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AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

1 April 2016

EDENCRETE™ - US UPDATE

Commercial Order for EdenCrete™ Received in USA for a Heavy Wear and Highly Abrasive Application

HIGHLIGHTS

- **Important US commercial EdenCrete™ order received for use in replacing a high strength concrete slab located in an area of extreme heavy duty wear and abrasion, following a successful field trial in October 2015.**
- **The EdenCrete™ slab in the field trial replaced only the upper 70% of the original cracked concrete slab, greatly reduced costs, and outperformed a full -depth control slab with no EdenCrete™.**
- **The new replacement EdenCrete™ slab, compared to a slab constructed using the new ultra high strength specifications, will:**
 - **deliver a total project cost saving of approximately 40% - 45%,**
 - **be 50% thinner than the new ultra high strength slab design,**
 - **use only fiberglass fibres and carbon nanotube reinforcement in lieu of traditional steel mesh or rebar,**
 - **require little or no sub-base preparations, and**
 - **is intended to provide at least a comparable 5-year service life.**
- **Both the field trial slab and the forthcoming slab replacement use the same EdenCrete™ enriched concrete mix that was approved by GDOT for use in its 24-hour concrete repair mix. If similar improvements in performance and cost savings can be replicated in other highway and infrastructure trials, the commercial rollout of EdenCrete™ into the US infrastructure market may be accelerated.**

DETAILS

Eden Energy Limited (“Eden”) (ASX: EDE) is pleased to announce that it has received an important commercial order for its EdenCrete™ concrete admixture that is to be used to replace numerous sections of a concrete hard stand area that is subject to very heavy wear and abrasion.

The project is to take place at a major regional maintenance facility in Georgia for a large national US company where very heavy steel components from a national transport fleet are brought for repairs and maintenance.

The concrete at the maintenance facility is exposed to extreme rolling loads, impact loads and abrasive wear; and several times each year, under a scheduled maintenance programme, sections of the hard stand area that are severely cracked and require replacement are ripped up and replaced (see **Figure 1**).



Figure 1. EdenCrete™ field trial slab in foreground with heavily loaded semi-trailer carrying a typical load in upper right of photograph

Each repair programme usually involves replacing approximately 90 cubic yards of the most worn sections of concrete, spread across various locations around the large yard. The first project in which EdenCrete™ is to be used is scheduled to begin in early in April 2016.

This project follows a successful field trial of EdenCrete™ in October 2015 at the same maintenance facility when a concrete pad enriched with EdenCrete™, using the same concrete mix that was approved by Georgia Department of Transportation (GDOT) in November 2015 for 24 hour maintenance and B Class concrete, but without any set accelerator. The field trial was undertaken to compare performance under identical conditions and concrete mix design against a second concrete pad but with no added EdenCrete™.

Over the past six months the standard concrete trial pad without the added EdenCrete™ has cracked in multiple places and is starting to show damage at the edges (see **Figure 2**).



Figure 2. Control slab showing considerable cracking
However, the EdenCrete™ enriched concrete trial pad is still in good condition (see **Figure 3**)



Figure 3. EdenCrete™ Field Trial Slab showing no cracking or damage

As a result, EdenCrete™ has been specified to be used in the next replacement slab, the thickness of which is to be reduced by 30% from the original design and 50% from a the newly proposed 5-year service life design mix. It requires less concrete, no steel re-enforcing and a reduced excavation time. Consequently, the budgeted repair costs (including the EdenCrete™) of the replacement slab are approximately 40% - 45% less than for the newly designed ultra-high strength concrete slabs without EdenCrete™ that have a targeted 5 year service life. The thinner EdenCrete™ replacement slab is also planned to last at least 5 years.

This successful field trial, in an extremely aggressive environment, is an important milestone in the commercial rollout of EdenCrete™. It confirmed, under very hard wearing and abrasive operating conditions, that EdenCrete™ concrete delivered greatly enhanced performance and durability. This was anticipated, based on the results (through 90 days) achieved in laboratory tests of EdenCrete™ under ASTM C494 “Type S”, a US and International standard for specific types of chemical concrete admixtures (see Figure 4).

EdenCrete™ ASTM C494 Results (Reported by Intelligent Concrete LLC)								
Test	% Increase of EdenCrete (4gal/yd. ³) over Reference							
	Age (Days)							
	1	3	7	28	56	90	180	365
Compressive Strength (ASTM C39)	25%	35%	39%	41%	41%	39%	5/25/16	12/1/16
Flexural Strength (ASTM C78)		25%	10%	32%	Complete			
Split-tensile Strength (ASTM C495)				29%	22%	Complete		
Abrasion Resistance (ASTM C779 Proc C)					56%	59%	Complete	
Length Change (ASTM C157; Shrinkage)	61% reduction; Complete							
Time of Set (ASTM C403)	Reduced: Initial Set 3 min, Final Set 4 min; Complete							
Freeze/Thaw Resistance (ASTM C665)	Results with the 180-day Interim report: 6/5/16							

Figure 4. ASTM C494 “S” test results for EdenCrete™ (to 90 days)

Importantly, the data from the ASTM C494 abrasion resistance tests, which showed a 56% reduction in the depth of abrasive wear at 56 days, and which was extended at 90 days to a 59% reduction in the depth of wear, produces the impressive performance chart in **Figure 5**.

