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The Honorable Mary Jo White  
Chair  
U.S. Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549

RE: Cost Estimates for Section 1504 of the Dodd-Frank Act (project-level disclosure of payments by resource extraction issuers)

Claigan Environmental has been asked by Global Witness to estimate what it will cost companies to comply with project-level reporting pursuant to the rules proposed under Section 1504 of the Dodd-Frank Act, which mandates disclosure of payments by resource extraction issuers. Claigan Environmental staff specializes in material disclosure and has significant experience with oil, gas, and mineral supply chains, including in data gathering, software, cost analysis and disclosure. We have previously produced and submitted to the SEC several cost estimates for compliance with Section 1502 of the Dodd-Frank Act and have been called to testify before the House Committee on Financial Services Subcommittee on International Monetary Policy and Trade.

The costing provided in this submission focuses on the initial direct cost of Section 1504 of the Dodd-Frank Act and subsequent maintenance direct costs. A principal cost model is described below. This costing model is different than other approaches which state the expected cost for an issuer and then estimate total costs based on the anticipated number of affected issuers. This costing model looks instead at the number of fields or mines in the world, determines the average number of SEC issuer projects per field or mine, and calculates total compliance costs to be incurred by issuers.

Three costing estimates for compliance with Section 1504 of Dodd-Frank have been submitted to the Securities and Exchange Commission (SEC). Each of the estimates was for a specific company and was not generalizable to all SEC issuers. None of these individual estimates included significant justification or explanation of methodology and the SEC should observe caution in referencing these studies.<sup>1</sup>

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<sup>1</sup> It is not advisable that SEC rely on any unfounded or unsubstantiated estimated, precisely as the UK implementing agency rejected cost information provided by the industry that was “unusable” due to lack of justification. UK Department for Business, Innovation and Skills, “UK implementation of the EU

This cost projection presented here takes a different approach. Instead of estimating the cost per company and estimating the number of affected companies, Claigan took the following approach, described in consecutive steps:

- (1) Estimating the cost for a company to report on their activities for an individual field or mine
- (2) Identifying the total number of mines, and fields in the world
- (3) Surveying a large sample size of fields and mines to determine the average number of SEC issuer projects per field or mine
- (4) Calculating the total cost for SEC issuer projects per field or mine based on
  - o Cost per reporting a particular field or mine \* total number of fields or mines \* average number of SEC issuers per field or mine

This method has the following advantages:

- Draws on significantly more data than previous cost estimates,
- Reduces estimation error, and
- Provides a costing methodology that can be applied to estimating compliance costs for a single company or all SEC issuers<sup>2</sup>

#### Estimate of Initial Direct Costs for Section 1504 of Dodd-Frank

	Number (A)	SEC Issuer Projects Per Field or Mine* (B)	Initial Cost: ERP Hours (C)	Initial Internal Accounting Hours (D)	External Review Hours (E)	Initial Cost per Field or Mine (F) =(C+D+E)*\$150	Avg Initial Cost for All SEC Issuers Per Field or Mine (G)=(F)*(B)	Total Initial Cost =(G)*(A)
Giant oil and gas fields	500	2.05	40	120	20	\$27,000	\$55,350	\$27,675,000
Small oil and gas fields	64,500	0.2	16	40	8	\$9,600	\$1,920	\$123,840,000
Mines	27500	0.113	16	40	8	\$9,600	\$1,085	\$29,832,000
Total estimated initial direct costs:								<b>\$181,347,000</b>

\* SEC Issuers per Field or Mine is the average number of SEC issuer projects in each field or mine, where project represents a single contract, license, lease, concession or similar legal agreement, consistent with the SEC proposal.

Accounting Directive: Chapter 10: extractive industries reporting - impact assessment," March 2014, at para. 36, p.10, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/298603/bis-14-669-impact-assessment-consultation-on-the-uk-implementation-of-the-eu-accounting-directive.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298603/bis-14-669-impact-assessment-consultation-on-the-uk-implementation-of-the-eu-accounting-directive.pdf).

<sup>2</sup> In its 2012 rule, the SEC calculated compliance costs on a per issuer basis, however we believe that the methodology adopted here is more accurate and flexible.

