

# **Appia Files NI 43-101 Technical Report on Maiden Indicated and Inferred Mineral Resource Estimate for the PCH Ionic Adsorption Clay Project in Goiás, Brazil**

written by Raj Shah | April 16, 2024

**6.6 Million Tonnes Indicated Grading 2,513 ppm TREO**

**46.2 Million Tonnes Inferred Grading 2,888 ppm TREO**

April 16, 2024 ([Source](#)) – Appia Rare Earths & Uranium Corp. (CSE: API) (OTCQX: APAAF) (FSE: A0I0) (MUN: A0I0) (BER: A0I0) (the “Company” or “Appia”) announced today that an independent technical report prepared in accordance with National Instrument 43-101 (“NI 43-101”) has been filed for the PCH ionic adsorption clay (IAC) project (the “PCH Project”) located in the State of Goiás, Brazil. The report entitled ‘**Technical Report on the Maiden Mineral Resource Estimate for The PCH Project, State of Goiás, Brazil**’ dated April 15<sup>th</sup>, 2024 with an effective date of February 1, 2024 (the “PCH MRE Report”). The PCH MRE Report was co-authored by Yann Camus, P.Eng., Marc-Antoine Laporte, P.Geo., M.Sc., and Sarah Dean, P.Geo., of SGS Canada Inc. (“SGS”), all of whom are independent qualified persons under NI 43-101. The PCH MRE Report is available for review on SEDARplus ([www.sedarplus.com](http://www.sedarplus.com)) and the Company’s website [www.appiareu.com](http://www.appiareu.com).

There are no material differences in the PCH MRE Report from those results disclosed in the Company’s press release issued

March 1, 2024. ([Click Here](#)).

Stephen Burega, President, commented, “The PCH MRE Report has outlined both exceptional grade and volume across both Target IV and Buriti zones which cover a total area of approximately 480 hectares. Within Target IV Appia has identified a high-grade zone with an inferred resource totalling 13.5 Mt at an average grade of 7307 parts per million (PPM) TREO.”

He continued, “The data generated from the first 300 drill holes at PCH has provided our team with a strong geological signature to track and confirm additional high-grade mineralization at newly identified ionic adsorption clay targets across the remaining tenements which encompass a very large area of over +40,000 hectares. The phase II auger drilling program is currently well underway, and we look forward to reporting on results as data becomes available.”

The Mineral Resource Statement prepared by SGS for the PCH Project is detail below.

Mineralized Zone	Classification	Volume	SG	Tonnes	TREO	MREO	HREO	Sm <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Sc <sub>2</sub> O <sub>3</sub>	Co
		Mm <sup>3</sup>		Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Target IV	Indicated	3.3	1.97	6.6	2513	562	186	58.3	5.8	31.1	109	358	15.9	22
	Inferred	6.9	1.96	13.5	7307	1391	331	114.4	9.6	49.4	311	907	24.6	74
Buriti	Inferred	16.7	1.96	32.7	1059	259	101	29.0	3.1	17.8	45	164	68.6	127
TOTAL	Indicated	3.3	1.97	6.6	2513	562	186	58.3	5.8	31.1	109	358	15.9	22
	Inferred	23.6	1.96	46.2	2888	591	168	54.0	5.0	27.0	123	381	55.7	111

Table 1: PCH Mineral Resource Estimate.

To view an enhanced version of this graphic, please visit: [https://images.newsfilecorp.com/files/5416/205668\\_table1appia.jpg](https://images.newsfilecorp.com/files/5416/205668_table1appia.jpg)

1. The MRE has an effective date of the 1<sup>st</sup> of February 2024.
2. The Qualified Person for the MRE is Mr. Yann Camus,

P.Eng., an employee of SGS.

