

### MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE THREE AND SIX MONTH PERIODS ENDED JUNE 30, 2018

Titanium Corporation Inc. ("Titanium" or the "Company") has prepared the following management's discussion and analysis ("MD&A") to provide information to assist investors and others in understanding the financial results for the three and six-month periods ended June 30, 2018. The Company changed its fiscal year end from August 31 to December 31 on January 24, 2018. As such, the period ended June 30, 2018 is the second reporting period in the new fiscal year. The comparative three and six-month interim periods for purposes of reporting in the transition year is May 31, 2017. This MD&A should be read in conjunction with Titanium's audited financial statements as at and for the four-month period ended December 31, 2017 and the year ended August 31, 2017 (the "Financial Statements"). This MD&A is dated as at and based on information available to management as of August 27, 2018. The Company is a development stage company whose common shares are listed on the TSX Venture Exchange under the symbol "TIC".

The above referenced material is available on Titanium's website at www.titaniumcorporation.com or it can be found, along with additional information about Titanium, on the System for Electronic Document Analysis and Retrieval ("SEDAR") at www.sedar.com.

The Financial Statements have been prepared in accordance with Canadian generally accepted accounting principles as set out in the Handbook of the Chartered Professional Accountants of Canada ("CPA Handbook") which incorporate International Financial Reporting Standards ("IFRS"). All amounts included in this MD&A are in Canadian dollars, unless otherwise specified.

This MD&A contains forward-looking statements and information within the meaning of applicable Canadian securities laws (collectively, "forward-looking information") that reflects the current expectations of management about the future results, performance, achievements, prospects or opportunities for Titanium. Forward-looking information is provided in this document in the discussion of Titanium's research and development and commercialization plans under the heading "Titanium's Business" and Titanium's business plans for fiscal 2018 under the headings "Update" and "Next Steps". This forward-looking information generally can be identified by use of forward-looking words such as "may", "will", "expect", "estimate", "anticipate", "believe", "project", "should" or "continue" or the negative thereof or similar variations.

Forward-looking information is presented in this MD&A for the purpose of assisting investors and others in understanding certain key elements of our financial results and business plan, as well as our objectives, strategic priorities and business outlook, and in obtaining a better understanding of our anticipated operating environment. Readers are cautioned that such forward-looking information may not be appropriate for other purposes.

Forward-looking information, by its very nature, is subject to inherent risks and uncertainties and is based on several assumptions, both general and specific, which give rise to the possibility that actual results or events could differ materially from our expectations expressed in or implied by such forward-looking information and that our business outlook, objectives, plans and strategic priorities may not be achieved. In particular, the forward-looking information contained in this MD&A is based (in whole or in part) on the results of our research, pilot programs, studies, and commercialization efforts described in this MD&A under the heading "Titanium's Business". The Company has not commercially demonstrated its technologies and there can be no assurance that such research, pilot programs and engineering design and related studies will prove to be accurate, nor that such commercialization efforts will be successful, so actual results and future events could differ materially from those expected or estimated in such forward-looking information. As a result, we cannot guarantee that any forward-looking information will materialize, and we caution you against relying on any of this forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information.

Additional information on these and other factors are disclosed elsewhere in this MD&A, including under the heading "Discussion of Risks", and in other reports filed with the securities regulatory authorities in Canada from time to time and available on SEDAR (sedar.com).

The forward-looking information contained in this MD&A describes our expectations as of August 27, 2018 and, accordingly, is subject to change after such date. Except as may be required by Canadian securities laws, we do not undertake any obligation to update or revise any forward-looking information contained in this MD&A, whether as a result of new information, future events or otherwise.

### **Titanium's Business**

The Company has developed innovative Creating Value from Waste<sup>TM</sup> ("CVW<sup>TM</sup>") technology that recovers bitumen, solvents, valuable minerals and water from oil sands froth treatment tailings. The Company expects that the recovery of bitumen, associated solvents and water will result in important and timely environmental improvements for the oil sands industry and the recovery of the lost commodities will create economic growth, jobs and diversification.

The Company is operating in the mining sector of Canada's oil sands industry. In July 2017, the Company announced that it was working with Canadian Natural Resources Limited ("Canadian Natural") on an engineering design project for the first commercial implementation of CVW<sup>TM</sup> technology at Canadian Natural's Horizon oil sands site. The \$10.2 million engineering design phase is being supported by up to \$5 million of grant funding from Emissions Reduction Alberta ("ERA") with the Company funding \$1.5 million and Canadian Natural funding up to \$3.7 million.

The oil sands mining sector surface mines deposits in northern Alberta's Athabasca Oil Sands region to extract bitumen (heavy oil trapped in the sands) for local upgrading into synthetic crude oil or for dilution and pipelining to refineries. Heavy minerals that naturally occur in these oil sands deposits are concentrated in tailings during the secondary bitumen extraction step referred to as 'froth treatment'. Oil sands producers currently use either a naphtha or paraffinic based solvent to process bitumen at the froth treatment stage. These solvent-based processes result in the loss of solvents, bitumen and heavy minerals in froth treatment tailings streams which are currently deposited in tailings ponds. The combination of solvent and bitumen losses to tailings ponds results in substantial volatile organic compound ("VOC") emissions and greenhouse gas ("GHG") emissions from the ponds in the form of methane. Global Warming Potential ("GWP") is widely used as the measure of the relative climate impact of different GHGs. The 100–year GWP of methane is reported to be 28 to 36 times greater than CO<sub>2</sub> and the 20-year GWP is reported as 84 to 87 times greater.

Tailings management remains one of the more difficult environmental challenges for the oil sands mining sector. The Company believes that its CVW<sup>TM</sup> technology can assist the industry in meeting certain of the regulatory requirements of the Alberta Energy Regulator's (the "AER") new Directive 85 outlined below. In particular, the Company's technology has the potential to address a number of the aspects of sub-objective 2 by mitigating risks associated with treated froth fluid fine tailings.

Oil sands tailings are comprised of water, fine clays, residual bitumen, salts and soluble organic compounds. They also contain solvents which are added to the oil sands during the separation process (froth treatment). In 2016 and 2017, the AER issued the first version of a new Directive 85 and a revised version: Fluid Tailings Management for Oil Sands Mining Projects which sets out requirements for managing and reclaiming fluid tailings including the following requirements: existing operators were required to submit fluid tailing management applications by November 1, 2016; operators must minimize fluid tailings accumulation by ensuring that fluid tailings are treated and reclaimed progressively during the life of the project; new fluid tailings must be ready to reclaim by ten years after the end of mine life, while legacy fluid tailings must be ready to reclaim by the end of mine life; and operators are required to report annually on the performance of their fluid tailings management plans.

