MADURAI FRIDAY, JANUARY 20, 2017



www.thehindu.in - Regd. TN/MA/7/2015-2017 - RNI No. TNENG/1978/49962 - ISSN 0971 - 751X - Vol. 40 - No. 17 - TAMIL NADU EDITION - 26 Pages - Rs. 6.00

Printed at Chennai, Coimbatore, Bengaluru, Hyderabad, Madurai, Noida, Visakhapatnam, Thiruvananthapuram, Kochi, Vijayawada, Mangaluru, Tiruchirapalli, Kolkata, Hubballi, Mohali, Allahabad, Malappuram and Mumbai

## CECRI chemical treatment methodology to help TAMIN

SPECIAL CORRESPONDENT

SIVAGANGA: CSIR-Central Electro Chemical Research Institute (CECRI) has developed a chemical treatment methodology for treating the 'tailing water' for Tamil Nadu Mineral's (TAMIN) Graphite Beneficiation Plant, which consumed about three lakh litres of water a day and struggled to operate the plant during drought.

When water table depleted to a dismal level in the district following failure of monsoons, TAMIN, which produced graphite from ore dug out from its graphite mine at Komalipatti near here,

struggled to operate the plant to its full capacity for want of water and sought the assistance of the CECRI to address the problem.

After Vijayamohanan K. Pillai, Director and S. Syed Azim, chief scientist, CECRI, explained the technology on Wednesday at the CECRI, Karaikudi, Vallalar, Managing Director, TAMIN, inspected the process of conversion of tailing water and reuse of the same after recycling process at the plant here on Thursday.

"Thanks to the technology, we are able to save three lakh litres of water a day and run the plant to its full capacity," Mr. Vallalar said. The plant

suffered in day-to-day operation due to shortage of water, he said.

After TAMIN explained the problem, a team of scientists from the CECRI tested the tailing water and suggested that by adding potassium permanganate in the ratio of 12.5 grams in 10,000 litres, the discharged water could be treated and reused, a TAMIN release said.

Adopting the 'simple method', the CECRI demonstrated the efficacy of the technology in the plant during December last and successfully converted about 45 lakh litres of tailing water, it said. The recycled water was

used in the plant and "we found that the quality of graphite concentrate was not affected and there was also no harm to the employees, who dealt with the water," it said.

As per the recycling process, the tailing water discharged from the plant was stored in a concrete tank and after adding potassium permanganate in the prescribed ratio, it was agitated with the help of compressor air. The agitated water became clear water for reuse after it was allowed to settle for 24 hours, it said. The plant produced 500 to 600 tonnes of graphite, a month.