002504              | D Block Metals, LLC   | United States of America  |
| 109 | Tantalum  | CID002304<br>CID000456 | Exotech Inc.  | United States of America  |
| 110 | Tantalum  | CID000450              | F&X Electro-Materials Ltd.                                  | China                     |
| 111 | Tantalum  | CID000400              | FIR Metals & Resource Ltd.                                  | China                     |
| 112 | Tantalum  | CID002558              | Global Advanced Metals Aizu                                 | Japan                     |
| 113 | Tantalum  | CID002557              | Global Advanced Metals Boyertown                            | United States of America  |
| 114 | Tantalum  | CID002537              | H.C. Starck Hermsdorf GmbH                                  | Germany                   |
| 115 | Tantalum  | CID002548              | H.C. Starck Inc.  | United States of America  |
| 110 | Tantalum  | CID002348              | Hengyang King Xing Lifeng New Materials Co., Ltd.           | China                     |
| 117 | Tantalum  | CID002432<br>CID002512 | Jiangxi Dinghai Tantalum & Niobium Co., Ltd.                | China                     |
| 110 | Tantalum  | CID002312<br>CID002842 | Jiangxi Tuohong New Raw Material                            | China                     |
| 119 | Tantalum  | CID002842<br>CID000914 | JiuJiang JinXin Nonferrous Metals Co., Ltd.                 | China                     |
| 120 | Tantalum  | CID000914<br>CID000917 | Jiujiang Tanbre Co., Ltd.                                   | China                     |
| 121 | Tantalum  | CID000917              | Metallurgical Products India Pvt., Ltd.                     | India                     |
| 122 | Tantalum  | CID001103<br>CID001192 | Mitsui Mining and Smelting Co., Ltd.                        |                           |
| 125 | Tantalum  | CID001192<br>CID001277 | Ningxia Orient Tantalum Industry Co., Ltd.                  | Japan<br>China            |
| 124 | Tantalum  | CID001277              | NPM Silmet AS   | Estonia                   |
| 125 | Tantalum  | CID001200<br>CID002544 | TANIOBIS Co., Ltd.  | Thailand                  |
| 120 | Tantalum  | CID002545              | TANIOBIS Co., Etd.<br>TANIOBIS GmbH                         | Germany                   |
| 127 | Tantalum  | CID002545<br>CID002549 | TANIOBIS Glibh<br>TANIOBIS Japan Co., Ltd.                  | Japan                     |
| 128 | Tantalum  | CID002549<br>CID002550 | TANIOBIS Japan Co., Ltd.<br>TANIOBIS Smelting GmbH & Co. KG | Germany                   |
| 129 | Tantalum  | CID002550<br>CID001969 | Ulba Metallurgical Plant JSC                                | Kazakhstan                |
| 130 | Tantalum  | CID001969<br>CID000616 | XIMEI RESOURCES (GUANGDONG) LIMITED                         | China                     |
| 121 | Tantaluin | CID00010               | AIMEI RESOURCES (GUANGDUNG) LIMITED                         | CIIIIId                   |

| SN         | METAL      | CID                    | STANDARD SMELTER NAME                                    | SMELTER COUNTRY                               |
|------------|------------|------------------------|--|---|
| 132        | Tantalum   | CID001522              | Yanling Jincheng Tantalum & Niobium Co., Ltd.            | China   |
| 133        | Tin        | CID000292              | Alpha  | United States of America                      |
| 134        | Tin        | CID000228              | Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.        | China   |
| 135        | Tin        | CID003190              | Chifeng Dajingzi Tin Industry Co., Ltd.                  | China   |
| 136        | Tin        | CID001070              | China Tin Group Co., Ltd.                                | China   |
| 137        | Tin        | CID000402              | Dowa   | Japan   |
| 138        | Tin        | CID000438              | EM Vinto   | Bolivia (Plurinational State of)              |
| 139        | Tin        | CID000468              | Fenix Metals   | Poland  |
| 140        | Tin        | CID000942              | Gejiu Kai Meng Industry and Trade LLC                    | China   |
| 141        | Tin        | CID000538              | Gejiu Non-Ferrous Metal Processing Co., Ltd.             | China   |
| 142        | Tin        | CID001908              | Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.           | China   |
