



ديزرت كنترول السعودية
Saudi Desert Control

Company Profile



2025

Introduction

Saudi Desert Control, established in 2023, a leader in sustainable land transformation using the Norwegian Desert Control’s Liquid Natural Clay (LNC) technology.

Our innovative approach enhances soil health, reduces water usage by up to 50%, and bolsters resilience against droughts and extreme temperatures.

We're dedicated to biodiversity preservation and carbon reduction, aligning seamlessly with Saudi Vision 2030's goals for a greener and sustainable future.

12+

Years of R&D

5+

Years of Field Validation

48

Countries Patented



Solution Areas

LNC can be used for a wide range of applications



Agriculture

Boost the productivity of your agricultural lands with our LNC technology, specifically tailored for farming needs. It can be applied directly through irrigation systems, making it versatile for both greenhouse and open-field agriculture. Achieve healthier crops and higher yields while optimizing water usage and reducing dependence on chemical fertilizers.



Sustainable Green Landscapes

Enhance the sustainability of parks and green spaces with our LNC technology. Our eco-friendly solution rejuvenates soils by improving water and nutrient retention, creating resilient green landscapes even in harsh environments while conserving water resources.



Turf, Sports, and Recreational Fields

Golf courses and football pitches in desert environments face significant challenges due to high water demand and maintaining firm, fast playing surfaces. Our mineral turf solution retains soil moisture, reduces irrigation needs, and maintains turf quality.



Desert Greening

LNC is ideal for desert greening, including afforestation, reforestation, and regenerative desert projects. It improves soil health, reduces transplantation shock, and boosts sapling survival rates. Our solutions benefit forest management, nurseries, seedling cultivation, and urban forestry projects.



Dust Mitigation & Infrastructure Protection

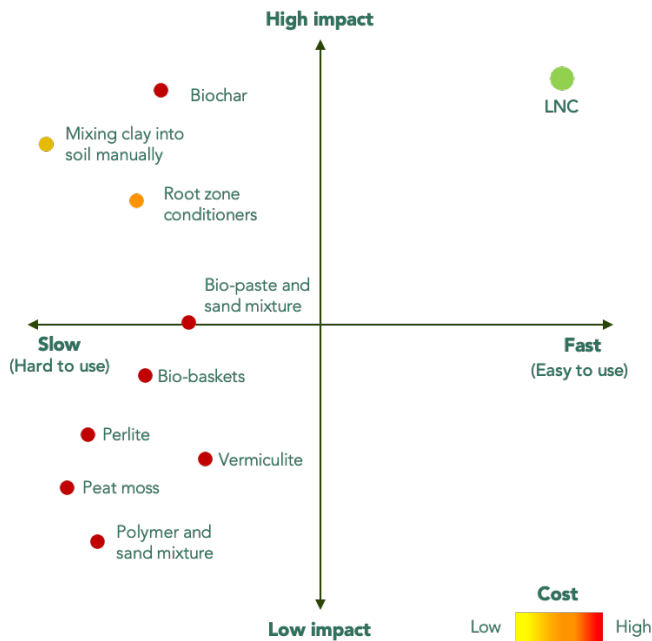
LNC is ideal for dust mitigation and infrastructure protection. It enhances soil stability, reducing dust and erosion. Our solutions benefit construction sites, roadways, and urban areas, ensuring better air quality and protecting infrastructure from dust-related damage.

LNC Technology

Comparison of LNC vs Traditional Methods

Traditional Methods

Soil amendments and soil conditioners (Biochar, Polymers, Perlite, etc..)



- ◆ Traditional treatments take 7-15 years to take effect and require 100 kg of raw material per m²
- ◆ Carbon footprint associated with logistics and transportation.
- ◆ Highly intrusive, requires manual or mechanical intervention.
- ◆ Expensive, degradable, and requires frequent re-application.



