

BRITISH LITHIUM COMMUNITY LIAISON GROUP

held in the offices at their Pilot Plant, Roche Road, Stenalees on 12th December 2023

Introduction and welcome from Mark Hewson, UK Industrial Hub Director

Imerys update

- decline in volumes of clay sold so there will be an extended shutdown over the Christmas/ New Year period. No redundancies yet but people being ‘farewelled’ (as people leave or retire their departure is marked with an event).
- Imerys is the 2nd largest user of water in the Southwest. Aware of their impact on resources and working closely with Southwest Water to minimise usage etc

Update on British Lithium (Cornwall) and EMILI (Beauvoir, France) Alan Parte, Vice President of Lithium Projects, Imerys

BL part of UK net zero strategy and European Green Deal. Road transport in UK and Europe produces 20% of greenhouse gases so move to electric vehicles will support these strategies. Forecast demand from 80,000 tonnes LCE (lithium carbonate equivalent) in 2022 to 600,000 tonnes LCE in 2030 – with most at present coming from China, Australia and South America.

Estimate all lithium projects across UK and EU will produce 250,000 tonnes LCE so demand is greater than supply.

Potential total resources of 117M tonnes in Beauvoir and 161M tonnes in Cornwall BL owned 80% by Imerys and 20% by Lithium Assets Ltd. Exploratory drilling in 2019, pilot plant opened in 2021 and produces 99.8% pure lithium carbonate. Have raised £450M to cover cost of quarrying, machinery and processing plant with aim to produce 21,000 tonnes each year which will meet one third of UK demand when UK fully transitions to full electric vehicle transportation

Visit to pilot plant

Once fully kitted out in PPE we walked around the pilot plant built inside an old blockworks. BL use a different process to Cornish Lithium.

Rock comes from opencast mines in the old clayworks and is crushed into small pieces. These are then ground down, mixed with water and the metal bearing fragments in the slurry separated out by magnets.

This concentrate is then roasted with sulphates to make lithium sulphate which as it is soluble in water can be separated out by mixing with water. The liquid is then treated to change the lithium sulphate into lithium carbonate which is not soluble and so can be collected.

The waste rock will be disposed of in old clay pits, no plans at present to recover other metals such as tin as by-products.

Sharron Kelsey