In order to evaluate whether active treated tailings deposits are on a trajectory to meet the high-level objective, there are two sub-objectives of Directive 85 that address different aspects of performance: Sub-objective 1: the deposit's physical properties are on a trajectory to support future stages of activity; Sub-objective 2: to minimize the effect the deposit has on the surrounding environment and ensure that it will not compromise the ability to reclaim to a locally common, diverse, and self-sustaining ecosystem. Sub objective 2 focuses on circumstances where the operator may propose management strategies, design features, or mitigation measures for risks

associated with the specific nature of the deposit or its surrounding environment that could impact reclamation—for example, design features that control specific water movement such as drainage control systems, or management of risks associated with deposit characteristics such as treated froth fluid fine tailings, acidification, specific additives, or gas formation. If appropriate, an operator may propose and justify additional sub objectives.

Six large oil sands mining sites are currently operated by Canadian Natural (Horizon and Albian Sands sites), Suncor Energy Inc. (Base Plant and Fort Hills sites), Syncrude Canada, and Imperial Oil Limited (Kearl). Expansion projects doubling production at Albian Sands and Kearl have been completed in recent years and an expansion phase at Canadian Natural's Horizon site and the new Fort Hills oil sands mining project have been commissioned and are expected to ramp up in 2018. The expansions and new site will significantly increase Canada's oil sands mining production in the years ahead. The growth of the oil sands mining industry means that increased volumes of bitumen, solvents and heavy minerals will be lost in froth treatment tailings until new technology is adopted to recover this lost value. Growth also means that GHG and VOC emissions will continue to rise.

Since 2008, the Company has been conducting a series of research and development ("R&D") and demonstration piloting programs including:

- Successfully executing a two-year research program endorsed by the Alberta Government and supported by a \$3.5 million Alberta Energy Innovation Fund ("AEIF") grant received in March 2008. The key achievements of the program were the development of technologies to remove bitumen from heavy minerals and recover bitumen, solvents and water from froth treatment tailings.
- Following the research program, the Company completed successful integrated demonstration pilot programs over a four-year period in collaboration with a consortium comprised of oil sands operators and the Federal and Alberta governments. The programs were supported by \$6.5 million of Federal government grants from Sustainable Development Technology Canada ("SDTC") which funded approximately 25% of the programs.

The Company's technology has been developed to meet the current and future needs of all the major oil sands operators related to froth treatment tailings recovery and remediation. In addition to the anticipated benefits of additional commodity recoveries and emissions reductions, the Company's technology affords a number of other opportunities to reduce the environmental footprint of mining oil sands operations. Based on the results of the Company's research programs, tailings dewater more effectively in subsequent tailings management operations toward meeting Government of Alberta regulations which require reductions in the volume of tailings. The removal of bitumen and solvents could also enable the direct reuse of hot froth treatment tailings water in other mineable oil

sands services, reducing energy costs, river water usage and GHGs related to reheating cold pond water used in the bitumen extraction process.

Based on our research, pilot programs and studies, key economic drivers that support the adoption of Titanium's technology include: the commodity value and reduced operating costs for recovery of bitumen and solvents currently lost to tailings ponds; the value of recovered zircon and titanium products and the potential for the recovery of rare earth minerals; the value of emissions reductions under current and future regulatory regimes; potential energy cost reductions due to hot process water reuse; and cost reductions related to enhanced tailings remediation. We believe that, with a heightened focus by the oil sands operators on reducing operating costs, optimizing production and reducing environmental impacts and the strong commitment by the Alberta and Federal governments to reduce carbon emissions and increased monitoring of oil sands emissions, there is now a shared urgency by stakeholders to implement technology solutions that address these concerns. Potential economic returns, incremental resource recovery, development of a new minerals industry and reduction of environmental impacts, we believe, all favour adoption of the Company's technology. Please refer to the material risks, uncertainties and other factors which may affect the Company which are described in more detail in this MD&A under the heading "Discussion of Risks".

### **Update**

The Company has continued to make excellent progress on commercialization of its CVW™ technology at Canadian Natural's Horizon oil sands site. Front End Engineering Design ("FEED"), the first step in project planning and engineering, is well underway and the Company has successfully completed its second Milestone under the ERA Contribution Agreement. The Federal and Alberta governments continue to prioritize climate change reduction, innovation, clean technology and economic diversification with a number of announced funding programs. The Company is in the process of qualifying for a number of these provincial and federal funding programs for ongoing phases of the project.

These and other highlights for the three and six-month periods ended June 30, 2018 and recent months are set out in more detail below:

• The Company continued with the project execution phase working with Canadian Natural, the engineering firms of Stantec, and IHC Robbins on the FEED and associated studies. Third-party engineering commenced in April 2018 and is expected to be completed by the end of 2018 with the overall FEED project to be completed in early 2019. The Company has also retained consultants and technical

- firms to assist with other aspects of the engineering design and associated planning including project management, regulatory approvals, aboriginal engagement and minerals marketing.
- On August 17, 2018, the Company announced the achievement of Milestone 2 of the FEED phase of its CVW<sup>TM</sup> Horizon project. ERA funding is provided in stages during the project as the Company meets and reports against predetermined milestones established under the ERA Contribution Agreement. As at June 30, 2018 the Company estimates ERA and partner contributions for their share of eligible project expenditures is approximately \$2.6 million of which, \$0.3 million represents a 20% ERA holdback payable on the completion of the project. These amounts will be received by the Company upon completion of agreed milestones outlined in the contribution agreement. Project activities during the Milestone 2 period included design basis criteria, initial plot plans, heat and material balances and process flow diagrams for both the concentrator facility and the minerals separation plant.
- On May 15, 2018, the Company announced the achievement of Milestone 1 of the FEED phase of its CVW<sup>TM</sup> Horizon project. On May 18, and July 8, 2018 the Company received \$430,152 and \$211,623, respectively, from ERA and project partners as their contribution towards the achievement of the first milestone. Milestone 1 activities included identifying locations and tie-ins for the new facilities, preparing detailed scopes of work for requests for proposals ("RFPs") and selection of the engineering contractors.
- The Company has been meeting with Canadian investment banks regarding their potential participation in the structuring and financing of the project and their support of the Company in financial markets. The Company, in consultation with outside experts, is executing an active investor outreach campaign to communicate the Company's investment story to a wider investor audience.
- The Company has an active program to communicate its technology and the project to, and engage with, government, industry, the public and the investment community. In January, by invitation, the Company participated in the Federal Government Economic Strategy Table on "Innovation and Growing Firms to Scale" held at the MaRS Complex in Toronto, which focused on the support and financing of clean technologies. In March, the Company participated in the Globe 2018 Forum which brought together business and government leaders from over 50 countries. Held every two years in Vancouver, Globe featured a Leadership Summit for Sustainable Business and an Innovation Expo. In April, by invitation, the Company attended the B7 meetings in Quebec City where roundtables included Scaling up Small Business and Climate Change and Resource Efficiency. B7 meetings include business representatives from all the G7 countries and are held in advance of each annual G7 meeting which this year was held in Canada. Also, in April, the Company participated along with ERA in the OCE Discovery Conference in Toronto. Discovery is Canada's leading innovation-to-commercialization conference to showcase leading edge

