



05 July 2021

**Pensana Plc**  
**("Pensana" or the "Company")**

## **Commencing development of the world's first Freeport rare earth processing hub**

Pensana Plc is pleased to announce that following the recent £15 million premium equity raise which was strongly supported by the Company's major shareholders, early stage development has commenced on the establishment of its rare earth processing hub at the Saltend Chemicals Park in Humber, UK.

The Saltend plant would be the first major rare earth separation facility to be constructed in over a decade and the first to be located in a Freeport. The final tax and customs regimes for the Humber Freeport (one of Europe's busiest ports) are being finalised but are expected to take the form of an economic enterprise zone providing a combination of benefits, enabling the rapid development of the project and frictionless trade with European and international customers.

Pensana is aiming to establish Saltend as an attractive alternative to mining houses who may otherwise be limited to selling their products to China, having designed the facility to be easily adapted to cater for a range of rare earth feedstocks.

Importantly, for many miners around the world who are looking to access the European and US supply chains, it is becoming increasingly clear that the planned EU and UK carbon border taxation will mean that it is no longer acceptable for manufacturers to source material extracted or processed unsustainably.

### **Site development under way at Saltend and Longonjo**

The Company is advancing the front end engineering designs (FEED) for the Saltend and Longonjo projects towards conclusion in October. Ongoing continuous process pilot plant runs to confirm equipment selection, sizing and specifications will continue through to September reflecting the importance placed on confirmation of scalability of design.

Pensana is working with Wood, the international engineering group. Wood has committed forty experts from its Western Australian, UK and South African operations to work on FEED for both projects.

The Saltend site is currently being prepared for construction by the pxGroup and is scheduled to be handed over in the next few months.

Saltend project workstreams underway in conjunction with the pxGroup include:

- Design of external bulk supplies including power, water, steam, fuel and reagents.
- Preparation of works packages for demolition and removal of the redundant tank farm.
- Arrangements with Associated British Ports (ABP) for direct port access to the Saltend site.
- Redesign and relocation of fire-fighting facilities to accommodate the refinery.
- Topographic and geotechnical surveys for FEED.
- Submissions in respect of the operating/environmental permit following the Saltend planning approval.

In Angola, Pensana is working closely with contractors and government officials to progress the Longonjo project while strictly adhering to travel restrictions arising from the global pandemic. Project workstreams underway include:

- Ongoing involvement of vendors in the preparations for procurement of long lead items including key kiln, acid plant and comminution equipment.
- Procurement activities towards establishment of the construction camp.
- Mining area bypass road as agreed by the Huambo province.
- Arrangements with relevant authorities for the connection of high tension electrical power line to the mine.
- Optimisation of the freight handling at the Port of Lobito and on the Benguela Railway for reagent supply and product export.

Additionally, Pensana’s management team is active in:

- Discussions with a number of rare earth project developers with a view to providing them with an attractive processing alternative to the existing supply chains in China.
- Advancing the recently completed concept study into the establishment of a facility at Saltend to convert the NdPr oxides into metal alloy.
- Discussions with Equinor following first phase approval to establishing a hydrogen based (NdPr) recycling facility at Saltend for end-of-life offshore wind turbine nacelles.
- Undertaking life cycle analysis on the total carbon emissions of the final product.

These early works mark the beginning of the use of proceeds:

<i>Saltend Solvent extraction (“SX”) refinery</i>	<i>\$4.9m</i>
<i>Longonjo site infrastructure</i>	<i>\$3.4m</i>
<i>Longonjo concentrator plant</i>	<i>\$5.1m</i>
<i>Longonjo Mixed Rare Earth Sulphate (“MRES”) plant</i>	<i>\$4.7m</i>
<i>General corporate expenses, exploration and deal costs</i>	<i>\$3.0m</i>

**Paul Atherley, Chairman of Pensana, commented:**

*“Demands for more secure and responsible supply chains, higher prices on carbon, and policies such as the border carbon adjustments are setting the stage for greater transparency and traceability in minerals and metals - enablers of the global energy transition.*

*The Humber is already the UK’s busiest port complex the freeport status with its customs and tax incentives aimed at levelling up provides the opportunity to establish the world’s first rare earth processing hub within an economic enterprise zone, with the benefits of frictionless trade with Europe and the rest of the world.*

*We continue to work closely with our application for funding from the Automotive Transformation Fund, a long-term programme designed to enable the UK to build the world’s most comprehensive and compelling electrified vehicle supply chain, supporting over 160,000 jobs.”*

**For further information:**

**Pensana Plc**

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**About Pensana**

Pensana plans to establish Saltend as an independent, sustainable supplier of the key magnet metal oxides to a market which is currently dominated by China. The US\$125 million Saltend facility is being designed to produce circa 12,500 tonnes per annum of rare earth oxides, of which 4,500 tonnes will be neodymium and praseodymium (NdPr), representing around 5% of the world market in 2025.

The Saltend facility is located within the world class Saltend Chemicals Park a cluster of world class chemicals and renewable energy businesses at the heart of the UK’s energy estuary, host to a range companies including BP Petrochemicals technology, INEOS, Air Products, Triton Power, Nippon Gohsei and Tricoya.

The US\$125 million plug and play facility will create over 500 jobs during construction and 100 direct jobs once in production. It will be the first major separation facility to be established in over a decade and will be come one of only three major producers located outside China.

Initial feedstock will be shipped as a clean, high purity mixed rare earth sulphate (MRES) from the Company’s Longonjo low impact mine in Angola. The open-cast mine, state of the art concentrator and proprietary MRES processing plant are being designed by Wood to the highest international standards, will be powered by minimal carbon hydro-electric power and connected to the Port of Lobito by the recently upgraded Benguela railway line.

Pensana is of the view that provenance of critical rare earth materials supply, life cycle analysis and GHG Scope 1, 2 and 3 emissions will all become significant factors in supply chains

for major customers. The Company intends to offer customers an independently and sustainably sourced supply of the metal oxides and carbonates of increasing importance to a range of applications central to the energy transition, industrial, medical, military and communications sectors.

For many miners around the world who are looking to access the European and US supply chains, it is becoming increasingly clear that the planned EU and UK carbon border taxation will mean that it is no longer acceptable for manufacturers to source material extracted or processed unsustainably.

Pensana is aiming to establish Saltend as an attractive alternative to mining houses who may otherwise be limited to selling their products to China having designed the facility to be easily adapted to cater for a range of rare earth feedstocks.