HARNESSING NATURE'S TECHNOLOGY

# **BIOZONE MANUFACTURING**

#### **TURNKEY CLEAN WATER, WASTEWATER, AIR TECHNOLOGIES AND SOIL REMEDIATION**





## INTRODUCTION

bioremediation



- Unique purification technology by means of naturally occurring oxygen, ozone and bacteria providing chemical free oxidation and
- 25 years experience in water,waste and air purification
- Tailor made engineered turnkey solutions





#### THE VALUE OF OZONE REPLACING CHEMICALS & MEDICINES

#### OZONE

- Is the strongest oxidizer commercially available
- Requires no storage and is generated on site
- Ozone is safe, natural and an excellent flocculent
- Reverts back to oxygen rapidly leaving no harmful contaminants
- Iron and manganese oxidation
- Medical oxygen therapy
- Also oxidises virus such as cryptosporidium,
   Enteroviruses (72 types, e.g., polio, Gastroenteritis, heart echo, & coxsackie viruses), Covid 19...

## **APPLICATIONS**





#### **REMOVE UNWANTED SMELLS**

Hotel rooms, smoking, garbage and refuse areas, lift wells, mortuaries, fat rendering plants/sites, public transit.



**OXIDISE IRON AND/OR MANGANESE IN WATER** Borehole, river or dam water.



#### **DECONTAMINATE WITH OZONE GAS** Schools, offices, factory spaces,

containers, mortuaries, buses, taxis, trains and trucks.

#### WASH / RINSE / SPRAY WITH CHEMICAL FREE Germicidal Water

Fruit, vegetables, meat, preparation surfaces, CIP, bottles and packaging.



#### **DISINFECT WATER WITHOUT CHLORINE**

Wine and water bottle filling plants, factory water, pharmaceutical, koi ponds, aquariums.

#### BIOREMEDIATION

Encouraging and growing natural bacteria to solve soil, water and waste pollution.



#### MAINTAIN GERM AND VIRUS FREE INDOOR AIR

Washrooms, toilets, call centres, offices, factory work spaces.

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#### **FUNGUS, MOULD, BACTERIA ETHYLENE CONTROL** Cold rooms, transportation and storage.



#### TREAT AND RECYCLE WASTE AND PROCESS WATER FOR REUSE

Factory, sewage treatment plants, waste water.

#### USE OZONE TO ATTAIN CARBON CREDITS WITH NON THERMAL TECHNOLOGIES

Waste treatment and oxidising noxious gases such as Nitrous and Sulphur oxides.



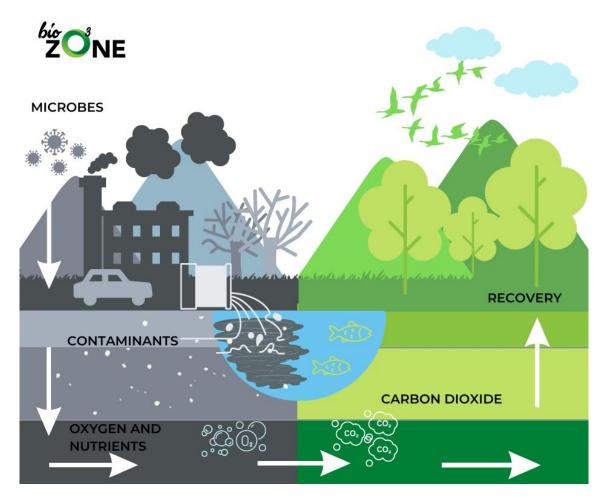
#### **REPLACE CHEMICALS & STEAM WITH OZONE**

Industrial laundries, autoclaves and medical waste



## **SAVING AND PROTECTING THE ENVIRONMENT**

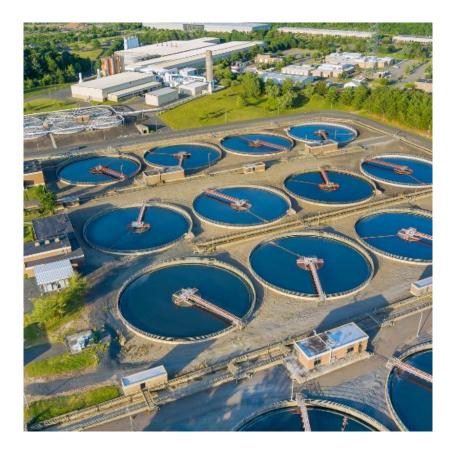
- Ozone
- Bioreactor technologies
- Bioremediation
- Nano Bubbling





### **BIOREMEDIATION EXAMPLES (PAST, PRESENT AND POTENTIAL)**

Project	Area
Capricorn Business Park Lake	Cape Town
North End	Port Elizabeth
Nyl Dam	Mokopane
Bruma Lake	Johannesburg
Holfontein	Breswol



### **CARBON CREDITS**



- NOX Nitrous oxide removal
- Manganese oxidation
- Treat / recycle wastewater
- Recycle process and effluent water
- Industrial laundries
- Medical waste removal
- Pulp and paper bleach