- technology and bring together key players from industry, academia, government and the investment community.
- During the first six month of the new fiscal year, there were further stock option and warrant transactions that resulted in cash proceeds of \$1.2 million to the Company. On January 10, 2018, management exercised 450,000 stock options set to expire in April 2018 for proceeds to the Company of \$450,000. On February 16, 2018, Mossco Capital Inc., an affiliated Canadian resident corporation controlled by Mr. Moss Kadey, exercised in full its 1,000,000 non-transferable common share purchase warrants at a price of \$0.70 per share which resulted in the issuance of 1,000,000 common shares of Titanium for proceeds of \$700,000 to the Company.
- The Company is continuing cash conservation programs including those under which executive officers receive a portion of their compensation in RSUs and directors elect to receive all or portions of their fees in the form of DSUs, to both conserve cash and further align themselves with shareholder interests.

### **Next Steps**

Implementing Titanium's technology would see concentrator facilities built at oil sands sites which integrate with existing oil sands operations. Separate minerals separation facilities would be constructed to process heavy mineral concentrates ("HMC") into final minerals products. The facilities may be jointly owned and operated along with oil sands operators or strategic partners. The Company has advanced proposals and flexible business models whereby customers may elect to license technology and build certain of the facilities or elect to have the Company, together with partners, build and operate these facilities.

The Company is working with Canadian Natural on the engineering design for implementation of our CVW<sup>TM</sup> technology at the Horizon site. The Company is acting as the lead proponent and overall project manager for the project, working in close collaboration with Canadian Natural and ERA. In this role, the Company is responsible for contracting with the outside engineering and other firms required for the project, managing and funding these outside contracts, project controls, reporting progress against agreed milestones and collecting partner funding contributions upon milestone achievement from ERA and Canadian Natural.

The engineering design is underway and third-party engineering commenced in April 2018 and is expected to be completed by the end of 2018 with the overall FEED project to be completed in early 2019. During the engineering design phase, the Company and Canadian Natural will be undertaking a number of related commercialization activities including: pursuing available Federal and Alberta government funding programs and other sources of funding for the potential construction phase of the project; working with the Alberta government to develop a competitive fiscal structure for the project including the new minerals products; minerals market

development activities; and working with partners interested in participating in the project. Subject to the successful completion of the FEED study and evaluation of results, the Company and Canadian Natural's next steps would include finalizing the business model, participants, commercial structure and financing plans and proceeding with the potential detailed engineering and construction of the facilities that would take approximately 30 months.

There is wide acceptance that innovation and new technologies will be the principal solutions for reducing both environmental impacts and operating costs in Canada's oil sands industry. Through a disciplined R&D approach and with cooperation from industry and governments, the Company believes that it has successfully developed unique, practical technology solutions for oil sands tailings waste that offer significant improvements to technologies currently used to address both environmental and economic challenges.

### **Financial Information & Analysis**

### Summary of Selected Quarterly Results

The following table summarizes the financial results of the Company for the three and six-month periods ended June 30, 2018 and each of the seven most recently completed three and/or four-month (transition) periods prepared under IFRS (Canadian dollars in millions except per share data):

	3-month period ended June 30, 2018		3-month period ended Mar 31, 2018		4-month period ended Dec 31, 2017		3-month period ended Aug 31, 2017	
STATEMENT OF LOSS								
Net Loss	\$	3.0	\$	1.6	\$	1.5	\$	0.7
Basic and Diluted Loss per Share	\$	0.04	\$	0.02	\$	0.02	\$	0.01
	3-month period ended May 31, 2017		3-month period ended Feb 28, 2017		3-month period ended Nov 30, 2016		3-month period ended Aug 31, 2016	
Net Loss	\$	0.8	\$	0.9	\$	0.7	\$	0.8
Basic and Diluted Loss per Share	\$	0.01	\$	0.01	\$	0.01	\$	0.02

Titanium is focused on achieving long-term financial success by implementing its innovative CVW<sup>TM</sup> technologies into commercial operations at oil sands sites. The Company is working with Canadian Natural on engineering design for the potential implementation of its technology at Canadian Natural's Horizon site. However, until commercial arrangements and investment decisions are made, and facilities are constructed and operating, the Company expects to continue to incur losses. Currently, quarterly losses are comprised of R&D project costs and general and administrative ("G&A") expenditures. Changes in quarterly losses are dependent on the level of commercialization and R&D project activity that the Company has underway at any time.

The following explains the Company's financial results for the three and six-month periods ended June 30, 2018 compared to the three-and six-month periods ended May 31, 2017:

- Net loss for the three-month period ended June 30, 2018 was \$3.0 million, or \$0.04 per share compared to \$0.7 million or \$0.01 per share for the three-month period ended May 31, 2017. Net loss for the six-month period ended June 30, 2018 was \$4.6 million compared to \$1.6 million for the six-month period ended May 31, 2017. The net loss was higher in both the three and six-month periods ended June 30, 2018 compared to the three and six-month periods ended May 31, 2017 due to project and staffing costs for the engineering design project for Canadian Natural's Horizon site that commenced in October 2017. The Company has recognized \$0.4 million of government contributions for the engineering design project at June 30, 2018. On July 8, 2018 \$0.2 million was received for partner contributions related to the costs incurred during the first milestone period of the project. The funding contributions from ERA and Canadian Natural are recognized as a recovery of project costs upon achievement of the agreed milestones contained in the Contribution Agreement with ERA and collection of cash. For a development stage company, the net loss was in line with expectations.
- The Company had \$3.9 million in cash and short-term investments at June 30, 2018 as compared to \$5.0 million at December 31, 2017. The decrease in cash of \$1.1 million relates to funding project costs incurred to June 30, 2018. Subsequent to June 30, 2018, \$0.2 million was received as partner contributions for project costs incurred for the first milestone of the project. On August 17, 2018 the Company announced the completion of the second milestone and received \$0.9 million from government contributions of the \$1.6 million in expected recovery of costs and in-kind contributions incurred to June 30, 2018. The balance of \$0.7 million is expected to be received in the next quarter. During the six-month period ended June 30, 2018 proceeds of \$1.2 million were received from the exercise of warrants and (\$0.7 million) and the exercise of stock options (\$0.5 million). The cash balances are held by two major Canadian chartered banks in interest bearing cash accounts and short-term investments. A portion of cash is invested in a guaranteed investment certificates ("GIC") with a maturity date of less than twelve months.

