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**Annual Information Form**

**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019**

**DATED SEPTEMBER 8, 2020**

**NANO ONE MATERIALS CORP.**  
**ANNUAL INFORMATION FORM**  
**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019**

**TABLE OF CONTENTS**

|                                                            |    |
|------------------------------------------------------------|----|
| INTRODUCTORY NOTES .....                                   | 4  |
| Date of Information.....                                   | 4  |
| Currency.....                                              | 4  |
| Cautionary Note Regarding Forward-Looking Information..... | 4  |
| GLOSSARY OF DEFINED TERMS .....                            | 5  |
| CORPORATE STRUCTURE .....                                  | 6  |
| Name, Address, and Incorporation .....                     | 6  |
| Intercorporate Relationships .....                         | 6  |
| GENERAL DEVELOPMENT OF THE BUSINESS.....                   | 6  |
| Three Year History .....                                   | 6  |
| DESCRIPTION OF THE BUSINESS.....                           | 9  |
| Corporate Summary .....                                    | 9  |
| Process Developments .....                                 | 10 |
| Product Developments .....                                 | 11 |
| Stage of Development.....                                  | 12 |
| Electric Vehicle Industry .....                            | 12 |
| Specialized Skills and Knowledge.....                      | 13 |
| Patents and Proprietary Technology .....                   | 13 |
| Competitive Conditions .....                               | 14 |
| Economic Dependence.....                                   | 15 |
| Environmental Matters.....                                 | 15 |
| Employees .....                                            | 15 |
| Risk Factors .....                                         | 16 |
| DIVIDENDS.....                                             | 21 |
| DESCRIPTION OF CAPITAL STRUCTURE .....                     | 21 |
| Authorized Capital .....                                   | 21 |
| Common Shares .....                                        | 21 |

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| MARKET FOR SECURITIES .....                                              | 22 |
| Trading Price and Volume .....                                           | 22 |
| Prior Sales .....                                                        | 23 |
| ESCROWED SECURITIES .....                                                | 23 |
| DIRECTORS AND OFFICERS .....                                             | 23 |
| Cease Trade Orders, Bankruptcies, Penalties or Sanctions .....           | 25 |
| Conflicts of Interest.....                                               | 26 |
| LEGAL PROCEEDINGS AND REGULATORY ACTIONS.....                            | 26 |
| AUDIT COMMITTEE .....                                                    | 27 |
| The Audit Committee Charter .....                                        | 27 |
| Composition of the Audit Committee.....                                  | 27 |
| Relevant Education and Experience of Members of the Audit Committee..... | 27 |
| Audit Committee Oversight.....                                           | 28 |
| Pre-Approval Policies and Procedures.....                                | 28 |
| External Auditor Service Fees .....                                      | 28 |
| Exemptions .....                                                         | 29 |
| INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS .....         | 29 |
| TRANSFER AGENT AND REGISTRAR.....                                        | 29 |
| MATERIAL CONTRACTS .....                                                 | 29 |
| NAMES AND INTERESTS OF EXPERTS .....                                     | 29 |
| ADDITIONAL INFORMATION.....                                              | 30 |
| SCHEDULE “A” .....                                                       | 31 |

## **INTRODUCTORY NOTES**

### **Date of Information**

In this Annual Information Form (the “AIF”), unless the content otherwise requires, references to “the Company” or “Nano One” mean Nano One Materials Corp. All information in this AIF is as at December 31, 2019, with subsequent events disclosed to September 8, 2020.

### **Currency**

All dollar amounts are expressed in Canadian dollars unless otherwise indicated.

### **Cautionary Note Regarding Forward-Looking Information**

Except for statements of historical fact, this AIF contains certain forward-looking statements and forward-looking information within the meaning of applicable securities law. Such forward-looking statements and information include, but are not limited to, statements or information with respect to: the Company’s future business and strategies; requirements for additional capital and future financing; estimated future working capital, funds available, and uses of funds, and future capital expenditures and other expenses for specific operations, intellectual property protection; industry demand; ability to obtain employees, consultants or advisors with specialized skills and knowledge; anticipated joint development programs; incurrence of costs; competitive conditions; general economic conditions; and scalability of developed technology.

Forward-looking information is frequently characterized by words such as “plan”, “project”, “intend”, “believe”, “anticipate”, “estimate” and other similar words, or statements that certain events or conditions “may” or “will” occur. Although the Company’s management believes that the assumptions made and the expectations represented by such statement or information are reasonable, there can be no assurance that a forward-looking statement or information referenced herein will prove to be accurate. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include risks relating to research and development; the Company’s intellectual property applications being approved; the Company’s ability to protect its proprietary rights from unauthorized use or disclosure; the ability of the Company to obtain additional financing and secure government assistance; the Company’s limited operating history; the Company’s ability to attract employees, consultants, or advisors with the necessary skills and knowledge; the need to comply with environmental and governmental regulations; fluctuations in currency exchange rates; operating hazards and risks; competition; the possibility of adverse developments in the financial markets generally; and other risks and uncertainties. The Company undertakes no obligation to update forward-looking statements and information if circumstances or management’s estimates should change except as required by law. The reader is cautioned not to place undue reliance on forward-looking statements and information. More detailed information about potential factors that could affect results is included in the documents that may be filed from time to time with the Canadian securities regulatory authorities by the Company.

For a more detailed discussion of certain of these risk factors, see “*Risk Factors*”. The list of “*Risk Factors*” set out in this AIF is not exhaustive of the factors that may affect any of our forward-looking information.

## **GLOSSARY OF DEFINED TERMS**

Unless otherwise defined herein, the following terms used in this AIF have the meanings set forth below:

|                        |                                                                                                                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>“Board”</b>         | means the board of directors of Nano One.                                                                                                                                                                                                           |
| <b>“BCBCA”</b>         | means the <i>British Columbia Business Corporations Act</i> .                                                                                                                                                                                       |
| <b>“Common Shares”</b> | means the common shares in the capital of Nano One                                                                                                                                                                                                  |
| <b>“NI 51-102”</b>     | means National Instrument 51-102, Continuous Disclosure Obligations                                                                                                                                                                                 |
| <b>“TSX-V”</b>         | means the TSX Venture Exchange Inc.                                                                                                                                                                                                                 |
| <b>“SEDAR”</b>         | means the System for Electronic Document Analysis and Retrieval, the electronic filing system for the disclosure documents of public companies and investments funds across Canada, available at <a href="http://www.sedar.com">www.sedar.com</a> . |

## **CORPORATE STRUCTURE**

### **Name, Address, and Incorporation**

The Company was incorporated under the laws of the Province of Alberta on November 5, 1987 and continued under the laws of the Province of British Columbia on September 8, 2004. On March 5, 2015, the Company completed a combination with Perfect Lithium Corp. (“PLC”), a private company incorporated in February 2011 under the laws of the Province of British Columbia, whereby it acquired all the issued and outstanding common shares of PLC in exchange for issuing Common Shares to the former shareholders of PLC. On July 1, 2015, the Company amalgamated with PLC and continued as one company under the name, Nano One Materials Corp. Nano One trades on the TSX-V under the symbol “NNO”.

The Company has developed, patented, and scaled-up innovative processes that produce cathode active materials (CAM) for lithium-ion battery applications in electric vehicles, energy storage, and consumer electronics. The processes are engineered with a low carbon footprint to form protective coatings on individual crystals that improve durability, capacity, charge rates, and add value while reducing process steps and cost. The Company holds several patents, with others pending.

The Company’s head office is located at Unit 101B, 8575 Government Street, Burnaby, BC V3N 4V1 and its registered and records office is located at 2900 - 550 Burrard Street, Vancouver, British Columbia V6C 0A3.

### **Intercorporate Relationships**

Nano One does not have any subsidiaries.

