

FORM 51-102F3
MATERIAL CHANGE REPORT

Item 1. Name and Address of Company

Pele Mountain Resources Inc. ("**Pele**" or the "**Company**")
2200 Yonge Street
Suite 905
Toronto, ON M4S 2C6

Item 2. Date of Material Change

July 5, 2011

Item 3. News Release

Press release issued by Pele on July 5, 2011 via a Canadian news wire service, a copy of which has been filed via SEDAR.

Item 4. Summary of Material Change

Pele is pleased to announce results of a NI 43-101 Preliminary Economic Assessment (the "**PEA**") on its Eco Ridge Mine Rare Earths and Uranium Project ("**Eco Ridge**" or the "**Project**").

Item 5. Full Description of Material Change

The PEA was prepared by Roscoe Postle Associates ("**RPA**") and demonstrates that Eco Ridge has potential to become a profitable producer of rare earth oxides ("**REO**") and uranium oxide ("**U₃O₈**").

The Project is located in Elliot Lake, Ontario, the only Canadian mining camp to ever achieve commercial REO production and an historically important source of "Heavy" REO in North America. Recent extraordinary REO market developments, sparked by China's reduction of export quotas, have resulted in sharply higher prices, inciting a rush to find and bring to production new sources outside of China. With well-understood geology, excellent regional infrastructure, and strong local support, Eco Ridge is an ideal location for a safe, secure, and reliable long-term supply of REO and U₃O₈. Pele is focused on transitioning Eco Ridge into the feasibility and licensing stages as it advances the Project toward development and production.

Highlights of the PEA include (all financial terms in US\$):

- 9,400-tonne per day operation with life-of-mine production of 10.7-million pounds of Total REO and 24.9-million pounds of U₃O₈ over a 14-year mine life.
- Cumulative operating cash flow of US\$1.72-billion; Cumulative pre-tax cash flow of US\$1.31-billion.
- Positive NPV of \$662-million (at a 7.5% discount rate); IRR of 47-percent.
- Operating cash cost of \$16 per pound U₃O₈, net of REO credits.
- Start-up capital cost of \$212-million; Sustaining capital cost of \$195-million.

- Life-of-mine production includes 430,000 pounds of dysprosium oxide (Dy₂O₃), 1.28-million pounds of neodymium oxide (Nd₂O₃), 2.08-million pounds of yttrium oxide (Y₂O₃), and 67,000 pounds of scandium oxide (Sc₂O₃).
- Two-thirds of REO revenue is from Heavy REO (including yttrium and scandium oxides) many of which are forecast to be in particularly short supply in the years ahead while demand continues to rise sharply.
- Opportunities for improvement of project economics include improved REO and U₃O₈ recoveries, and increased resources and production rate.

Pele President and CEO Al Shefsky, stated: "We are extremely pleased with this PEA of our Eco Ridge Mine Project. The PEA confirms our long-standing belief that Eco Ridge can be an important future source of rare earths and uranium, perhaps most critically as a secure and reliable long-term source of Heavy REO outside of China. Our project economics are robust and compelling and we are already planning next steps to rapidly advance towards development and production. The Eco Ridge PEA forecasts pre-tax cash-flow exceeding \$7.00 per fully diluted Pele share. We do not believe that our stock price currently reflects the value of this important asset."

The 14-year production plan calls for a 9,400-tonne per day operation with average annual production of 708,000 pounds of Total REO and 2.07-million pounds of U₃O₈. Underground development has been designed to be developed within the mineralized beds. This development muck, plus approximately 40-percent of the material broken in stopes will be brought to surface and processed on the Heap Leach Facility ("**HLF**"). The remaining material will be bioleached underground with leach solutions circulated in closed systems within each stope. Leach solutions from both surface and underground will go through a solvent extraction plant designed to recover U₃O₈. The effluent from the U₃O₈ recovery plant will go through a secondary solvent extraction plant to recover the REO. The PEA is based on mining and processing plans designed by engineers who have direct experience with commercial production in the Elliot Lake camp. The mining and processing methods utilized in the PEA have been successfully used in past commercial production at other mines in the area.

Key operational and economic data are summarized in Tables 1 & 2 below.

Table 1: Key Operational Data

Forecast Mine Life:	14 years
Total Tonnage Mined ¹ :	37.0 million tonnes
U ₃ O ₈ Produced ² :	24.9 million pounds
Total REO Produced ² :	10.7 million pounds

Notes:

1. The PEA is based on a Mineral Resource estimate that was publicly disclosed in Pele's press release dated February 24, 2011. See Table 4 below.
2. See Tables 3A & 3B for more details, including forecast production of each individual oxide.

