

# BIOKUBE



## For Oil & Mining Camps

Wastewater Treatment

Reuse of treated wastewater



Containerized STPs for easy transportation

More than 5000 global references



## *At the sharp edge of a leading industry*

Today's oil & gas industry is characterized by a constant strive towards three essential values: Flexibility, reliability and short return on investments. That is why BioCube offers containerized sewage treatment plants based on solid and heavily tested technology, while simultaneously providing the opportunity for re-using the treated wastewater.

### **Next generation of water treatment**

BioCube is not only offering odorless, low footprint treatment solutions, but is leading the industry to a greener more sustainable tomorrow with a deep focus on re-using treated wastewater. Hence, in BioCube we see treated wastewater as a valuable asset that can add true value to your business.

### **Allows various re-use opportunities**

BioCube's technology can help you optimize your camp's operating costs significantly, by facilitating huge saving on your fresh water bill. Treated wastewater can a. o. replace the use of freshwater for irrigation, toilet flushing and car washing etc.

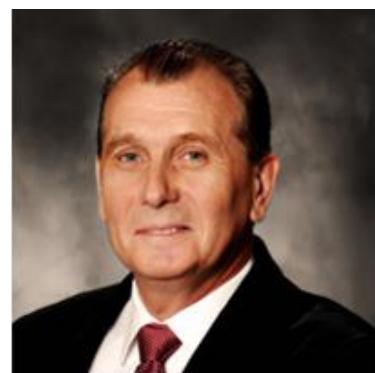
### **At BioCube we keep our promises**

An investment in the right wastewater system is a vital and crucial decision for any camp. History shows that not only the well being of the staff, but also the drilling and mining camps' legal drilling permission given by authorities, can suffer from wrong decisions regarding

wastewater treatment. That is why I strongly recommend you to partner with BioCube. We work closely with you not only in the design phase and implantation phase but also in the years after start-up through our well-reputed international O&M support.

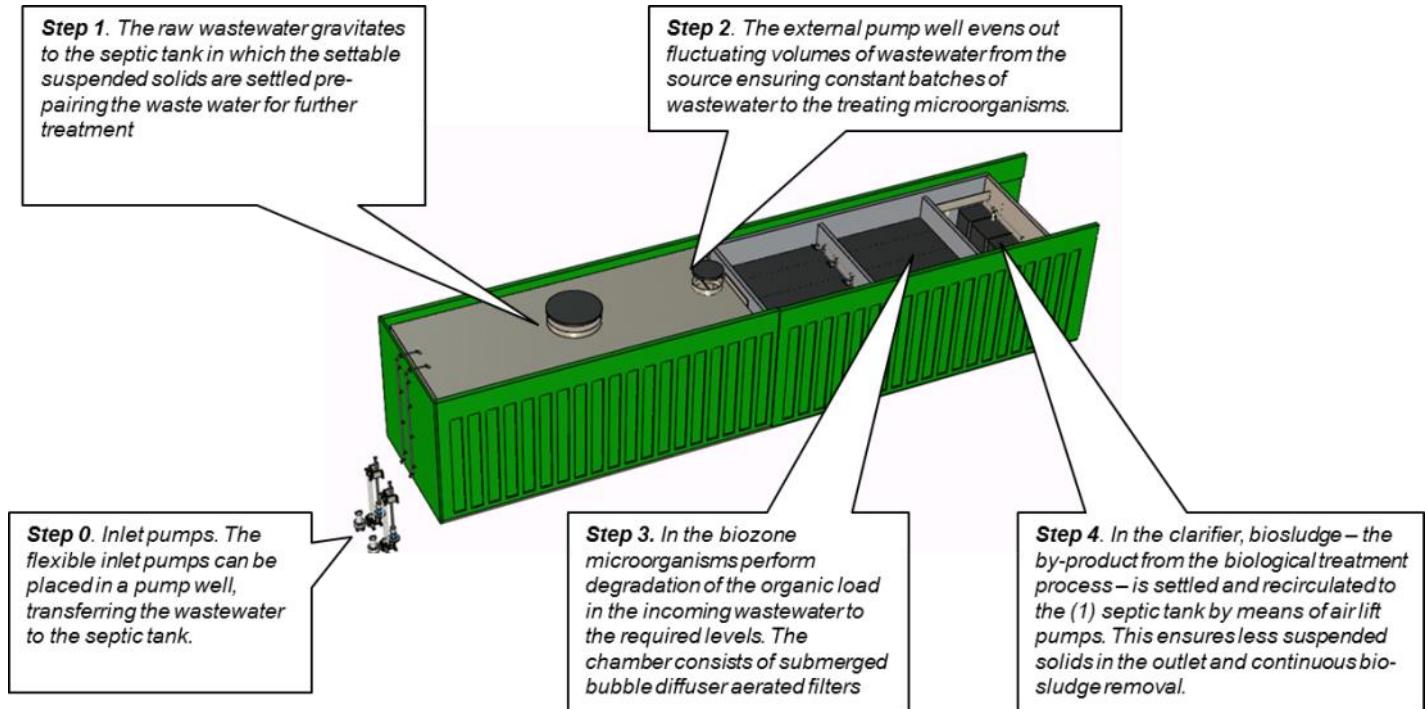
### **Meet another BioCube customer**

BioCube's true value proposition is brought forward by our long reference list of satisfied customers. I hereby urge you to call BioCube today and arrange a meeting with one of our representatives to see an installed BioCube system and talk to the customer - one of your colleagues. That will speak for itself!