## **GENERAL DEVELOPMENT OF THE BUSINESS**

### **Three Year History**

#### Fiscal 2017

In 2017, the Company completed a non-brokered private placement of units that generated gross proceeds of \$4,180,000, and it completed construction and commissioning of its demonstration pilot plant which had begun during 2016. The pilot plant was the product of a collaboration agreement between the Company, NORAM Engineering and Constructors Ltd. (“NORAM”), and B.C. Research Inc. (“BCRI”) whereby the parties would design, procure, construct, optimize, and operate a pilot production plant with the goal of simulating full scale production of lithium-ion cathode materials, showcasing the Company’s patented technology and demonstrating the cost, scalability, performance, and novelty of the Company’s technology to strategic industry players. Key components of the pilot plant are capable of producing hundreds (100’s) of kilograms batches of various lithium-mixed metal cathode materials that are strategically important to electric vehicle, grid storage, and consumer electronic batteries.

The pilot plant project was supported by the Government of Canada through grants totalling approximately \$3,815,000 in aggregate (received from 2016 to 2019, of which approximately \$1,406,000 was received during 2017). This includes approximately \$2,081,000 from Sustainable Development Technology Canada (“SDTC”), and approximately \$1,734,000 from the Automotive Supplier Innovation Program (“ASIP”), a program of Innovation, Science and Economic Development Canada (“ISED”). The Company demonstrated the synthesis of high energy cathode material for electrical vehicles using lithium carbonate feedstock instead of lithium hydroxide with energy densities on par with industry standards. This demonstration underlines the opportunity of the Company’s technology to enable a wider range of lithium sources for the rapidly growing electric vehicle market and supplements the Company’s other opportunities in the space including improved cathode material durability, power, energy, and processing cost.

The Company successfully demonstrated pilot scale synthesis of Lithium Nickel Manganese Cobaltate (“NMC”), NMC111 and NMC622 with nickel content at 33% and 60%, respectively. These pilot tests were conducted at approximately 100 times normal lab scale and the results provided added confidence that these nickel rich materials can be manufactured at commercial scale. Electrochemical testing of battery cells made with these pilot materials showed initial energy capacity measurements in excess of that achieved in the laboratory. The Company also successfully completed an 18-month project developing cobalt free LNMO cathode material (Lithium Nickel Manganese Oxide or High Voltage Spinel, “HVS”), for lithium-ion batteries, with the support of National Research Council - Industrial Research Assistance Program (“NRC-IRAP”).

### Fiscal 2018

In 2018, the Company announced that it had entered into a Joint Development Agreement with Saint-Gobain (November 2018), a French multinational corporation that produces a wide variety of construction and high-performance materials for applications in automotive, aerospace, health, and energy. Under the joint development agreement, the two companies are working in collaboration to enhance the thermal processing and performance of their respective materials. Saint-Gobain also joined the Company’s SDTC funded project as a consortium member contributing work-in-kind.

The Company also began efforts to synthesize NMC811 with 80% nickel content, which provides relatively high energy density and has applications in longer range electric vehicles. However, NMC811 has well known instabilities that can lead to costly issues with safety, longevity, and handling. The Company is developing an NMC811 material with proprietary coatings and additives to address the inherent shortcomings of NMC811. The Company also successfully synthesized LNMO (or HVS), in the pilot plant with protective coatings that reduce side reactions and improve stability at higher operating temperatures.

The Company also developed a low-cost process for the production of high-performance Lithium Iron Phosphate (“LFP”). This process uses lower cost sources of lithium, iron and phosphorus than incumbent processes, and has been successfully demonstrated in preliminary pilot volumes. The process also generates a carbon coating simultaneously with the formation of the LFP particles thereby eliminating additional process steps. Further, the process generates material

with a small particle size which is desirable, and with an initial energy capacity in excess of 160mAhg<sup>-1</sup> which is equivalent to or better than the highest performing LFP material available.

During 2018, the Company received aggregate payments from government grant funding programs of approximately \$1,428,000. Additionally, the Company executed an agreement with NRC-IRAP (August 2018) for the development of coatings for high durability lithium-ion battery cathodes.

### Fiscal 2019

In 2019, the Company entered into a Joint Development Agreement with Pulead Technology Industry (“Pulead”). Pulead is a highly respected Chinese cathode producer with a track record of partnering with international providers of intellectual property. The two companies are working to improve the cost and performance of LFP materials and to expand its use in industrial batteries, e-buses, and electric vehicles. The objective is to develop, evaluate and optimize scaled up production of Pulead’s LFP cathode materials using the Company’s technology, for use in lithium-ion batteries.

Additionally, the Company executed a contribution agreement with SDTC (July 2019), for non-dilutive and non-repayable funding of up to \$5,000,000 in respect of the Company’s “Scaling Advanced Battery Materials” project. The proceeds are to be distributed over three years in five payments, of which the first instalment of approximately \$974,000 was received during 2019 and will be directed at the expansion of Nano One’s business and technical activities with its partners. The goals are to expand the laboratory, pilot plant, and staffing to support the advancement of next generation lithium-ion battery cathode materials used in electric vehicles, and renewable energy storage.

It was also announced that Volkswagen Group Research had joined Nano One's consortium as an SDTC project contributor, along with previously announced consortium members Pulead, and Saint-Gobain.

In June 2019, the Company received a purchase order in the amount of \$550,000 from a Global OEM (Original Equipment Manufacturer) to jointly evaluate processes and innovative cathode materials for high energy density lithium-ion batteries in automotive applications. The project concluded successfully in May 2020.

During 2019, the Company received aggregate payments from government funding programs of approximately \$1,456,000.

### ***Subsequent Events***

In February 2020, the Company completed a non-brokered private placement consisting of the issue of 9,565,000 units at a price of \$1.15 per unit for gross proceeds of approximately \$11,000,000. Each unit consists of one common share and one-half of a common share purchase warrant with each whole warrant exercisable into one common share at an exercise price of \$1.60 until February 21, 2023. In connection with the placement, the Company also issued 467,740 finders’ warrants having the same terms as the warrants attached to the units.

In May 2020, the Company announced that the Innovative Clean Energy (ICE) Fund of the Province of British Columbia's Ministry of Energy, Mines and Petroleum Resources will be contributing \$3,033,000 to the "Scaling Advanced Battery Material" project in conjunction with, and over and above, the SDTC's \$5,000,000 funding.

In June 2020, the Company completed a detailed engineering report that enhances design specifications, tightens budgetary estimates, and models improved economics for the commercial scale production (4,800 tonne per year) of LFP. The details in this engineering report will help advance the marketing and commercialization of Nano One's technology and help address rising global enthusiasm for LFP with auto companies announcing 600 km range EVs in 2020. The report also forms an engineering basis for Nano One's other cathode materials, namely NMC, and lithium nickel manganese oxide (LNMO).

In June 2020, the Company announced the development of a coated, single crystal cathode material for lithium-ion batteries that is providing up to four (4)-times improvement in longevity. This technology is applicable to all of Nano One's cathode materials but is especially relevant to NMC811.

In August 2020, the Company entered into a Joint Development Agreement with a multi-billion-dollar Asian cathode material producer based outside of China. Pursuant to the agreement, the parties will jointly develop and evaluate cathode materials made with combined technologies including Nano One's patented One-Pot process (described below) for the production of high-performance coated single crystal cathode powders. The agreement also provides a framework to develop a business plan for the commercialization of these jointly developed materials. The potential outcomes of the agreement include formation of a joint venture, licensing of Nano One's technology, and/or further joint development work.

### **Significant Acquisitions**

The Company has not completed any acquisition during its most recently completed fiscal year for which disclosure is required under part 8 of NI 51-102.

## **DESCRIPTION OF THE BUSINESS**

### **Corporate Summary**

The Company has developed, patented and scaled-up innovative processes that produce cathode active materials (CAM) for lithium-ion battery applications in electric vehicles, energy storage systems, and consumer electronics. The processes are engineered with a low carbon footprint to form protective coatings on individual crystals that improve durability, capacity, and charge rates and add value while reducing process steps and cost.

The nanocrystal innovation addresses a fundamental battery trade-off between energy density and durability. Increased durability would provide electric vehicle manufacturers greater flexibility in optimizing range, charging rates, safety, and cost. Nano One's patented One-Pot process combines all input components: lithium, metals, additives, and coatings in a single

reaction to produce a precursor that, when dried and fired, forms quickly into a single crystal cathode material simultaneously with its protective coating.