VS

LNC is a New Product Category

Soil Ecosystem Enhancement for Coarse's Soil



Immense water savings:
Up to 50%



Requires 1/100 raw materials
vs. traditional clay treatments



Instantly effective



1 Application lasts ~5 Years



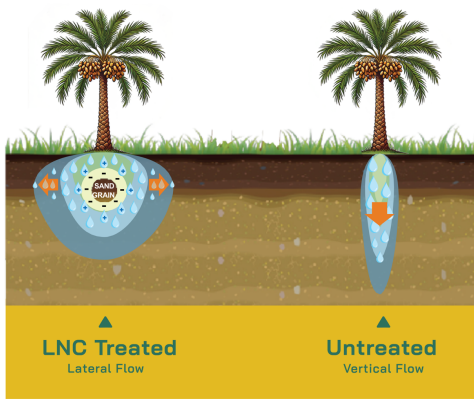
Non-intrusive easy application



100% Natural

How LNC Technology Works

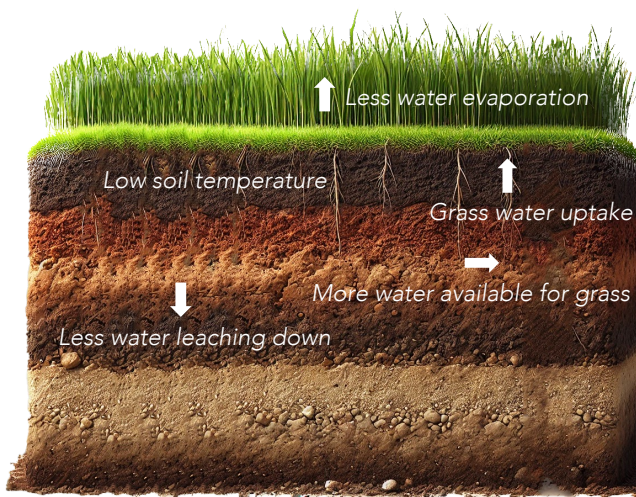
Degraded sand into soil that retains water and nutrients



When applied, LNC percolates into the soil and forms a layer around the plant root zone. The clay particles adhere to grains of sand, binding them together to create a cohesive soil structure that acts like a sponge. This structure retains water and nutrients more effectively, making water flow horizontally under the soil rather than vertically. This horizontal movement reduces the need for frequent irrigation and enhances soil fertility.



Our soil sampling and sensors monitor soil health KPIs and LNC performance and advanced analytics that includes water use, soil moisture, soil temperature, etc.



LNC Increases micropores and reduces macropores in the sandy soil texture preventing water from evaporating and from draining too deeply into the soil.

Liquid Natural Clay Production

Mobile Production Unit



Production Unit Specs

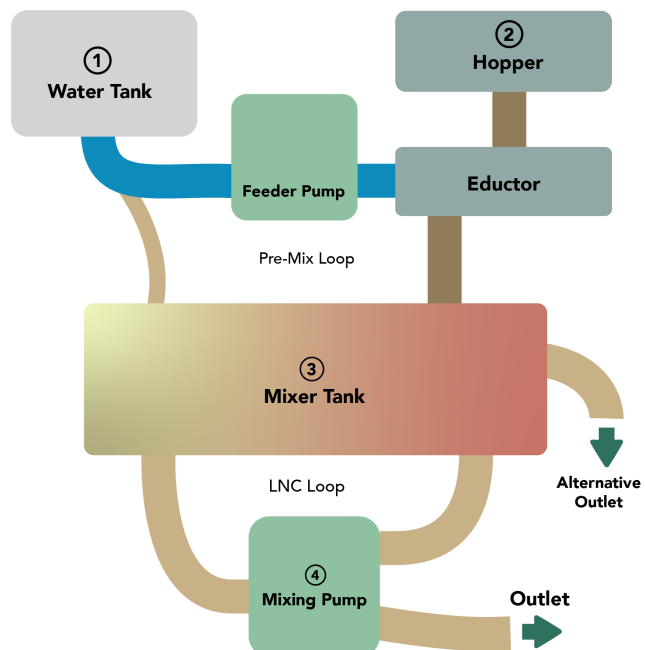
- Size: 20-foot container
- Weight: 5.8 Tons
- Mobile capability: 1,000,000 L/day/ 4 Units
- Easy to move with a forklift and mobile crane

Reduced Carbon Emissions

Reduced transportation requirements and lower carbon footprint due to on-site formulation and production.

How it's produced

By combining our analytics with proprietary algorithms, we customize each formulation to match local soil.



