



Claigan Environmental  
105 Schneider Road, Suite 211  
Kanata, ON K2K 1Y3

December 16, 2011

The Honorable Mary L. Schapiro  
Chairman  
U.S. Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549

**RE: Implementation costing for Section 1502 of the Dodd-Frank Act (conflict minerals)**

Claigan Environmental Inc. has previously submitted information on October 28, 2011 and December 1, 2011. Claigan visited the SEC on December 12 and 13, 2011, and submitted an additional powerpoint presentation at that time. Claigan has been asked to make a further detailed submission based on the powerpoint slide package submitted to the SEC on December 12 and 13.

The costing provided below reflects current on-going programs and service provider quotes. In absence of SEC rules on conflict minerals, companies are using their own independent and divergent interpretations of the anticipated rules by their customers, and taking costly action based on those widely differing assumptions. Companies are finding it more expensive to comply to these diverse procurement specifications than they would be expected to incur from a single final rule from the SEC.

We have been asked why our projected costs have decreased between the estimates we made October 28 and the updated cost estimates we provided on December 1. As companies and industry programs have progressed, more specific and reliable information has become available and more competition has entered the market. Due to the evolution of the market, cost projections from more than three (3) months ago should be viewed with some level of skepticism. Cost projections provided more than six (6) months ago are unlikely to have the advantage of substantiated program data.

**Claigan's Cost Estimate**

**A. Cost Model Inputs**

The cost model was developed using the following data:

- Actual corporate program and budgetary estimates for conflict minerals compliance for:
  - Large, medium, small, micro and nano-cap companies

- Conflict minerals compliance service provider quotations
- Census and government information on the number and size of companies in the electronics supply chain
- A detailed review of all products and complete supplier lists for two SEC issuers having approximately \$1B per annum revenue

***B. Expected Initial Compliance Cost for an SEC Issuer Having \$1B Revenue (Electronics Industry)***

The following table provides a breakdown of the costs by compliance activity for a company complying with Section 1502 of the Dodd-Frank Act. The details of how these numbers were generated were provided to the SEC on December 1, 2011.

<b>Activity</b>	<b>Cost</b>
Corporate Compliance	
a. Legal / Organizational / Conflict Minerals Report	\$60,000
b. Program Management (1/4 person for 1 year)	\$38,000
c. 3rd Party Audit	\$15,000
Data Gathering in the Supply Chain	
a. 2,000 suppliers X \$40 per supplier	\$80,000
Software	
a. IT System (average)	\$25,000
b. IT Support (1/4 person for 4 months)	\$10,000
<b>TOTAL</b>	<b>\$228,000</b>

The total cost of \$228k for a \$1B company is a worst-case estimate. \$228k is higher than most service quotations being issued for a complete conflict minerals program. It also assumes there will be inefficiencies in executing a program, and it does not take into account the benefits realized by companies when following social compliance laws, including greater supply chain knowledge, and more efficient manufacturing, reduced costs of competition due to a more level playing field with regards to commoditized inputs (such as labor, natural resources).

Corporate Compliance

Corporate compliance costs reflect the organizational effort to complete a conflict minerals report (outside of supplier data gathering and IT requirements). For larger companies, one of the principal sources of cost is the sheer effort required to communicate the requirement to a company's various purchasing groups and receive

from them useful information. The average \$1B per annum company regulated by the SEC normally has multiple brands each with multiple purchasing groups. Companies in this size range are normally budgeting roughly ¼ of a program manager per annum cost for conflict minerals compliance. This cost is supported by job postings on online sites, all of which list conflict minerals as a fraction of the new hire's duties <sup>1</sup>.

Our numbers are also based on the assumption that the final SEC rule provides a reasonable interpretation of the definition of 'necessary to the functionality or production of a product'. This rule has critical implications for metal alloys. Many metal alloys only contain tin as a contaminant and tin is not part of the specification of the alloy. For an illustrative example, see wikipedia 'List of Alloys'<sup>2</sup>. If a company is able to ignore alloys that are not intended to contain 3TGs, 76% of the listed alloys would be out of scope of conflict minerals reporting, including the high volume materials of cold rolled steel, hot rolled steel, and stainless steel.

