CDE and YTL promote Manufactured Sandsto improve project efficiency

BatuTiga Quarry SdnBhd, YTL Corporation Berhad's quarry division, operates 15 quarry sites with 25 crushing and screening plants in Peninsular Malaysia, producing more than 21 million tons of quarry products per year. The division produces various sizes of quarry products including 20mm,10mm, Quarry Dust, Crusher Run, Ballast, Armour Rocks and other customized sizes, and is the largest producer of Manufactured Sand in Malaysia. In the production of Manufactured Sand, the division has enhanced its quality for use in the production of ready mixed concrete by improving the particle shape and controlling the silt content, by using proven world class technology and equipment. For sole purpose, CDE manufactured sands technology was first introduced attheir Batu Tiga Quarry situated near Kuala Lumpur, Malaysia.

The process of producing Manufactured sand begins withcrushing of hard rocks into smaller fractions in a controlled manner to achieve a good particle shape. However, the crushing operation generates high and varying level of ultra-finesthat lowers the commercial value of the crushed material and creates technical challenges for its use in concrete production. To alleviate these challenges, advanced wet processing techniques from CDE was used to consistently grade sand, making it free from adulteration and impurities, furthermore improving the project efficiency by reducing the consumption of cement.

"We have almost eliminated river-sand in our projects through substitutions and wherever sand has to be used, we have switched to manufactured-sand. It not only addresses ecological issues but also improves project efficiency significantly," explained Mr. Patrick Pereira, Executive Director of YTL group quarry division. "CDE Combo technology has helped us to enhance the quality of manufactured sand bycontrolling the level of siltand deliveringthe right gradation. It also gives us the flexibility of adjusting the fineness modulus of sand as per our project requirement".

Sand accounts for 35 per cent of the volume of concrete used in the building construction industry and as the Asian region rides a growth trajectory, its demand has ballooned and led to the plunder of river beds. Traditional sources of sand such as rivers and creeks are being restricted by several countries around the SE Asia causing significant shortages. The destruction of riverine ecosystems by indiscriminate sand mining is gradually giving way to a lightly regulated industrial-scale production of manufactured-sand with support of large conglomerates like YTL Group. It is lending some respite to city administrators and affectedcommunities. Manufactured sand has not only addressed environmental issues but also improved delivery and aided in cost reduction of construction projects.

CDEis creatingthis entirely new marketplace across Asia with over 280 installations spread over India, Malaysia, Indonesia, Thailand, Vietnam, Japan, Philippines, Sri Lanka, Pakistan and Bangladesh. "Our sustainable technology of producing washed and graded manufactured sand, is helping to replace natural sand, which is fast becoming scarce and expensive. It will benefit the sand manufacturers by providing top quality graded construction sand and sustainable operations by reusing up to 95% of water used. By utilizing normally low-value crusher fines for sand production, we can extend the life of natural resources and also add huge commercial value to our customer's enterprise," shared Manish Bhartia, Managing Director of CDE Asia.

At the Clean Enviro Summit Singapore (CESS) on 11th July 2018, CDE Asia will also launch the state-of-the-art CDE mobile recycling plant.

Held at the Marina Bay Sands Singapore, the launch will be attended by British High Commissioner to Singapore, H.E Scott Wightman. CDE Asia, which overseesits Asian operations, is part of CDE Global that is headquartered in Northern Ireland.

British High Commissioner Scott Wightman said, "I am delighted that today marks the launch of the mobile recycling plant and CDE's expansion in Asia. CDE's expansion in the region underscores the importance of providing a cost-effective, sustainable solution for the industry in light of the sand shortage in Asia."

CDE ReUrban recycling range is a portable recycling system to tackle construction, demolition and excavation wastes. It uses physical and aqueous based methods involving high intensity surface scrubbing of material to dislodge adhering fines necessary to reduce water absorption in recycled sand& aggregate. Fines fraction are graded and recovered as manufactured sands.

For media enquiries, please contact: Melissa Fu Communications Manager British High Commission Singapore

Melissa.fu@fco.gov.uk +65 9710 6638

Sourendra Das Assistant Manager – Corporate Communications CDE Asia Limited

<u>Sdas@cdeasia.com</u> +65 9359 8803/+91 907 3382760

About CDE

CDE is the leading provider of washing equipment for quarries, mines and recycling operations on the global market. The CDE equipment range has applications across a wide range of materials and is delivering significant efficiencies in the construction and recycling, mining, specialist industrial sands and environmental sectors. Working across 5 sectors and 8 regions, CDE has been co-creating with customers for over 20 years to deliver collaborative, imaginative and unique processing systems. The CDE Global Headquarters are located in Northern Ireland and the company also has regional base in Kolkata, India to serve their Asian market.

About YTL

YTL Corporation Berhad is an integrated infrastructure developer with extensive operations in countries including Malaysia, the United Kingdom, Singapore, Indonesia, Australia, Japan and China. YTL Corporation Berhad, is amongst the largest companies listed on the Main Market of Bursa Malaysia Securities Berhad ("Bursa Securities").