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

Form SD

SPECIALIZED DISCLOSURE REPORT

Vicor Corporation

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

0-18277
(Commission
File No.)

04-2742817
(I.R.S. Employer
Identification Number)

25 Frontage Road, Andover, Massachusetts
(Address of Principal Executive Offices)

01810
(Zip Code)

James A. Simms
Vice President, Chief Financial Officer

(978) 470-2900

(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, 2016.

Section 1—Conflict Minerals Disclosure**Item 1.01 Conflict Minerals Disclosure and Report**

Vicor Corporation evaluated its current product lines and determined that certain products we manufacture or contract to manufacture contain tin, tungsten, tantalum and/or gold (“3TG”). Based on surveys of our suppliers and other inquiry, we determined that some of the 3TG in these products may have originated from the Democratic Republic of the Congo or an adjoining country. As a result, we have prepared and filed a Conflict Minerals Report. A copy of the Company’s Conflict Minerals Report is provided as Exhibit 1.01 hereto and is publicly available at: www.vicorpower.com under “About Vicor”.

Item 1.02 Exhibit

The Company’s Conflict Minerals Report required by Item 1.01 is filed as Exhibit 1.01 to this Form SD.

Section 2—Exhibits**Item 2.01 Exhibits**

Exhibit 1.01—Conflict Minerals Report 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.

VICOR CORPORATION

By /s/ James A. Simms
James A. Simms
Vice President, Chief Financial Officer

May 26, 2017
(Date)

Vicor Corporation
Conflict Minerals Report
for the Year Ended December 31, 2016

This Conflict Minerals Report (“CMR”) for the year ended December 31, 2016 is presented to comply with Rule 13p-1 (the “Rule”) under the Securities Exchange Act of 1934 (the “Exchange Act”). The Securities and Exchange Commission (“SEC”) adopted the Rule to implement reporting and disclosure requirements related to conflict minerals as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”). The Rule imposes certain reporting obligations on SEC registrants whose manufactured products contain so-called conflict minerals that are necessary to the functionality or production of their products. “Conflict minerals” are defined as cassiterite, columbite-tantalite, gold, wolframite, and their derivatives, which are limited to tin, tantalum, tungsten, and gold (“3TG”). These requirements apply to registrants whatever the geographic origin of the conflict minerals and whether or not the conflict minerals fund armed conflict in the DRC or an adjoining country (the “Covered Countries”).

1. Introduction

1.1 Company Overview

This report has been prepared by management of Vicor Corporation (herein referred to as “Vicor, “the Company,” “we,” “us,” or “our”). The information in this report covers the activities of Vicor and all of its consolidated subsidiaries.

We design, develop, manufacture and market modular components and complete systems for converting, regulating, and controlling electric current. In electrically-powered devices utilizing Alternating Current (“AC”) voltage from a primary AC source (for example, a wall outlet), a power system converts AC voltage into the stable Direct Current (“DC”) voltage necessary to power subsystems and/or individual applications or “loads”. In many electronic devices, this DC voltage may be further converted to one or more lower voltages required by a range of loads. In equipment utilizing DC voltage from a primary DC source (for example, a generator or battery), the initial DC voltage frequently requires further conversion to one or more voltages. Because numerous applications requiring different DC voltages and varied power ratings may exist within an electronic device, and system power architectures themselves vary, we offer an extensive range of products and accessories in numerous application-specific configurations. Our website, www.vicorpower.com, sets forth detailed information describing all of products and the applications for which they may be used. The information contained on our website is not a part of, nor incorporated by reference into, this CMR or the Specialized Disclosure Report on Form SD to which it is an exhibit and shall not be deemed “filed” under the Exchange Act.