#### Data Gathering from Affected Suppliers in a Company's Supply Chain

As per our December 1<sup>st</sup> submission, there will be overlap in supplier contacts by different divisions of the same company. We used a factor of two in our calculation to account for these inefficiencies. Companies have submitted much highernumbers in estimating their number of suppliers than we believe is the case. Through careful inspection of actual bills of materials from a cross-sample of companies, we have found that initial total affected supplier counts are overestimated by companies by a multiple of 5- to 10-times due to the following reasons:

- a. Companies' supplier lists are not restricted to a recent time period (i.e. no filter applied to limit supplier list to those from whom parts have been purchased in the past three years)
- b. The same suppliers are listed multiple times due to different spelling of the same name, or use of abbreviations (example - International Rectifier, IR, Inter. Rec., etc...)
- c. Different country offices of the same suppliers are listed separately
- d. The list of suppliers is not limited to those suppliers with a reasonable chance of using any of the four conflict minerals ("3TGs").

#### Software Costs

The estimated industry-wide software cost for affected companies is expected to be \$125M. This differs substantially from the estimates of \$6B and \$2B reported by NAM and Tulane. A cost of \$6B is 10 times the total annual sales for all restricted materials software (of which conflict minerals is a small part) and does not seem realistic. Particularly since conflict minerals software for small companies can be downloaded for

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<sup>1</sup> Corporate Quality Management System (QMS), Senior Engineer, Qualcomm. Available at [https://jobs.qualcomm.com/public/jobDetails.xhtml?requisitionId=1889313&page=jobSearch&jobSearch&source=Indeed\\_organic](https://jobs.qualcomm.com/public/jobDetails.xhtml?requisitionId=1889313&page=jobSearch&jobSearch&source=Indeed_organic)

<sup>2</sup> Available at: [http://en.wikipedia.org/wiki/List\\_of\\_alloys](http://en.wikipedia.org/wiki/List_of_alloys)

free from companies such as Assent Compliance<sup>3</sup>. The systems quoted by NAM and Tulane are the most expensive systems on the market. They are for large scale companies attempting to comply with multiple environmental regulations. At worst, only 25% of the cost of this sort of software should be applied to conflict minerals compliance. Most companies we interviewed said they would not need to invest in new software solely for conflict minerals, some said they would make small augmentations to current systems or are exploring smaller multi function packages to support their total global compliance requirements (not just conflict minerals).

### ***c. Estimated Total Cost to Issuers for Initial Compliance (All affected issuers)***

The following table is a breakdown of expected cost by size of company. The numbers of issuers in each revenue range is based on numbers extracted from SEC proposed rules (p. 76)<sup>4</sup>, Fortune 500 2011 List<sup>5</sup>, Alpha One Capital report on US micro caps<sup>6</sup> and Aalto University School of Economics report on nano caps<sup>7</sup>.

<b>Size</b>	<b># of Companies</b>	<b>Cost / Company</b>	<b>Total</b>
1M to 10M	2,100	\$6,500	\$13,650,000
10M to 100M	2,100	\$21,000	\$44,100,000
100M to 1B	1,100	\$53,000	\$58,300,000
1B+	500	\$218,000	\$109,000,000
10B+	200	\$813,000	\$162,600,000
<b>Total</b>	<b>6,000</b>		<b>\$387,650,000</b>

The total cost of \$387M for issuers is a worst-case scenario if reasonable rules are implemented. The generation of this estimate assumes that all of the affected issuer's business is related to conflict minerals. It also assumes that all issuers will be required to submit a conflict minerals report.

<sup>3</sup> Available at: <http://www.assentcompliance.com/openwaveapp/>

<sup>4</sup> 17 CFR Parts 229, 249, "Conflict Minerals: Proposed Rule." Available at: <http://sec.gov/rules/proposed/2010/34-63547.pdf>

<sup>5</sup> "Fortune 500 List" (2011). Published by Fortune Magazine. Available at: [http://money.cnn.com/magazines/fortune/fortune500/2011/full\\_list/](http://money.cnn.com/magazines/fortune/fortune500/2011/full_list/)