#### **Research and Development Expenditures**

Below is a summary of the R&D expenditures by category (\$ thousands):

	Thre	ee months en	ded	Six months ended			
	June 30, 2018	May 31, 2017	Increase (decrease)	June 30, 2018	May 31, 2017	Increase (decrease)	
Projects and other	\$ 2,642	\$ 61	\$ 2,581	\$ 3,358	\$ 82	\$ 3,276	
Compensation and benefits	165	88	77	329	178	151	
Deferred compensation	32	34	(2)	65	69	(4)	
Equity-based compensation	71	19	52	127	31	96	
R&D costs	\$ 2,910	\$ 202	\$ 2,708	\$ 3,879	\$ 360	\$ 3,519	
Recovery of project costs	(430)	-	(430)	(430)	-	(430)	
R&D net of recovery	\$ 2,480	\$ 202	\$ 2,278	\$ 3,449	\$ 360	\$ 3,089	

R&D spending in the current quarter consisted primarily of project costs related to the engineering design project and compensation for technical staff. The Company is developing engineering designs for implementation of our CVW<sup>TM</sup> technology at the Horizon site. The Company is acting as the lead proponent and overall project manager of the project, working in close collaboration with Canadian Natural and ERA. In this role, the Company is responsible for contracting with the outside engineering and other firms required for the project, managing and funding these outside contracts, project controls, reporting progress against agreed milestones and collecting partner funding contributions upon milestone achievement from ERA and Canadian Natural. The increase in projects costs, rent and other of \$2.0 million for the three-month period ended June 30, 2018 compared to the three-month period May 31, 2017 is due to costs incurred for the engineering design project for Canadian Natural's Horizon site. The project commenced in October 2017 and the Company has incurred eligible expenditures and in-kind contributions of approximately \$3.4 million as of June 30, 2018. The portion of ERA and partner contributions for their share of eligible project and in-kind contributions incurred to June 30, 2018 after adjusting for a 20% ERA holdback, is approximately \$2.2 million. These amounts will be recovered by the Company upon completion of agreed milestones in accordance with the Contribution Agreement. Third-party engineering commenced in April 2018 and is expected to be completed by the end of 2018 with the overall FEED project to be completed in early 2019. Additional staff have been hired by the Company which has resulted in an increase in compensation and benefits for the three-month period ended June 30, 2018 as compared to the three-month period ended May 31, 2017.

### **General and Administrative Expenditures**

The following table provides details of G&A expenditures by category (\$ thousands):

	Thr	ee months er	ıded	Six months ended			
	June 30, 2018	May 31, 2017	Increase (decrease)	June 30, 2018	May 31, 2017	Increase (decrease)	
Compensation and benefits	\$ 185	\$ 128	\$ 57	\$ 377	\$ 262	\$ 115	
Deferred compensation	64	88	(24)	128	177	(49)	
Consulting and professional fees	49	73	(24)	114	133	(19)	
Directors fees	93	65	28	185	135	50	
Travel	17	17	-	37	35	2	
Rent, insurance and office	32	27	5	80	57	23	
Investor relations and regulatory	64	9	55	106	56	50	
Stock-based compensation	77	55	22	154	92	62	
	\$ 581	\$ 462	<b>\$ 119</b>	\$ 1,181	\$ 947	\$ 234	

• G&A expenses for the three-month period ending June 30, 2018 were \$0.6 million compared to \$0.5 million for the three-month period ended May 31, 2017. The increase is primarily related to compensation and benefits for management where the board has reinstated cash compensation for contracted salaries and portions of incentive pay. This increase in cash compensation was offset by a decrease in deferred compensation as the amount of annual incentive estimated for settlement with RSUs is expected to be offset by an increase in cash compensation. The increase in director fees, for the three-month period ending June 30, 2018 relates to annual fees for the commercialization committee members which was established January 1, 2018. Investor relations expense is higher for the three and six-month periods ended June 30, 2018 compared to the three and six-month periods ended May 31, 2017 as the Company commenced an active program in February 2018 with Loderock Advisors Inc. to communicate its technology and the project to the public and the investor community. Stock based compensation was higher during the three-month period ended June 30, 2018 as the Company granted 1,125,000 incentive stock options on April 30, 2018 and the number and fair value of stock options being amortized was greater than the comparative three-month period ended May 31, 2017.

### **Liquidity and Capital Resources and Recoverability**

The Company had \$3.9 million in cash and short-term investments at June 30, 2018 as compared to \$5.0 million at December 31, 2017. The decrease in cash of \$1.1 million relates to the timing of funding project costs incurred and the collection of government and partner contributions as at June 30, 2018. Subsequent to June 30, 2018, \$0.2 million was received as partner contributions for project costs incurred for the first milestone of the project. On August 17, 2018, the Company announced the successful completion of the second milestone of the FEED Study

project. In conjunction with the milestone completion, the Company invoiced project partners \$1,626,311 for eligible expenses and in-kind contributions incurred up until June 30, 2018. On August 17, 2018 \$946,900 was received as ERA's contribution towards the second milestone project costs. The balance is expected to be received in the third quarter. During the six-month period ended June 30, 2018 proceeds of \$1.2 million were received from the exercise of warrants (\$0.7 million) and the exercise of stock options (\$0.5 million). The Company believes that it has sufficient cash and funding contribution commitments from ERA and Canadian Natural to fund its expenses, including the estimated engineering design project commitment and its G&A costs, for the next year. The Company has 1,675,000 common share purchase warrants outstanding, exercisable at \$0.70 per common share, issued to standby purchasers who participated in the December 2016 rights offering. These common share purchase warrants which are due to expire in December 2018 may provide further cash resources to the Company upon exercise. Other potential sources which may be available to the Company to fund its future cash requirements include, but are not limited to, new or additional government grants, loans, issuances of securities or some form of partnership or joint venture.

The Company's cash balance consists of interest bearing cash accounts. The Company also has short term investments consisting of a GIC held at a Schedule I Canadian chartered bank.

The Company is a development stage enterprise as it has yet to earn any revenues from its planned operations. The Company is devoting substantially all its efforts toward commercializing its proprietary technology. The recoverability of amounts expended on R&D, other than the R&D costs related to the FEED project costs recoverable from ERA and Canadian Natural, is dependent on the ability of the Company to complete commercialization at oil sands sites and achieve future profitable operations. The Company is dependent on raising funds through the issuance of shares or other securities, loans, government grants and/or attracting partners to undertake further development and commercialization of its technology. While the Company has been successful in obtaining the necessary financing to develop the business to this point, there are no assurances that the Company will be successful in the future in these endeavors. See "Discussion of Risks" in this MD&A.

The following is a summary of the cash flow for the periods noted:

• Cash used in operating activities for the three and six-month periods ended June 30, 2018 was \$1.1 and \$2.3 million, respectively, compared to \$0.3 and \$0.8 million, respectively, for the three-and six-month periods ended May 31, 2017. The increase use of cash for project and operating expenses related to the engineering design project at Horizon which will be offset in future quarters through contributions from ERA and Canadian Natural with achievement of milestones.

