NAM Files NI 43-101 Technical Report for Preliminary Economic Assessment on the River Valley PGE Project, Sudbury, Ontario, Canada

written by Raj Shah | August 8, 2019

August 8, 2019 (Source) – New Age Metals Inc. (NAM or the Company) (TSXV:NAM) (OTC:NMTLF) (FSE:P7J.F) Harry Barr, Chairman & CEO, stated; "We are pleased to announce that we have filed our National Instrument 43-101 Technical Report on the Preliminary Economic Assessment (PEA) on the Company's 100% owned River Valley PGM Project in Sudbury, Ontario Canada (River Valley or the Project) titled "Technical Report, Updated Mineral Resource Estimate and Preliminary Economic Assessment of the River Valley Project" with an Effective Date of June 27, 2019, on SEDAR at www.sedar.com. The PEA demonstrates positive economics for a large-scale open pit mining operation, with 14 years of Palladium and Platinum production."

(*) Cautionary statement NI 43-101: The PEA was prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). Readers are cautioned that the PEA is preliminary in nature. It includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves,

and there is no certainty that the PEA will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

All currency is stated as CDN$ unless stated otherwise.

PEA Highlights (CDN$ unless otherwise noted):

- Life of mine (LOM) of 14 years, with 6 million tonnes annually of potential process plant feed at an average grade of 0.88 g/t Palladium Equivalent (PdEq) and process recovery rate of 80%, resulting in an annual average payable PdEq production of 119,000 ounces
- Pre-Production capital requirements: $495 M
- Undiscounted cash flow before income and mining taxes of $586M
- Undiscounted cash flow after income and mining taxes of $384M
- Average unit operating cost of $19.50/tonne over the life-of-mine
- LOM average operating cash cost of $971 per ounce (US$709/oz) and all-in sustaining cash cost of $972 per ounce (US$709/oz) at a 1.37 CDN: USD exchange rate.
- A mining contractor will be engaged for the open pit mining
- Pre-tax NPV (5%): $261M, After-tax NPV (5%): $138 M
- Pre-tax IRR: 13%, After-tax IRR: 10%
- Assumed metal prices of US$1,200/oz Pd, US$1,050/oz Pt, US$1,350/oz Au, US$3.25/lb Cu, US$8.00/lb Ni, US$35/lb Co
- Using a + 20% Pd price sensitivity (to the base case of US$1,200/oz Pd) US$1,440 /oz Pd returns a pre-tax IRR of 19% and an after tax-IRR of 15%.
- River Valley process plant feed will be treated by a conventional sulphide flotation process plant to produce a single saleable PGE concentrate that will be transported

to the Sudbury area for smelting/refining
- Potential for up to 325 jobs at the peak of production

Project Economics and Sensitivities

The economic results of the PEA are summarized in Table 1 on an after-tax basis. The sensitivities and the impact of cash flows have been calculated for +/- 20% variations against the base case.

Table 1: Project Economics Sensitivity. All values shown are on an after-tax basis.

Project Sensitivity Analysis									
Pd Price Sensitivity									
%	-20%	-15%	-10%	-5%	Base Case	+5%	+10%	+15%	+20%
US$/oz	960	1,020	1,080	1,140	1,200	1,260	1,320	1,380	1,440
NPV (CDN$ M)	-23	16	59	98	138	179	220	260	300
IRR (%)	4	6	7	8	10	11	12	13	15
OPEX Sensitivity									
%	-20%	-15%	-10%	-5%	Base Case	+5%	+10%	+15%	+20%
Cost Per Tonne	16	17	18	18	19	20	21	22	23
NPV (CDN$ M)	212	194	175	157	138	120	102	83	68
IRR (%)	14	12	11	10	10	9	8	7	7

CAPEX Sensitivity									
%	-20%	-15%	-10%	-5%	Base Case	+5%	+10%	+15%	+20%
CAPEX (CDN$ M)	397	422	446	471	496	521	546	570	595
NPV (CDN$ M)	284	248	212	175	138	102	64	28	-6
IRR (%)	14	13	12	11	10	8	7	6	5

Updated Mineral Resource Estimate

The pit constrained Updated Mineral Resource Estimate which formed the basis of the PEA, is set out in Table 2 and was prepared by WSP under the supervision of Todd McCracken, P. Geo., an “Independent Qualified Person”, as defined in NI 43-101. The effective date of this Updated Mineral Resource Estimate is January 9, 2019. The Updated Mineral Resource database contains 710 boreholes with 106,554 assays records in the database, and 2,642 surface channel samplings. The Updated Mineral Resource Estimate was completed on the Dana North, Dana South, Pine, Banshee, Lismer, Lismer Extension, Varley, Azen, Razor, and River Valley Extension Zones, using the ordinary kriging (OK) methodology on a capped and composited borehole dataset consistent with industry standards. Validation of the results was conducted thought the use of visual inspection, swath plots and global statistical comparison of the model against inverse distance squared (ID2) and nearest neighbour (NN) models.

Table 2: Pit Constrained Updated Mineral Resource Estimate for River Valley PGM Project – Effective Date June 27, 2019.