1.2 Products Overview

We offer a comprehensive range of individual, highly integrated building blocks enabling design of a power system specific to a customer's needs. Since introducing and popularizing the encapsulated brick package format during the 1980s, our product focus has been on high performance DC-DC switching converters providing the transformation, regulation, isolation, filtering, and/or input protection necessary to power and protect sophisticated electronic loads. With the development of Factorized Power Architecture™ (“FPA”), VI Chip™ modules, Picor® point-of-load regulators, and, most recently, ChiP (ChiP is an acronym for “Converter housed in Package”) modules and the VIA (VIA is an acronym for “Vicor Integrated Adaptor™”) packaging platform, we believe we offer the most advanced range of high-performance power components in the industry. A secondary and highly complementary product strategy has been to vertically integrate our component-level building blocks into complete power systems representing turnkey AC-DC and DC-DC solutions for our customers' power needs.

The market for power supplies and their enabling components has consistently evolved in response to advancing technologies and corresponding changes in customer requirements. Throughout our history, we have modified our strategy to adapt to evolving market challenges and opportunities, leveraging our strength in research and development. In response to current trends and changes in customer requirements, we are implementing a strategy addressing both the realities of today's power conversion marketplace and our vision of its long-term direction. Our balanced strategy involves maintaining a profitable legacy business in bricks and brick-based system solutions, while investing in the next generation of power management components incorporating innovations of our VI Chip and Picor subsidiaries. In 2013, we expanded our VI Chip product line, introducing the ChiP concept, a product platform designed with the goal of setting best-in-class standards for the next generation of scalable power modules. While our original VI Chip modules were designed to facilitate implementations of our FPA, an innovative, component-based, power system architecture, ChiP modules support all known power distribution architectures, including FPA, and represent a significant extension of our modular power system design methodology, the basis for our transition to an OEM-focused strategy. At the same time, our Picor subsidiary undertook development of a high-performance family of point-of-load regulators, in “SiP” (System in Package LGA package) format (where LGA refers to “land grid array”), to be integrated into our expanded product portfolio, truly enabling comprehensive power management solutions to point(s)-of-load. Picor is a fables (i.e., it utilizes third parties to manufacture its products) designer, developer, and marketer of high performance integrated circuits and related products for use in a variety of power system applications. In 2014, we introduced the VIA packaging concept, a rugged, double-sided package for ChiP modules integrating complementary components, circuitry, and superior thermal management.

3TG appear in virtually all Vicor products. For example, tin is utilized as a joining material in all devices (tin-based solder), tantalum is used in tantalum capacitors, tungsten is used in certain electronic components used in VI Chip products, and gold is used in certain electronic components and as a printed circuit board finishing agent.

1.3 Supply Chain

Our supply chain includes approximately 1,000 different suppliers. Because of our size, the complexity of our products, and the depth, breadth, and constant evolution of our supply chain, it is difficult to identify actors upstream from our direct suppliers. There are many tiers of suppliers and sub-suppliers between the Company and a smelter that processes 3TG that is contained in a particular product. Therefore, it is inherently difficult to ascertain the ultimate source of 3TG in the products we manufacture.

As a result, we are relying on our direct suppliers to provide information on the origin of the 3TG contained in components and materials supplied to us – including sources of 3TG that are supplied to them from lower tier suppliers. Since 2013, we have revised contract terms applicable to many of our suppliers with regard to 3TG. Those terms require suppliers to issue certificates certifying compliance with Section 1502 of the Dodd-Frank Act, as may be applicable to the materials and/or services being provided. Our primary means of determining country of origin of necessary 3TG was by conducting a supply chain survey with direct suppliers using the joint Electronic Industry Citizen Coalition (“EICC”) and Global e-Sustainability Initiative (“GeSI”) EICC-GeSI Conflict Minerals Reporting Template (“CMRT”), version 4.10 or higher. This supply chain survey, and the conflict minerals program as a whole, has been developed and implemented in cooperation with our third-party service provider, Assent Compliance, Inc. (“Assent”). All of our direct suppliers were surveyed as we could not definitively determine which supplier sourced material contained 3TG that were necessary to the functionality or production of our products.