• Cash provided by financing activities for the three and six-month periods ended June 30, 2018 was \$ nil and \$1.2 million, respectively, compared to \$nil and \$ 5.4 million, respectively, for the three-month period ended May 31, 2017. During the six-month period ended June 30, 2018 cash provided by financing activities related to the exercise of 1,000,000 common share purchase warrants for proceeds of \$0.7 million and \$0.5 million from the exercise of 482,500 stock options by management. In the comparative period ending May 31, 2017, the Company closed a fully subscribed \$6.5 million rights offering using a portion of the proceeds (\$1.0 million) to repay the Company's outstanding loans to satisfy all its debt obligations.

#### **Financial Instruments and Financial Risk Factors**

The Company has, for accounting purposes, designated its cash, cash equivalents, short term investments, goods and services tax receivable, as loans and receivables. Trade and other payables, accrued liabilities and loans are classified for accounting purposes as other financial liabilities. The Company estimates that both the carrying and fair value amounts of the Company's financial instruments are approximately equivalent because of the short-term nature of the assets and liabilities. The Company manages the risks relating to the financial instruments by investing in short-term highly liquid certificates of investment issued by Schedule I Canadian chartered banks. This discussion on risks is not all-inclusive and other factors may currently, or in the future, affect the Company and should also be read in conjunction with the other risks described under the heading "Discussion of Risks" in this MD&A.

#### Financial risk

The Company's activities expose it to a variety of financial, credit, liquidity and market risks, including interest rate and foreign exchange rate risks.

Financial risk management is carried out by the Company's management team with guidance from the Audit Committee and the Board of Directors of the Company. The Board of Directors of the Company also provides guidance for enterprise risk management.

### Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to cash and cash equivalents, short term investments and recovery of costs related to the engineering design project under contribution agreements with ERA and Canadian Natural. Cash and cash equivalents and short-term investments are held with Schedule I Canadian Chartered banks which are reviewed by management. Management believes that the credit risk concentration with respect to financial instruments and accounts receivable is minimal.

### Liquidity risk

Liquidity risk is the risk that the Company will not have sufficient cash resources to meet its financial obligations as they come due. The Company's approach to managing liquidity risk is to ensure that adequate resources are available to meet its obligations as they come due. As at June 30, 2018, the Company had an aggregate cash, cash equivalents and short-term investment balance of \$3.9 million (December 31, 2017 - \$5.0 million) to settle current liabilities of \$1.3 million (December 31, 2017 - \$0.2 million). Subsequent to June 30, 2018, \$0.2 million was received as partner contributions for project costs incurred for the first milestone of the project. On August 17, 2018 the Company announced the completion of the second milestone and expects government and partner contributions of \$1.6 million as recovery of costs incurred to June 30, 2018. Currently, most of the Company's liabilities have contractual terms of 45 days or less with the remainder due within one year.

#### Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

### a) Interest rate risk

The Company's current policy is to invest excess cash in interest bearing cash accounts, bankers' acceptances and guaranteed investment certificates issued by Schedule I Canadian banks. The income statement includes interest income associated with the Company's financial instruments. The Company periodically monitors its investments and the creditworthiness of the banks it holds investments in.

### b) Foreign currency risk

The Company's reporting and functional currency is the Canadian dollar and most purchases are transacted in Canadian dollars. Some research and development expenses are denominated in US dollars and to a lesser extent, Australian dollars. The Company does not hold any significant balances in foreign currencies to give rise to exposure to foreign exchange risk. Any impact from fluctuations in foreign exchange rates would be minimal and therefore the Company does not hedge its foreign exchange risk.

### **Discussion of Risks**

An investment in our common shares is risky. Investors should carefully consider the risk factors set out below and consider all other information contained herein and in our other public filings before making an investment decision. The risks and uncertainties described below and elsewhere in this MD&A are not the only ones the Company faces.

Additional risks and uncertainties, including those that the Company is not currently aware of or that management of the Company currently deems immaterial, may also adversely affect the Company's economics, operating results, financial condition, prospects for commercialization and the profitability of commercial projects.

### We expect to continue incurring losses and consuming cash for several years and will likely need to raise additional capital, the availability of which cannot be assured.

We expect to incur continued losses until we can produce sufficient revenues to cover our costs. If we are unable to successfully implement our business plan, our cash requirements may increase, and we may find it difficult to raise additional funding and continue operations. We expect our cash reserves will be reduced due to future operating losses, and we cannot provide certainty as to how long our cash reserves will last or whether we will be able to access additional capital when necessary in order to carry on business.

# A market for our $CVW^{TM}$ process may never develop or may take longer to develop than we anticipate and our engineering design project with Canadian Natural may not be adopted on a commercial scale.

Our CVW<sup>TM</sup> process represents an emerging market opportunity, and we do not know whether oil sands operators will adopt our CVW<sup>TM</sup> process in their operations. For reasons discussed in more detail below, the development of a market for our CVW<sup>TM</sup> process is subject to uncertainty and risk and may be affected by many factors, some of which are beyond our control, including the emergence of newer, more competitive technologies and processes, the cost of building and operating facilities to run our CVW<sup>TM</sup> process, regulatory requirements, the final fiscal structure applicable to our CVW<sup>TM</sup> process, the perception of oil sands producers of the viability and necessity of our CVW<sup>TM</sup> process, and the financial capacity and willingness of oil sands producers to commit capital in the uncertain oil price environment.

As described elsewhere in this MD&A, the Company and Canadian Natural have commenced the engineering design phase for the implementation of the Company's CVW<sup>TM</sup> technology at Canadian Natural's Horizon oil sands site. Neither the commencement of the engineering design phase, nor the successful completion of this phase, provides any assurance or guarantee that Canadian Natural will proceed with a subsequent EPC phase or the further commissioning of the Company's CVW<sup>TM</sup> technology. This process may take longer and be costlier than expected, may not be on terms favourable to the Company or may not materialize into binding agreements for commercialization. As such, there is still uncertainty and risk that our CVW<sup>TM</sup> process will not be adopted on a commercial scale. If a market for our CVW<sup>TM</sup> process fails to develop, or develops more slowly than we anticipate, we may never achieve profitability.

### The engineering design project for implementation of the Company's $CVW^{TM}$ technology at Canadian Natural's Horizon site may cost more and/or take longer than expected.