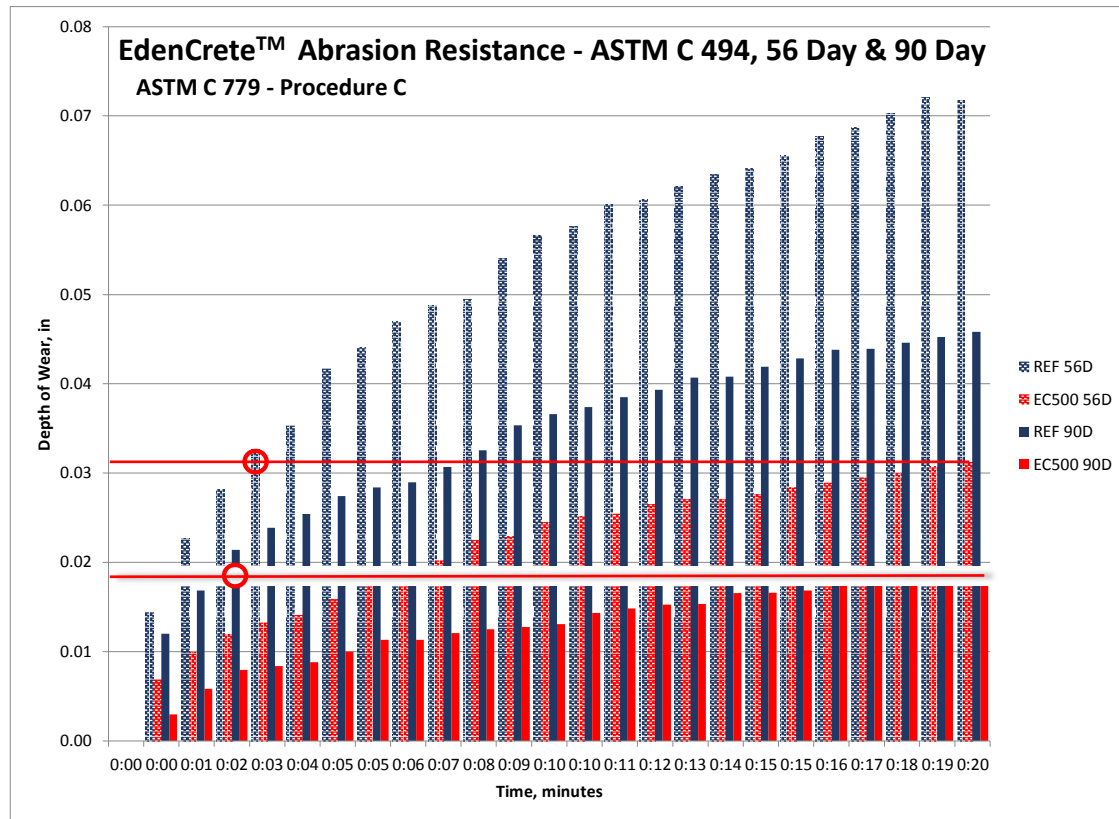


Figure 5. ASTM C494 abrasion resistance test at 56 days and 90 days

Summary

The US Interstate Highway network was estimated by the US Geological Survey in 2005 to consume almost 40% of all cement used in the USA.

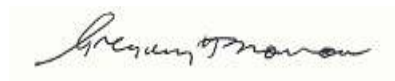
The successful results of this field trial detailed above and the forthcoming slab replacement, both using the same EdenCrete™ enriched concrete mix (but excluding the accelerant) that has been approved by GDOT for use in both its 24 hour concrete repair mix and Class B concrete), are greatly encouraging events.

If the anticipated improvements in performance and cost savings that are expected from the forthcoming replacement slab can be replicated in other highway and infrastructure trials and projects, the commercial rollout of EdenCrete™ into the huge US infrastructure market may well be significantly accelerated.

A further GDOT field trial of EdenCrete™ enriched concrete for broader use in concrete pavement and/or concrete white topping has been approved (**EDE: ASX 10 December 2015**) and is planned to be undertaken with GDOT in the next 3-6 months.

BACKGROUND

EdenCrete™ is Eden's 100% owned, proprietary carbon-strengthened concrete additive, one of the primary target markets for which is improving the performance of concrete used in the construction and maintenance of concrete roads, bridges and other infrastructure. Additionally, it has potential for use in a range of other applications including high-rise building construction, marine and coastal applications, water storage and pipelines, and pre-fabricated concrete structures and products.

A handwritten signature in black ink, appearing to read "Gregory H. Solomon", is displayed on a light yellow rectangular background.

Gregory H. Solomon
Executive Chairman