### Estimate of Ongoing Direct Costs for Section 1504 of Dodd-Frank (After the First Year)

	Number (A)	SEC Issuer Projects Per Field or Mine (B)	Ongoing Cost: ERP Hours (C)	Ongoing Internal Accounting Hours (D)	External Review Hours (E)	Ongoing Cost per Field or Mine (F) =(C+D+E)*\$150	Avg Ongoing Cost for All SEC Issuers Per Field or Mine (G)=(F)*(B)	Total Ongoing Cost =(G)*(A)
Giant oil and gas fields	500	2.05	8	30	20	\$8,700	\$17,835	\$8,917,500
Small oil and gas fields	64,500	0.2	4	15	8	\$4,050	\$810	\$52,245,000
Mines	27500	0.113	4	15	8	\$4,050	\$458	\$12,585,375
Total estimated ongoing direct costs:								<b>\$73,747,875</b>

### Overview

This costing estimate was developed by looking at all oil and gas fields, and metal and minerals mines worldwide (excluding non-mineral extraction such as coal and rock), projecting a cost per field or mine for compliance, and then multiplying against the number of issuers per field or mine.

### Number of Fields and Mines

There are 65,000<sup>3</sup> oil and gas fields globally with 500 of them classified as ‘giant’ fields<sup>4</sup> (producing over 100,000 barrels per day – and are currently active)<sup>5</sup>. Since half of the world oil and gas supply is generated by these 500 active giant oil and gas fields, giant fields were costed independently of the larger number of small oil and gas fields.

There are roughly 2,500 metal mines and 25,000 industrial mineral mines worldwide (excluding roughly 100,000 rock mines)<sup>6</sup>. A total of 27,500 mines was used in the cost model presented here.

### SEC Issuer Projects per Field or Mine

A detailed review of ownership and operation of giant fields, small fields and mines was undertaken to identify the average number of SEC issuer projects per field or mine. The review of giant fields produced an average of 2.05 SEC issuer projects per giant field. The review includes the following fields: Ghawar, Tupi, Rumaila, Tengiz, Majnoon, Samotlor, Prudhoe Bay, Sarir, Chicotepec, Ekofisk, Oseberg, Clair, Hibernia, Terra Nova, Midway Sunset, Daqing, Mangala, Toot, South Belridge, Dalia, Bolivar, and Boscan. This provided a reasonable sample of operations in a wide range of countries: Angola, Brazil, Canada, China, India, Iraq, Kazakhstan,

<sup>3</sup> Rystad Energy, UCube Upstream Database, <http://www.rystadenergy.com/Databases/UCube>.

<sup>4</sup> Mikael Höök, Robert Hirsch, Kjell Aleklett, “Giant oil field decline rates and their influence on world oil production,” in Energy Policy (2009), p. 3.

<sup>5</sup> Steven M. Gorelick, Oil Panic and the Global Crisis: Predictions and Myths (2011), p. 20.

<sup>6</sup> Mining Journal Online, <http://www.mining-journal.com/knowledge/Mining-Explained>.

Libya, Mexico, Norway, Pakistan, Russia, Saudi Arabia, United Kingdom, United States, and Venezuela.<sup>7</sup>

Data for smaller fields was less easily available. Average number of SEC issuer projects per small field of 0.20 was calculated based on a review of smaller fields in the following countries: Mauritania, Sudan, United Kingdom, and United States. Based on our review, smaller fields, relative to larger fields have a lower number of average owner/operators, and an even lower ratio of SEC issuer projects per owner/operator.

Like data for smaller fields, data for a wide variety of mines is not as generally available as data for giant oil fields. However, an average of 0.113 SEC issuer projects per mine was estimated through a review of 452 mines over 61 countries including Afghanistan, Argentina, Australia, Bolivia, Botswana, Brazil, Bulgaria, Burkina Faso, Canada, Chile, China, Columbia, Côte d'Ivoire, Dominican Republic, DRC, Ecuador, Egypt, Eritrea, Finland, French Guyana, Georgia, Ghana, Greece, Guatemala, Guinea, Honduras, India, Indonesia, Ireland, Kazakhstan, Kyrgyz Republic, Laos, Mali, Mauritania, Mexico, Mongolia, Namibia, New Zealand, Nicaragua, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, South Africa, Spain, Sudan, Surinam, Sweden, Tanzania, Thailand, Turkey, USA, Uzbekistan, Vietnam, Zambia, and Zimbabwe.

The number of issuer projects per field was based primarily on licensing and contracts, accessed through a review of public literature. The details of each licensing and ownership contract are often confidential, but the owner or licensee of each field or mine is normally public information.