<sup>6</sup> "Micro Cap Equities: Small but powerful" (2011). Published by AlphaOne Capital Partners. Available at: [http://www.alphaonecapital.com/ac/ac.nsf/0/966339444FAB80B4862578CC0052F37B/\\$FILE/AlphaOne\\_Micro\\_Cap\\_Whitepaper.pdf](http://www.alphaonecapital.com/ac/ac.nsf/0/966339444FAB80B4862578CC0052F37B/$FILE/AlphaOne_Micro_Cap_Whitepaper.pdf)

<sup>7</sup> Seppänen, Harri J., "Financial Statement Information and Evaluation of Newly Listed High-Technology Nano Caps" (May 3, 2010). Available at SSRN: <http://ssrn.com/abstract=1599614>

***D. Estimated Total Cost to Non-Issuers for Initial Compliance (All affected suppliers in companies' supply chains)***

The following table provides a breakdown of expected cost to the supply chain by size of company. The numbers of suppliers in each revenue range is based on numbers from international census data from the Consumer Electronics Association & Technology Forecasters and the report on the Economic Impact of the European Union RoHS Directive on the Electronics Industry<sup>8</sup>.

<b>Size</b>	<b># of Companies</b>	<b>Cost / Company</b>	<b>Total</b>
1M to 10M	35,000	\$3,250	\$113,750,000
10M to 100M	11,600	\$9,000	\$104,400,000
100M to 1B	4,500	\$35,333	\$159,000,000
1B+	314	\$144,000	\$45,216,000
10B+	10	\$542,000	\$5,420,000
<b>Total</b>	<b>51,424</b>		<b>\$427,786,000</b>

The total cost of \$427M to supply chain participants are also a worst-case estimate. These costs were estimated to be two-thirds of the cost expected to be incurred by issuers since the data gathering requirements for supply chain actors will be similar, and a third-party audit is not required for non-issuers.

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<sup>8</sup> Technology Forecasters Inc., "Economic Impact of the European Union RoHS Directive on the Electronics Industry," 21 January 2008. Available at: <http://www.smafederation.org.sg/Portals/0/Events/Ppt%20Slides/Report%20FINAL%20TFI-CES%202008-01-23%20JS.pdf>

### ***E. Comparison of Cost Estimate Totals (Issuers and non-issuers combined)***

The following table provides a comparison of anticipated total cost to industry as estimated by Claigan Environmental, compared with previously published numbers from NAM<sup>9</sup> and Tulane University<sup>10</sup>.

<b>Model</b>	<b>Issuers Cost</b>	<b>Supply Chain Cost</b>	<b>Total</b>
Claigan	\$ 387,650,000	\$ 427,786,000	\$ 815,436,000
NAM	\$8,000,000,000	\$1,400,000,000	\$9,400,000,000
Tulane	\$7,930,000,000		\$7,930,000,000

Our cost model was not intended to be a rebuttal of the NAM or Tulane numbers, but inevitably they are compared. At a very high level, the NAM numbers have the disadvantage of being created more than six (6) months ago and not having the advantage of modern numbers and information. The Tulane numbers, even though more recent, reference heavily the NAM information and suffer from the same information gap.

In our view, the NAM/Tulane estimates:

- Are based on out of date industry information
- Quoted the most expensive multifunction software packages
- Did not follow generally accepted accounting practices
- Did not use actual programs or service quotations
- Did not use enough publicly cited information like census information
- Overestimated the average size of affected companies
- Overestimated the number of suppliers in companies' supply chain
- Misused key EU data
- Did not include the involvement of professional providers
- Did not submit their numbers for independent review

### ***F. Financial Cost if SEC Rule is not Created***

If the SEC continues to delay a final rule there will be a substantial additional cost to industry that is outside of the requirements of the law.