## **Addressable Markets**

The Company's first addressable market is cathode materials for lithium-ion rechargeable batteries for electric vehicles, energy storage systems, and consumer electronics. There is growing demand in the lithium-ion battery market for more cost effective, higher performance, and environmentally sustainable energy storage solutions. Nano One anticipates growth potential for the technology in many other materials markets including dental, catalysts, specialty ceramics, pharmaceutical, semiconductors, agriculture, aerospace, and communications.

## **Process Developments**

Nano One has developed a new process of producing high-performance cathode materials, which uses standard equipment and simple methods that are known to scale in a wide range of industrial applications. This new process can produce higher performance composite materials while using lower cost feedstock and simpler processing. Nano One's patented and patent-pending technology is a flexible manufacturing platform that enables lithium carbonate (or hydroxide) to be used as feedstock alongside other raw materials comprising metals such as nickel, manganese, cobalt, iron, phosphate, and aluminum. It is a water-based process operating at mild pH and temperature that forms the energy storing cathode materials used in lithium-ion batteries. The process can be configured to produce a range of different nanostructured materials and has the flexibility to shift with emerging and future battery market trends and other growth opportunities.

The process consists of three stages, and the major innovations lie in the first stage where a special mode of combining reactants controls crystal nucleation and growth of particles. Nucleation is the self-assembly of molecules into an organized structure. The desired nano-scale or superfine structure is formed in the first stage of the production cycle and eliminates many steps common to the incumbent industrial processes.

The desired crystal structure, morphology and performance enhancing coatings of the materials are formed readily and simultaneously in the final thermal processing steps, eliminating extra coating steps and the need for long and repeated firings. The process produces materials with stable phase composition (crystal structure) and high porosity, but which is configurable to meet a variety of energy density requirements.

Nano-crystalline structures are formed early in the process and before calcination (i.e. heating to high temperature) which simplifies processing and is advantageous for material performance, process throughput, and scale-up. Characterization of the materials by electron microscope and x-ray provides evidence of the size, composition, and kind of crystal structure needed to withstand thousands of charge cycles.

Typically, synthesis of nanomaterials at the bench scale is performed in small quantities anywhere from 10g to 100g of material. Subsequent scale-up from these small quantities often leads to detrimental changes in thermodynamics (heat, temperature, energy, work) and reaction

kinetics (reaction rates and chemical change). Consequently, the Company has designed, constructed and commissioned bench scale and pilot scale reactors that emulate the thermodynamic and reaction kinetics expected in full-scale production of cathode materials.

The Company continues to develop coating and doping (chemical additives) technologies for LFP, NMC, and LNMO materials (see details of these specific formulations below) with the objective of improving both the durability, stability, and performance characteristics of these materials for use in solid state batteries and other advanced lithium-ion batteries. The Company's process is suitable for component gradients within crystals and surface coatings without the need for additional process steps.

## **Product Developments**

The Company's primary cathode formulations under research include:

- Lithium Nickel Manganese Cobaltate (NMC622, NMC811);
- Lithium Nickel Manganese Oxide (High Voltage Spinel) (LNMO or HVS); and
- Lithium Iron Phosphate (LFP).

In June 2020, the Company announced a breakthrough development of a coated, single crystal cathode material for lithium-ion batteries that is providing up to four (4)-times improvement in longevity compared to uncoated materials. This technology is applicable to all of Nano One's cathode materials but is especially relevant to NMC811.

### ***NMC622***

The Company successfully piloted NMC622 with 60% nickel content. See "Three Year History – Fiscal 2017".

### ***NMC811***

The Company began efforts on NMC811 with 80% nickel content, which provides relatively high energy density and has applications in longer range electric vehicles. See "Three Year History – Fiscal 2018".

### ***LNMO or HVS***

The Company successfully synthesized LNMO (or HVS). Nano One is working with various automotive manufacturers to evaluate its patented One Pot process and coated LNMO (HVS) cathode materials. See "Three Year History – Fiscal 2018".

The largest single challenge in solid state batteries is to design a stable and commercially viable interface between the solid electrolyte, of polymer, ceramic or glass composition, and the solid cathode and anode materials on either side of this electrolyte. The coated LNMO (or HVS) stabilizes the interface between cathode and electrolyte because (i) it does not expand and stress the cathode-electrolyte interface like other cathode materials, and (ii) the coating protects the cathode from side-reactions with the electrolyte while allowing the rapid transfer of lithium-ions between the electrolyte and the cathode. In comparison to other cathode materials, HVS is faster

charging and operates at higher voltage enabling increased power and energy densities. HVS is also free of cobalt and the associated supply chain risk.

## ***LFP***

The Company has developed and successfully piloted a low-cost process for the production of LFP using lower cost sources of materials. See “Three Year Historical – Fiscal 2018”.

As LFP is the safest and lowest cost cathode material for lithium-ion batteries due to its high durability and exclusion of supply-constrained cobalt or nickel, cost reductions could significantly increase the demand for LFP as it becomes a cathode of choice for energy storage systems, replaces lead-acid batteries, and expands its foothold in the electric vehicle industry.

## **Stage of Development**

The Company conducts its own research and development and its technologies and materials are currently in a pre-commercial stage. Aggregate costs for the pre-commercial activities are approximately \$5,000,000 per year,

- LFP is in the final stages of Scale-Up (internal pilot) and Prototyping (Engineering and Demonstration samples) phases. Third Party Validation and First Commercial Plant are targeted for 2021-22.
- NMC811 (and equivalents) are in Feasibility (lab-scale) and Validation (demonstration of commercial interest) phases. Scale-Up, Prototyping, Validation, and Commercial Plant are targeted for 2020-23.

HVS is in the Scale-up Phase, with Prototyping, Validation, Third Party Validation and First Commercial Plant to follow in 2020-22.

## **Electric Vehicle Industry**

The electric vehicle industry is being driven partly by demands for longer range vehicles which require higher energy density lithium-ion batteries that are safe, reliable and cost-effective with increasing demand for environmentally sustainable raw materials, and production processes. These factors have increased the demand for cathode materials composed of higher nickel and lower cobalt content.

Nickel-rich cathode materials include nickel cobalt aluminum oxide (NCA) and nickel-manganese cobalt oxide (NMC-532, 622 and 811). These materials are expected to converge into similar formulations and play an increasingly dominant role in the lithium-ion batteries used by major electric vehicle manufacturers.

Current industrial methods require higher cost lithium hydroxide as feedstock for these nickel-rich cathode materials. The flexibility of the Company’s process enables the use of lithium feedstock in the form of either carbonate or hydroxide for the production of high-performance cathode materials which could reduce constraints on the supply of battery grade lithium by enabling new sources.

To date, the Company has demonstrated the synthesis of high energy cathode material for electric vehicles with energy densities on par with industry standards. This demonstration underlines the opportunity of Nano One's technology to enable a wider range of lithium sources for the rapidly growing electric vehicle market and supplements the Company's other opportunities in the space including improved cathode material durability, power, energy, and processing cost.

### **Specialized Skills and Knowledge**

The Company requires the specialized skills and knowledge of public market specialists, operations managers, material scientists, electrochemists, thermal processing engineers, process engineers, hydro metallurgists, battery testers, technicians, business development, government liaison, and regional marketing expertise. Most of these skills are already in place and where gaps develop, the Company is readily able to identify individuals and companies in the Canadian talent pool as employees, consultants, and/or advisors.