Canadian Natural and ERA's funding commitments for the project are limited to a maximum of \$3.7 million and \$5.0 million, respectively, and are dependent upon the achievement of project milestones. Any increase in project costs over \$10.2 million will be for the account of the Company. In addition, delays in the achievement of project milestones or the reimbursement of project costs upon the achievement of project milestones will result in the Company financing project costs for longer than expected. Cost overruns and delays in the achievement of project milestones or project cost reimbursements may have a material adverse effect on the Company's business, financial condition, results of operations and cash flow. Depending on the amount of any overruns or length of any delays, the Company may be required to raise additional capital through the issuance of securities, loans, new or additional government grants and/or some form of partnership or joint venture. There can be no guarantee that the Company will be able to raise additional capital or funding on acceptable terms or at all.

Crude oil and bitumen price fluctuations are beyond our control and may affect the ability and willingness of oil sands producers to evaluate our  $CVW^{\text{IM}}$  process or enter into commercial projects with us.

Crude oil and bitumen price fluctuations are beyond our control and may have a material adverse effect on the willingness of oil sands producers to evaluate whether to adopt and integrate our CVW<sup>TM</sup> process in existing or new oil sands projects and on the economics, operating results, financial condition and profitability of any commercial projects involving our CVW<sup>TM</sup> process.

The financial condition, operating results and future growth of oil sands producers are substantially dependent on prevailing and expected prices of oil and bitumen. Prices for oil are subject to large fluctuations in response to changes in the supply of and demand for oil, geo-political uncertainty and a variety of additional factors, including access to markets and sufficient transportation capacity, all of which are beyond the control of oil sands producers.

Oil prices could remain volatile and may decline in the future as a result of global excess supply due to the increased growth of shale oil production in the United States, the decline in global demand for exported crude oil commodities, and the Organization of the Petroleum Exporting Countries' ("OPEC") decisions pertaining to the oil production of OPEC member countries, among other factors.

Prolonged periods of low crude oil and bitumen prices could result in certain oil sands producers reducing or eliminating their spending on new capital-intensive projects (as opposed to sustaining capital expenditures or existing projects) which could have a material adverse effect on the timing and willingness of oil sands producers to adopt and integrate our CVW<sup>TM</sup> process into their existing and future oil sands operations.

The breadth and complexity of changes to Canadian federal and provincial environmental laws make it difficult for oil sands producers to predict the potential financial impacts of these changes on oil sands producers and their operations which may affect the timing and willingness of oil sands producers to evaluate our  $CVW^{\text{IM}}$  process or enter into commercial projects with us.

A number of statutes, regulations and frameworks are under development or have been issued by various Canadian federal and provincial regulators that affect oil sands developments, including changes relating to such issues as tailings management, water use, air emissions and land use. The breadth and complexity of these changes and proposed changes make it difficult for oil sands producers to predict the potential financial impacts of these changes on them and their operations. Because it is not currently possible to predict the nature of any future requirements or the impact on oil sands producers and their business, financial condition, results of operations and cash flow, oil sands producers may be unwilling to evaluate our CVW<sup>TM</sup> process or proceed past the engineering design phase and enter into commercial projects with us until these uncertainties and risks are better understood.

### Our potential customer base is concentrated, and we are subject to risks from those customers' internal research and development of competing tailings management strategies.

Based on the current stage of our CVW<sup>TM</sup> process, our potential customer base is limited to the mining sector of Canada's oil sands industry now consisting of Canadian Natural (Horizon and Albian Sands sites), Suncor Energy Inc. (Base Plant and Fort Hills sites), Syncrude Canada, and Imperial Oil Limited (Kearl), each of whom may prefer other methods of dealing with froth treatment tailings that do not include our CVW<sup>TM</sup> process.

As our CVW<sup>TM</sup> process has the potential to replace existing methods of dealing with froth treatment tailings, competition for our process will come from current oil sands producers, from improvements to current methods of dealing with froth treatment tailings and from new alternative methods of dealing with froth treatment tailings.

Additionally, oil sands producers are working on developing alternative methods of dealing with froth treatment tailings, such as thickening and dewatering methods, which could meet current regulatory requirements. The industry may elect to use such methods or develop others as alternatives to adopting the Company's technology.

While the Company has commenced the engineering design phase for the implementation of the Company's CVW<sup>TM</sup> technology at Canadian Natural's Horizon oil sands site, Canadian Natural is not required to proceed past this phase nor has it agreed to adopt the Company's CVW<sup>TM</sup> technology on a commercial scale. There is no guarantee that the engineering design phase at the Horizon oil sands site will be successful.

Other companies, research facilities and universities are actively engaged in the research and development of processes for dealing with froth treatment tailings. Each of these organizations has the potential to develop competing processes that would diminish the competitiveness of our CVW<sup>TM</sup> process. These organizations,

including the oil sands producers themselves, have substantial financial resources, research and development capabilities, and other resources, which give them significant competitive advantages over us.

### We may not be able to successfully execute our business plan.

The execution of our business plan poses many challenges and is based on a number of assumptions. We may not be able to successfully execute our business plan. In addition, we cannot guarantee that we will be able to leverage our relationships with oil sands producers for the implementation and development of our CVW<sup>TM</sup> process. We may not be able to proceed past the engineering design phase with oil sands producers to develop a commercial project. If we experience significant cost overruns on our programs, or if our business plan is costlier than we anticipate, certain research and development activities may be delayed or eliminated, resulting in changes or delays to our commercialization plans, or we may be compelled to secure additional funding (which may or may not be available) to execute our business plan. We cannot predict with certainty our future revenues or results from our operations. If the assumptions on which our revenue or expenditure forecasts are based change, the benefits of our business plan may change as well. In addition, we may consider expanding our business beyond what is currently contemplated in our business plan. Depending on the financing requirements of a potential acquisition or new process opportunity, we may be required to raise additional capital through the issuance of equity or debt. If we are unable to raise additional capital on acceptable terms, we may be unable to pursue a potential acquisition or new process opportunity.

### We are dependent upon oil sands producers to adopt and integrate our $CVW^{TM}$ process in their oil sands operations.

Our success depends on the willingness and capacity of oil sands producers to adopt and integrate our CVW<sup>TM</sup> process into their own oil sands operations. For oil sands producers to adopt and implement our CVW<sup>TM</sup> process, we will have to negotiate commercial terms for the implementation of these technologies. This will require the interest and cooperation of the oil sands operators. The cost and complexity of integrating our CVW<sup>TM</sup> process is uncertain and will vary depending on the site and the objectives of each oil sands operator. We can offer no guarantee we will be able to conclude such commercial negotiations on reasonable terms or at all.

Furthermore, any integration, design, construction or operational problems encountered by oil sands producers associated with adopting and integrating our CVW<sup>TM</sup> process could adversely affect the market opportunity for our CVW<sup>TM</sup> process and our financial results.