Liquid Natural Clay Production

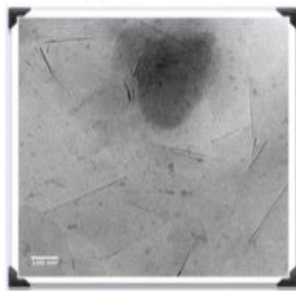
Composition and Materials



Bentonite Clay

LNC is produced by selecting high-quality bentonite clay, which is mixed with water to achieve a uniform liquid suspension. This mixture undergoes a rigorous homogenization process to ensure even dispersion of clay particles. The formulation is customized for each client to meet specific soil and crop needs.

Clay platelet (TEM)



Aggregate - stack of platelets (TEM)



Eco-friendly aspects of the unit and process requires 1/100 raw materials vs. traditional clay treatments

Certifications

UNITED ARAB EMIRATES
MINISTRY OF CLIMATE CHANGE
& ENVIRONMENT

الإمارات العربية المتحدة
وزارة التغير المناخي والبيئة

شهادة تسجيل سماد أو مستحضر زراعي
Registration certificate of fertilizers and agricultural conditioners

This is to certify that the product is registered at the Ministry of Climate Change & Environment according to the following information

هذا هو ما نؤكد أن المنتج مسجل لدى وزارة التغير المناخي والبيئة وفقاً للمعلومات التالية

Certificate No.	DDG-APH-24-2318038	رقم الشهادة
Verification Code	229-5254	رمز التحقق
Issue date	13-07-2023	تاريخ الإصدار
Expiry date	12-07-2028	تاريخ الانتهاء
Operation Name	Desert Control Liquid Natural Clay - Natural Clay Manufacturing - Sole Proprietorship L.L.C.	اسم المنشأة
Operation Address	21 Al Jada'a St - Abu Dhabi Industrial City - ICAD - Abu Dhabi - United Arab Emirates	موقع المنشأة
Commercial Name	Liquid Natural Clay	اسم المنتج
Product Category	Certified Organic Fertilizers	فئة المنتج
Producing Company	Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.	شركة الإنتاج
Country of Origin	الإمارات العربية المتحدة	بلد المنشأ

هذا المستند معتمد إلكترونياً ولا يحتاج إلى توقيع أو ختم
This document is electronically approved and does not require signature or stamp

المنتج معتمد إلكترونياً ولا يحتاج إلى توقيع أو ختم
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UNITED ARAB EMIRATES
MINISTRY OF INDUSTRY
& ADVANCED TECHNOLOGY

الإمارات العربية المتحدة
وزارة الصناعة والتكنولوجيا المتقدمة

جوسان الترخيص
SCHEDULE OF CERTIFICATION
Ministry of Industry and Advanced Technology

Company Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.

Product Category: Organic

Certificate No.: 20-03-68803-023-03-901620-00002

Registration Date: 16/03/2023

Valid Until: 15/03/2024

Approved organic areas: NA

Sl.No	Brand Name	Chemical Name	Chemical Details	Registered Dimension/Size	Country of Origin
1	Desert Control	Liquid Natural Clay-LNC	NA	R22-03-08-0816-0816-2023-0916-023020	United Arab Emirates
2	Desert Control	Bentonite	NA	JOBCAALAM2000247-2	United Arab Emirates

Issuing Parties

SGS

مختبر SGS من قبل وزارة الصناعة والتكنولوجيا المتقدمة
Issued by Ministry of Industry and Advanced Technology

This is an electronic certificate and does not require stamp and signature. Certificate will be invalid in case of any modification

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OMRI Listed®

The following product is OMRI Listed. It may be used in certified organic production or food processing and handling according to the USDA National Organic Program regulations.