### **Patents and Proprietary Technology**

The Company believes that monetization of its technology is best pursued by protecting its proprietary position with patents and by pursuing a licensing strategy. This is seen as a capitally efficient means to leverage the supply chain, manufacturing, distribution, and legal strengths of multinational materials producers, while allowing the Company and its collaborators to focus on core strengths in technology development.

| <u>Patent Family</u>                                                                       | <u>Short Description</u>                                                                                  | <u>Title</u>                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US 9,136,534<br>CA 2,906,009                                                               | Method of forming a powder by generation of a complexecelle                                               | Complexometric Precursor Formulation For Industrial Production Of High Performance Fine And Ultrafine Powders And Nanopowders For Specialized Applications                        |
| US 9,159,999<br>US 10,446,835<br>CA 2,905,984                                              | Method of forming a powder by formation of a surface interface                                            | Complexometric Precursor Formulation Methodology For Industrial Production Of Fine and Ultrafine Powders and NanoPowders of Layered Lithium Mixed Oxides for Battery Applications |
| US 9,698,419<br>TW I517487<br>US 10,283,763<br>CN 105594023<br>JP 6271599<br>KR 10-1839000 | Battery having a defined discharge capacity, defined porosity, low sodium content and low sulfur content. | Complexometric Precursor Formulation Methodology for Industrial Production of Fine and Ultrafine Powders and Nanopowders of Layered Lithium Mixed Oxides for Battery Production   |
| CA 2905525                                                                                 | Reactor                                                                                                   | Reactor Vessel for Complexecelle Formation                                                                                                                                        |

|                                |                                                                                                                                        |                                                                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US 10,374,232<br>KR 10-1854708 | NMC prepared by the Nano One Process                                                                                                   | Complexometric Precursor Formulation Methodology for Industrial Production of Fine and Ultrafine Powders and Nanopowders for Lithium Metal Oxides for Battery Applications |
| TW I672852                     | Calcined powder comprising a surface stabilized with $\text{MnPO}_4$ . Method of forming the powder and battery comprising the powder. | Phosphate Stabilized Lithium-ion Battery Cathode                                                                                                                           |
| US 10,189,719                  | Process for the formation of lithium metal oxide including recycling of raw materials                                                  | Improved Process for the Manufacture of Lithium Metal Oxide Cathode Materials                                                                                              |

The intellectual property was developed and is wholly-owned by the Company. The Company has filed other patent applications and may file additional patents at a later date to further strengthen its intellectual property and technology going forward, although no assurances can be given that it will be successful in such endeavours. The Company seeks to limit disclosure of its intellectual property by requiring employees, consultants, and partners with access to the technology to execute confidentiality agreements, non-competition agreements, and by restricting access to intellectual property and technology.

### **Competitive Conditions**

The lithium-ion battery market is competitive, with significant barriers to entry, long paths to commercialization, complex supply chains and many technical and market uncertainties.

In response to these challenges, the Company is developing industrial process technology and materials for license to established industrial participants in cathode materials manufacturing, and more broadly, the lithium-ion battery supply chain.

The lithium-ion battery market and the cathode production part of the supply chain are in a rapid multi-year growth phase that is expected to persist through this decade, driven largely by the global transition to electric mobility and industrial energy storage. The Company has developed a cathode production platform technology, capable of making a wide range of cathode materials and enabling the Company to shift, remain relevant, and compete with evolving technological and chemistry trends.

The Company has very few direct competitors as most cathode producers use in-house manufacturing methods based upon a conventional technology and are focused on manufacturing rather than disruptive process innovation.

The Company has been developing its cathode production technology, human resources, and know-how since February 2011 and has invested over \$11,000,000 in R&D. The Company has a growing portfolio of strategically relevant intellectual property to protect its IP from competitors, which includes 16 patents granted and 30+ patents pending in battery centric jurisdictions around the world, as well as trade secrets and engineering plans for full scale production facilities.

China, Korea, Japan, and Taiwan have dominated battery and cathode manufacturing over the last decade, but as jurisdictions such as the Americas, Europe and India ramp up the adoption of electric vehicles and grid storage for renewable energy, the Company expects to see

opportunities to develop its business and license its technology in many diverse geographic areas. Post-COVID infrastructure spending, Environmental, Social, and Governance (ESG) investment strategy and re-patriation of critical supply chains are all expected to accelerate adoption of lithium-ion batteries and the required manufacturing base, to create a wider range of business opportunities for the Company. Further to this, the Company is positioning itself for opportunities in supply chain consolidation to further improve cost competitiveness and environmental sustainability.

The Company has developed significant interest from various industry segments looking for lower cost, lower supply chain risk, improved environmental sustainability, and improved performance. The Company is working to create demand for its technologies through collaboration with OEMs (automotive, industrial, consumer electronic) on the design of next generation batteries. The Company also aims to fulfill demand for its technology through licensing, partnership, and integration with cathode and raw materials producers. This leverages the Company's strengths in process innovation and partners it with the supply chain management, production and sales channels of established OEMs, and materials producers.

### **Economic Dependence**

Though the Company has two joint development agreements in effect (Saint-Gobain, and Pulead) which are integral to the Company's continued research advancements and process improvements, the Company's business is not substantially dependent on any single contract.

The adoption of the Company's technology for the commercial production of cathode materials depends on third party validation of its technology through materials testing, cost modelling, engineering planning, and joint development as precursors to commercial traction through licensing and/or joint venture. The Company has multiple Joint Development programs underway and is working to add more, and as such, is not dependant on the success of any single arrangement to further its business objectives in 2020 and 2021. All such programs are advancing, and all parties are discussing next steps to further the relationships.

### **Environmental Matters**

An obligation to incur environmental costs may arise from the future requirement to decommission its plant and dispose of related infrastructure and chemical materials. The Company has no known obligations of any significance to incur environmental costs, related to its research and development activities, as at December 31, 2019 and the date hereof.

### **Employees**

As at December 31, 2019, the Company had 29 employees, inclusive of members of key management personnel, of which 24 employees are either partially or fully dedicated to the Company's research activities. The Company considers its employee relations to be amicable. In addition, the Company engages contractors and consultants from time to time for administrative, legal and other services as required.

As at the date hereof, the Company had 31 employees.

## **Risk Factors**

*An investment in the Company is speculative and involves a high degree of risk due to the nature of the Company's business. The following risk factors, as well as risks not currently known to the Company, could materially adversely affect the Company's future business, operations and financial condition and could cause them to differ materially from the estimates described in forward-looking statements contained herein. Prospective investors should carefully consider the following risk factors along with the other matters set out herein:*

### ***Global Pandemic (COVID-19)***

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak, which has continued to spread, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or results of operations or on the Company's industry partners who provide in-kind and/or financial contributions to the Company's government programs. There are travel restrictions and health and safety concerns that may delay the Company's research activities. Operations depend on safeguarding all personnel during the outbreak, which may be prohibitive in certain aspects. Nonetheless, the Company has implemented prevention measures at its office and laboratory facilities including the facilitation of remote work programs. Various Government wage and loan subsidies are available to qualified companies to assist them with operating costs during the pandemic, and the various programs are constantly being expanded and relaxed, which may qualify the Company for additional assistance. As at the date hereof, the Company had qualified for and received an additional \$250,000 from SDTC (April 2020), and approximately \$195,000 from the Innovative Assistance Program (under NRC-IRAP) (July to August 2020), both in relation to COVID-19 pandemic relief.

### ***Intellectual Property Protection***

The Company cannot provide any assurance that any intellectual property applications will be approved. Even if they are approved, such patents, trademarks or other intellectual property registrations may be successfully challenged by others or invalidated. The success of the Company and its ability to compete are substantially dependent on its internally developed technologies and processes which the Company will need to protect through a combination of patent, copyright, trade secret and trademark law.

The trademark, copyright, and trade secret positions of the Company's business are uncertain and involve complex and evolving legal and factual questions. In addition, there can be no assurance that competitors will not seek to apply for and obtain trademarks and trade names that will prevent, limit or interfere with the Company's processes. There can be no assurance that the Company will have the financial resources to defend its patents, trademarks, and copyrights from infringement or claims of invalidity. Litigation may be necessary in the future to enforce the Company's intellectual property rights, to protect the Company's trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement. Any such litigation could result in substantial costs and diversion of resources, and could have a

material adverse effect on the Company's business, operating results, and financial condition. There can be no assurance that the Company's means of protecting its proprietary rights will be adequate or that competitors will not independently develop similar services or products. Any failure by the Company to adequately protect its intellectual property could have a material adverse effect on its business, operating results and financial condition.

The patent positions of emerging companies can be highly uncertain and involve complex legal and factual questions. Thus, there can be no assurance that any patent applications made by or on behalf of the Company will result in the issuance of patents, that the Company will develop additional proprietary products that are patentable, that any patents issued or licensed to the Company will provide the Company with any competitive advantages or will not be challenged by any third parties, that the patents of others will not impede the ability of the Company to do business or that third parties will not be able to circumvent the patents assigned or licensed to the Company. Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the Company's products or, if patents are issued and licensed to the Company, design around the patented product developed for the benefit of the Company.