3. The MRE provided in this table were estimated using current Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) Standards on Mineral Resources and Reserves, Definitions and Guidelines.
4. Mineral Resources that are not Mineral Reserves have not demonstrated economic viability. Additional drilling will be required to convert Inferred and Indicated Mineral Resources to Measured Mineral Resources. There is no certainty that any part of a Mineral Resource will ever be converted into Reserves.
5. All analyses used for the MRE were performed by SGS GEOSOL by ICM40B: Multi Acid Digestion / ICP OES – ICP MS and by IMS95R: Lithium Metaborate Fusion / ICP-MS.
6. MRE are stated at a cut-off total NSR value of 10 US\$/t. The full price list and recovery used to estimate the NSR is in Table 2. The estimated basket price of TREO is US\$26.98.
7. GEOVIA’s Whittle™ software was used to provide an optimized pit envelope to demonstrate reasonable prospecting for economic extraction. Preliminary pit optimization parameters included overall pit slope of 30 degrees, in-pit mining costs of \$2.10, processing and G/A costs of \$9/t, and overall mining loss and dilution of 5%. Full details of the preliminary pit-optimization parameters can be found in Table 2. The basket price and oxides price list in Table 2 are based on forward-looking pricing. These future prices are predicted based on market trends, economic forecasts, and other relevant factors. The actual prices may vary depending on changes in these factors.
8. Figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
9. Resources are presented undiluted and in situ, constrained

within a 3D model, and are considered to have reasonable prospects for eventual economic extraction.

10. Bulk density values were determined based on physical test work and assumed porosities for each type of material.
11. Total Rare Earth Oxides:  $TREO = Y_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 + Sm_2O_3$ .
12. Magnetic Rare Earth Oxides:  $MREO = Sm_2O_3 + Tb_4O_7 + Dy_2O_3 + Pr_6O_{11} + Nd_2O_3$ .
13. Heavy Rare Earth Oxides:  $HREO = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3$ .
14. The MRE may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

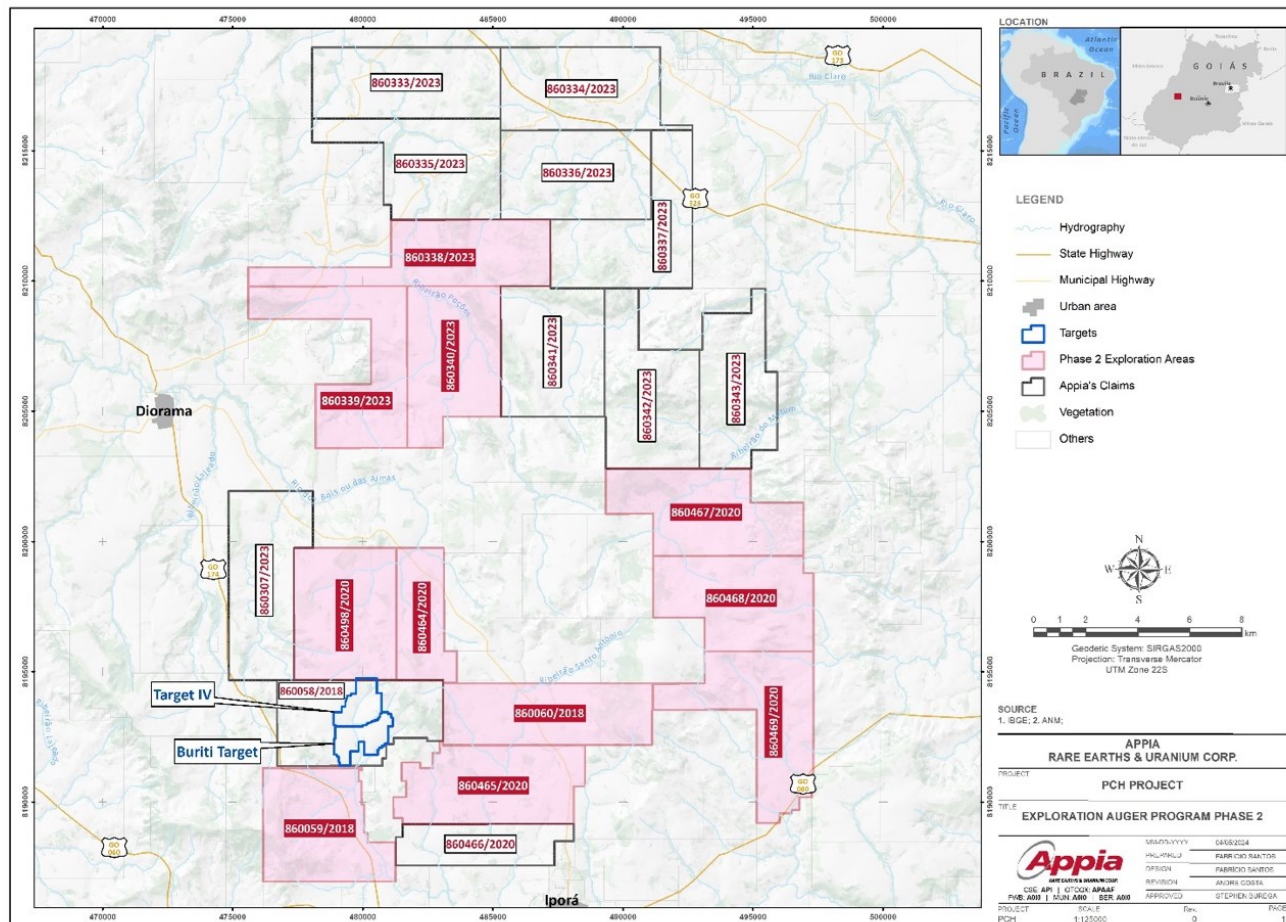
## **Phase II Auger Drilling Across the PCH Project**