Table 2: Base Case Economic Data (all financial terms in US\$000)

Gross Revenue from U ₃ O ₈ ¹ :	\$	2,119,000
Gross Revenue from REO ¹ :	\$	1,470,000
Total Gross Revenue:	\$	3,589,000
Total Realized Revenue ² :	\$	3,428,000
Realized Revenue per Tonne:	\$	93
Total Operating Costs ³ :	\$	1,707,000
Operating Cost per Tonne:	\$	46
Operating Cash Flow:	\$	1,721,000
Start-Up Capital Cost ⁴ :	\$	212,000
Sustaining Capital Cost:	\$	195,000
Total Capital Cost:	\$	407,000
Pre-Tax Cash Flow:	\$	1,314,000
Pre-Tax IRR:		46.8%
Net Present Value:	\$	826,000(5.0% discount rate)
	\$	662,000(7.5% discount rate)
	\$	533,000(10.0% discount rate)

Notes:

1. See Tables 3A & 3B for more details.
2. Deductions from Gross Revenue were applied to account for royalty payments as well as for an assessment of \$30 per kg of oxide in concentrate to account for offsite separation and upgrading costs to produce high purity saleable REOs.
3. Operating costs include mining, processing and G&A costs.
4. Pre-production capital cost estimates includes a 25-percent contingency.
5. The PEA assumes a C\$:US\$ exchange rate of 1.00:1.00.

Note: The PEA is preliminary in nature. It includes inferred mineral resources which 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 preliminary economic assessment will be realized.

Mr. Shefsky continued, "Light REO at Eco Ridge occur primarily in the mineral monazite and would likely require a different processing circuit to achieve significantly better recoveries than the range reported today. Economic trade off studies will be undertaken to determine if this approach is advisable. However, several of the Heavy REO at Eco Ridge occur within uranium minerals together with U₃O₈. Based on metallurgical and mineralogical studies to date, we believe there are excellent prospects for improving Heavy REO recoveries from the 34-percent average we are reporting today. Increased recoveries of Heavy REO (and U₃O₈) present an important opportunity to enhance the economics at Eco Ridge."

Estimated mineral recoveries used in the PEA are based on historic operations in Elliot Lake for underground recovery of U₃O₈ and on extrapolations of time recovery curves from preliminary metallurgical testing at SGS Canada Ltd. for REO. Assumed recoveries

of individual oxides, along with forecast production and revenue contributions from each individual oxide are listed in Tables 3A & 3B below.

Table 3A: Uranium Recovery & Revenue

Uranium Oxide	Average Grade	Estimated Recovery	Recovered Oxide (000 lb)	Base Case Price (US\$/lb)	Revenue (US\$000)
U ₃ O ₈	0.044 %	70 %	24,931	85	2,119,147

Table 3B: Rare Earths Recovery & Revenue

Individual REO	Average Grade (g/t)	Estimated Recovery	Recovered Oxides (000 kg)	Base Case Price (US\$/kg)	Revenue (US\$000)
CeO ₂	643.3	7 %	1,547	43	66,954
La ₂ O ₃	338.1	7 %	813	45	36,566
Nd ₂ O ₃	196.6	8 %	582	571	332,135
Pr ₆ O ₁₁	60.1	8 %	178	142	25,167
Sm ₂ O ₃	33.2	14 %	166	211	35,002
Eu ₂ O ₃	1.9	15 %	10	2,445	25,163
Gd ₂ O ₃	23.2	19 %	158	292	46,294
Sc ₂ O ₃	5.1	16 %	30	5,308	160,942
Y ₂ O ₃	64.4	40 %	942	209	196,777
Yb ₂ O ₃	4.5	41 %	67	126	8,441
Dy ₂ O ₃	14.1	38 %	195	1,744	340,111
Er ₂ O ₃	5.9	41 %	88	492	43,479
Ho ₂ O ₃	2.6	38 %	36	381	13,797
Lu ₂ O ₃	0.7	39 %	10	1,151	11,184
Tb ₄ O ₇	3.1	28 %	32	2,651	85,478
Tm ₂ O ₃	0.9	41 %	13	3,182	42,842
Total Light REO¹	1,271.3	7 %	3,286		495,824
Total Heavy REO²	126.4	34 %	1,583		974,508
Total REO	1,397.7		4,869		1,470,332

Notes:

1. Light REO includes La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, and Sm₂O₃.
2. Heavy REO includes Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, and Lu₂O₃. Y₂O₃ and Sc₂O₃ are also included in Heavy REO.

The "Base Case" U₃O₈ price of \$85 per pound is based on forecast price expectations by a group of independent analysts. This compares to a current long-term contract price of \$68 per pound.

Base Case REO price calculations began with a 6-month trailing average of daily prices from January 1, 2011 to June 30, 2011 as published by Asian Metal, a market service whose price assessments serve as the benchmark for contracts signed by major industry participants worldwide. The trailing average was based on daily FOB China prices as

available. Otherwise, domestic China prices were used with an escalation factor of 25-percent to account for duties and taxes (scandium is the only significant contributor to which this escalation applies).