### **Enterprise Resource Planning (ERP) Hours**

ERP Hours provided in the table on page 2 above are based on our industry experience and expertise and represent our estimate of the average number of 1504-related hours of effort per issuer per field or mine spent on ERP software modifications (modification of the existing electronic financial system or financial reporting tools). These ERP tools are very advanced tools that contain all of the companies' taxes and other payment information. These tools may require some modification to generate the required reports, however the information contained in the systems will not necessarily have to be extensively modified because the systems generally already capture most of the information required to be reported under Section 1504. SEC issuers are already required to "make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the issuer" pursuant to the Foreign Corrupt Practices Act (FCPA).<sup>8</sup> 1504 compliance is therefore more a categorization and reporting exercise as opposed to generation and recording of new data. Due to the required payment categories under Section 1504, additional vendor payment classification information may be required in the ERP system for each field or mine. There should be no major outlay of funds to acquire new software or

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<sup>7</sup> Literature review. Claigan Environmental, January - April 2014.

<sup>8</sup> 15 U.S.C. § 78m(b)(2)(A).

implement new infrastructure. In many cases, the current classification system used by an issuer will be effective in its current state. In-kind payments may pose some challenge, but national or regional taxation entities plus shareholders would be interested in all types of payments (including in-kind payments) for tax purposes, and systems must be in place to handle reporting from a tax or SEC financial point of view. The requirements for internal controls over financial reporting, as well as disclosure controls and procedures, mean that issuers should already be tracking these types of payments.

### **Internal Accounting Hours**

“Internal Accounting Hours” given in tables on page 2 above are based on our industry and expertise and represent our estimate of the average number of 1504-related hours per issuer per field or mine spent on internal accounting. The majority of these hours will be spent on payment classification (including creating rules, training, implementation of classification, discussion with headquarters, and re-classification). The actual work of creating a report with the required details will be very simple in most ERP systems when the proper classification system is put in place. In some cases, the report generation may only require a handful of hours of work (in particular single ownership small mines and fields).

### **Hourly Rate**

The average hourly rate, according to the United States Department of Labor – Bureau of Labor Statistics, places the hourly mean wage for accountants and auditors in the field of Management, Scientific, and Technical Consulting Services at \$37.27.<sup>9</sup> To be conservative, we are multiplying this by a factor of 3, yielding the worst case loaded rate of \$112 per hour. To avoid argument on a ‘too low’ hourly wage, \$150 per hour was used for the purpose of the costing model. Moreover, this is a conservative estimate because it uses prevailing US wage rate whereas much of the 1504 compliance work will rely on local employees in the host countries, most of whom are paid at prevailing local wage rate rather than much higher US wage rates.

We found no basis for an hourly cost of \$400 per hour. While this hourly rate may be applicable to external legal advice by experienced legal counsel, it has little bearing in the case of 1504, where compliance will largely require internal rather than external hours.

### **Total Cost for Industry**

The total initial compliance cost to SEC issuers is expected to be roughly \$255M, of which approximately \$73.75M per annum are ongoing costs. The initial compliance cost calculation is a conservatively high estimate and is reflective of companies exerting more effort than is required in order to ensure their disclosure is correct.

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<sup>9</sup> United States Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, May 2014, <http://www.bls.gov/oes/current/oes132011.htm>.

We estimate the ongoing cost to be roughly \$73.75M per annum. Most of the first year costs are from implementation of accounting systems and processes to aggregate the data. Once these are in place, subsequent years should have significantly lower effort levels likely by another factor of 2.

These costs calculations are conservative because they cover all SEC issuers and do not factor in that many SEC issuers will already be collecting and disclosing this information to comply with reporting obligations in other jurisdictions. The actual compliance cost could be at least 30% lower, assuming that over 30% of issuers are subject to similar laws in other jurisdictions, according to SEC estimates.<sup>10</sup>

## 2. Comparison against other costing models

For comparison purposes, we reviewed costing statements submitted by Barrick, Rio Tinto, and Exxon. The analysis below shows that most of these companies' submissions to the SEC grossly overstated their compliance cost estimates. Moreover, our model provides a much more usable approach for identifying the cost to all SEC issuers as it does not rely on guesswork on individual efforts by companies.

### **Barrick Gold Costing<sup>11</sup>**

Barrick Gold stated a cost of roughly 500 hours of effort for compliance per year with an additional \$100,000 in travel and IT costs for initial compliance. This equates to roughly \$175,000 in total cost in the first year. According to Barrick's website, Barrick currently has operations in 27 mines.<sup>12</sup> This would average to roughly \$6,500 per operation. Our model predicts closer to \$8,400 per operation. The results are quite similar considering the uncertainty in creating a costing model for compliance with Section 1504 of Dodd-Frank. Overall, the Barrick costing model seems to be the most valid and accurate costing model submitted to SEC and should be attributed more weight by the SEC when calculating expected industry costs.

