

# REQUEST FOR INFORMATION

**Marco Island Wastewater Treatment Plant (WWTP) reuse water**

**RFI NO.: #2023-001**

**Oct. 7, 2022**

**Response due date: Dec. 6, 2022**

**ATTN: Lina Upham** - Purchasing & Risk Manager/Deputy City Clerk, City of Marco Island, 50 Bald Eagle, Marco Island, Florida, FL34145

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## Company information: Flo-Clear Water Systems Inc.

Started in 2015 with small Wastewater Treatment Plants (50-150 gallons/min), Flo-Clear Water Systems Inc. took a strategic business decision to better serve the demanding wastewater treatment market by adopting disruptive technologies in our wastewater treatment systems for the treatment of wastewater, liquid waste, and solid waste from various industries. Flo-Clear Water Systems Inc. is also representing and acting on behalf of 6 other multinational companies to best serve the water treatment industry.

After many years investing in development, improvement and refining the technology, Flo-Clear Water Systems focused its own treatment applications in the sectors of Liquid waste, Hazardous waste, Mining, Industrial liquid waste and wastewater, Sludge treatment and Oil & Gas.

The main goal was to find a Complete Solution for Liquid Waste Treatment. And we succeeded with the following results:

- TAILORED MADE SOLUTIONS to liquid/solid waste treatment problems
- AT LEAST 50% decrease in operational expenses
- AT LEAST 90% of water is saved to be RE-cycled and RE-used
- Up to 90% decrease in waste transportation
- SCALABLE TECHNOLOGY – capability to install customizable treatment capacities from 150 gallons/min to 25 million gallons per day and more.
- ZERO WASTE! NO waste generated; NO waste transported.
- ZERO EMISSIONS! NO smog emissions; NO Greenhouse Gas Emissions

### LIQUID WASTE TREATMENT:

**Design & Build Treatment Facilities** completely equipped with: Reactor Block, Primary Clarifier, Secondary Clarifier, water pumping groups, Chemical feeding units, Process Control Unit, etc.

### SOLID WASTE TREATMENT:

**Design & Build Treatment Facilities** completely equipped with: Process Control Unit, Thickened sludge silos, solid-liquid separators, elevators, conveyors, pumps groups, chemical feeding units, Belt conveyors, etc.

# Liquid Waste Treatment Facilities

Installing the treatment capacity you need is solved by proper sizing of dimensions and operational capacity of block reactor

- continuous treatment flow
- high treatment speed, high technology
- small size, easily customizable, versatile mobility