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<sup>9</sup> National Association of Manufacturers (NAM), "NAM Comments on Conflict Minerals" as submitted to SEC on 2 March 2011. Available at: [http://www.nam.org/~media/DE6DA95D7CA5475BB24F80869A643CD3/NAM\\_Comments\\_on\\_Conflict\\_minerals\\_3\\_2\\_11\\_as\\_submitted.pdf](http://www.nam.org/~media/DE6DA95D7CA5475BB24F80869A643CD3/NAM_Comments_on_Conflict_minerals_3_2_11_as_submitted.pdf)

<sup>10</sup> Bayer, Chris, "A Critical Analysis of the SEC and NAM Economic Impact Models and the Proposal of a 3rd Model: in view of the Implementation of Section 1502 of the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act," 17 October 2011. Available at: [http://www.payson.tulane.edu/assets/files/3rd\\_Economic\\_Impact\\_Model-Conflict\\_Minerals.pdf](http://www.payson.tulane.edu/assets/files/3rd_Economic_Impact_Model-Conflict_Minerals.pdf)

In absence of a single rule, companies are being subjected to conflict minerals requirements based on the interpretation of each of their customers. These interpretations are often based on projected rules evolved from the December 2010 SEC proposed rules. As the SEC continues to discuss details of the final rules, companies are developing procurement policies and conflict minerals policies in isolation based on the 2010 proposed rules.

Instead of having to obey a single rule, suppliers in particular are having to obey multiple rules. Below is a sample (with references) of the different (and often divergent) specifications that suppliers are currently having to obey. These multiple specifications are costing companies money. Almost the entire supply chain supplies at least one of the companies listed below (or hopes to supply them), leaving very few companies unaffected.

Intel <sup>a</sup>	Liteon <sup>k</sup>	AMD <sup>u</sup>
HP <sup>b</sup>	Apple <sup>l</sup>	TDK <sup>v</sup>
Skyworks <sup>c</sup>	Spirit Aerospace <sup>m</sup>	Panasonic <sup>w</sup>
Molex <sup>d</sup>	Nordstrom <sup>n</sup>	Texas Instruments <sup>x</sup>
Kemet <sup>e</sup>	K&L Microwave <sup>o</sup>	Honeywell <sup>y</sup>
Freescale <sup>f</sup>	ST Microelectronics <sup>p</sup>	Tyco <sup>z</sup>
National Semiconductor <sup>g</sup>	Ford <sup>q</sup>	Calumet <sup>aa</sup>
Triquint <sup>h</sup>	Honsel <sup>r</sup>	Sony <sup>bb</sup>
Flextronics <sup>i</sup>	Fairview Microwave <sup>s</sup>	Stanford University <sup>cc</sup>
Motorola <sup>j</sup>	Advanced Interconnections <sup>t</sup>	University of Pennsylvania <sup>dd</sup>

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- b. Intel, "Environmental Product Content Specification 18-1201," (31 December 2010) Section 5.5.1 Conflict Metal Reporting. Available at: [https://supplier.intel.com/static/EHS/Environmental\\_Product\\_Content\\_Specification.pdf](https://supplier.intel.com/static/EHS/Environmental_Product_Content_Specification.pdf)
- c. HP, "HP Standard 011 General Specification for the Environment," (1 August 2011) Sections 3.11, 3.16, 3.34, 3.35, 3.38. Available at: <http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf>
- d. Skyworks, "Supplier Sustainability Specification - SQ03-0337, rev. 3" (15 June 2011) Section 4.9.1 Conflict Minerals. Available at: <http://www.skyworksinc.com/downloads/suppliers/SQ030337.pdf>
- e. Molex, "Conflict Minerals Policy," 28 October 2011. Available at: [http://www.molex.com/images/about/QEHS\\_699000\\_009\\_RevisionA.pdf](http://www.molex.com/images/about/QEHS_699000_009_RevisionA.pdf)
- e. Kemet, "KEMET Policy on Conflict Minerals." Available at: <http://www.kemet.com/kemet/web/homepage/kechome.nsf/weben/KEMET%20Policy%20on%20Conflict%20Minerals>
- f. Freescale, "Supplier Code of Conduct." Available at: [http://www.freescale.com/webapp/sps/site/overview.jsp?code=SDIVERSITY\\_CONDUCT](http://www.freescale.com/webapp/sps/site/overview.jsp?code=SDIVERSITY_CONDUCT)
- g. National Semiconductor, "Corporate Standard Procedure: Supplier Environmental Requirements for Materials and Products, (SC) CSP-9-111C1 rev Q" (19 April 2011). Available at: <http://www.national.com/assets/en/other/CSP-9-111C1.pdf>
- h. Triquint, "TriQuint Policy on Conflict Minerals," (19 May 2011). Available at: [http://www.triquint.com/company/ehs/TriQuint\\_Conflict\\_Metals\\_Policy.pdf](http://www.triquint.com/company/ehs/TriQuint_Conflict_Metals_Policy.pdf)
- i. Flextronic, "Flextronics Conflict Minerals Policy," (15 July 2011). Available at: <http://www.flextronics.com/partners/supplierinfo/Files/Conflict%20Minerals%20Policy.pdf>
- j. Motorola, "Sourcing of Metals; Materials Disclosure Process." Available at: <http://responsibility.motorola.com/index.php/suppliers/miningmetal/>
- k. Liteon, "LOIT Sourcing Policy for Conflict Mineral." Available at: <http://www.liteonit.com/en-gb/liteon-standard.html>