Product: Desert Control LNC

Company: Desert Control Murty Wares 1219 E 27th Street YUMA, AZ 85358-0305 United States

Status: Allowed

Category: NOP-Bermonite

Issue date: 13-jun-2023

Product number: dsl-18739

Class: Crop Fertilizer and Soil Amendments

Expiration date: 1-Sep-2024

Restrictions: Not applicable

Executive Director/CEO

Organic Materials Review Institute
P.O. Box 11536, Eugene, OR 97440-3758, USA
541.343.7500 info@omri.org OMRI.org

LNC Impact on Agriculture

Leading Commercial Performance through Research-Based Data

Date Palm Production



WATER USAGE

⚡ 46%

Less water for irrigation



ENERGY USAGE

⚡ 50%

Less for irrigation systems



QUALITY

⚡ 15-24%

Fruit Grade A



YIELD

⚡ 16%

1st Year Harvest



PROFIT

⚡ 1.5x - 2.4x

Water Use Efficiency (WUE)



FERTILIZER USAGE

⚡ 20%

Nutrient use efficiency & Store SOC

Alfalfa Production



WATER USAGE

⚡ 55%

Less water for irrigation



ENERGY USAGE

⚡ 55%

Less for irrigation systems



FERTILIZER USAGE

⚡ 22%

Nutrient use efficiency



QUALITY

⚡ 13%

Crude Protein (Alfalfa)



GERMINATION

⚡ 40%

Plant Density per Area



PROFIT

⚡ 2x

Water Use Efficiency (WUE)

Previous Projects

Real success stories of LNC impact

Research Field Trial by Yuma Extension

University of Arizona's Yuma Mesa Research Station, USA



In the first test of Desert Control's Liquid Natural Clay (LNC), a half-acre of unfarmed, nutrient-poor land on the University of Arizona's Yuma Mesa research center was chosen. The LNC treatment showed promising results, with romaine lettuce yields increasing by 20 to 50 percent compared to untreated soil. This innovative, chemical-free soil amendment, which keeps water near the roots, has been approved for organic farming and is being tested on romaine lettuce, celery, watermelons, and bell peppers.

Golf Course in Arizona

Elevating the Game of Golf with Improved Sustainability and Water Conservation



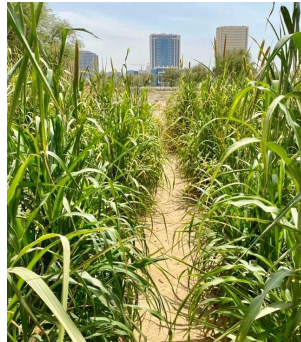
Coyote Wash Golf has adopted Liquid Natural Clay technology for their course, significantly enhancing water retention in the top twelve inches of soil. This innovative solution balances turf quality with water conservation, fostering long-term sustainability. LNC underscores the golf industry's commitment to responsible stewardship, transforming golf course management to conserve vital resources while maintaining pristine landscapes and offering enriching experiences for players and spectators.

Previous Projects

Real success stories of LNC impact

Research Field Trial

International Centre of Biosaline and Agriculture, UAE



Research by ICBA (International Center for Biosaline Agriculture) documents increased yields while using up to 50% less water for irrigation.

Cucumber Farming Trial with LNC, Private Farm

Al Kharj, Riyadh Province, Saudi Arabia



We conducted a field trial in Al Kharj, using Liquid Natural Clay (LNC) alone and in combination with other solutions to farm cucumbers in several greenhouses. The results demonstrated excellent moisture retention in Saudi soil, showcasing the effectiveness of LNC in enhancing soil water retention and supporting agricultural productivity. This experiment highlights the potential of LNC for improving soil conditions and promoting sustainable farming practices in arid regions.

Company's Events and Expos

Meet us to learn more!

Our participation in industry events and expos is vital for raising awareness about our services, understanding sector needs, and learning directly from farmers about their requirements. We always aim to provide hands-on demos, making our presence more engaging for visitors.

Past Participations



Saudi Sustainable Building Expo, 2024

Our team had the pleasure of participating in the Sustainable Building Show in Riyadh, from 2nd of June till the 5th of June, where we showcased the capabilities of Liquid Natural Clay (LNC) while focusing on dust mitigation and infrastructure protection.

Agri-Tech Mini-Hub at Estidamah Center

Our team proudly participated and showcased the transformative capabilities of Liquid Natural Clay, earning recognition for our significant contributions to sustainable agricultural practices, food security, and resource conservation in the Kingdom.



Future Participations



Saudi Agriculture Expo 2024

We are excited to participate in the upcoming agriculture expo (21 October – 24 October) to meet new people and showcase our technology. Please visit us to learn more.



office@saudidesertcontrol.com

www.saudidesertcontrol.com

Riyadh, Saudi Arabia

Tel: +966539864005