1.4 Conflict Minerals Policy

We have adopted the following conflict minerals policy:

Vicor Corporation's goal is to maintain the highest standards of integrity and ethical behavior in the conduct of our business. We also seek to comply fully with laws and regulations affecting the conduct of our business.

Provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act require us to make reasonable efforts to determine and document the origin of certain metals used in our products. The intent of the provisions is to inhibit and restrict the demand for "Conflict Minerals" (i.e., gold, tantalum, tin, and tungsten, as well as their ores) sourced from the Democratic Republic of the Congo, or the adjoining central African countries of Angola, Burundi, Central African Republic, the Republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda and Zambia, thereby reducing financial support for the ongoing humanitarian crisis in the region. Vicor is fully committed to the effort to exclude from its products any Conflict Minerals, the purchase of which might indirectly benefit insurgent, armed groups, and others engaged in the abuse of human rights.

Having confirmed the use of the subject metals in our products, we established and began a process by which we are documenting our supply chain and identifying vendors of the subject metals. With these vendors, we will seek to identify the country and mine of origin for the subject metals we use. If we conclude we have used "Conflict Minerals", we must undertake further evaluation of the origin of the specific metals to determine their specific source (i.e., whether the metals were sourced from a mine, smelter, or refiner not participating in an approved conflict-free certification program).

We are collaborating closely with parties in our supply chain, with the objective of developing and implementing a robust process by which Vicor can achieve and maintain "DRC Conflict Free" status. We encourage all parties in our Supplier Base to be DRC Conflict Free, to source only from conflict free areas and to utilize smelters certified DRC Conflict Free under the Conflict Free Smelter Program, developed by the Electronic Industry Citizen Coalition and the Global e-Sustainability Initiative. We also are supporting our customers' efforts to reach the common goal of a socially and environmentally responsible supply chain.

Our policy is publicly available on our website at www.vicorpower.com under "About Vicor".

2. Conflict Minerals Compliance Process

2.1 Reasonable Country of Origin Inquiry ("RCOI")

Our RCOI was designed to provide a reasonable basis for us to determine whether we source 3TG from the Covered Countries.

Our primary means of determining country of origin of necessary 3TG was by conducting a supply chain survey with direct suppliers using the template developed by the EICC and the GeSI, known as the Conflict Minerals Reporting Template (the "CMRT"). The CMRT was developed to facilitate disclosure and communication of information regarding smelters that provide material to a company's supply chain. It includes questions regarding a direct supplier's conflict minerals policy, engagement with its direct suppliers, and a listing of the smelters the direct supplier and its suppliers use. In addition, the CMRT contains questions about the origin of conflict minerals included in the direct supplier's products, as well as supplier due diligence. Written instructions and recorded training illustrating the use of the tool are available on EICC's website. The majority of companies required to file a Specialized Disclosure Report on Form SD are using the CMRT in their compliance processes related to conflict minerals. All of our direct suppliers were surveyed as we could not definitively determine which products contained 3TG that were necessary to the functionality or production of our products. This supply chain survey, and the conflict minerals program as a whole, has been developed and implemented in cooperation with Assent.

We began our supplier scoping process by filtering our vendor list to remove:

- Service providers/suppliers
- Indirect materials suppliers
- Inactive suppliers (minimum 5 years since last purchase)

This was done to ensure that all suppliers surveyed provided items to Vicor that were used in final products in the year 2016. Once the filtering was completed, we populated the list with contact information and this list, composed of approximately 1,000 suppliers, was then provided to Assent for upload to their Assent Compliance Manager SaaS (Software as a Solution) system. Assent then conducted the supplier survey portion of the RCOI.