Class	Tonnes ‘,000	Pd (g/t)	Pt (g/t)	Rh (g/t)	Au (g/t)	Cu (%)	Ni (%)	Co (%)	PdEq (g/t)
Measured	56,096.7	0.54	0.20	0.013	0.03	0.06	0.02	0.006	0.94
Indicated	43,158.5	0.49	0.19	0.003	0.03	0.05	0.02	0.006	0.84
Meas +Ind	99,255.2	0.52	0.20	0.009	0.03	0.06	0.02	0.006	0.90
Inferred	52,306.0	0.31	0.15	0.012	0.04	0.04	0.02	0.001	0.63

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Class	PGM + Au (oz)	PdEq (oz)	PtEq (oz)
Measured	1,394,000	1,701,000	1,701,000
Indicated	983,000	1,166,000	1,166,000
Meas +Ind	2,377,000	2,867,000	2,867,000
Inferred	841,000	1,059,000	1,059,000

Notes:

1. CIM definition standards were followed for the Mineral Resource Estimate.
2. The 2018 Mineral Resource models used Ordinary Kriging grade estimation within a three-dimensional block model with mineralized zones defined by wireframed solids.
3. A base cut-off grade of 0.35 g/t PdEq was used for reporting Mineral Resources in a constrained pit and 2.00 g/t PdEq was used for reporting the Mineral Resources under the pit.
4. Palladium Equivalent (PdEq) calculated using (US$): $950/oz Pd, $950/oz Pt, $1,275/oz Au, $1,500/oz Rh, $2.75/lb Cu, $5.25/lb Ni, $36/lb Co.
5. Numbers may not add exactly due to rounding.
6. Mineral Resources that are not Mineral Reserves do not have economic viability

7. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

About NAM'S PGM Division

NAM's flagship project is its 100% owned River Valley PGM Project (NAM Website – River Valley Project) in the Sudbury Mining District of Northern Ontario (100 km east of Sudbury, Ontario). Recently the Company announced the results of the first PEA (see News Release – June 27th, 2019) completed on the River Valley Project. The PEA has been developed by various independent consultants – P&E Mining Consultants Inc. (P&E) was responsible for the open pit mining, surface infrastructure, tailings facility, and project economics; DRA Americas Inc. ("DRA") was responsible for all metallurgical test work and processing aspects of the Project; and WSP Canada Inc. ("WSP") was responsible for the Mineral Resource Estimate. The PEA is a preliminary report, however, it has demonstrated that there are potentially positive economics for a large-scale mining open pit operation, with 14 years of Palladium and Platinum production.

On April 4th, 2018, NAM signed an agreement with one of Alaska's top geological consulting companies. The companies stated objective is to acquire additional PGM and Rare Metal projects in Alaska. On April 18th, 2018, NAM announced the right to purchase 100% of the Genesis PGM Project, NAM's first Alaskan PGM acquisition related to the April 4th agreement. The Genesis PGM Project is a road accessible, under explored, highly prospective, multi-prospect drill ready Palladium (Pd)- Platinum (Pt)- Nickel (Ni)- Copper (Cu) property. A comprehensive report on previous exploration and future phases of work was completed

by Avalon Development of Fairbanks Alaska in August 2018 on Genesis.

On August 29, 2018, the Avalon report was submitted to NAM, management is actively seeking an option/joint-venture partner for this road accessible PGM and Multiple Element Project using the Prospector Generator business model. See our latest press release dated July 25, 2019 which details the current summer work program for the Genesis Project.

About NAM'S Lithium Division

The Company has eight pegmatite hosted Lithium Projects in the Winnipeg River Pegmatite Field, located in SE Manitoba. Three of the projects are drill ready. The Company has applied for a drill permit for its Lithium Two Project and expects the final permit to be granted by the end of July. This Pegmatite Field hosts the world class Tanco Pegmatite that has been mined for Tantalum, Cesium and Spodumene (one of the primary Lithium minerals) in varying capacities, since 1969. NAM's Lithium Projects are strategically situated in this prolific Pegmatite Field. Presently, NAM is the largest mineral claim holders for Lithium in the Winnipeg River Pegmatite Field. On January 15th 2018, NAM announced an agreement with Azincourt Energy Corporation (see Jan 15, 2018, Feb 22nd, 2018 and April 11th, 2018, May 2nd, 2018 Press Releases.

Qualified Persons and NI 43-101 Disclosure

The PEA was prepared under the supervision of Eugene Puritch, P.Eng. of P&E Mining Consultants Inc. The Updated Mineral Resource Estimate was prepared by Todd McCracken, P.Geo. of WSP Canada Inc. Metallurgical test work and process plant design and cost estimates were prepared by Jim Kambossos, P. Eng. of DRA Americas Inc. All three are independent Qualified Persons in accordance with NI 43-101. Mr. Puritch has reviewed and approved

the technical information in this news release. Michael Neumann, P.Eng., Managing Director for NAM is the Company Qualified Person as defined by National Instrument 43-101 and has reviewed and approved the technical content of this news release.

On behalf of the Board of Directors

“Harry Barr”

Harry G. Barr, Chairman and CEO

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reports that identify important risk factors that could cause actual results to differ from those contained in the forward-looking statements. The Company does not undertake any obligation to review or confirm analysts’ expectations or estimates or to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Investors should not place undue reliance on forward-looking statements.