The 6-month trailing average price of each individual REO (except thulium oxide) was then adjusted by RPA according to a factor (the "**Adjustment Factor**") provided in a June 7, 2011 report by Asian Metal (the "**REO Price Forecast**") prepared for Pele to be used in the PEA. The Adjustment Factor is based on the percentage change between the REO prices prevailing on June 7, 2011 and Asian Metal's forecasted REO prices for 2015 and was used by RPA to decrease or increase the 6-month trailing average prices to determine Base Case prices for REO in the PEA. RPA chose to reduce the 6-month trailing average price for thulium oxide from \$22,000 per kilogram to \$2,000 per kilogram, because it is traded in a very low volume market, before applying the Adjustment Factor to arrive at the Base Case price of \$3,182 per kilogram.

If the Asian Metal REO Price Forecast figures are applied to the PEA model, it results in considerably stronger financial projections for the Project, including a NPV (at a 7.5-percent discount rate) of \$1.48-billion and an IRR of 92-percent.

The Project has no known environmental liabilities and enjoys strong local support. The Province of Ontario has recently granted two renewable 21-year mining leases at Eco Ridge (the "**Mining Leases**"), giving Pele the exclusive right to mine in the leased areas. The Mining Leases also include surface rights except for an area covered by surface patents owned by the City of Elliot Lake (the "**City**"). The City has also granted Pele a renewable 21-year lease with a conditional option to purchase the City's surface patents (the "**City Lease**"). Both the Mining Leases and the City Lease allow for siting of project infrastructure like mine portals and processing facilities.

Pele places great value on community relations and has maintained friendly and productive dialogue with local First Nations and the City of Elliot Lake since the inception of the Eco Ridge Mine project. The Company's approach to sustainable development and operations at Eco Ridge is set out in a Project Description, which was filed with the Canadian Federal Government's Office of Major Projects Management and the Canadian Nuclear Safety Commission in September 2008. Pele is committed to sustainable development and seeks to provide long-term benefits to local communities.

Pele intends to pursue the following potential opportunities to improve project economics at Eco Ridge:

- Increased recovery of REO and U₃O₈ brought to surface. Process efficiencies may be improved by crushing ore delivered to the HLF.
- Increased recovery of REO and U₃O₈ from underground by optimizing leaching conditions and the time recovery curve. Metallurgical test work is underway at SGS Canada.
- Adding to the mine life and/or production rate by drilling off additional resources. A drill program is currently underway with objectives to improve the classification and expand the mineral resource as described below.
- Participation in higher margin downstream REO value chain through strategic alliances and/or vertical integration.

NI 43-101 Compliant Resource

Classification	Tonnes of Resource	Total REO		U ₃ O ₈	
		Pounds	(%)	Pounds	(%)
Indicated	14,312,000	51,859,000	0.164	15,182,000	0.048
Inferred	33,121,000	96,352,000	0.132	31,444,000	0.043

Notes:

1. CIM definitions were followed for Mineral Resources.
2. The Qualified Person for this Mineral Resource estimate is Tudorel Ciuculescu, P.Geol.
3. Mineral Resources are estimated at a cut-off grade of 0.028% U₃O₈.
4. Mineral Resources are estimated using an average long-term uranium price of US\$60 per lb, and a C\$:US\$ exchange rate of 0.95:1.00.
5. Total Rare Earth Oxides include La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃, Sm₂O₃, Eu₂O₃, Gd₂O₃, Tb₄O₇, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, and Lu₂O₃. Y₂O₃ and Sc₂O₃ are also included in TREO.
6. The resource wireframe at Eco Ridge contains both Indicated and Inferred U₃O₈ and TREO resources within the near surface portion of the Main Conglomerate Bed.
7. The U₃O₈ resource estimate is based on a total of 237 drill holes. These comprise 152 recent drill holes drilled by Pele Mountain between 2006 and 2009, and 85 historic drill holes drilled between 1954 and 1974.
8. The REO resource estimate is based on a total of 123 recent drill holes.
9. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Pele recently announced the commencement of a 7,000-metre drill program. As the mineralized reefs of the Elliot Lake mining camp are well known for their consistency and size, the mineral resources at Eco Ridge have excellent potential for improvement of classification and expansion. The program will include in-fill drilling within the existing Resource Wireframe with an objective of upgrading up to 5-million tonnes of Inferred Resources into the Indicated category. Indicated Resources may be converted to Mineral Reserves during the feasibility process, while Inferred Resources may not. The program will also include step-out drilling to the north of the Resource Wireframe with an objective of bringing up to 10-million additional tonnes of the mineralized reef into the Inferred Resource category.

The technical and economic information relating to the PEA in this press release has been reviewed and approved by Jason Cox, P.Eng., Director of Mine Engineering for RPA, an independent qualified person under NI 43-101. The PEA technical report will be filed on SEDAR in due course.

Item 6. Reliance on sub-section 7.1(2) or (3) of National Instrument 51-102

Not Applicable.

Item 7. Omitted Information

No information has been omitted from this material change report.

Item 8. Executive Officer

The following senior officer of Pele is knowledgeable about the material change and the Report and may be contacted by the Commission as follows:

Alan L. Shefsky, President and Chief Executive Officer

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Item 9. Date of Report

July 5, 2011.