During the supplier survey, suppliers were contacted via the Assent Compliance Manager, a SaaS platform that enables its users to complete and track supplier communications as well as allow suppliers to upload completed CMRT forms directly to the platform for risk assessment and management. Non-responsive suppliers were contacted a minimum of three times by the Assent Compliance Manager and then were also managed by the Assent Compliance Supply Chain team in one-on-one communications. This included two follow ups from the supply chain team. For the 2016 reporting period, there was a significant decrease due to the closure during 2015 of 4 subsidiary manufacturing locations, partially offset by an increase in the number of suppliers surveyed due to an increase in size in Vicor's supply chain. This resulted in a total Supplier Listing very much reduced from the total used in previous years. For the 2016 Reporting Year, Vicor requested product specific CMRTs from all suppliers contacted. This was done to be able to receive smelter names that were actually used to produce Vicor components and/or products. While not all suppliers were able to provide product specific CMRTs, many were able to do so. Vicor received responses from 50.8% of in-scope suppliers. Of the 504 suppliers that provided a response, approximately 35% reported that their products contained 3TGs necessary to the functionality or production of their products.

This year's program included automated data validation on all submitted CMRTs. The goal of data validation is to increase the accuracy of submissions and identify any contradictory answers in the CMRT. All submitted forms are accepted and classified as valid or invalid so that data is still retained.

On the basis of the responses to our RCOI, Vicor is unable to determine that 3TGs necessary to the functionality or production of our products did not originate in the DRC or any of the Covered Countries. Therefore, in accordance with Rule 13p-1, Vicor engaged in the due diligence measures on the source and chain of custody of those 3TGs, as described in the next section of this Conflict Minerals Report.

2.2 Management Systems

2.2.1 Conflict Minerals Policy

As described above, we have adopted a conflict minerals policy, which is posted on our website at <http://www.vicorpower.com/about-vicor>.

2.2.2 Internal Team and Training

The Company has established a management team relating to conflict minerals. Our management team is overseen by the Chief Financial Officer and a team of subject matter experts from relevant functions such as quality, supply chain, operations, finance and legal. The team of subject matter experts is responsible for implementing our conflict minerals compliance strategy and is led by the Senior Environmental Compliance Engineer, who acts as the conflict minerals program manager. Senior management is briefed about the results of our due diligence efforts on a regular basis.

We, in cooperation with Assent, have developed internal training programs to educate anyone within the Company that is a potential contact point for suppliers or other external parties regarding the Company's conflict minerals compliance efforts. We intend to review our training programs at least annually to make sure they are continuously aligned with current regulations, our initiatives, and the tools we use.

2.2.3 Control Systems

As we do not typically have a direct relationship with 3TG smelters and refiners, we are engaged and actively cooperate with other manufacturers in our industry and other sectors. Without limitation, we participate in the Association Connecting Electronics Industries (ICE) industry-wide initiative to disclose upstream actors in the supply chain.

Our controls include our Code of Business Conduct, which outlines expected behaviors for all our employees.

2.2.4 Supplier Engagement

We rely on our direct suppliers to provide information on the origin of the 3TG contained in components and materials supplied to us – including sources of 3TG that are supplied to them from lower tier suppliers.

In accordance with the Organization for Economic Co-operation and Development ("OECD") requirement to strengthen engagement with suppliers, we have, in cooperation with Assent, provided education to suppliers on the Conflict Minerals regulations as well as the expectations of the law through Assent's learning management system, Assent University (see Section 2.4, below). All training is tracked and evaluated. In addition, we have leveraged the existing communications within the Company, specifically through our procurement personnel, to encourage supplier interactions with Assent as well for them to understand the need for completion of the surveys. Feedback from this process has allowed us to enhance the training, focus it and adapt it to each user's needs. It has also allowed for our supplier communications to be more focused and ensure expectations are clear.

2.2.5 Grievance Mechanism

We have longstanding grievance mechanisms whereby employees and suppliers can report violations of the Company's policies, including our conflict minerals policy. This mechanism is described in detail in our Code of Business Conduct.

2.2.6 Records Maintenance

We will retain all relevant RCOI and due diligence documentation for at least five years, as required by our document retention policy.

