

Finnish company showcases exciting, innovative solutions in the treatment of contaminated mining waste - Mining Indaba Cape Town

Interviews and meetings

Meet company representatives at the Mining Indaba, February 3rd-6th, at Cape Town International Convention Centre (CTICC), Mining Finland booth 108.

(<https://www.miningindaba.com/Home>)

- Jouni Jääskeläinen, CEO, EPSE OY
- Felix Fondem, Director of International Operations, EPSE OY

Finnish company EPSE Ltd (Global EcoProcess Services) is delighted to be back in South Africa to take part in the 2020 Mining Indaba as part of the Mining Finland group. EPSE innovative patented technology for the treatment of mining and industrial wastewater, is operating successfully in Europe, and pilot testing in China has led to agreement for two new industrial projects. In 2019 EPSE was granted funding of EUR 1.9m (R31,147,540) from the European Union's Horizon 2020 Project Fund (note 3 below) which will assist EPSE to invest in business projects and partnerships in South Africa including creating local jobs. EPSE is at Mining Indaba to build on existing relationships with local companies and to develop new business contacts in Africa, Asia and Europe, with the key focus being South Africa.

The EPSE technology delivers ground breaking innovation in the treatment of waste for the mining and industrial sector, and delivers substantial investment and operational cost savings. The process is based on the patented EPSE treatment solutions. Key advantages are low operational costs and low investment in infrastructure in a one step processing solution for hazardous wastewater treatment. The solution delivers outstanding results, cost efficiency, purification of polluted water and extraction of metals. It also offers environmental benefits as the ability to recycle contaminated water into clean potable water is essential in draught stricken South Africa and the Continent.

The EPSE solution has transformed the treatment of acid mine drainage (AMD) and industrial waste water by addressing the serious problem of metal pollution in contaminated waste. The end result produces not only purified clean water but the heavy metals in hazardous waste are converted into environmentally harmless insoluble and inert metals that can then be further recycled and used in production for several other purposes.

Unlike other available technologies, the EPSE solution removes these metals completely and the precipitate is inert and insoluble. Soluble precipitates of metals are a hazardous waste that must be stored in controlled landfill deposits creating an increasing environmental risk globally as well as high costs for mining and waste treatment companies. The EPSE solution eliminates this need.

Although primarily addressing the numerous metals in mining waste, it is also capable of substantially reducing concentrations of sulfates, salts, alkali and partially alkaline earth metals, which are a major concern where there is a need to recover water to a potable water quality level.

Jouni Jääskeläinen, CEO, EPSE OY said, "Since developing this exciting technology, we have been extensively developing our practical expertise and capabilities, which can be seen in full operation at our mobile plant facility or at our partner's Kiertä Environmental Services Ltd (<http://www.kiertä.fi/en/>) waste treatment facilities in Helsinki Finland".

He continued, "Two years ago, our technology was adopted as one of the mainstream solutions to treat industrial hazardous waste at one of the leading environmental, industry and renewable energy services companies in the Nordic region, Lassila & Tikanoja Plc (<http://www.lassila-tikanoja.com>). An important advantage is that EPSE can be integrated into existing water treatment solutions to achieve cost savings of up to 20-40% compared to conventional treatment methods.

However, substantially higher cost savings can be achieved by a partial or full replacement of existing conventional water treatment technologies”.

Felix Fonde, Director of International Operations, EPSE OY said, “Over the past four years Mining Indaba has become one of our milestone events of the year in our internationalization efforts in the global mining industry market. Our objective is to further develop our network of relevant contacts in the mining sector, enhance the exposure, awareness and knowledge of EPSE technology, further gain valuable and relevant in-depth knowledge of the mining waste water treatment industry development and needs, and make targeted new contacts for the introduction of our technology in Southern Africa in particular and worldwide.