

ACN 109 200 900

# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT 17 April 2023

# **US EdenCrete® Market Continues to Grow**

Eden Innovations Ltd (Eden)(ASX: EDE) is pleased to report that:

- US market for EdenCrete® products continues to grow with both new and repeat customers; and
- EdenCrete® Pz7 has successfully completed the 12 months' NTPEP evaluation.

## **Details**

## Some of the Recent New Projects and New Customers

- Fifth US warehouse project for Michelin to include EdenCrete® Anderson, South Carolina
  - Concrete slab for warehouse requiring 400+ cubic yards of concrete.
  - o EdenCrete® to be dosed at 1 gallon per cubic yard of concrete.
  - o Estimated start date is mid-May 2023.
- Blue Dot Ready Mix Company Charlotte, North Carolina
  - New Customer
  - Has installed bulk storage and dispensing at 4 of their 6 plants.
  - EdenCrete is to be used in shotcrete and pumped concrete applications including for construction, residential and commercial walls, curbing, and line pumped mixes.
- Artisan Group Nags Head, North Carolina
  - New Customer
  - US Skate Park builders (primarily on east coast, Florida to Massachusetts)
  - o EdenCrete® in the shotcrete used to construct the skate parks see Figure 1.



Figure 1. Mooresville Skate Park,- North Carolina.

#### Mooresville Skate Park, North Carolina

- Blue Dot ready mix was the concrete supplier.
- Project started in September 2022 and was completed in January 2023

#### Warsaw City Skate Park, North Carolina

Project started in February 2023 and completed in March 2023

#### Kitty Hawk, North Carolina

Skate park planned to begin within the next month.

#### Greenfield, Massachusetts

Skate park planned

#### Dover, Delaware

Skate park planned

#### Portsmouth, New Hampshire

Skate park planned

#### • Crete Solutions – Charlotte, North Carolina

- o Charlotte, NC plant has been selling EdenCrete in bulk for 2 years
- o Denver, NC plant is new Customer-Installed bulk EdenCrete® storage and dispensing.

#### Wilder Apartment Project, Denver Colorado

- o 500+ cubic yards of shotcrete, dosed with EdenCrete® at 0.50 gpy, used for foundation walls of a multi-story condominium building with On-Demand Concrete (see Figure 2).
- Repeated applications of shotcrete completed. Both General Contractor and shotcrete contractor pleased with thicker stack-ability, smooth finish, less dust and approximately 10-15% less rebound waste achieved with EdenCrete® in the shotcrete mix.



Figure 2. Wilder Apartment Project- Denver, Colorado.

#### Longs Peak Dairy, Pierce, Colorado

- o Construction of a concrete fluid retention basin for methane gas capture completed at Longs Peak Dairy (see Figures 3-4), requiring 250 cubic yards of concrete with EdenCrete® dosed at 2 gallons/ cubic yard of concrete.
- The basin will be used to liquify bovine waste, that will then be pumped into a tank where it will generate methane that will be collected and sold into the energy grid at a premium, helping to lessen the amount of methane released into the atmosphere by cattle.
- o The use of this technology is growing rapidly, with the next fluid retention basin planned to be constructed in the next few months at Platteville, Colorado.
- o There are potentially five additional fluid retention basin projects that are in the planning stage, to be located in Northeast Colorado and Northwest Kansas.



Figure 3. Longs Peak Dairy-fluid retention basin floor.



Figure 4. Longs Peak Dairy-fluid retention basin with walls.

### Harrison Western – New water tunnel, Colorado

- Harrison Western is a mining and construction company specializing in mining, heavy civil and industrial construction, geo-construction, and tunnelling.
- Recently Harrison Western trialled EdenCrete® in concrete that was to be pumped and applied as shotcrete, in the construction of a new water tunnel, at high altitude in the mountains of Colorado and they were very satisfied with the results.
- They were required to pump the concrete approximately 37 metres (125 feet) but had been having difficulty pumping it even 13 metres (40 feet).
- When EdenCrete® was added into the concrete mix, Harrison Western was able to achieve the required performance and has now begun to bid all shotcrete projects with EdenCrete® included as a critical component of the concrete mix design.