As described elsewhere in this MD&A, the Company and Canadian Natural have commenced the engineering design phase for the implementation of the Company's CVW<sup>TM</sup> technology at Canadian Natural's Horizon oil sands site. Neither the commencement of the engineering design phase, nor the successful completion of this phase

provides any assurance or guarantee that Canadian Natural will proceed with a subsequent EPC phase or the further commissioning of the Company's CVW<sup>TM</sup> technology. This process may take longer and be costlier than expected, may not be on terms favourable to the Company or may not materialize into binding agreements for commercialization at all. As such, there is still uncertainty and risk that our CVW<sup>TM</sup> process will not be adopted on a commercial scale.

We cannot guarantee that we will be able to develop a commercially scaled version of our CVW<sup>TM</sup> process on the timetable we anticipate, or at all. We may encounter problems and delays in the commercialization of the CVW<sup>TM</sup> process for a number of reasons, many of which are beyond our control.

### The $CVW^{TM}$ process has not been commercially demonstrated and process recoveries on a commercial level are uncertain.

To date, we have focused primarily on R&D. The CVW<sup>TM</sup> process is a new process and consequently we have no experience operating on a large-scale commercial basis. As such, the recovery of bitumen, heavy minerals, solvent and water in commercial projects and the environmental impacts of using the CVW<sup>TM</sup> process involves uncertainty. There can be no assurance that the Company's CVW<sup>TM</sup> process will recover bitumen, heavy minerals, solvent and water at the expected levels, with the expected operating costs or on the expected schedule. In addition, there is inherent variability and uncertainty regarding the composition of the feed tailings that may be processed by the CVW<sup>TM</sup> process from different oil sands sites in commercial projects and over time from the same site, which could impact realized recovery rates, product volumes, revenues and operating costs significantly.

More specifically, there is uncertainty relating to the volumes of bitumen, heavy minerals, solvent and water that may be recovered from froth treatment tailings using the CVW<sup>TM</sup> process due to uncertainties in froth tailings composition and process recovery rates. While there have been many Athabasca basin studies that have assessed the composition of oil sands ores, as well as extensive sampling conducted by the Company and some of its potential oil sands commercialization partners on live froth treatment tailings at various oil sands sites, there remains uncertainty about the levels of bitumen, solvent and heavy minerals, and the composition of such heavy minerals, in any froth treatment tailings streams that may be used in a commercial project. These could vary substantially and adversely from the levels and composition expected by the Company. As such, actual production, and the net revenues and cash flows to be derived therefrom, may vary from time to time, and over the life of a commercial project from expected levels, and such variations may be material.

## We have no experience operating our $CVW^{TM}$ process on a commercial basis and there are uncertainties involved with commercial project execution.

The execution of commercial projects, once negotiated, involves risks associated with the planning, engineering, cost, construction, integration, commissioning and start-up of new CVW<sup>TM</sup> facilities with existing or new oil sands

operations. Risks include: failures in the specification, design or technology selection; building the project in the approved time and at the agreed cost; and meeting agreed performance targets, including capital and operating costs, efficiency, recoveries and maintenance costs. Actual results in the execution of commercial projects could materially and adversely vary from expected outcomes. Many factors can affect key outcomes, including general economic, business and market conditions, the availability and cost of qualified personnel, key materials and equipment, the complexity of managing multiple suppliers and contractors, the complexity of building within existing operating sites, weather conditions, changing government regulations, approval requirements, permits and public expectations.

Capital cost overruns or delays in achieving commercial implementation could have a material adverse effect on the Company's business, financial condition, results of operations and cash flow. Moreover, commercial implementation may require substantial capital and we do not know whether we will be able to secure sufficient funding on terms acceptable to us or at all. Our failure to complete commercial implementation or financing could have a material adverse effect on our business and financial results.

### We are dependent on oil sands operators for froth treatment tailings volumes.

There are numerous uncertainties involved with estimating the quantities of froth treatment tailings that may be available for processing in future commercial projects using the CVW<sup>TM</sup> process. The quantity of froth treatment tailings available will depend on a number of factors, including the overall volumes of oil sands ore mined and processed by oil sands operators, their extraction and froth treatment efficiency, and the amount and timing of any operational downtime due to planned or unplanned slowdowns, shutdowns or other restrictions on production. The availability of froth treatment tailings for processing will depend on oil sands operators' froth tailings volumes, over which the Company has no control.

# Heavy minerals price fluctuations are beyond our control and may have a material adverse effect on our business, operating results, financial condition and profitability.

The ability of the Company to develop, finance and operate minerals facilities in the future will be significantly affected by the price of zircon and titanium in the world market. In particular, zircon prices have fluctuated widely since 2009 and are affected by numerous factors beyond the Company's control such as global and regional supply and demand (particularly from China), global or regional political, economic or financial conditions, the cost of substitutes, interest rates, inflation or deflation, and fluctuations in the value of the United States dollar and foreign currencies. There is a high degree of uncertainty regarding the future price of zircon and other minerals that could have an adverse effect on the Company's ability to develop, finance and operate minerals facilities.

The Chinese market has become a significant source of global demand for commodities, including zircon and other minerals. Chinese demand has been a major driver in global commodities markets for a number of years. A slowing in China's economic growth could result in lower prices and demand for the products from our CVW<sup>TM</sup> process, which would have a negative impact on the Company. We could also experience these negative effects if demand from China slowed for other reasons, such as increased self-sufficiency or certain thrifting initiatives by customers.

Future mineral price declines could adversely affect our continued development of, and eventual commercial production from, our CVW<sup>TM</sup> process. These declines could impair the economic feasibility to develop, finance and operate minerals facilities. Depending on the price of and demand for zircon and other minerals, the Company may not be able to proceed with the development of minerals facilities. Additionally, continuing to commercially develop our CVW<sup>TM</sup> process may not be feasible. Even if the continued commercial development of our CVW<sup>TM</sup> process is ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays and interrupt operations until the reassessment can be completed.

### Forecasting our financial and business results due to fluctuations in commodity prices creates complexities and may restrict our access to funding for our commercialization plan.

Due to the stage of development of our business, it is difficult to predict our future revenues or results of operations accurately. We are also subject to normal market and financial risks such as credit risks, foreign currency risks and fluctuations in commodity prices. As a result, it is possible that in one or more future quarters, our operating results may fall below the expectations of investors and securities analysts. Not meeting investor and security analyst expectations may materially and adversely impact the trading price of our common shares and restrict our ability to secure required funding to pursue our commercialization plans.

# The royalty regime in Alberta and other fiscal incentives may not encourage oil sands operators to enter into commercialization agreements and could significantly reduce the value of the Company's $CVW^{TM}$ process and technologies.

The prospects for commercializing the CVW<sup>TM</sup> process, and the Company's operating cash flow from commercial projects, will be affected by the applicable royalty regime, any future changes to the royalty regime by the Government of Alberta and any Alberta or Federal fiscal incentives. The Province of Alberta receives royalties linked to price and production levels on the production of natural resources from lands in which it owns the mineral rights, including lands with new and existing oil sands projects.