Since patent applications are maintained in secrecy for a period of time after filing, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, the Company cannot be certain that the inventors of the patents were the first creators of inventions covered by pending applications, or that it was the first to file patent applications for such inventions. There can be no assurance that the Company's patents, if issued, would be valid or enforceable by a court or that a competitor's technology or product would be found to infringe such patents.

The Company is not currently aware of any claims asserted by third parties that the Company's intellectual property infringes on their intellectual property. However, in the future, a third party may assert a claim that the Company infringes on their intellectual property. If the Company is forced to defend against these claims, which may be with or without any merit or whether they are resolved in favour or against the Company, the Company may face costly litigation and diversion of management's attention and resources. As a result of such a dispute, the Company may have to develop costly non-infringement technology or enter into license agreements which may not be available at favourable terms.

### ***Performance and Scalability***

To be successful, Nano One will have to successfully scale its internally developed technology while maintaining high product quality and reliability. If Nano One cannot maintain high product quality on a large scale, the Company will be adversely affected. Nano One may encounter difficulties in scaling up cathode materials that are typically required to prototype full size battery cells. Even if Nano One is successful in developing its technologies, Nano One does not know whether the Company will do so in time to satisfy the requirements of the electric vehicle industry or other industries. The Company's current facility hosts a pilot plant and laboratory with limited production capacity.

Any interruption in operations at the current facility could result in the inability to successfully execute the business plan. A number of factors could cause interruptions, including, but not limited to, equipment malfunctions or failures, work stoppages or slow-downs, damage to or destruction of the facility, or regional power shortages. The success of the Company and its ability to compete are substantially dependent on its internally developed technologies.

### ***Management of Growth***

The Company could experience growth that could put a significant strain on each of the Company's managerial, operational and financial resources. The Company must implement and constantly improve its operational and financial systems and expand, train, and manage its employee base to manage growth. In addition, the Company expects that its operational and management systems will face increased strain as a result of the expansion of the Company's technologies. The Company might not be able to effectively manage the expansion of its operations and systems, and its procedures and controls might not be adequate to support its operations. In addition, management might not be able to make and execute decisions rapidly enough to exploit market opportunities for the expansion of the Company's technologies. If the Company is unable to manage its growth effectively, its business, results of operations, and financial condition will suffer. Failure to effectively manage growth could also result in difficulty in launching new processing technology or enhancing existing processing technology, declines in quality or end-user satisfaction, increases in costs or other operational difficulties, and any of these difficulties could have a material adverse effect on its business, prospects, financial condition, results of operations, and cash flows.

### ***Competition***

Despite efforts by the Company to protect its proprietary rights on which the Company's business is dependent, competitive products may be developed in the future. Competition could adversely affect the Company's ability to acquire market share.

### ***Execution of Business Plan***

The execution of the Company's business plan poses many challenges and is based on a number of assumptions. The Company may not be able to successfully execute its business plan. If the Company experiences significant cost overruns on its programs, or if its business plan is more costly than it anticipates, certain research and development activities may be delayed or eliminated, resulting in changes or delays to its commercialization plans, or the Company may be compelled to secure additional funding (which may or may not be available) to execute its business plan. The Company cannot predict with certainty its future revenues or results from its operations. If the assumptions on which its revenues or expenditures forecasts are based change, the benefits of the Company's business plan may change as well. In addition, the Company may consider expanding its business beyond what is currently contemplated in its business plan. Depending on the financing requirements of a potential acquisition or new product opportunity, the Company may be required to raise additional capital through the issuance of equity or debt. If the Company is unable to raise additional capital on acceptable terms, it may be unable to pursue a potential acquisition or new product opportunity.

Currently, the Company has no history of profitable operations or material revenue. As such, the Company is subject to many risks including under-capitalization, cash shortages, and limitations with respect to personnel, financial, and other resources.

### ***Access to Proprietary Information***

The Company generally controls access to and distribution of its technologies, documentation, and other proprietary information. Despite efforts by the Company to protect its proprietary rights from unauthorized use or disclosure, parties may attempt to disclose, obtain, or use its solutions or technologies. There can be no assurance that the steps the Company has taken or will be taking will prevent misappropriation of its solutions or technologies, particularly in foreign jurisdictions where laws or law enforcement practices may not protect proprietary rights as fully as in Canada or the United States.

### ***Information Technology Interruptions or Breaches***

The Company's business operations are managed through a variety of information technology systems. These systems govern all aspects of its operations. While the Company has implemented a number of measures to keep its technology systems fully operational and to mitigate the risks associated with a failure of its systems, the Company's systems are subject to damage or interruption from power outages, computer and telecommunications failures, computer viruses, cyber-attacks, security breaches, catastrophic events such as fires, floods, earthquakes, tornadoes, hurricanes, acts of war or terrorism, and usage errors by its employees. If the Company's information technology systems are damaged or cease to function properly, the Company may have to make a significant investment to fix or replace them and the Company may suffer loss of critical data and interruptions or delays in its operations in the interim. Any material interruption in its information technology systems could have a material adverse effect on the Company's business, prospects, financial condition, results of operations, and cash flows.

### ***Environmental Regulation***

The Company's business and operations are subject to environmental regulation in the areas in which it operates. There is no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's business and operations. Additionally, applicable regulations may change, and additional government regulations may be enacted that could impact the Company. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action. If we are not able to maintain regulatory compliance, are slow or unable to adopt new requirements or policies, or effect changes to existing requirements, the Company may be adversely affected.

### ***Commodity Price, Raw Materials***

Industrial chemicals used in Nano One's technologies are subject to market price fluctuations. Market price fluctuations could have a material adverse effect on Nano One's business plan execution. There can be no assurance that the price of the raw materials will not increase in the future.

### ***Dependence on Management and Key Personnel***

The Company's success depends largely upon the continued services of its executive Officers and other key employees. From time to time, there may be changes in the Company's executive management team resulting from the hiring or departure of executives, which could disrupt its business. If the Company is unable to attract and retain top talents, its ability to compete may be harmed. The Company's success is also highly dependent on its continuing ability to identify, hire, train, retain and motivate highly qualified personnel. Competition for highly skilled technical, research and development, management, sales, and other employees is high in the Company's industry, and the Company may not be successful in attracting and retaining such personnel. Failure to attract and retain qualified executive Officers and other key employees could have a material adverse effect on its business, prospects, financial condition, results of operations, and cash flows.

### ***Economic Conditions***

Current and future unfavourable economic conditions could negatively impact the Company's financial viability. Unfavourable economic conditions could also increase the Company's financing costs, decrease net income or increase net loss, limit access to capital markets, and negatively impact any of the availability of credit facilities to the Company. See "Global Pandemic (COVID-19)" above.

### ***Additional Capital Requirements***

The Company has incurred annual losses since inception and it plans on continuing to make significant expenditures to support its business growth and may require additional funds to respond to business challenges, including the need to expand sales and marketing activities, develop new processing technologies to enhance its existing technology, enhance its operating infrastructure, and acquire complementary businesses and technologies. Accordingly, the Company may need to engage in equity or debt financings to secure additional funds. If the Company raises additional funds through further issuances of equity or convertible debt securities, the Company's existing shareholders could suffer significant dilution, and any new equity securities the Company issues could have rights, preferences and privileges superior to those of holders of the Company's Common Shares. Any debt financing secured by the Company in the future could involve restrictive covenants relating to its capital raising activities and other financial and operational matters, which might make it more difficult for it to obtain additional capital and to pursue business opportunities.

The Company can provide no assurance that sufficient debt or equity financing will be available on reasonable terms or at all to support its business growth and to respond to business challenges and failure to obtain sufficient debt or equity financing when required could have a material adverse effect on its business, prospects, financial condition, results of operations, and cash flows.

## **DIVIDENDS**

No dividends on the Common Shares have been paid by the Company to date and the Company has no plans at present to pay dividends.