The Company also wishes to announce the expansion of its auger drilling exploration program aimed at the identification of new Ionic Adsorption Clay (IAC) targets on the remaining claims to the east and north of Target IV and Buriti Zones, on its 40,963.18 ha. PCH project within the Goiás State of Brazil. The geological environment of the remaining tenements is equivalent to the one characterized on Target IV, and it will be tested during the Phase II auger drilling program.

The selection of the new target zones to be tested was based on three primary factors including:

1. A similar geological formation which the Company has identified as the Iporá Granite;
2. Similar weathering profile development with well-developed transition zone between Pedolith and Saprolites where the

Ionic Adsorption Clays occur; and  
 3. Positive showing of the related gamma spectrometric geophysical response.



Map 1 – Location map of Appia’s PCH Project area including a total of 22 claims across 40,963.18 ha.

To view an enhanced version of this graphic, please visit:  
[https://images.newsfilecorp.com/files/5416/205668\\_d237214d34ab3888\\_002full.jpg](https://images.newsfilecorp.com/files/5416/205668_d237214d34ab3888_002full.jpg)

### Qualified Person

The technical content in this news release was reviewed and approved by Mr. Don Hains, P.Geo, Consulting Geologist, and a Qualified Person as defined by National Instrument 43-101.

The MRE has been prepared by Yann Camus, P.Eng., of SGS Canada Inc (“SGS”) from Blainville, Quebec and is a Qualified Person (QP) as defined under NI 43-101. He is responsible for the MRE and has reviewed and approved the scientific and technical information related to the MRE contained in this news release.

### **About Appia Rare Earths & Uranium Corp. (Appia)**

Appia is a publicly traded Canadian company in the rare earth element and uranium sectors. The Company is currently focusing on delineating high-grade critical rare earth elements and gallium on the Alces Lake property, as well as exploring for high-grade uranium in the prolific Athabasca Basin on its Otherside, Loranger, North Wollaston, and Eastside properties. The Company holds the surface rights to exploration for 94,982.39 hectares (234,706.59 acres) in Saskatchewan. The Company also has a 100% interest in 13,008 hectares (32,143 acres), with rare earth elements and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario. Lastly, the Company holds the right to acquire up to a 70% interest in the PCH Project (See June 9<sup>th</sup>, 2023 Press Release – Click [HERE](#)) which is 40,963.18 ha. in size and located within the Goiás State of Brazil. (See January 11<sup>th</sup>, 2024 Press Release – [Click HERE](#)).

**Appia has 136.3 million common shares outstanding, 144.5 million shares fully diluted.**

*Cautionary note regarding forward-looking statements: This News Release contains forward-looking statements which are typically preceded by, followed by or including the words “believes”, “expects”, “anticipates”, “estimates”, “intends”, “plans” or similar expressions. Forward-looking statements are not a guarantee of future performance as they involve risks, uncertainties and assumptions. We do not intend and do not assume any obligation to update these forward-looking statements*

*and shareholders are cautioned not to put undue reliance on such statements.*

*Neither the Canadian Securities Exchange nor its Market Regulator (as that term is defined in the policies of the CSE) accepts responsibility for the adequacy or accuracy of this release.*

*For more information, visit [www.appiareu.com](http://www.appiareu.com).*

*As part of our ongoing effort to keep investors, interested parties and stakeholders updated, we have several communication portals. If you have any questions online ([X](#), [Facebook](#), [LinkedIn](#)) please feel free to send direct messages.*

*To book a one-on-one 30-minute Zoom video call, please [click here](#).*

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