- l. Apple, "Apple Supplier Responsibility: 2011 Progress Report." Available at: [http://images.apple.com/supplierresponsibility/pdf/Apple\\_SR\\_2011\\_Progress\\_Report.pdf](http://images.apple.com/supplierresponsibility/pdf/Apple_SR_2011_Progress_Report.pdf)
- m. Spirit Aerospace, "Supplier Communication; Issue 120 S/O 2011." Available at: <http://www.spiritaero.com/assets/0/305/335/faa79957-0863-4dd9-ad9d-c0761860aed6.pdf>
- n. Nordstrom, "Partnership Guidelines: The Kimberly Process and Conflict Minerals." Available at: <http://shop.nordstrom.com/c/nordstrom-cares-partnership-guidelines>
- o. K&L Microwave, "K&L Microwave Inc. Statement on Conflict Minerals" (December 2010). Available at: [http://www.klmicrowave.com/\\_upload/KLConflictMineralStatement.pdf](http://www.klmicrowave.com/_upload/KLConflictMineralStatement.pdf)
- p. ST Microelectronics, "ST Microelectronics Statement on Conflict Minerals" (2 March 2011). Available at: [http://www.st.com/internet/com/CORPORATE\\_RESOURCES/COMPANY/POLICY\\_STATEMENT/STM\\_statement\\_onconflict\\_minerals\\_final\\_signed.pdf](http://www.st.com/internet/com/CORPORATE_RESOURCES/COMPANY/POLICY_STATEMENT/STM_statement_onconflict_minerals_final_signed.pdf)
- q. Ford "2011 Restricted Substance Management Standard," (29 March 2011) Section 1.13 Critical Raw Materials and "Conflict Minerals." Available at: [http://www.mdsystem.com/html/data/RSMS\\_Package\\_2011.pdf](http://www.mdsystem.com/html/data/RSMS_Package_2011.pdf)
- r. Honsel, "General Conditions of Purchase," (June 2011). Available at: [http://www2.honsel.com/uploads/media/General\\_Conditions\\_of\\_Purchase.pdf](http://www2.honsel.com/uploads/media/General_Conditions_of_Purchase.pdf)
- s. Fairview Microwave, Conflict Minerals Statement. Available at: [http://www.fairviewmicrowave.com/microwave\\_tech\\_info.htm](http://www.fairviewmicrowave.com/microwave_tech_info.htm)
- t. Advanced Interconnections, "Advanced Interconnections Corp. Conflict Minerals/Metals Statement," (October 2010). Available at: [http://www.advanced.com/pdf/AIC\\_ConflictMetals\\_Statement.pdf](http://www.advanced.com/pdf/AIC_ConflictMetals_Statement.pdf)
- u. AMD, "Supplier Responsibility: Conflict Minerals." Available at: <http://www.amd.com/us/aboutamd/corporate-information/corporate-responsibility/supply-chain-management/Pages/supply-chain.aspx>
- v. TDK, "Social Responsibility / Supplier Relations / Response to Conflict Minerals." Available at: [http://www.global.tdk.com/csr/social\\_responsibility/csr02200.htm#anchor\\_05](http://www.global.tdk.com/csr/social_responsibility/csr02200.htm#anchor_05)
- w. Panasonic, "Panasonic to Implement OECD Due Diligence Guidance." Available at: <http://www.panasonic-batteries.com/eu/news/17>
- x. Texas Instruments, "Conflict Minerals Due Diligence Tool." Available at: <http://wpl.ext.ti.com/ConflictMinerals/MainPage.htm>
- y. Honeywell, "Honeywell Electronic Materials Conflict Minerals Statement," (10 February 2011). Available at: [https://www51.honeywell.com/sm/em/common/documents/Honeywell\\_Electronic\\_Materials\\_conflict\\_minerals\\_policy.pdf](https://www51.honeywell.com/sm/em/common/documents/Honeywell_Electronic_Materials_conflict_minerals_policy.pdf)
- z. Tyco, "Supplier Relationships: Metals Materials / TE Statement on Conflict Minerals," and "TEC-1015: TE Connectivity: Guide to Supplier Social Responsibility." Available at: <http://www.te.com/responsibility/supplier.aspx> and [http://www.te.com/supplier/ssr/TEGuideToSSR\\_TEC1015\\_EN.pdf](http://www.te.com/supplier/ssr/TEGuideToSSR_TEC1015_EN.pdf)
- aa. Calumet, "Calumet Electronics to begin Conflict Minerals Initiative" (29 August 2011). Available at: [http://www.cec-up.com/PDFs/PressReleases/Calumet\\_press\\_release\\_conflict\\_mineral\\_initiative\\_08292011.pdf](http://www.cec-up.com/PDFs/PressReleases/Calumet_press_release_conflict_mineral_initiative_08292011.pdf)
- bb. Sony, "Participation in the Electronic Industry Citizenship Coalition (EICC)", (15 September 2011). Available at: <http://www.sony.net/SonyInfo/csr/quality/code/index.html>
- cc. Stanford University, Press Release, "Stanford University First to Adopt Policy on Conflict Minerals," (24-June-2010). Available at: <http://news.change.org/stories/stanford-university-first-to-adopt-policy-on-conflict-minerals>
- dd. University of Pennsylvania, "Conflict Minerals Statement." Available at: <http://www.purchasing.upenn.edu/social/conflict-materials.php>