Small



> 10.000m<sup>3</sup>/day

Medium

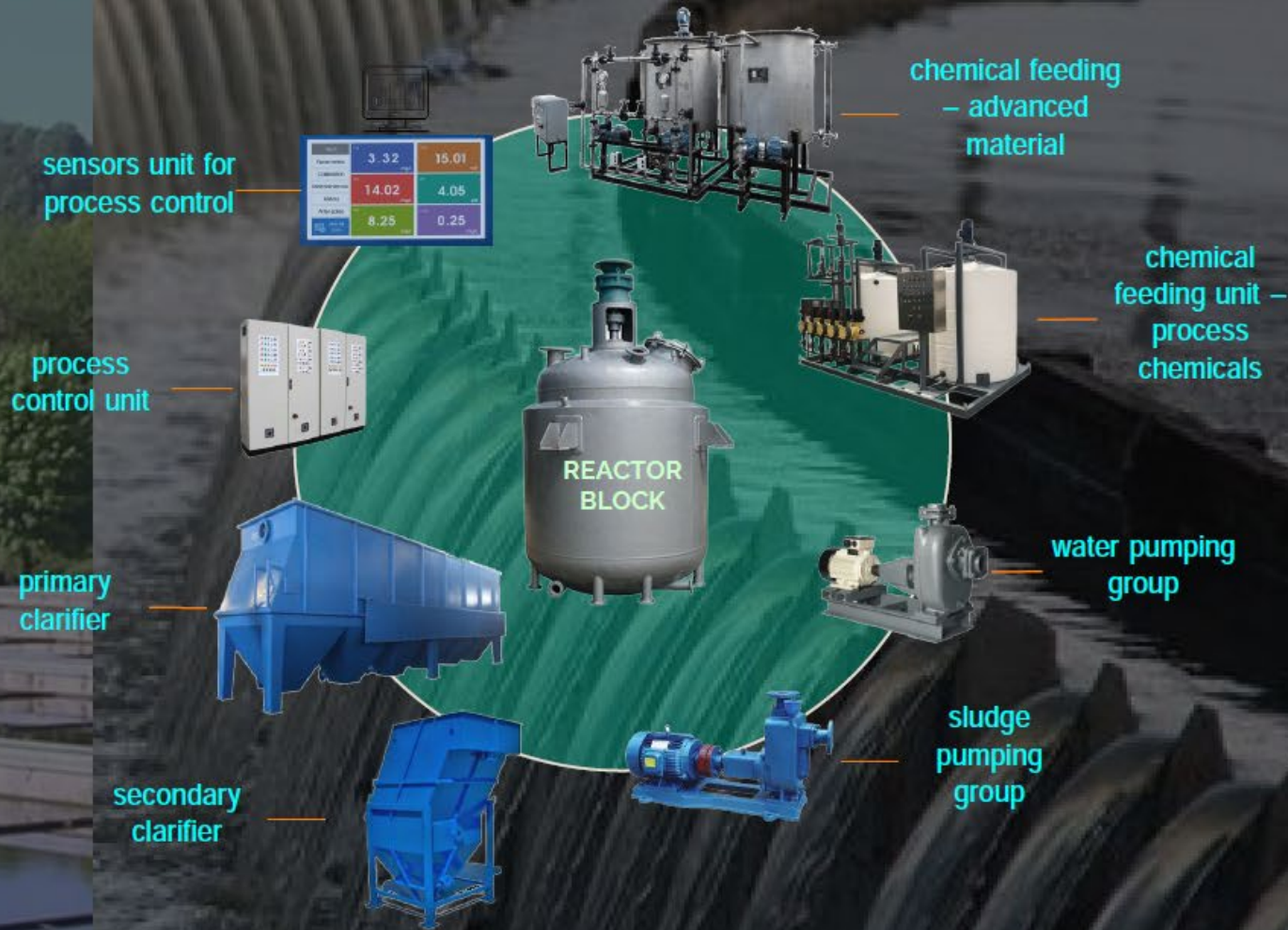


10.000-100.000m<sup>3</sup>/day

Large



over 100.000 m<sup>3</sup>/day





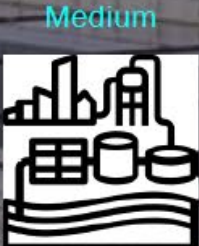
# Sludge Treatment Facilities

The already thickened sludge is extra-dewatered by using not expensive equipments

- uses cheap infrastructure and equipments
- can be easily up-scaled as needed, no matter how much