2.3 Identify and Assess Risk in Our Supply Chain

Because of our size, the complexity of our products, and the depth, breadth, and constant evolution of our supply chain, it is difficult for us to identify actors upstream from our direct suppliers. Accordingly we participate in industry-wide initiatives as described above.

We have identified approximately 1,000 direct suppliers. We rely on suppliers whose materials or components contain 3TG to provide us with information about the source of 3TG contained in those materials or components. Our direct suppliers similarly rely upon information provided by their suppliers. Many of the largest suppliers either are SEC registrants and subject to the Rule or are suppliers to other SEC registrants that are subject to the Rule. Tracing materials back to their mine of origin is a complex aspect of responsible sourcing in our supply chain. We have determined that seeking information about 3TG smelters and refiners in our supply chain represents the most reasonable effort we can make to determine the mines or locations of origin of the 3TGs in our supply chain. This was done by adopting methodology outlined by the Conflict-Free Sourcing Initiative's ("CFSI") joint industry programs and outreach initiatives and requiring our suppliers to conform with the same standards to meet the OECD Guidelines, and report to us using the CMRT. Through this industry joint effort, we made reasonable determination of the mines or locations of origin of the 3TGs in our supply chain. We also requested that all of our suppliers support the initiative by following the sourcing initiative and working to align their declared sources with the "Known" and "Conflict Free" lists of sourced metals.

In accordance with OECD Guidelines, we assess the risk levels associated with conflict minerals in our supply chain. Smelters that are not certified as DRC-Conflict Free by third party sources such as the CFSI or the London Bullion Market Association ("LBMA") Responsible Gold Programme, pose a significant risk. Where a smelter is not identified as Conflict Free by such sources, we rate the risk as High, Medium or Low. This rating is based on various factors, including: (i) whether the smelter/refiner has Conflict-Free Smelter Program audit status, (ii) the smelter's geographic location, including proximity to the Covered Countries; and (iii) known or plausible evidence of unethical or conflict sourcing.

As per the OECD Due Diligence Guidance, suppliers are given clear performance objectives within reasonable timeframes with the ultimate goal of progressive elimination of these risks from the supply chain.

In addition, suppliers are guided to the Assent University learning platform to engage in educational materials on mitigating the risk of smelters or refiners on the supply chain.

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

- Do you have a policy in place that includes DRC conflict-free sourcing?
- Have you implemented due diligence measures for conflict-free sourcing?
- Do you verify due diligence information received from your suppliers?
- Does your verification process include corrective action management?

When suppliers meet or exceed the above criteria, they are deemed to have a strong program. Evaluating and tracking the strength of the program can assist in making key risk mitigation decisions as the program progresses.

2.4 Design and Implement a Strategy to Respond to Risks

In response to this risk assessment, the Company has an approved risk management plan through which the conflict minerals program is implemented, managed and monitored. Updates to this risk assessment are provided regularly to senior management.

As described above, we participate in industry-wide initiatives to disclose upstream actors in the supply chain.

As part of our risk management plan, to ensure suppliers understand our expectations, we have provided both video, recorded training and documented instructions through Assent. We answered all questions that suppliers requiring further clarification presented to us. We then provided each supplier a copy of the CMRT to complete for purposes of conflict minerals tracking. Furthermore, we reviewed responses to the reporting CMRT with specific suppliers where we needed clarification. As described in our conflict minerals policy, we intend to engage any of our suppliers whom we have reason to believe are supplying us with 3TG from sources that may support conflict in the DRC or any adjoining country to establish an alternative source of 3TG that does not support such conflict, as provided in the OECD guidance.

As a last resort in cases which may be termed “extreme,” Vicor has established a Risk and a Resolution Committee to respond to suppliers that are deemed to potentially expose the Company to unacceptable risks, either due to unacceptable responses to our inquiries or due to a refusal to respond or to ultimate non-responses. This may result in the termination of the contract with such supplier(s). Records are kept of all Committee Meetings.

