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AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

6 March 2020

EDENCRETE® - PORT OF SAVANNAH TRIAL

HIGHLIGHTS

- **Highly encouraging independent laboratory testing of the compressive strength of EdenCrete® enriched concrete being trialled at the Port of Savannah has been completed.**
- **Compressive strength achieved at 28 days of 10,010 psi exceeded by 100% the required minimum 28 day strength of 5,000psi.**
- **Compressive strength achieved at 28 hours (5,720 psi) exceeded the required minimum to re-open the section (4,000psi) by 43%, approximately 48 hours earlier than is usually the case.**
- **EdenCrete® dosage rate was 1 US gallon per cubic yard (4.95 litres/cubic metre) of concrete.**
- **The review of the performance of the EdenCrete® enriched concrete is anticipated to be undertaken over approximately three months.**

DETAILS

Eden Innovations Ltd (Eden) (ASX:EDE) is pleased to announce the successful completion of the independent laboratory testing of the compressive strength of the EdenCrete® enriched concrete being trialled at the Port of Savannah (part of Georgia Port Authority) (see Eden Announcement- ASX: EDE 7 February 2020).

The trial involves a section of concrete (known as the “runway”) in the container terminal area that is subject to very heavy loading and abrasion from the tyres of the large rubber tyred gantry (RTG) cranes (see Figures 1-4).

The average compressive strength achieved in the independent laboratory tests by the EdenCrete® enriched concrete after 28 days, was 10,010 psi (68.95MPa), exceeding by 100% the required minimum 28 day strength of 5,000psi (34.47MPa).

Also of interest is the fact that the average compressive strength achieved after 2 days was 6,780psi (46.75MPa), after 3 days was 7,810psi (53.85 MPa) and after 7days was 8,550psi (58.95MPa).

As previously announced, highly encouraging very early strength of the EdenCrete® concrete was also obtained. The average compressive strength of the EdenCrete® concrete at 28 hours after being poured, achieved 5,720 psi (39.4 MPa), exceeding the minimum strength (4,000psi) that is required for the repaired section to be re-opened for

use, by 1,720psi (11.6 MPa) or a very impressive 43%, and also exceeded by 15.2% the minimum 28 days strength of 5,000psi.

This very early strength gain is significant operationally and commercially because the usual time, before which a repaired section can be re-opened, is often around 3-4 days.

In this trial EdenCrete® was added to the concrete mix at 1 US gallon per cubic yard (4.95 litres/ cubic metre) of concrete.

The trial involves monitoring the on-going performance of the EdenCrete® concrete over the coming months. There is no set period for the trial, although Eden understands that the review of the performance is likely to undertaken over approximately three months.



Figure 1. EdenCrete®- enriched concrete being poured at Garden City Terminal, Port of Savannah



Figure 2. EdenCrete®- enriched concrete being poured at Garden City Terminal, Port of Savannah

The Port of Savannah

After the two ports in Los Angeles (Port of Los Angeles and Long Beach), the Port of Savannah is reported to be the next busiest US container port.¹

The port consists of two modern, deep-water terminals with over 20 Post-Panamax (PPX) cranes, and handles 20,000 container movements daily and is presently being deepened to accommodate larger vessels, since the PPX work was accomplished (widening of the Panama Canal). Details of the Port of Savannah's recent growth in container trade include:

- In 2018, total container trade reached 4.35 million TEUs (Twenty-foot Equivalent Units).
- Its total container trade grew 30% between CY14 to CY18 inclusive, at a 6.8% compound annual growth rate, fuelled by growth in imports (up 36%) and exports (up 25%)².

Importantly, the Georgia Port Authority plans to increase the capacity of the Port of Savannah from its current 5.5 million TEUs per year to 8 million TEUs per year by 2028, including:

- Expanding its ship-to-shore crane fleet from 30 to 42 cranes, including replacing older cranes, so the entire fleet will accommodate vessels greater than 14,000 TEUs, and
- Increasing the RTG cranes from 146 to more than 210.³



Figure 3. Some of approximately 30 ship-to-shore cranes currently operating at Port of Savannah



Figure 4. One of approximately 150 rubber tyred gantry cranes currently operating at Port of Savannah

1. inboundlogistics.com/cms/article/top-10-us-container-ports/
2. gaports.com/Portals/2/Market%20Intelligence/CY18%20Annual%20Container%20Trade.pdf?ver=2019-06-17-164835-097
3. gaports.com/media/press-releases/articleid/200/artmid/3569
4. gaports.com/about/savannah-harbor-expansion-project

SUMMARY

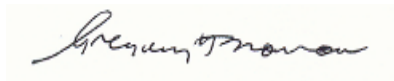
The Port of Savannah trial is the first trial for EdenCrete® in a marine or coastal environment, and apart from the very significant amount of future work at the Port of Savannah that it could potentially generate, it could also help open up a new, and very large infrastructure market including not only for ports but also a range of other coastal works and that are likely to be required as ocean levels continue to rise.

BACKGROUND

EdenCrete® is Eden's 100% owned, proprietary carbon-strengthened concrete additive that enhances a wide range of performance characteristics of the concrete including compressive strength, flexural strength, tensile strength, abrasion resistance, reduced permeability, increased

modulus of elasticity, and reduced shrinkage, delivering stronger, tougher, more durable and longer lasting concrete.

One of the primary target markets for EdenCrete® is improving the performance of concrete used in the construction and maintenance of concrete roads, bridges and other infrastructure, particularly where it is subject to heavy wear, freeze/thaw weather conditions and/or high levels of added salt. Additionally, it has potential for use in most other concrete applications including high-rise building construction, marine and coastal applications, water storage and pipelines, hardstand areas, warehouses, shotcrete applications and pre-stressed and pre-cast concrete structures and products.



Gregory H. Solomon
Executive Chairman

This announcement was authorised by the above signatory.
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