## EdenCrete®Pz7 -NTPEP Evaluation Program successfully completed

- EdenCrete® Pz7 successfully completed the ASTM C494 evaluation program via NTPEP.
- The entire EdenCrete® product range (EdenCrete®, EdenCrete®Pz, and EdenCrete®Pz7) has now successfully completed both the ASTM C494 program as well as the NTPEP program.
  - NTPEP (National Transportation Product Evaluation Program) combines the professional and physical resources of the AASHTO (Association of American State Highway Transportation Officials) member departments in order to evaluate materials, products, and devices of common interest for use in highway and bridge construction.
  - The primary goal of the program is to provide cost-effective evaluations for the State Departments of Transportation (DOTs) by eliminating duplication of testing and auditing by States and duplication of effort by manufacturers that provide products for evaluation.

# **Summary**

#### The continued steady growth in:

- the range of applications,
- o the number of new and repeat customers,
- and the number of US states where EdenCrete® products are being used on a regular basis,

is strong testament to the benefits that the EdenCrete® products have been shown to deliver to concrete over the past eight years.

These benefits range from improved wet properties, enhanced workability, improved pumpability, and reduced waste in shotcrete applications, whilst at the same time frequently delivering material improvement in many other performance characteristics of the concrete including compressive and flexural strength, abrasion resistance and reduced chloride permeability, resulting in more durable, longer lasting concrete.

# EdenCrete® Background

Eden's 100% owned range of EdenCrete® products are carbon-strengthened concrete additives that enhance a wide range of performance characteristics of the concrete including compressive strength, flexural strength, tensile strength, abrasion resistance, reduced permeability, increased modulus of elasticity, reduced shrinkage, collectively delivering stronger, tougher, more durable, longer lasting concrete.

EdenCrete® is also highly suited for all pumped concrete applications, including shotcrete applications, with low dosages of EdenCrete® delivering reduced friction and consequentially requiring lower pump pressures, improved workability and producing far less rebound of the shotcrete.

EdenCrete® is generally used in concrete that incorporates a high percentage of Ordinary Portland Cement (OPC or Portland cement) whilst EdenCrete®Pz and EdenCrete®Pz7 are mostly used in concrete that incorporates a high percentage of pozzolans as an alternative cementitious material (including fly-ash and blast furnace slag which are each waste by-products from coal fired power stations and metal smelting

respectively, thereby each being treated, as a waste by-product, as having a zero Greenhouse Gas footprint from its production process).

As a result, EdenCrete\*Pz and EdenCrete\*Pz7 have repeatedly shown that they are capable of enabling the proportion of the Portland cement in the concrete to be replaced by a percentage of pozzolans with far lower Greenhouse Gas footprints, resulting in a reduction in the Greenhouse Gas footprint generated in the production of the various cementitious components used in the manufacturing of the concrete.

All these products have been repeatedly shown to be suitable for use in ready-mix concrete, pre-cast and prestressed concrete, shotcrete, pumped concrete and volumetric concrete.

One of the primary target markets for EdenCrete® products is improving the performance of concrete used in the construction and maintenance of concrete roads, bridges, ports, airports, and other infrastructure, particularly where it is subject to heavy wear, freeze/thaw weather conditions, heavy snow falls, and/or high levels of added salt or de-icing chemicals.

Since 2015, EdenCrete® products have been sold in the USA and more recently also in Australia and a growing number of other countries. They have successfully and repeatedly delivered a wide range of benefits when incorporated into concrete that is used in many different applications, including low-rise, medium-rise and high-rise building construction, roads and bridges, ports/marine/coastal applications, airports, bus stations, carparks, water pipes, hardstand areas, waste transfer stations, warehouses, all shotcrete applications, stadiums, swimming pools, earth stablisation, sculptured concrete, structural concrete insulated panels, light weight building panels, and a wide range of pre-stressed and pre-cast concrete structures and products.

Gregory H. Solomon

Executive Chairman

This announcement was authorised by the above signatory.

For any queries regarding this announcement please contact him on +618 9282 5889.