For a more specific example of the confusion faced by companies, see the following passages from the supplier specifications from Intel and Triquint.

Intel's Conflict Mineral Supplier Requirements include Cobalt:

"The SEC is developing regulations to implement these "conflict mineral" requirements, which initially apply to tin, tantalum, tungsten and gold. Intel will also be tracking Cobalt (Co) as part of its

Intel Socially Responsible Sourcing Statement. <https://supplier.intel.com/supplierhub/>. While we can't be certain what the new regulations will require when published on or before April 2011, based on the legislation, we know Intel will have to provide a description of the measures we take to exercise due diligence on the source and chain of custody of such minerals in our supply chain; furthermore, we anticipate the SEC and our customers will expect to audit Intel as to our due diligence...."

Triquint requires suppliers to provide Cobalt & Niobium origin data:

"The common derivatives from these minerals are:

- a. Coltan – columbium (niobium) and tantalum
- b. Cassiterite – tin
- c. Gold
- d. Wolframite – tungsten

It is possible that cobalt might be considered as a derivative of a Conflict Mineral in the future, as most cobalt is produced as a byproduct of the mining of laterite ores, containing copper and nickel....

TriQuint uses all six of these metals in its products. Not every product contains every metal, but almost every product contains at least one of these metals."

By implementing a final rule, the SEC will put a halt to both unnecessary and duplicative efforts that are caused by differing anticipated requirements of the regulations. We believe the costs of this unnecessary and duplicative work to be in the hundreds of millions of dollars.

There is significant costs advantage for companies in having to obey a single rule instead of 30+ different interpretations. Companies have made commitments to their customers, smelters have changed supply chains, and consumers are aware. The 'genie is out of the bottle'. Conflict Minerals compliance will not stop because there is no final SEC rule. It will just become less expensive if there is one.

## G. Conclusion

The cost of implementing a final SEC rule is expected to be \$815M per year at the most. This is a worst-case estimate, and assumes industry finds no additional costs savings. In absence of a final rule, we expect enough companies to move forward with conflict minerals that virtually all suppliers will be affected. Implementation of a single harmonized rule should save industry substantial amounts of capitol. Delay of the SEC rule is expensive to all affected companies.