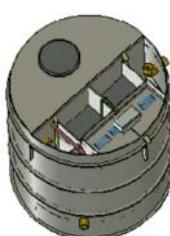
*Christian Vinson  
CEO ALMANA ENERGY PTE. LTD.  
Co-founder of InterOil Corp.  
Shareholder & Board Member of BioCube A/S*

## Technology



## Products

All BioCube products are based on the same technology and can all be applied for oil & mining camps. The temporary nature of these camps, however favours the following three most typical products.



### Mars Combi

Fully Packaged STP designed for minimum visual impact. The systems are typically installed above ground e.g. at offshore oil rigs.



### Jupiter Combi IB

The Jupiter Combi Solution is a packaged fully integrated STP. The systems are typically installed above ground for non-permanent installations and are mobile for easy relocation.



### BioContainer Combi, IB

BioContainer Systems are containerized Sewage Treatment Plants, designed for above ground, temporary installations, easy installation, transportation and relocation.

*Treated wastewater is a valuable asset and can be reused. BioCube has more than 15 years experience in designing treatment systems with innovation in the re-use of treated wastewater. BioCube can design systems for the following purposes:*



## 1 Toilet Flushing

Redistributing treated wastewater back to the toilets for flushing is an increasingly popular means of cutting costs on camps' waterbills. The treated flushing water is completely safe, clear and odorless.



## 2 Car/Truck Washing

Using treated wastewater for car/truck washing is one of the most popular options for camps, as it forms a major part of a camp's fresh water consumption. Reusing treated wastewater for this purpose is therefore an obvious and beneficiary choice.



## 3 Washing of tools, Mud Mixing

The heavy consumption of freshwater for washing of mining or drilling tools etc. at camps, can easily be subsidized by treated wastewater, allowing great cost reductions. Treated wastewater can be used for the mixing of mud composition at the drilling site.



## 4 Laundry

Applying the BioCube technology to camps' laundry stations, can reduce the freshwater consumption for laundry significantly and bring you significant savings on your operational costs.



## 5 Irrigation

Using treated wastewater for irrigation is another typically applied re-use purpose at camp sites. Usually, kitchen gardens and flower beds are watered with purified wastewater with large cost saving potentials on the freshwater bills.



*Easy Relocation*

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### *Waste water treatment in standard shipping containers for easy relocation*

BioContainer Systems are containerized Sewage Treatment Plants, most commonly used for treating waste water at camps, oil rig sites & remote locations.



The systems are fully transportable and can easily be relocated and reinstalled at new sites. This will under normal circumstances only require a two day operation, a crane and a flat bedded truck.



The systems are packaged in standard open top shipping containers, and come in 20' and 40' versions respectively. The models vary in terms of included integrated treatment steps.



## Reference Case: Viking Drilling, Northern Iraq

A total of 7 BioContainers where installed in at Viking Drilling's sites in Northern Iraq. They where delivered as so-called BioContainer 20' Combi, EB units, leaving a complete wastewater treatment solution to treat the wastewater from the camps' personnel.

### Trouble free operations

The BioContainers have been running smoothly for years and several of the plants have been relocated to other sites with very simple and hazard free operations.

Reference Name	Viking Drilling
Product Type	BioContainer 20' Combi, EB
Country	Iraq
Application	Oil Drilling Camp
Client	Viking
Capacity [M <sup>3</sup> /day]	36
Year of Installation	2012

Since the treatment plants were installed at the 7 sites, Viking Drilling has been very satisfied. As they have been able to relocate the plants to other sites very quickly they have been very satisfied. This allows their drilling activities to be in operation quickly, while at the same time giving the opportunity to use the treated sewerage water for flushing toilets as well as washing and maintaining mining tools.

# References

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## *BHP Billiton, Mining Camp, Guinea*



Reference Name	BHP Billiton, Mining Camp
Product Type	BioContainer Combi IB
Country	Guinea
Application	Mining Camp
Client	BHP Billiton
Capacity [M <sup>3</sup> /day]	50
Year of Installation	2009

## *Labour Camp, Carillion Alawi LLC, Oman*



Reference Name	Carillion Alawi LLC
Product Type	2 x BioContainer 40' BioMax
Country	Oman
Application	Oil Drilling Camp
Client	Carillion Alawi LLC
Capacity [M <sup>3</sup> /day]	200
Year of Installation	2008

# Reference & Contact

# BIOKUBE

Selection of Companies who have chosen BioKube Systems



**SPIECAPAG**

**KHARAFI NATIONAL**



**INTEGRATED CAMP SERVICES**



**carillion**



**ExxonMobil**

Japanese Army



Countries with BioKube representation. BioKube has more than 5000 systems installed worldwide in 50 countries. For additional references please see BioKube's international reference list at [www.biokube.com](http://www.biokube.com)

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