New Waste Water Treatment Module

Posted by JimMedall - 13 Nov 2012 22:25

I would like to introduce you to a revolutionary waste water treatment module that is coming to market for the first time.

Housed in an 8x8x20 shipping container, the i50 can treat 50,000 gallons of raw sewage a day (about 200 houses) and process the water to high quality irrigation water.

This product is unique due to is portability, scalability, and its extremely energy efficient design. In fact, the California Energy Commission has given us a grant for $750,000 to become Title 22 certified.

This unit will also treat river or well water at a 200,000 gallon per day capacity. We believe that our technology will benefit the people of the world with poor drinking water and sanitary conditions.

Jim Medall

704-649-2190

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Re: New Waste Water Treatment Module

Posted by mwaniki - 16 Nov 2012 02:38

Hi Jim

This is Steven Mwaniki the publisher of the '***Africa Water,Sanitation & Hygiene***' magazine.I have perused your Module and its very impressive.

This information we are sure will be of special interest and beneficial to our readers (the majority are not members of the SuSaN forum) and in this respect, we are kindly seeking permission to preprint this Module in a readable version probably not more than 2 pages on A4 format and probably use 11 pts in a friendly font.Please include images,illustrations and or diagrams .Please visit our website at www.afriwater.org to view our publication and other details.

'***Africa Water,Sanitation & Hygiene***'is a hub of knowledge sharing and development and also dissemination of information to all the stakeholders in the water and sanitation sectors down to the community level. . The publication also focuses on a vast array of environmental and health lists that may periodically address water resources issues.

The publication is non-political, non-partisan and solicits for information freely for public consumption. It is free and not to be sold to ensure that nobody is disadvantaged in accessing the information. The Africa Water & Sanitation is a not-for-profit development publication.

As a matter of courtesy and appreciation,we will acknowledge the permission to reprint by inserting your names and logo in the article so that you may enjoy a commendable and value added corporate image.

Thanking you

S.Mwaniki

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Re: New Waste Water Treatment Module

Posted by JimMedall - 17 Nov 2012 16:16

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thanks for your note. I did respond to you email this morning. We would very much like to help with your article. I sent more information to your email.

All the best,

Jim

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Re: New Waste Water Treatment Module

Posted by mwaniki - 18 Nov 2012 01:30

Hi Jim

I have seen your mail and will revert as soon as possible.

Thanking you

Mwaniki

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Re: New Waste Water Treatment Module

Posted by blackburn - 19 Nov 2012 14:02

Gentlemen, While I did try to get into your folder, I could not. This week I'm going to Taiwan. So it would be very nice to give me a background. The type of communal toilet and treatment. If your search for ATAD you will find a number of messages on the system. What is your system like? Regards, Jim

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Re: New Waste Water Treatment Module

Posted by blackburn - 26 Nov 2012 03:32

I am happy that there is more interest in this area. All go as far as to say, within the ranks of biological process pathogen removal ATADs are number 1

Regards Everybody, Jim

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Re: New Waste Water Treatment Module

Posted by CAGIEA - 26 Nov 2012 09:13

Hi Jim

The new waste water treatment is good news to us. Please keep us informed on the price when the plant comes on market.

Deo

CAGIEA

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Re: New Waste Water Treatment Module

Posted by JimMedall - 27 Nov 2012 23:28

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The system uses biological treatment and UV to purify the water. The electronics are state of the art and it uses very little electricity, and they make the system fully automated with quarterly maintenance visits.

Since is it in a storage container it is easy to transport and set up.

Please email me if you have further interest at

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Re: New Waste Water Treatment Module

Posted by JimMedall - 27 Nov 2012 23:29

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The plant will be installed in Dublin, California by the first week in January! We have pricing and will quote in a separate email.

Please contact me at

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Re: New Waste Water Treatment Module

Posted by Geoffroy Germeau - 03 Dec 2012 10:05

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Dear everybody,

Dear Jim,

As many peaple, I am quite interested about your announcement; Can we have some basic technical information about energy consumption of the unit and performance? On your website the process is not clear; is it based on UV-radiation? As far as I know it is quite power consuming, and UV are not effective in high-turbide water. it yould be great to have relevant information.

Thanks in advance,

Geoffroy

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Re: New Waste Water Treatment Module

Posted by JimMedall - 03 Dec 2012 14:48

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Deo,

In response to your comment about infected food in Africa, we can help with contaminated food. The food is likely contaminated because they irrigate and/or fertilize with raw human waste. We can give them disinfected waste water for irrigation without removing the nutrients (fertilizer). Other treatment systems will remove the nutrients.

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Re: New Waste Water Treatment Module Specifications

Posted by JimMedall - 03 Dec 2012 14:57

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i50 Water Treatment Module Equipment Specifications

Capacity 50,000 gallons/day

Size Footprint: 8 ft x 20 ft

Can be shipped and housed in standard 20’ shipping container

Intended Influent-- Sanitary waste water, primarily municipal and agricultural

Effluent Water Quality

Total Suspended Solids > 75% reduction < 25 micron particle size

Biochemical Oxygen Demand > 60% reduction

Total Coliform < 2.2 MPN per100 ml

Virus deactivation/kill > 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2 (polio virus) per California Title 22 water reuse criteria

Effluent Output Maximum of 40 gallons per minute -- Average of 35 gallons/minute.

Output interrupted every 1 to 3 hours by internal cleaning cycle.

2” PVC union interface.

Effluent Output Hydraulic Head Approximately 6 feet of water

Hydraulic Retention Time < 1 hour

Reject Output < 15% of influent flow. 3” PVC union interface.

Power requirements 480 VAC, 3-phase, < 6,000 watts

Unit energy consumption 2.5 watt-hr/gal, 2.7 watt-hr/gal with aerated storage

Supplies

No supplies needed other than electrical power.

Scheduled maintenance

Every 3 months for inspection.

Every 12 months for replacement of UV lamps.

Every 5 years for replacements of pumps, compressors and UV ballasts.

Every 10 years for replacement of valves and sensors.

Basic electrical and plumbing skills are required for maintenance.

Operating Cost

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