## **SUCCESSFUL PROJECTS**





COMPANY	PROJECT
Prepared water bottling	Ozone generators for bottled water and ozonated water on route
Meat Mania	Water bottling plant and borehole water treatment
Eastplats Mines	Sewage treatment container
Ushaka	Marine life support
Olympic Village Maputo	Sewage treatment plant for 2000 athletes accomodation and the Stadium
Roodeplaat, Themba, Bitou, Midvaal, Rietvlei, Delmas	Municipal Water treatment plants upgrades
LA Visagie, Blueberry, Cannabis	Ozonation of fresh produce in transit irrigation and production areas
Freshmark / Shoprite	Cold Room distribution warehouse storage for fresh produce
Yukon	Cold room storage for carrots for export to USA
Gift of the Givers	Various Engineered water treatment systems countrywide
Motsepe Foundation	Water purification for rural communities country wide

## **FUTURE & POTENTIAL PROJECTS**

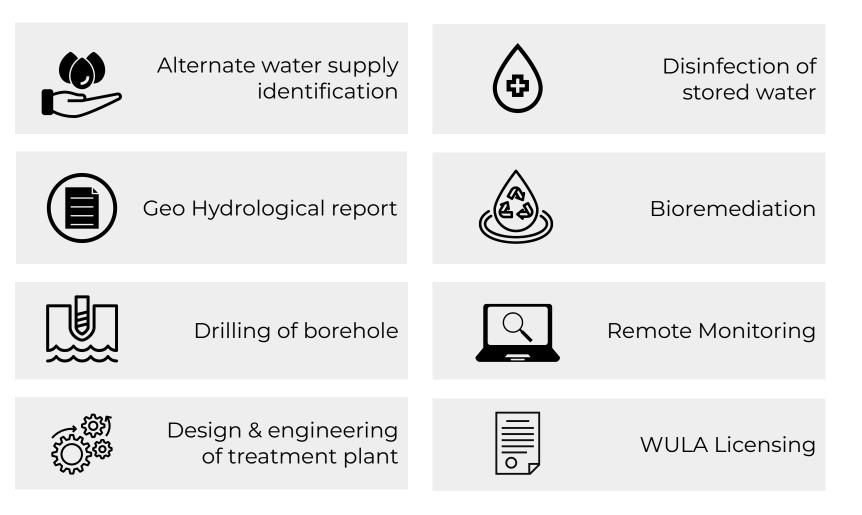


- Water treatment
- Wastewater treatment
- MBR ( Membrane reactor)
- Irrigation water nano bubbling
- Industrial air pollution NOX
- Manganese removal (industrial)
- Acid mine drainage (AMD)
- Cyanide and arsenic
- Pollution spills: oil, fuel, waste
- Cold medical waste treatment
- Industrial laundry
- Pit latrines



## **THE TURNKEY ENGINEERED SOLUTION**







## **GIFT OF THE GIVERS FOUNDATION**

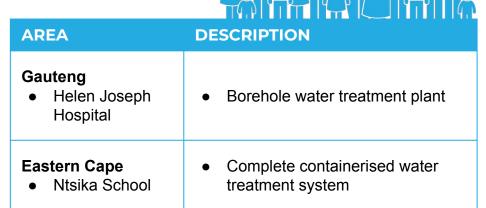




Biozone Manufacturing was commissioned to supply, and install borehole filtration systems in the Eastern Cape and Gauteng.



The water treatment plants help provide SANS 241 safe and clean drinking water to these communities.







### **GIFT OF THE GIVERS FOUNDATION**



#### **OFFICIAL VENDOR AND DONOR SUPPLIER**



## **GIFT OF THE GIVERS FOUNDATION**



#### **INSTALLATION OF BOREHOLE WATER FILTRATION SYSTEMS**







DIOZONE MANOFACTORING // Corporate pron



## **MOTSEPE FOUNDATION (ARM)**



#### INSTALLATION OF BOREHOLE WATER FILTRATION SYSTEMS

- Biozone Manufacturing was commissioned to supply, and install 11 borehole filtration systems in Limpopo, Eastern Cape, Northern Cape, Mpumalanga, Giyani and Tzaneen.
- Designed and installed by Biozone Manufacturing.
- Help provide safe and clean drinking water to these communities.



AREA	INSTALLATIONS
Limpopo <ul> <li>Kutama Village</li> </ul>	1
<ul><li>Eastern Cape</li><li>Royal Nqadu</li></ul>	1
Giyani Sedan Village Ka Nsavulani Village Jokong Village	3
<ul> <li>Tzaneen</li> <li>Lulekani Matiko Village</li> <li>Ka Ngaluleme</li> <li>Royal Khalanga Lodge</li> </ul>	3
Northern Cape	2
Mpumalanga	1

### **MOTSEPE FOUNDATION**



#### **INSTALLATION OF BOREHOLE WATER FILTRATION SYSTEMS**



### **OUR STRATEGIC PARTNERS**















### **SOME OF OUR HAPPY CUSTOMERS**





### **CONTACT US**



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