## **DESCRIPTION OF CAPITAL STRUCTURE**

### **Authorized Capital**

The Company has an authorized share capital consisting of an unlimited number of common shares without par value (the “**Common Shares**”). As at the date hereof, the Company had outstanding (i) 80,465,869 fully paid and non-assessable Common Shares without par value (December 31, 2019 - 67,189,802).

### **Common Shares**

The holders of the Common Shares are entitled to receive notice of and to attend all meetings of the shareholders of the Company and have one vote for each Common Share held at all meetings of the shareholders of the Company. All of the Common Shares rank equally within their class as to dividends, voting rights, participation in assets and in all other respects. None of the Common Shares are subject to any call or assessment nor pre-emptive or conversion rights. There are no provisions attached to the Common Shares for redemption, purchase for cancellation, surrender, or sinking or purchase funds.

As at the date hereof, 4,709,127 Common Shares are reserved for issuance under stock options granted, collectively ranging in exercise prices from \$0.38 to \$2.52 per share.

As at the date hereof, 4,632,987 Common Shares are reserved for issuance under share purchase warrants issued, all of which are exercisable at \$1.60 per share.

## MARKET FOR SECURITIES

### Trading Price and Volume

The following table sets forth information relating to the trading of the Common Shares on the TSX-V under the symbol “NNO”, for the Company’s last completed fiscal year and up to August 2020. This data assumes the entire volume under the TSX-V and includes all ATS (Alternative Trading Systems) data.

| <b>Month</b>       | <b>High<br/>(\$)</b> | <b>Low<br/>(\$)</b> | <b>Close<br/>(\$)</b> | <b>Volume</b> |
|--------------------|----------------------|---------------------|-----------------------|---------------|
| January 2019       | 1.55                 | 1.11                | 1.41                  | 1,830,235     |
| February 2019      | 1.69                 | 1.38                | 1.42                  | 2,142,923     |
| March 2019         | 1.48                 | 1.20                | 1.24                  | 906,563       |
| April 2019         | 1.36                 | 1.16                | 1.24                  | 895,387       |
| May 2019           | 1.39                 | 1.19                | 1.31                  | 1,515,793     |
| June 2019          | 1.51                 | 1.29                | 1.33                  | 2,427,424     |
| July 2019          | 1.40                 | 1.16                | 1.22                  | 1,590,776     |
| August 2019        | 1.25                 | 1.07                | 1.24                  | 1,241,820     |
| September 2019     | 1.47                 | 1.19                | 1.27                  | 1,336,418     |
| October 2019       | 1.29                 | 1.10                | 1.15                  | 1,081,007     |
| November 2019      | 1.30                 | 1.08                | 1.13                  | 1,046,435     |
| December 2019      | 1.25                 | 1.07                | 1.16                  | 1,065,604     |
| January 2020       | 1.54                 | 1.12                | 1.32                  | 3,263,013     |
| February 2020      | 1.69                 | 1.23                | 1.27                  | 5,488,128     |
| March 2020         | 1.36                 | 0.75                | 0.93                  | 4,085,028     |
| April 2020         | 1.34                 | 0.85                | 1.28                  | 2,347,120     |
| May 2020           | 1.50                 | 1.21                | 1.32                  | 2,325,504     |
| June 2020          | 1.58                 | 1.21                | 1.34                  | 3,830,140     |
| July 2020          | 3.46                 | 1.35                | 2.96                  | 25,121,266    |
| August 2020        | 3.77                 | 2.45                | 3.15                  | 12,042,584    |
| September 1-7 2020 | 3.24                 | 2.73                | 2.96                  | 2,249,453     |

## Prior Sales

During the fiscal year ended December 31, 2019, the following securities of the Company, which are not listed or quoted on a marketplace, were granted or issued:

| Date of Grant or Issuance | Aggregate Number and Type of Securities | Exercise Price per Security (\$) |
|---------------------------|-----------------------------------------|----------------------------------|
| January 24, 2019          | 60,000 Options                          | 1.37                             |
| March 21, 2019            | 100,000 Options                         | 1.35                             |
| August 23, 2019           | 676,500 Warrants <sup>(1)</sup>         | 1.60                             |
| September 3, 2019         | 35,000 Options                          | 1.25                             |

- (1) The warrants were issued pursuant to an incentive warrant exercise program which facilitated the early exercise of outstanding warrants which had an expiry of September 8, 2019. Under the program, 676,500 warrants were exercised into Common Shares at a price of \$1.25 each for proceeds of \$845,625 on August 23, 2019. Accordingly, the Company issued one incentive warrant for every warrant exercised under the program.

## ESCROWED SECURITIES

To the knowledge of the Company, there are no securities of the Company that are in escrow or subject to contractual restriction.

## DIRECTORS AND OFFICERS

The Company's directors are elected by the shareholders at each annual meeting and hold office until the next annual meeting at which time they may be re-elected or replaced. Casual vacancies on the Board are filled by the remaining directors, in accordance with the articles of the Company, and the persons filling those vacancies hold office until the next annual general meeting at which time they may be re-elected or replaced. The officers are appointed by the Board and hold office at the pleasure of the Board.

The following table sets forth the name of each of our directors and executive officers, their province or state and country of residence, their position(s) with the Company, their principal occupation during the preceding five years, and the date they first became a director or officer of the Company.

| <b>Name, Position(s) with the Company <sup>(1)</sup> and Place of Residence <sup>(3)</sup></b>           | <b>Principal Occupation <sup>(2)</sup> <sup>(3)</sup></b>                                                                                                                                                                                                                                                                                                                                                                                      | <b>Date(s) Served as a Director or Officer Since</b> | <b>Ownership or Control Over Voting Shares Held <sup>(3)</sup></b> |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------|
| <b>Paul Matysek</b><br>Chairman and Director<br><i>British Columbia, Canada</i>                          | The Company's Chairman since March 2015.<br><br>Director of Forsys Metals Corp. since October 2007, Chairman of Victory Metals Inc. since January 2019, CEO and Chairman of Gold X Mining Corp. since April 2020.<br><br>Past Chairman of First Cobalt Corp. and Lithium X Energy Corp. since October 2019. Past President and CEO of Goldrock Mines Corp., Lithium One Inc., Potash One Inc. and Energy Metals Corporation from 2004 to 2015. | January 29, 2012                                     | 2,570,249 <sup>(5)</sup>                                           |
| <b>Dan Blondal</b><br>CEO and Director<br><i>British Columbia, Canada</i>                                | The Company's CEO since March 2015.<br><br>CEO of Perfect Lithium Corp. since July 2014, co-CEO of Perfect Lithium Corp. since 2011.                                                                                                                                                                                                                                                                                                           | March 5, 2015                                        | 1,560,000                                                          |
| <b>John Lando</b> <sup>(4)</sup><br>President and Director<br><i>British Columbia, Canada</i>            | The Company's President since March 2015, and interim CFO from October 2018 to January 2020. President of Perfect Lithium Corp. since 2011.<br><br>President of Northern Lion Gold Corp., and New World Resource Corp.                                                                                                                                                                                                                         | March 5, 2015                                        | 1,942,500 <sup>(6)</sup>                                           |
| <b>Lyle Brown</b> <sup>(4)(7)</sup><br>Director<br><i>British Columbia, Canada</i>                       | Partner of Culver & Co., an accounting firm.                                                                                                                                                                                                                                                                                                                                                                                                   | March 5, 2015                                        | 215,333                                                            |
| <b>Dr. Joseph Guy</b> <sup>(4)(7)</sup><br>Director<br><i>North Carolina, USA</i>                        | Patent Agent since 1992. Patent Filing Specialists Inc. since 2018.<br><br>Perkins Law Firm, LLC from 2013-2018. Nexsen Pruet, LLC from 2000 - 2013.                                                                                                                                                                                                                                                                                           | March 5, 2015                                        | 100,000                                                            |
| <b>Dan Martino</b><br>Chief Financial Officer and Corporate Secretary<br><i>British Columbia, Canada</i> | The Company's CFO and Corporate Secretary since January 2020. Chartered Professional Accountant at Donaldson Brohman Martin CPA, Inc.<br><br>Former Principal at Davidson & Company LLP, in assurance and financial reporting.                                                                                                                                                                                                                 | January 20, 2020                                     | 10,000                                                             |
| <b>Stephen Campbell</b><br>Chief Technology Officer<br><i>British Columbia, Canada</i>                   | The Company's CTO since October 2018. Principal Scientist of the Company from September 2015 to September 2018.                                                                                                                                                                                                                                                                                                                                | October 9, 2018                                      | Nil                                                                |

