SGS, LLC & BLUE WORLD SCIENCES





BLUE WORLD SCIENCES

History of Blue World Sciences





- Blue World Sciences, Inc. (BWS) is a science & technology company
- BWS research has developed and designed new superior and Green building materials
- Portland concrete has a two hundred year old history
- Four thousand years ago the ancient Egyptians & Romans built concrete structures that are still with us today
- The superior concrete technology they used was lost forever until rediscovered most recently by Blue World Sciences

- Early attempts at geo-polymers demonstrated the superiority of this ancient concrete
- The geo-polymers had their own problems with costs, sustainability & caustic chemical composition
- Today we have an elasto-polymer from a stronger more durable sustainable, non-caustic, high performance concrete developed by BWS with over 9 years of research & testing



 The BWS product promises high growth in a high demand market that yields large profit margins with a small capital investment

With further investigation & independent testing applied to the development, BWS offers even greater opportunity to have truly Green Construction so whether we think roads or buildings or precast products such as block / brick products, or roofing there is no doubt that BWS is an industry leader



How Do We Start?

Feasibility Study:

Analysis of raw materials
 Testing of raw materials
 Independent laboratory reports
 Cost analysis
 Market analysis
 Regulatory approvals

Franchise Licensing





Blue Crete Discovery

Blue Crete – organic based concrete is the result of a natural process of bio-mineralization. The organic algae serves as an ionic scaffold for the collection and covalent bonding of minerals. This basic process of nature, like the formation of the sea turtle shell or the elephant tusk or like our own skeleton, is the foundation for the production of a superior concrete, which we call Blue Crete. With Blue Crete and its amazing properties we can create new as well as improved applications. Soil Stabilization is just one of these.



Blue World Sciences has developed our algae and other organic materials to provide a new approach to the manufactu of cement.

Now there is no need for ovens.



Our protected Algae and organic powder transforms our Blue Crete binder into a high performance cement.





Exothermic Reaction

 Due to the Covalent Bonding nature of Blue Crete cement, it becomes Monolithic, and cures by an Exothermic Reaction, which intrinsically expels the water.



Portland Cement Cures by Hydration which is a completely different chemical reaction.

Permeability......Compare OPC with Blue Crete



Blue Crete... Is hydrophobic, which means liquids will not penetrate like they do with OPC.

Great for: Roads and soil stabilization

- Waterproof basements
- Pipe Coatings
- Countertops
- Wastewater tanks
- Fish Farms
- Boats, Docks & harbors

Blue Crete will Covalently Bond and Never will Delaminate from Portland Cement

Blue Crete bonds without chemical additives and adhesives **NO NAILS REQUERED**



Blue Crete Super- Insulator almost no Heat Transfer



- Blue Crete binder gives the Blue Crete cement super insulating abilities no matter what the aggregate is.
- No more hot surfaces.
- It can be poured in freezing temperatures.

Portland blocks would probably explode with that much heat

Blue Crete Environmental Benefits

- Releases no CO2
- Burns no fossil fuels
- Earn Carbon Credits
- Can Remediate and Neutralize a variety of aggregates, including some Toxic Waste materials.
- Further testing using different industrial waste materials will help us to identify new and inexpensive raw material supplies





Blue Crete Precast and Soil Stabilization is where the \$Money\$ is at !



Blue Crete Cement Soil Stabilization roads are quick and strong and best of all inexpensive and even more interesting is that they are permanent

Products using Blue Crete are:

- Waterproof
- High Insulation (R factor)
- Mold retardant
- Will not fade or discolor
- Highly durable
- Acid, alkali & salt resistant
- Flexible
- No shrinkage or expansion
- Hurricane proof
- Covalently bond to the sub bed
- Form a monolithic structure of incredible strength
- Protection of metal from rust and oxidation deterioration
- Pot holes repaired easily and permanently



Blue Crete Cement Structures are Portland just can't do it

- Fire proof
- Seismic resistance
- Energy efficient
- The Original true Green Building Solution
- Higher compression strength
- Green environmentally friendly
- Have tensile strength
- High R factor
- Low freeze thaw coefficient
- Do not support the growth of micro organisms such as mold, bacteria



Blue Crete is an... Energy Saver!



It's Simple – Blue Crete makes a Better and Less Expensive Construction Products

What's the recipe for success?



BLUE CRETE SOIL STABLIZATION





Roadbed stabilization treatments include native roadbed soils, old graveled roads, or recycled roadway surface materials which can be excavated and mixed with Blue Crete to form superior road surfaces which becomes stable within hours.

We create a superior paved structure that maximizes potential road strength and extends the useful life of the road bed.

Blue Crete Road Stabilization Process

Soil Stabilization is the alteration of soils to enhance their physical properties.

Stabilization can increase the shear strength of a soil and/or control the shrink-swell properties of a soil, thus improving the load bearing capacity of a sub-grade to support pavements and foundations.

In the case of Blue Crete the soil is stabilized from the sub grade up forming a paved road surface ready to handle rugged and heavy traffic or to build structures upon Mixes old raw & untreated aggregate with Blue Crete Binder Soil Stabilization Mix to form a special quick setting and rugged cement surface

- High compression strength
- Resists cracks
- over three thousand PSI
- Forms monolithic structure
- •Covalently bonds with under bed
- Anti-seismic
- Waterproof
- Acid & alkali resistant
- •Coefficient of expansion near zero



NO OVENS – NO POLLUTION

- No toxic petro chemicals are used.
- NO cooking is necessary
- And, it all results in a superior road all done with our Blue Crete low carbon footprint process which means...

We are environmentally friendly!





Soil Stabilization takes advantage of existing road aggregate



Blue Crete Soil Stabilization roads...



Can be manufactured with salt water!

Blue Crete Road Stabilization platforms serve as foundations for structures

As a result of soil stabilization, the bearing capacity of the foundation of the structure is increased and its strength, water proof resistance to washout is so improved that great structures can be built upon these stabilized platforms of Blue Crete.





Even the best structure cannot stand on soil not properly stabilized

Soil stabilization is widely used in the construction onsagging soils of industrial and civil buildings; for strengthening the banks adjoining highways and structures



High performance concrete

Our products are made with natures approval

- Blue Crete Stabilization Products
 are Environmentally
- Friendly



Blue Crete Superior performance

- Economic
- Green
- Permanent
- Made from organic and other natural materials
- Monolithic
- Prevents metal from rusting
- Near Zero coefficient of expansion
- Flexible
- Resistant to heat cold acid and alkali conditions
- Will not crack
- The list goes on and on





Ph: +1 (954)907 1823 E Mail: blueworldsciences@gmail.com Ph: +1 (954)482 8147 E Mail: mvyskocil.sgs@gmail.com



SUSTAINABLE GLOBAL SOLUTIONS