



Pele Mountain Confirms Significant Concentrations of All Rare Earth Oxides at Eco Ridge Mine Project in Elliot Lake

Symbol: **GEM**
Listing: TSX Venture Exchange
Common Shares Outstanding: 95,486,944

FOR IMMEDIATE RELEASE

November 4, 2009 - Toronto - **Pele Mountain Resources Inc. (TSX Venture: GEM)** ("**Pele**" or the "**Company**") today announced the confirmation of significant concentrations of all rare earth oxides ("**REO**") in each of the 30 drill holes analyzed for REO to-date at its Eco Ridge Mine uranium project in Northern Ontario. As announced on October 7, the analysis of certain drill intersections at Eco Ridge has confirmed the presence of extensive REO in conjunction with uranium oxide (U_3O_8) in the Main Conglomerate Bed ("**MCB**"). The Eco Ridge Mine project is 100-percent owned by First Canadian Uranium Inc., a wholly owned subsidiary of Pele.

A total of 29 of the 30 analyzed holes were drilled over an area 2 kilometres across strike and 1 kilometre down dip within the area of the defined NI 43-101 uranium resources. The outlying hole was located north of the classified resources and intersected the down-dip continuation of both uranium and REO mineralization beyond the resource area. A table containing individual REO analyses for each of the 30 analyzed drill holes is available at http://www.pelemountain.com/pdfs/allREE_tableSW.pdf

Although Yttrium and heavy REE comprise a minority of the overall REO content of the Eco Ridge deposit, these minerals have far greater economic value than the light REO and have demonstrated good recoverability. Preliminary leach testing at SGS Canada Inc. indicates potential recoveries of approximately 64-percent of combined Yttrium and heavy REE.

REOs are critical components in many high-tech applications including hybrid motor vehicles, flat screen monitors, high-power magnets and a wide range of military applications. Although demand for REO is growing rapidly, over 90-percent of global production is controlled by China, which has recently imposed restrictions on their export.

With its excellent regional infrastructure, well-understood geology, and politically-stable and mining-friendly jurisdiction, Elliot Lake is an ideal location for the development of a long-term secure and reliable supply of uranium and REE. Pele's 100-percent owned Eco Ridge Mine project contains a NI 43-101 compliant resource of 6.4 million pounds of "indicated" U_3O_8 (5.68 million tonnes grading 0.051-percent U_3O_8) and 36.1 million pounds of "inferred" U_3O_8 (37.26 tonnes grading 0.044-percent U_3O_8) with the potential for significant

expansion. More than 300 million pounds of U₃O₈ were mined from similar deposits near Elliot Lake by Rio Algom and Denison Mines from 1956 to 1996. Elliot Lake was a global producer of Yttrium during the 1980s as a by-product of uranium production.

The samples were analyzed at SGS Canada Inc. and Activation Laboratories Ltd., both independent and ISO 17025 accredited laboratories. The Company is performing routine QA and QC on laboratory assay results. The calculations of REO grades shown in the table were independently reviewed by Scott Wilson Roscoe Postle Associates Inc. This press release has been reviewed and approved by Fergus Kerr, P.Eng., Vice President of Uranium Operations for Pele and a qualified person under NI 43-101.

About Pele

Pele Mountain Resources is discovering and developing the mineral wealth of Northern Ontario. At its Eco Ridge Mine uranium project, Pele is advancing toward the sustainable development of a safe, secure, and reliable operation near Elliot Lake. At its East Highland Gold project, Pele has located several high-grade showings and is working to identify mineable gold resources. The Company also holds the Ardeen Gold and Sudbury Nickel projects, which are actively explored under option agreements with Coventry Resources Ltd. and Wallbridge Mining Company, respectively. Pele's shares are listed on the TSX Venture Exchange under the symbol "GEM".

For further information please contact Al Shefsky, President, at (800) 315-7353, or visit the Pele website at www.pelemountain.com.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release. Some of the statements contained in this release are forward-looking statements, such as estimates and statements that describe Pele's future plans, objectives or goals, including words to the effect that Pele or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. The economic viability of the 43-101 mineral resource at Pele's Elliot Lake Project has not yet been demonstrated by a preliminary feasibility study.