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

Vicor does not have a direct relationship with conflict minerals smelters or refiners and as a result, Vicor does not perform direct audits of these entities in its supply chain. Vicor relies on the efforts of the industry associations that administer independent third-party smelter and refinery audit programs and encourages suppliers with more direct relationships with smelters to participate in comparable due diligence validation activities.

2.6 Report on Supply Chain Due Diligence

This conflict minerals report is being filed with the SEC as an exhibit to our specialized disclosure report on Form SD and is available on our website at www.vicorpower.com under “About Vicor”.

3. Due Diligence

3.1 Design of Due Diligence

Vicor designed its due diligence process to be in conformity, in all material respects, with the due diligence framework in the Organization of Economic Co-operation and Development Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, Second Edition and related Supplements on Tin, Tantalum and Tungsten and on Gold (collectively the “OECD Guidance”). Vicor’s due diligence process is based on multi-industry initiatives with the smelters and refiners who provide conflict minerals within global supply chains.

3.2 Due Diligence Results

During our due diligence efforts, members of Assent made at least three follow-up inquiries to each “failed” supplier who did not respond to our initial survey, by phone or email. Assent reviewed the responses against criteria developed to determine which required further engagement with our suppliers. These criteria included incomplete responses as well as inconsistencies within the data reported in the CMRT. Assent worked directly with those suppliers to provide revised responses.

The majority of the responses received provided data at the supplier company level or a division/segment level relative to the supplier, rather than at a level directly relating to a part number that the supplier supplies to us, or were otherwise unable to specify the smelters or refiners used for components supplied to us. We were therefore unable to determine whether any of the 3TG that these suppliers reported were contained in components or parts that the suppliers supplied to us or to validate that any of these smelters or refiners are actually in our supply chain.

As a result, we have elected not to present smelter and refiner names in this report.

For all responses that indicated a smelter, Assent compared the facilities listed to the list of smelters maintained by the Conflict-Free Sourcing Initiative (“CFSI”). If a supplier indicated that the facility was certified as “Conflict-Free,” Assent confirmed that the name was listed by CFSI as a certified smelter. Assent has assembled a dedicated Smelter Team to review and assess Smelter Data. As of April 15, 2017, we had identified 317 smelters or refiners as legitimate and we are working to validate the additional smelter/refiner entries from the submitted CMRTs.

3.3 Efforts to Determine Mine or Location of Origin

Through requesting our suppliers to complete the CMRT, and, as the program progresses, requiring full completion of all necessary smelter identification information which will enable the validation and disclosure of the smelters as well as the tracing of the 3TGs to their location of origin, we have determined that seeking information about 3TG smelters and refiners in our supply chain represents the most reasonable effort we can make to determine the mines or locations of origin of the 3TG in our supply chain.

4. Planned Process Improvements

We intend to take the following steps to improve our conflict minerals program:

- a. For the 2017 Conflict Minerals Program, we intend to request product-level CMRTs from all suppliers. This will ensure all reported smelters are actually utilized for Vicor components and products. For the 2016 reporting year, we requested significantly more product-level CMRTs from our suppliers than in 2015 and this led to more accurate smelter reporting both to us by our suppliers and by us to our customers.
- b. Track and add new suppliers as they enter Vicor's supply chain to the Company's Conflict Minerals program.
- c. Engage with suppliers and direct them to training resources to attempt to increase the response rate and improve the content of the supplier survey responses. In fact, our Response Rate has improved every year of our Conflict Minerals effort, as follows: 2013—23%, 2014—32%, 2015—42%, 2016—51%.
- d. Engage any of our suppliers found to be supplying us with 3TG from sources in the DRC or any adjoining country that they cannot demonstrate are "DRC conflict free" to establish an alternative source of 3TG that they can demonstrate are "DRC conflict free".