The Government of Alberta may not implement a fiscal regime for minerals and bitumen from oil sands tailings that incentivizes oil sands operators to enter commercialization agreements. Further, the Government of Alberta may implement a regime that adversely affects the results of operations, financial condition or prospects of the

Company or its oil sands partners. In addition, the Company may not be successful in obtaining Alberta or Federal fiscal incentives as part of the commercialization process.

### Exchange rate fluctuations are beyond our control and may have a material adverse effect on our business, operating results, financial condition and profitability.

Our revenues will be affected by fluctuations in the exchange rate between the Canadian dollar and the United States dollar. Once a commercial deal is arranged, we would expect to generate a significant portion of our revenues in United States dollars while a significant portion of our operating expenses, cost of revenues and capital expenditures are in Canadian dollars. As a result, any decrease in the value of the United States dollar relative to the Canadian dollar reduces the amount of Canadian dollar revenues we realize on sales, without a corresponding decrease in expenses. Exchange rate fluctuations are beyond our control, and the United States dollar may depreciate against the Canadian dollar in the future, which would result in lower revenues and margins. In order to reduce the potential negative effect of a weakening United States dollar, we may enter into various hedging programs. However, if the Canadian dollar increases in value, it will negatively affect our financial results.

### We depend on our intellectual property and our failure to protect that intellectual property could adversely affect our future growth and success.

Our success depends in part on our ability to protect our intellectual property rights. We rely on patent, trade secret, trademark and copyright laws to protect our intellectual property. However, our patent position remains subject to complex factual and legal issues, which may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, there is no assurance that effective patent, trade secret, trademark and copyright protection will always be available for our intellectual property rights, both in Canada and other countries.

We also seek to protect our proprietary intellectual property, including intellectual property that may not be patented or patentable, in part by confidentiality agreements and, if applicable, inventors' rights agreements with our strategic partners and employees. We can provide no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, or that such persons or institutions will not assert rights to intellectual property arising out of these relationships.

# We may be involved in intellectual property legal proceedings that cause us to incur significant expenses or prevents us from selling the $CVW^{TM}$ process.

We may become subject to legal proceedings in which it is alleged that we have infringed the intellectual property rights of others or commence legal proceedings against others who we believe are infringing upon our rights. Our involvement in intellectual property litigation could result in significant expense to us, adversely affecting the development of sales of the challenged process or intellectual property and diverting the efforts of our technical and management personnel, whether or not such litigation is resolved in our favour. In the event of an adverse outcome

as a defendant in any such litigation, we may, among other things, be required to: (a) pay substantial damages; (b) cease the development, use, sale or importation of processes that infringe upon other patented intellectual property; (c) expend significant resources to develop or acquire non-infringing intellectual property; (d) discontinue processes incorporating infringing technology; or (e) obtain licenses to the infringing intellectual property. We may not be successful in such development or acquisition or such licenses may not be available on reasonable terms. Any such development, acquisition or license could require the expenditure of substantial time and other resources and could have a material adverse effect on our business and financial results.

### There are operational hazards involved in the $CVW^{TM}$ process.

CVW<sup>TM</sup> projects will involve the typical risks associated with recovering, transporting and processing hydrocarbons, including fires, explosions, gaseous leaks, migration of harmful substances and spills. A casualty occurrence might result in the loss of life and equipment, as well as injury, property damage or the interruption of the operations of a commercial project. The Company may not carry adequate insurance with respect to all potential casualties, damages, losses and disruptions. Losses and liabilities arising from uninsured or under-insured events could have a material adverse effect on the Company's results of operations, financial condition and prospects.

#### We could lose or fail to attract the personnel necessary to run our business.

Our success depends in large part on our ability to attract and retain key management, engineering, scientific and operating personnel. As we develop additional capabilities and expand the scope of our operations, we will require more skilled personnel. Recruiting personnel for the oil sands and waste remediation industry is often highly competitive. We may not be able to continue to attract and retain qualified executive, managerial, technical and operational personnel needed for our business. Our failure to attract or retain qualified personnel could have a material adverse effect on our business.

### **Related Party Transaction**

There were no related party transactions.

### **Off Balance Sheet Arrangements**

The Company does not have any off-balance sheet arrangements.

### **Critical Accounting Estimates and Judgements**

The preparation of financial statements in accordance with IFRS requires management to make critical accounting estimates and judgments that affect the amounts reported in the financial statements and accompanying notes. These estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting

accounting estimates will, by definition, seldom equal the actual results. Management considers the following areas to be those where critical accounting policies affect the significant estimates and judgments used in the preparation of the Company's financial statements.

#### a) Government grants and partner project contributions

The recovery of government grants and partner project contributions requires judgement to determine that reasonable assurance exists when the Company has complied with conditions contained in the contribution agreements.

### b) Recognition of intangible assets

Determining the commencement of capitalization of development costs requires judgement to determine when conditions exist to capitalize costs related to the development of intangible assets.

### c) Fair value of stock options

Determining the fair value of stock options requires judgment related to the choice of a pricing model, the estimation of stock price volatility, the expected term of the underlying instruments, the estimation of the risk-free interest rate and the rate of forfeiture of the options granted.

#### d) Fair value of warrants

Determining the fair value of warrants requires judgment related to the choice of a pricing model, the estimation of stock price volatility, the expected term of the underlying instruments and the estimation of the risk-free interest rate.

### New standards and amendments issued but not yet adopted

Certain new standards, amendments to standards and interpretations are not yet effective for the current reporting period, and therefore have not been applied in preparing the financial statements.

IFRS 16 – "Leases". This is a new standard whereby a lessee recognizes a right-of-use asset and a lease liability. The right-of-use asset is treated similarly to other non-financial assets and depreciated accordingly. The liability accrues interest. This accounting treatment will typically produce a front-loaded expense profile. The new standard is effective January 1, 2019, for fiscal years commencing on or after that date with early adoption permitted.

The Company is currently evaluating the impact of adopting this standard on its financial statements but does not anticipate this new standard will have a significant effect on the financial statements.

### **Other Information**

### Outstanding Share Data - as at August 27, 2018:

Number of common shares issued and outstanding: 82,076,874

Number of common share awards granted and outstanding: 6,565,034

Number of warrants – Standby Purchase Agreements<sup>1</sup> 1,675,000

### **Compliance**

Mr. Neil Dawson, of Australia, and a registered member of AusIMM is the independent consultant who acts as the Qualified Person for the Company on the *CVW* <sup>TM</sup> project.

<sup>&</sup>lt;sup>1</sup> These common share purchase warrants of the Company were issued to standby purchasers who participated in the December 2016 rights offering. Each common share purchase warrant entitles the holder to purchase one additional common share of the Company at a price of \$0.70 per share. The warrants expire on December 21, 2018.