Notes:

- (1) For the purposes of disclosing positions held in the Company, “Company” includes the Company and any parent or subsidiary thereof.
- (2) Unless otherwise stated above, any nominees named above not elected at the last annual general meeting have held the principal occupation or employment indicated for at least five years.
- (3) The information as to province or state and country of residence, principal occupation, and number of shares beneficially owned by the nominees (directly or indirectly or over which control or direction is exercised) is not within the knowledge of the management of the Company and has been furnished by the respective nominees.
- (4) Members of the Company’s Audit Committee. Mr. Brown is Chair of the Audit Committee.
- (5) Mr. Matysek holds 1,829,583 Common Shares directly. 740,666 Common Shares are held indirectly by Mr. Matysek through Bedrock Capital Corporation, a company controlled by Mr. Matysek.
- (6) Mr. Lando holds 490,000 Common Shares directly. 1,452,500 Common Shares are held indirectly by Mr. Lando through Sterling Pacific Capital Inc., a company controlled by Mr. Lando.
- (7) Members of the Company’s Compensation Committee, which was formed on July 17, 2020. Dr. Guy is Chair of the Compensation Committee.

As at the date hereof, the directors and executive officers of the Company, collectively, beneficially own, directly and indirectly, or exercise control or direction over 6,398,082 Common Shares, representing approximately 8.0% of the total number of Common Shares outstanding. The statement as to the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by the directors and executive officers of the Company as a group is based upon information furnished by the directors and executive officers.

### **Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

No director or executive officer of the Company is, or within ten years prior to the date hereof has been, a director, chief executive officer or chief financial officer of any company (including the Company) that (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or (ii) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company (i) is, or within ten years prior to the date hereof has been, a director or executive officer of any company (including

the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (ii) has, within ten years prior to the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer, or shareholder.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

### **Conflicts of Interest**

Certain of the directors and/or executive officers of the Company serve (and may in the future serve) as directors and/or executive officers of other companies and therefore, it is possible that a conflict may arise between their duties as a director and/or executive officer or member of management of the Company and their duties as a director and/or executive officer of such other companies. The directors and executive officers of the Company are aware of the existence of laws governing accountability of directors and executive officers for corporate opportunity and requiring disclosures by directors of conflicts of interest and the Company will rely upon such laws in respect of any directors' and executive officers' conflicts of interest or in respect of any breaches of duty by any of its directors or executive officers. All such conflicts will be disclosed by such directors or executive officers in accordance with the BCBCA and they will govern themselves in respect thereof to the best of their ability in accordance with the obligations imposed upon them by law.

### **LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

To the best of Company's knowledge, there are no material legal proceedings by or against the Company or affecting any of its interests as at December 31, 2019 or the date hereof nor are we aware that any such proceedings are contemplated.

Furthermore, there are no: (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during its most recently completed fiscal year; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision in the Company; or (c) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority during its most recently completed fiscal year.

## **AUDIT COMMITTEE**

### **The Audit Committee Charter**

The Company's Audit Committee is governed by an Audit Committee Charter. A copy of the Company's Audit Committee Charter is attached hereto as Schedule "A".

### **Composition of the Audit Committee**

The Company's Audit Committee is comprised of three directors: John Lando, Dr. Joseph Guy, and Lyle Brown. As defined in NI 52-110, Dr. Joseph Guy and Lyle Brown are independent. John Lando is not independent as he is the President of the Company. As a venture issuer, the Company is not required to have an audit committee that is comprised entirely of independent directors but is required to have a majority of its members not be officers or employees.

All of the Audit Committee members are "financially literate", as defined in NI 52-110, as all have the industry experience necessary to understand and analyze financial statements of the Company, as well as the understanding of internal controls and procedures necessary for financial reporting.

The Audit Committee is responsible for the review of both interim and annual financial statements for the Company. For the purposes of performing their duties, the members of the Audit Committee have the right at all times, to inspect all the books and financial records of the Company and to discuss with management and the external auditors of the Company any accounts, records and matters relating to the financial statements of the Company. The audit committee members meet periodically with management and annually with the external auditors.

### **Relevant Education and Experience of Members of the Audit Committee**

Every member in the Audit Committee has sufficient education and experience to perform their responsibilities in relation to the Audit Committee, including:

- Understanding the accounting principles used by the Company to prepare its financial statements;
- Having the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and provisions;
- Experience preparing, auditing, analyzing, or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising one or more individuals engaged in such activities; and
- An understanding of internal controls and procedures for financial reporting.

The relevant education and/or experience of each member of the Audit Committee is as follows:

- Mr. Brown, chair of the Audit Committee, is a Chartered Professional Accountant. He has a clear understanding of the accounting principles used by the Company to prepare its financial statements; has the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves; has experience actively supervising one or more individuals engaged in preparing, auditing, analyzing, or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, and has an understanding of internal controls and procedures for financial reporting.
- Mr. Lando's industry experience in the management and administration of publicly traded companies provides him with an understanding of the accounting principles used by the Company to prepare its financial statements, the ability to assess the general application of such accounting principles, and analyze or evaluate financial statements, and an understanding of internal controls and procedures for financial reporting.
- Dr. Guy's experience in corporate research, management, and intellectual property provides him with an understanding of the accounting principles used by the Company to prepare its financial statements, the ability to assess the general application of such accounting principles, and analyze or evaluate financial statements, and an understanding of internal controls and procedures for financial reporting.

### **Audit Committee Oversight**

At no time since the commencement of the Company's most recently completed fiscal year was a recommendation of the Committee to nominate or compensate an external auditor (currently, Davidson & Company LLP) not adopted by the Board.

### **Pre-Approval Policies and Procedures**

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as set out in the Audit Committee Charter of the Company. A copy of the Company's Audit Committee Charter is attached hereto as Schedule "A".

### **External Auditor Service Fees**

In the following table, "audit fees" are fees billed by the Company's external auditor for services provided in auditing the Company's annual financial statements for the subject year. "Audit-related fees" are fees not included in audit fees that are billed by the auditor for assurance and related services that are reasonably related to the performance of the audit review of the Company's financial statements. "Tax fees" are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning. "All other fees" are fees billed by the auditor for products and services not included in the foregoing categories.

The aggregate fees billed by the Company's external auditor in the last two fiscal years, by category, are as follows:

| <b>Fiscal year Ending</b> | <b>Audit Fees</b> | <b>Audit-Related Fees<sup>(2)</sup></b> | <b>Tax Fees<sup>(1)</sup></b> | <b>All Other Fees</b> |
|---------------------------|-------------------|-----------------------------------------|-------------------------------|-----------------------|
| December 31, 2019         | \$32,500          | \$ -                                    | \$950                         | \$ -                  |
| December 31, 2018         | \$33,150          | \$7,500                                 | \$2,000                       | \$ -                  |

- (1) Tax Fees were for assistance provided to the Company in the preparation and filing of its annual tax returns.
- (2) Audit-related fees were for the auditors' review of the financial statements and MD&A for the quarter ended June 30, 2018.

### **Exemptions**

The Company is relying on the exemption provided by section 6.1 of NI 52-110, which exempts venture issuers, such as the Company, from the requirement that all directors of the Audit Committee be independent as required by Part 3 (Composition of the Audit Committee).

### **INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Other than disclosed elsewhere in this AIF, no director, senior officer or principal shareholder of the Company and no associate or affiliate of the foregoing have had a material interest, direct or indirect, in any transaction in which the Company has participated within the three year period prior to the date of this AIF, or will have any material interest in any proposed transaction, which has materially affected or will materially affect the Company.

### **TRANSFER AGENT AND REGISTRAR**

The Company's transfer agent and registrar is Computershare Investor Services Inc. located at 510 Burrard St, 3<sup>rd</sup> Floor, Vancouver, BC V6C 3B9.