Outside of first year costs, the cost to industry is expected to fall 50% year over year for conflict minerals compliance cost that will level out after the third year following the implementation of conflict minerals report filing requirements. In our PowerPoint submission to the SEC, we stated that we expected the costs to drop again in the fourth year. In re-review, the overall costs are not expected to drop under 10% of the initial costs as service providers are likely to justify their costs on the end disclosure / certification instead of the work involved.

## **Additional Notes**

### ***I) Opportunity for Cost Savings***

The projections above assume companies have to create unique conflict minerals reports. Based on work performed to date, most companies will require conflict reports (which is included in our costs estimates). The principal reasons that all companies will require conflict minerals reports are because companies have at least some material of indeterminate origin and suppliers have positively traced 3TG materials to the DRC.

If a material has been sourced back to the DRC, it is most likely because it has been traced back by a supplier or by an industry initiative such as the Conflict-Free Smelter program. In these normal cases, the issuer will have the supplier due diligence information to enter into their conflict minerals report. If an issuer can easily 'copy' the supplier due diligence information or directly use audited text from the conflict free smelter program, their projected conflict minerals and 3rd party audit costs would be reduced.

The additional cost savings in the first year would be roughly projected to be \$62M

### ***II) Effect on Competitiveness of US Business***

There seems to be a common perception that this rule will be a burden on SEC-regulated businesses and give companies in other jurisdictions (such as China) competitive advantages.

Data suggests strongly that the implementation of the rule will help recover competitiveness for US businesses that have lost market share due to advantages foreign companies have had for some time because they have been able to take more advantage of the cost margin opportunities provided by the DRC.

For example, 93% of the market share of the Tantalum capacitor metal market is made up of three (3) companies - Cabot (US/AUS), HC Starck (GER), and Ningxia (CHN)<sup>11</sup>.

Cabot and HC Starck have had their smelters successfully qualified under the Conflict Free Smelter Program<sup>12</sup>.

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<sup>11</sup> Chart: "Global Market Shares in Capacitor Grade Tantalum Metal Powder & Wire Combined: 2008F 2,124,000 Lbs. In Net New Purchases." Available at: <http://www.passivecomponentmagazine.com/wp-content/uploads/ta205-shares.jpg>

<sup>12</sup> EICC-GeSI, "CFS Program Compliant Tantalum Smelter List," (8 November 2011). Available at: <http://www.conflictreesmelter.org/cfslist.htm>

Ningxia has not, at this time, successfully qualified any of their smelters under the Conflict Free Smelter Program. Ningxia also historically sources 50% of their tantalum from Central Africa<sup>13</sup>.

Historically, a major Tantalum capacitor supplier has been sourcing tantalum metal from Ningxia over Cabot and HC Starck<sup>14</sup>.

In short, at face value it looks like Chinese companies have been benefiting more from the region than US and other Western companies. With conflict minerals legislation in place, companies will have to source more from the certified US and Western companies. This will allow US companies to increase sales and expand market share.

Additionally, as with other natural resources, labor and trade requirements, once the SEC rule on conflict minerals is finalized, pressure on China to change its behavior to being a responsible international actor will increase markedly.

In response to the common perception that Conflict Minerals impedes SEC-regulated companies and benefits companies not regulated by the SEC, it looks like some companies have had the benefit for some time and the Conflict Minerals legislation returns all companies to a more level playing field.

### **III) Changing Behaviours**

The question comes up whether this legislation is changing behaviours. At first glance, it looks like it is changing behaviours even for Chinese companies.

For example, F&X (a smaller tantalum provider) previously sourced tantalum from Rwanda and Burundi from sources of unclear provenance<sup>15</sup>. Now F&X is participating in the 'Solutions for Hope' project and sources conflict free certified material from the DRC<sup>16</sup>.

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<sup>13</sup> Ma, Tiffany, "China and Congo's coltan connection." Available at: [http://project2049.net/documents/china\\_and\\_congos\\_coltan\\_connection.pdf](http://project2049.net/documents/china_and_congos_coltan_connection.pdf)

<sup>14</sup> Glick, Leslie: Communication to Committee on Ways and Means on behalf of Kemet Corporation, (7 June 2002). Available at: <http://waysandmeans.house.gov/legacy/trade/107cong/tradebills/kemetcorp.pdf>

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