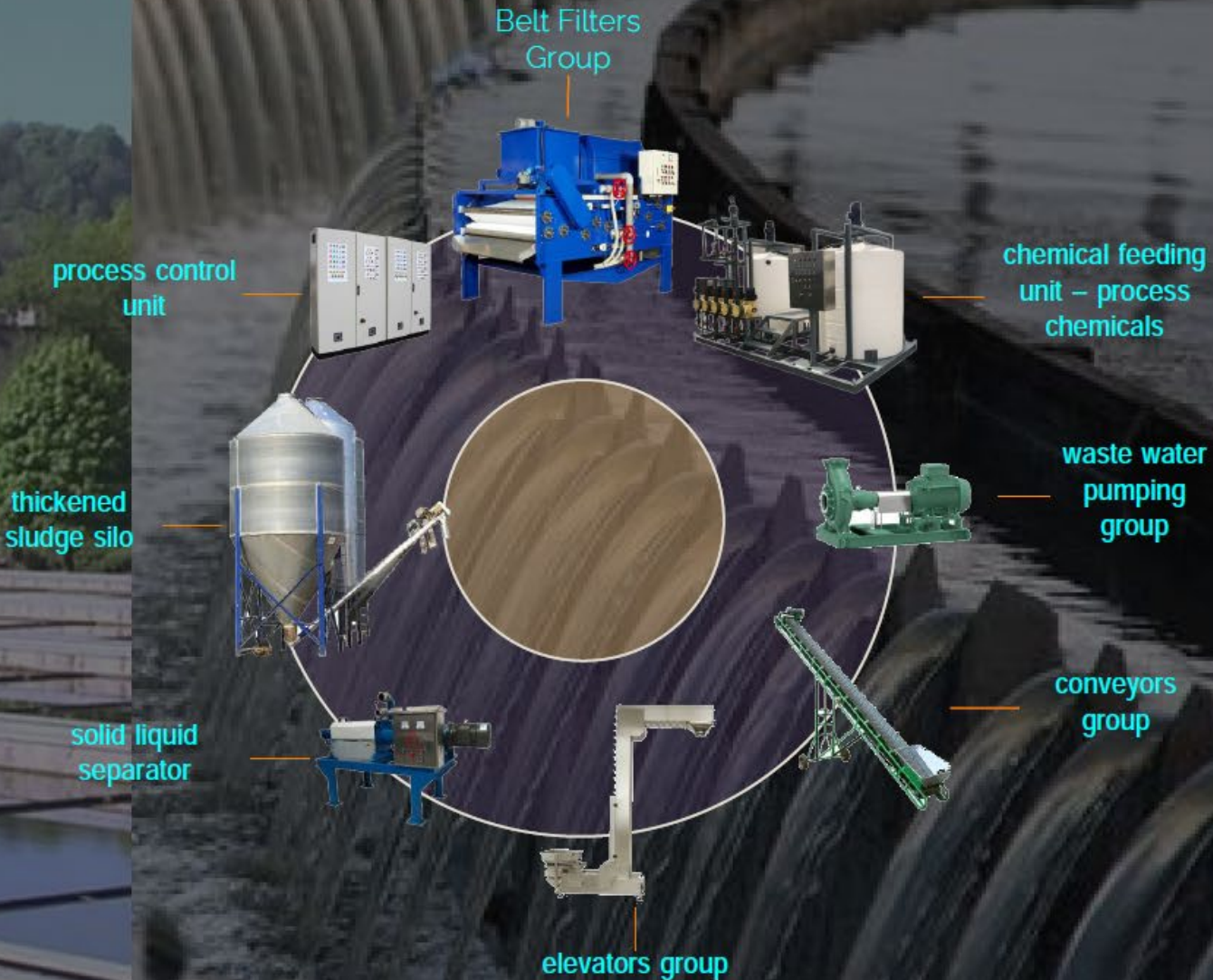
> 1.000Kg  
eq 55-70%  
water



1.000-10.000Kg  
eq 55-70% water



over 10.000Kg  
eq 55-70%  
water

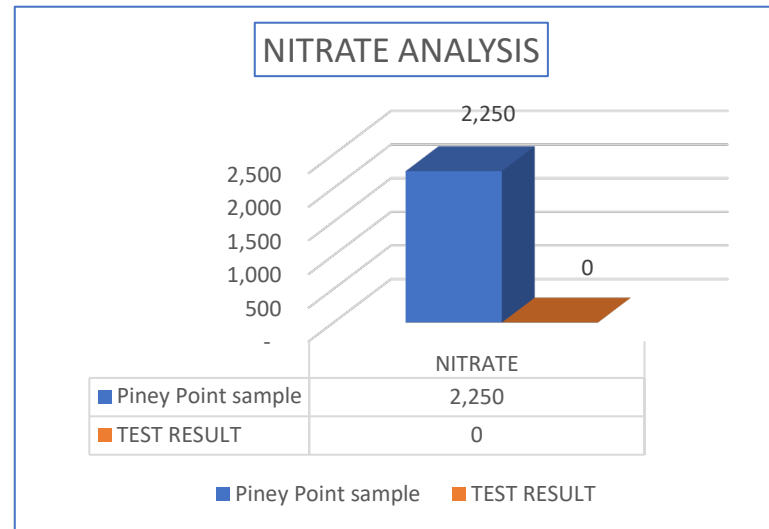
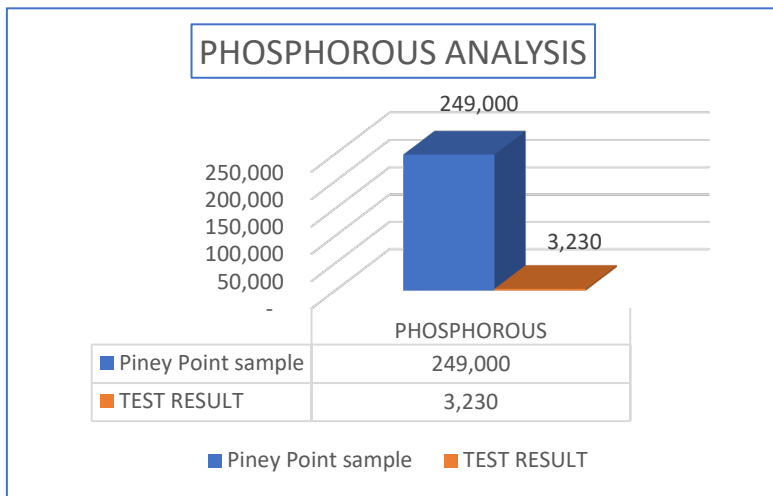


**Flo-Clear Water Systems Inc.** conducted tests in 2022 at Piney Point in Florida.

For the wastewater treatment we used our Prototype Treatment Station (**PWTS-05**) with a capacity of 0.5 gallons/min.

The clean water obtained after the treatment of the effluent has been sent for testing to the Authorized Laboratories in Florida.

The graph below shows reduction of nitrates/nitrites, heavy metals, phosphates **to undetectable levels**, and summarizes very well, the difference between the wastewater (effluent) and the clean water obtained.



## Ballpark figure for WWTP Unit-reuse water with a capacity of 6 mgd

ITEM No.	DESCRIPTION	PRICE
1	Capital Equipment for Liquid Waste - WWTP-reuse water <b>Include:</b> Reactor Block, Primary Clarifier, Secondary Clarifier, water pumping groups, Chemical feeding units, Process Control Unit, etc.	\$30,000,000
2	Operational Cost for Liquid Waste - WWTP-reuse water include consumables (* the price was calculated based on wastewater feed of 2500mg/L	\$16.7/1,000gal
3	Capital Equipment for Solid Waste - WWTP-reuse water <b>Include:</b> Process Control Unit, Thickened sludge silos, solid-liquid separators, elevators, conveyors, pumps groups, chemical feeding units, Belt conveyors, etc.	\$11,800,000
4	Operational Cost for Solid Waste - WWTP-reuse water include consumables (* the price was calculated based on wastewater feed of 2500mg/L	\$12/1,000gal
5	Other type of services: full design & build, installation, commissioning <b>are included.</b>	\$0

DISCLAIMERS: The equipment list provided is Flo-Clear Water Systems Inc.'s best estimate equipment package based on the available information to date and is provided for initial budgetary assessment purposes only. This document is not intended as a contractual offer, and is not capable of acceptance. The Parties intention to discuss the terms of services that might provided by Flo-Clear to Marco Island Wastewater Treatment Plant (WWTP)-reuse water and any commitment between the parties shall be subject to reaching an agreed Statement of Work and Master Service Agreement or Terms and Conditions.