### **MATERIAL CONTRACTS**

The Company has not entered into any material contracts (i) since the beginning of its most recently completed fiscal year or (ii) before the beginning of its most recently completed fiscal year and that are still in effect, other than contracts entered into in the ordinary course of business.

### **NAMES AND INTERESTS OF EXPERTS**

The Company's auditors are Davidson & Company LLP of 1200 - 609 Granville St, Vancouver, BC V7Y 1G6. Davidson & Company LLP is independent of the Company according to its rules of professional conduct.

## **ADDITIONAL INFORMATION**

Additional information relating to Nano One may be obtained from SEDAR at [www.sedar.com](http://www.sedar.com) under the Company's profile.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, options to purchase securities, and interests of insiders in material transactions, where applicable, are contained in the Company's information circular as filed on SEDAR on June 25, 2020.

Additional financial information is provided in the Company's annual financial statements and Management's Discussion & Analysis for the fiscal year ended December 31, 2019.

## **SCHEDULE “A”**

### **Charter of the Audit Committee of the Board of Directors**

#### **of Nano One Materials Corp.**

#### **(the “Company”)**

### **MANDATE**

The primary function of the audit committee (the “Committee”) of Nano One Materials Corp. (the “Company”) is to assist the Board of Directors in fulfilling its financial oversight responsibilities by reviewing the financial reports and other financial information provided by the Company to regulatory authorities and shareholders, the Company’s systems of internal controls regarding finance and accounting and the Company’s auditing, accounting and financial reporting processes. The Committee’s primary duties and responsibilities are to:

- Serve as an independent and objective party to monitor the Company’s financial reporting and internal control system and review the Company’s financial statements.
- Review and appraise the performance of the Company’s external auditors (the “Auditor”).
- Provide an open avenue of communication among the Company’s auditors, management and the Board of Directors.

### **COMPOSITION, PROCEDURES AND ORGANIZATION**

The Committee shall consist of at least three members. Each member must be a director of the Company. A majority of the members of the Committee shall not be executive officers or employees of the Company or of an affiliate of the Company. At least one (1) member of the Committee shall be financially literate. All members of the Committee who are not financially literate will work towards becoming financially literate to obtain working familiarity with basic finance and accounting practices. For the purposes of this Charter, the term “financially literate” means the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company’s financial statements.

The members of the Committee shall be appointed by the Board of Directors at its first meeting following the annual shareholders’ meeting. Unless a Chair is elected by the full Board of Directors, the members of the Committee may designate a Chair by a majority vote of the full Committee membership. The Chair shall be financially literate. The Board of Directors may at any time remove or replace any member of the Committee and may fill any vacancy in the Committee.

## **MEETINGS OF THE COMMITTEE**

Meetings of the Committee shall be scheduled to take place at regular intervals and, in any event, not less frequently than quarterly. Unless all members are present and waive notice, or those absent waive notice before or after a meeting, the Chairman will give the Committee members 24 hours' advance notice of each meeting and the matters to be discussed at such meeting. Notice may be given personally, by telephone, by facsimile or e-mail.

The Auditor shall be given reasonable notice of, and be entitled to attend and speak at, each meeting of the Committee concerning the Company's annual financial statements and, if the Committee determines it to be necessary or appropriate, at any other meeting. On request by the Auditor, the Chair shall call a meeting of the Committee to consider any matter that the Auditor believes should be brought to the attention of the Committee, the Board of Directors or the shareholders of the Company.

At each meeting of the Committee, a quorum shall consist of a majority of members that are not officers or employees of the Company or of an affiliate of the Company. A member may participate in a meeting of the Committee in person or by telephone if all members participating in the meeting, whether in person or by telephone or other communications medium other than telephone are able to communicate with each other and if all members who wish to participate in the meeting agree to such participation.

The Committee may periodically meet separately with each of management and the Auditor to discuss any matters that the Committee or any of these groups believes would be appropriate to discuss privately. In addition, the Committee should meet with the Auditor and management annually to review the Company's financial statements.

The Committee may invite to its meetings any director, any manager of the Company, and any other person whom it deems appropriate to consult in order to carry out its responsibilities.

## **RESPONSIBILITIES AND DUTIES**

To fulfil its responsibilities and duties, the Committee shall:

1. Review the Company's financial statements, including any certification, report, opinion, or review rendered by the Auditor, MD&A and any annual and interim earnings press releases before the Company publicly discloses such information.
2. Review and satisfy itself that adequate procedures are in place and review the Company's public disclosure of financial information extracted or derived from its financial statements, other than disclosure described in the previous paragraph, and periodically assess the adequacy of those procedures.
3. Be directly responsible for overseeing the work by the Auditor (including resolution of disagreements between management and the Auditor regarding financial reporting) engaged for the purpose of preparing or issuing an audit report or performing other audit review services for the Company.

4. Require the Auditor to report directly to the Committee.
5. Review annually the performance of the Auditor who shall be ultimately accountable to the Board of Directors and the Committee as representatives of the shareholders of the Company.
6. Review and discuss with the Auditor any disclosed relationships or services that may impact the objectivity and independence of the Auditor.
7. Take, or recommend that the Board of Directors take, appropriate action to oversee the independence of the Auditor.
8. Recommend to the Board of Directors the external auditor to be nominated at the annual general meeting for appointment and the Auditor for the ensuing year and the compensation for the Auditors, or, if applicable, the replacement of the Auditor.
9. Review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the Auditor and former independent external auditors of the Company.
10. Review with management and the Auditor the audit plan for the annual financial statements.
11. Review and pre-approve all audit and audit-related services and the fees and other compensation related thereto, and any non-audit services provided by the Auditor. The pre-approval requirement is waived with respect to the provision of non-audit services if:
  - (a) the aggregate amount of all such non-audit services that were not pre-approved is reasonably expected to constitute not more than 5% of the total amount of fees paid by the Company and its subsidiary entities to the Auditor during the fiscal year in which the non-audit services are provided;
  - (b) such services were not recognized by the Company at the time of the engagement to be non-audit services; and
  - (c) such services are promptly brought to the attention of the Committee and approved, prior to the completion of the audit, by the Committee or by one or more members of the Committee to whom authority to grant such approvals has been delegated by the Committee.
12. The Committee may delegate to one or more independent members of the Committee the authority to pre-approve non-audit services in satisfaction of the pre-approval requirement set forth in this section provided the pre-approval of non-audit services by any member to whom authority has been delegated must be presented to the Committee at its first scheduled meeting following such pre-approval.
13. In consultation with the Auditor, review with management the integrity of the Company's financial reporting process, both internal and external.

14. Consider the Auditor's judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.
15. Consider and approve, if appropriate, changes to the Company's auditing and accounting principles and practices as suggested by the Auditor and management.
16. Review significant judgments made by management in the preparation of the financial statements and the view of the Auditor as to the appropriateness of such judgments.
17. Following completion of the annual audit, review separately with management and the Auditor any significant difficulties encountered during the course of the audit, including any restrictions on the scope of the work or access to required information.
18. Review any significant disagreement among management and the Auditor in connection with the preparation of the financial statements.
19. Review with the Auditor and management the extent to which changes and improvements in financial or accounting practices have been implemented.
20. Discuss with the Auditor the Auditor's perception of the Company's financial and accounting personnel, any material recommendations which the Auditor may have, the level of co-operation which the Auditor received during the course of their review and the adequacy of their access to records, data or other requested information.
21. Maintain, review and update the procedures for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters, as set forth in Annex A attached to this Charter.
22. Perform such other duties as may be assigned to it by the Board of Directors from time to time or as may be required by applicable regulatory authorities or legislation.
23. Report regularly and on a timely basis to the Board of Directors on the matters coming before the Committee.
24. Review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board of Directors for approval.

## **AUTHORITY**

The Committee is authorized to:

- to seek any information it requires from any employee of the Company in order to perform its duties;

- to engage, at the Company's expense, independent legal counsel or other professional advisors in any matter within the scope of the role and duties of the Committee under this Charter;
- to set and pay compensation for any advisors engaged by the Committee; and
- to communicate directly with the internal and external auditors of the Company.

This Charter supersedes and replaces all prior charters and other terms of reference pertaining to the Committee.