| 143        | Tin        | CID000555              | Gejiu Zili Mining And Metallurgy Co., Ltd.               | China   |
| 144        | Tin        | CID003116              | Guangdong Hanhe Non-Ferrous Metal Co., Ltd.              | China   |
| 145        | Tin        | CID002844              | HuiChang Hill Tin Industry Co., Ltd.                     | China   |
| 146        | Tin        | CID001231              | Jiangxi New Nanshan Technology Ltd.                      | China   |
| 140        | Tin        | CID001231<br>CID003387 | Luna Smelter, Ltd.                                       | Rwanda  |
| 147        | Tin        | CID003379              | Ma'anshan Weitai Tin Co., Ltd.                           | China   |
| 140        | Tin        | CID002468              | Magnu's Minerais Metais e Ligas Ltda.                    | Brazil  |
| 149        | Tin        | CID002408              | Malaysia Smelting Corporation (MSC)                      | Malaysia                                      |
| 150        | Tin        | CID001105              | Melt Metais e Ligas S.A.                                 | Brazil  |
| 151        | Tin        | CID002300              | Mett Metals e Ligas 5.A.<br>Metallic Resources, Inc.     | United States of America                      |
| 152        | Tin        | CID001142<br>CID002773 | Metallo Belgium N.V.                                     | Belgium                                       |
| 153        | Tin        | CID002773              | Metallo Spain S.L.U.                                     | Spain   |
| 154        | Tin        | CID002774<br>CID001173 | Mineracao Taboca S.A.                                    | Brazil  |
| 155        | Tin        | CID001173              | Mineracao raboca S.A.<br>Minsur                          | PERU  |
| 150        | Tin        | CID001182<br>CID001191 | Mitsubishi Materials Corporation                         |   |
| 157        | Tin        | CID001191<br>CID001314 | O.M. Manufacturing (Thailand) Co., Ltd.                  | Japan<br>Thailand                             |
| 150        | Tin        | CID001314<br>CID002517 | O.M. Manufacturing Philippines, Inc.                     |   |
|            |            |                        |  | Philippines                                   |
| 160<br>161 | Tin<br>Tin | CID001337<br>CID001399 | Operaciones Metalurgicas S.A.<br>PT Artha Cipta Langgeng | Bolivia (Plurinational State of)<br>Indonesia |
|            |            |                        | PT ATD Makmur Mandiri Jaya                               | Indonesia                                     |
| 162<br>163 | Tin<br>Tin | CID002503<br>CID001406 | PT Babel Surya Alam Lestari                              | Indonesia                                     |
|            |            |                        | -  |   |
| 164        | Tin        | CID003205<br>CID001428 | PT Bangka Serumpun<br>Smelter not listed                 | Indonesia                                     |
| 165        | Tin        |                        |  | Indonesia                                     |
| 166        | Tin        | CID002835              | PT Menara Cipta Mulia                                    | Indonesia                                     |
| 167        | Tin        | CID001453              | PT Mitra Stania Prima                                    | Indonesia<br>Indonesia                        |
| 168        | Tin        | CID001458              | PT Prima Timah Utama                                     | Indonesia                                     |
| 169        |            | CID003381              | PT Rajawali Rimba Perkasa                                | Indonesia                                     |
| 170        | Tin        | CID001460              | PT Refined Bangka Tin                                    | Indonesia<br>Indonesia                        |
| 171        | Tin        | CID001468              | PT Stanindo Inti Perkasa                                 | Indonesia                                     |
| 172        | Tin        | CID001477              | PT Timah Tbk Kundur                                      | Indonesia                                     |
| 173        | Tin        | CID001482              | PT Timah Tbk Mentok                                      | Indonesia                                     |