### **Rio Tinto Costing<sup>13</sup>**

Rio Tinto stated an effort of 4,800 - 9,600 hours of effort across 120 operating entities. As the world's second largest mining company (after BHP Billiton), Rio Tinto is expected to incur a larger than average cost. However, of the 120 Rio Tinto operations, a disproportional number

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<sup>10</sup> According to a review of affected issuers by the SEC, 268 out of a total of 877 will already be subject to similar laws in other countries. Securities and Exchange Commission, "17 CFR Parts 240 and 249b Disclosure of Payments by Resource Extraction Issuers; Proposed Rule," December 23, 2015, p. 80093, <http://www.gpo.gov/fdsys/pkg/FR-2015-12-23/pdf/2015-31702.pdf>.

<sup>11</sup> Mazin, J.A. "Comments on Proposed Rules relating to the Dodd-Frank Act," February 28, 2011, p. 18, <http://www.sec.gov/comments/s7-40-10/s74010-86.pdf>.

<sup>12</sup> Barrick, <http://www.barrick.com/operations/default.aspx>.

<sup>13</sup> Rio Tinto, "Disclosure of Payments to Governments," March 2, 2011, p. 12, <http://www.sec.gov/comments/s7-42-10/s74210-44.pdf>.

look to be smelting and refining operations – not extractive operations. Fewer than 30 actual mines were identified.<sup>14</sup> It is difficult to justify Rio Tinto's effort being more than ten times Barrick's effort when Rio Tinto has only three more mines than Barrick. An effort close to 1,000 to 2,000 hours would be more realistic once non-extractive operations were removed.

Reducing the hourly rate to a more reasonable \$150 / hr rate instead of the \$400 / hr rate quoted in Rio Tinto's costing, and applying it only to those operations involved in extraction of minerals, the overall cost for Rio Tinto would be closer to \$150,000 to \$300,000 than the \$1,920,000 to \$3,840,000 described in the submission.

### **Exxon Mobil Costing<sup>15</sup>**

Exxon Mobil's SEC submission stated an implementation cost of \$50M but did not provide any detail on justifying the number. Without any basis for the cost, only rough comparisons can be made with Exxon's provided cost. In 2008, Exxon Mobil represented roughly 3% of the world's oil output.<sup>16</sup> If Exxon was involved in 3% of the world oil fields (which is a very rough and conservative estimate), a total direct cost for 1504 implementation would be closer to \$15M based on the model presented above. Moreover, as one of the world's largest companies, Exxon could likely find economies of scale (such as common ERP platforms and centralized report generation) and a \$15M cost should be seen as a worst case direct initial cost. While this may appear like a very sizeable figure, it should be placed in context against Exxon's most recent annual profit of \$32.6 billion in 2013, of which it is a negligible fraction (approximately 0.0046%).<sup>17</sup>

### **3. Summary**

1. Using the total number of fields and mines and the average number of issuers per field or mine to calculate the total cost for affected issuers is a far more accurate and justifiable model than trying to expand the anecdotal data to all affected issuers. It does not rely on estimating the number of affected issuers and estimating differences in costs depending on the size or other variables of each issuer.
2. The total cost to industry in the first year is expected to be \$181M.
3. The ongoing cost is expected to be \$73.75M per annum.
4. Of the other cost studies submitted to the SEC, the Barrick costing study seems reasonable and does not have the significant errors of the other provided industry estimates. The Barrick

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<sup>14</sup> Rio Tinto, website. Our Business Section. [www.riotinto.com](http://www.riotinto.com)

<sup>15</sup> Exxon Mobil, "Proposed Rules for Disclosure of Payments by Resource Extraction Issuers," January 31, 2011, p. 8, <http://www.sec.gov/comments/s7-42-10/s74210-11.pdf>.

<sup>16</sup> Hoyos, C. "The New Seven Sisters: Oil and Gas Giants Dwarf Western Rivals," *Financial Times*. April 21, 2008.

<sup>17</sup> Exxon's most recent SEC filing as of January 31, 2014.

<https://www.sec.gov/Archives/edgar/data/34088/000003408814000012/xom10k2013.htm>

costing estimate should be given greater weight by the SEC when calculating expected industry costs.