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("Tertiary" or "the Company")

2 April 2012

## **Building a Strategic Position in the Fluorspar Sector**

### **Progress Update**

Tertiary Minerals plc, is pleased to provide the following update on the progress of work at its two flagship fluorspar projects, Storuman in Sweden and Lassedalen in Norway, and to advise on recent market developments and strategic objectives.

#### **Background**

Tertiary Minerals plc (AIM:TYM) is one of a few publicly traded companies offering investors strategic exposure to the little known, but critically important industrial mineral, fluorspar ( $\text{CaF}_2$ ), the main source of fluorine (F) for industry.

About 6 million tonnes of fluorspar are used annually, mainly in the manufacture of hydrofluoric acid (HF) and derivative fluorine chemicals including refrigerant gases (fluorocarbons), fluoropolymers (e.g. Teflon™), and aluminium trifluoride (a flux used in the reduction of alumina to aluminium). There are also a number of smaller but nonetheless important uses for fluorine – for example as  $\text{LiPF}_6$  electrolyte in Lithium-ion batteries, via  $\text{UF}_6$  in the manufacture of nuclear fuel, in petroleum cracking and in pharmaceuticals where over 50% of new drugs include fluorine in their formulations.

#### **Storuman Fluorspar Project, Sweden**

At Storuman the Company is engaged in a preliminary feasibility study for a 28 million tonnes open pit fluorspar resource targeting production of 100,000 tonnes per year of acid grade fluorspar (>97%  $\text{CaF}_2$  and less than 1% silica). A mining operation of this scale would be a medium scale producer in World terms and the deposit is large enough to consider expansion of production in future.

#### ***Metallurgical testwork***

Preliminary feasibility stage metallurgical testwork has been progressing for some months now on both the Upper and Lower mineralised zones. Excellent results have been obtained from the Upper Zone (approx. 40% of deposit) where fluorspar meeting the above acid grade chemical specifications has been produced with very high recoveries (>90%). Work is currently focused on the Lower Zone (approx. 60% of deposit) where good recoveries have been obtained at a finer grind size and where current work aims to improve recovery at coarser product sizing which can be an important specification for some fluorspar consumers.

#### ***Preliminary Feasibility Study Progress***

Consultants have been selected for the various aspects of the prefeasibility study, including geotechnical, hydrogeological and tailings disposal studies. A transport and logistics study is

being coordinated by the Company with support and input from the Swedish Government funded Nordic Logistics Centre. A new railhead facility has been built near Storuman with a direct link to the wharf at Umeå port and this export facility should result in significant transport and capital costs savings for the Company.

All tenders have now been received for the main part of the preliminary feasibility study which will draw together the external component studies and include the main mine design, engineering design, capital and operating costs estimation. This major study will be awarded shortly and should be completed around the end of this year.

### ***Permitting***

Environmental permitting of mining operations in Sweden requires a two year baseline sampling programme. This started last year and archaeological and reindeer herding and other socio-environmental studies are also in progress with the objective to submit a mining lease application by the end of the first quarter of 2013 and the environmental permit application by second quarter of 2013.

Mine construction is targeted to start in 2015.

### **Lassedalen Fluorspar, Norway.**

The Lassedalen project hosts a JORC compliant underground-minable resource of 4 million tonnes grading 25% CaF<sub>2</sub>. It is located in an area of well-established infrastructure 80km southwest of Oslo.

### ***Metallurgical Testwork***

The Company is nearing completion of a scoping-level programme of metallurgical testwork. This is progressing well and, from results received to date, expectations are that the project will be able to produce the higher grade, higher value, acid grade of fluorspar with good recoveries.

### ***Scoping Study***

The Company has received tenders for the completion of a technical and economic scoping study and this will be awarded shortly. The Company is preparing an application for a government grant to co-finance a parallel study for ore-processing operations at the large Herøya industrial complex where existing utilities and tailings disposal opportunities could enhance project economics and permitting. Completion of the scoping study is scheduled for the middle of 2012.

Following completion of the scoping study a large drill programme is planned to upgrade and increase the existing Mineral Resource.

### **Market Developments & Strategic Objectives**

For decades China has been the dominant supplier of fluorspar to western markets but in recent years Chinese exports have fallen substantially as China has grown its internal demand in the manufacture of downstream fluorine products. China, now the World's largest consumer of fluorspar, is likely to become a net importer in the next few years. It is likely that China will meet the bulk of any domestic supply deficit from Mongolia, a growing producer of fluorspar which, for western export markets, already transits through China. Even now the geographical focus of Chinese fluorspar consumption (HF plants) is shifting away from the southern provinces towards the Mongolian border.

Demand for fluorspar is growing with the rising demand for refrigerators, air conditioners, and cars, especially in the BRIC countries. Consumption of fluorspar is rising by at least

1.5% per year at present which requires the equivalent of at least one new mid-size mining operation to be developed every year for the foreseeable future - yet only a handful of projects are at the advanced exploration or planning stages.

Western consumers of fluorspar, many of whom do not have captive sources of fluorspar, now face structural supply shortages. European consumption of fluorspar is second only to China and the European Commission has published a report placing fluorspar on the “critical list” of 14 minerals considered essential to European industry and, for which supply shortages are foreseen.

The supply squeeze has caused fluorspar prices to rise. In 2011, fluorspar prices rose as much as 69% in 2011 to a high of over US\$600/tonne for Chinese material delivered into Europe. In the past few months prices of Chinese fluorspar have stabilised at US\$500-530/tonne, 45% above prices this time last year. Prices for Mexican fluorspar have continued to rise.

The Company does not believe that western consumers of fluorspar will be able to rely on Chinese or even the growing Mongolian supplies in future. This is driving the Company’s strategy and objectives:

- to become a reliable long term supplier of fluorspar, supporting the fluorine chemical supply chain through development of fluorspar mining projects in stable, democratic and mining friendly jurisdictions;
- to become Europe’s largest fluorspar producer through development of the Storuman projects in Sweden & the Lassedalen deposit in Norway, and.
- to capitalise on current & future fluorspar supply shortages.

The Company is planning further fluorspar project acquisitions that are consistent with this strategy.

As the fluorspar market tightens there is a growing trend to vertical integration in the fluorine industry with the large chemical consumers seeking to tie up future sources of raw material supply. This is happening both in China and in the West.

Consistent with this trend, the Company is in on-going discussions with a number of consumers seeking to secure access to new sources of supply and, potentially, long term business relationships with the Company. These could take the form of marketing agreements and/or investment in the Company and/or projects in future. The Board will consider such arrangements providing they add value for shareholders.

Commenting on the current developments, Patrick Cheetham, Executive Chairman, said **“This year promises to be a busy and exciting year for the Company and we expect strong news flow from a number of value-adding milestones. We look forward to updating shareholders on further developments in due course.”**

#### **ENQUIRIES:**

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