| 174        | Tin        | CID001490              | PT Tinindo Inter Nusa                                    | Indonesia                                     |
| 175        | Tin        | CID002706              | Resind Industria e Comercio Ltda.                        | Brazil  |
| 176        | Tin        | CID001539              | Rui Da Hung  | Taiwan, Province of China                     |

| SN  | METAL    | CID       | STANDARD SMELTER NAME   | SMELTER COUNTRY          |
|-----|----------|-----------|---|--------------------------|
| 177 | Tin      | CID001758 | Soft Metais Ltda.   | Brazil                   |
| 178 | Tin      | CID002834 | Thai Nguyen Mining and Metallurgy Co., Ltd.                   | Vietnam                  |
| 179 | Tin      | CID001898 | Thaisarco   | Thailand                 |
| 180 | Tin      | CID002180 | Tin Smelting Branch of Yunnan Tin Co., Ltd.                   | China                    |
| 181 | Tin      | CID003325 | Tin Technology & Refining                                     | United States of America |
| 182 | Tin      | CID002036 | White Solder Metalurgia e Mineracao Ltda.                     | Brazil                   |
| 183 | Tin      | CID002158 | Yunnan Chengfeng Non-ferrous Metals Co., Ltd.                 | China                    |
| 184 | Tin      | CID003397 | Yunnan Yunfan Non-ferrous Metals Co., Ltd.                    | China                    |
| 185 | Tungsten | CID000004 | A.L.M.T. Corp.  | Japan                    |
| 186 | Tungsten | CID002513 | Chenzhou Diamond Tungsten Products Co., Ltd.                  | China                    |
| 187 | Tungsten | CID000258 | Chongyi Zhangyuan Tungsten Co., Ltd.                          | China                    |
| 188 | Tungsten | CID002645 | Ganzhou Haichuang Tungsten Co., Ltd.                          | China                    |
| 189 | Tungsten | CID000875 | Ganzhou Huaxing Tungsten Products Co., Ltd.                   | China                    |
| 190 | Tungsten | CID002494 | Ganzhou Seadragon W & Mo Co., Ltd.                            | China                    |
| 191 | Tungsten | CID000568 | Global Tungsten & Powders Corp.                               | United States of America |
| 192 | Tungsten | CID000218 | Guangdong Xianglu Tungsten Co., Ltd.                          | China                    |
| 193 | Tungsten | CID002541 | H.C. Starck Tungsten GmbH                                     | Germany                  |
| 194 | Tungsten | CID000769 | Hunan Chunchang Nonferrous Metals Co., Ltd.                   | China                    |
| 195 | Tungsten | CID002649 | Hydrometallurg, JSC   | Russian Federation       |
| 196 | Tungsten | CID000825 | Japan New Metals Co., Ltd.                                    | Japan                    |
| 197 | Tungsten | CID002551 | Jiangwu H.C. Starck Tungsten Products Co., Ltd.               | China                    |
| 198 | Tungsten | CID002321 | Jiangxi Gan Bei Tungsten Co., Ltd.                            | China                    |
| 199 | Tungsten | CID002318 | Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd. | China                    |
| 200 | Tungsten | CID002317 | Jiangxi Xinsheng Tungsten Industry Co., Ltd.                  | China                    |
| 201 | Tungsten | CID002316 | Jiangxi Yaosheng Tungsten Co., Ltd.                           | China                    |
| 202 | Tungsten | CID000105 | Kennametal Huntsville   | United States of America |
| 203 | Tungsten | CID002543 | Masan High-Tech Materials                                     | Vietnam                  |
| 204 | Tungsten | CID002589 | Niagara Refining LLC  | United States of America |
| 205 | Tungsten | CID002542 | TANIOBIS Smelting GmbH & Co. KG                               | Germany                  |
| 206 | Tungsten | CID002044 | Wolfram Bergbau und Hutten AG                                 | Austria                  |
| 207 | Tungsten | CID002320 | Xiamen Tungsten (H.C.) Co., Ltd.                              | China                    |
| 208 | Tungsten | CID002082 | Xiamen Tungsten Co., Ltd.                                     | China                    |

\* Note that the above reported standard smelter and refiner facility names and smelter locations were taken from the RMI report dated as of December 31, 2021.