

FRONTIER RARE EARTHS LIMITED NEWS RELEASE

Frontier makes senior appointment to its management team to lead scoping, prefeasibility and feasibility studies at the Zandkopsdrift rare earth project

Toronto, Ontario, March 29, 2011 – **Frontier Rare Earths Limited** (TSX:FRO) (TSX:FRO.WT) (“Frontier” or the “Company”) is pleased to announce the strengthening of its management team as it advances the evaluation and development of the Zandkopsdrift rare earth project (“Zandkopsdrift”) in South Africa. The Zandkopsdrift B Zone has the highest TREO⁽¹⁾ grade and the highest grade of high value HREO’s⁽²⁾ of significant advanced rare earth deposits⁽³⁾ outside China after Mountain Pass (Molycorp) and Mount Weld (Lynas).

Derick de Wit (B. Tech. Chem. Eng.) has been appointed Vice-President Project Development. Working alongside Dr Stuart Smith, Frontier’s Vice-President Exploration, Mr de Wit will lead the preparation and completion of the proposed scoping, prefeasibility and feasibility studies on Zandkopsdrift.

Mr de Wit is a chemical engineer with considerable experience in the minerals industry, gained with GRD Minproc, Bateman Projects, De Beers Consolidated Mines and Venmyn Rand, and has been responsible for managing due diligence, scoping, prefeasibility and feasibility studies, mineral asset valuations and independent technical reports for listed and private companies in accordance with NI 43-101, SAMREC and JORC reporting codes. Over the past 15 years Mr de Wit has been involved in the preparation and/or management of more than 30 independent review, scoping, prefeasibility and feasibility studies for minerals projects, both in Africa and Canada.

In these roles Mr de Wit has gained valuable experience of managing multi-disciplinary studies on complex minerals projects. Prior to joining Frontier, he was Managing Director of Venmyn Independent Projects (Pty) Ltd, a member of the Venmyn Rand Group, a leading independent consultant specialising in the technical and economic evaluation of minerals projects both in Africa and internationally.

James Kenny, Frontier’s CEO commented “*We are delighted that Derick has agreed to join our management team. His extensive experience will be of great benefit to Frontier and we believe that he will contribute significantly to the Company as we seek to advance Zandkopsdrift through to completion of a definitive feasibility study over the next two years.*”

About Frontier Rare Earths Limited (TSX: FRO) (TSX: FRO.WT)

Frontier Rare Earths Limited is a mineral exploration and development exclusively focused on the development of rare earths projects in Southern Africa. Frontier’s flagship asset is the Zandkopsdrift rare earth project, which is located in the Northern Cape Province of South Africa and is one of the largest undeveloped rare earth deposits worldwide. After Molycorp’s Mountain Pass and Lynas’ Mount Weld projects, the Zandkopsdrift B Zone has the highest TREO⁽¹⁾ grade and the highest grade of high value HREO’s⁽²⁾ of significant advanced deposits⁽³⁾ outside China. Zandkopsdrift’s favourable location is expected to provide significant advantages in relation to capital costs, operating costs and development time compared to other rare earth projects currently being evaluated, and makes it well positioned to become one of the first significant new producers of rare earths outside China after Molycorp and Lynas.

Frontier filed a NI 43-101 report on Zandkopsdrift in September 2010 including a resource estimate of circa 43m tonnes containing 950k tonnes TREO (56% in the Indicated Resource category).

Frontier is well funded with approximately \$53m cash and no debt and this strong working capital position will finance the proposed work programme of the Company and the expected completion of Scoping, Prefeasibility and Definitive Feasibility studies on Zandkopsdrift by the end of 2012. Frontier listed on the main board of the Toronto Stock Exchange in November 2010.

Shares Outstanding: 89,562,781

(1) TREO = total rare earth oxides

(2) HREO = heavy rare earth oxides; high value HREO's are Europium, Terbium and Dysprosium

(3) Significant advanced deposits are those with >200,000 tonnes TREO under SAMREC, JORC, CIM or equivalent international codes

For further information visit our website at www.frontierrareearths.com .

For questions and comments, please e-mail the Company at IR@frontierrareearths.com or contact James Kenny, CEO, at +352 208 80249 or +353 1 4966 006.

Forward Looking Statements – *Certain information set forth in this news release may contain forward-looking statements that involve substantial known and unknown risks and uncertainties. These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond the control of the Company, including, but not limited to the impact of general economic conditions, industry conditions, commodity prices, availability of financing, results of feasibility studies and dependence upon regulatory approvals. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements.*