

Session:

Women in Tech and Women in Water

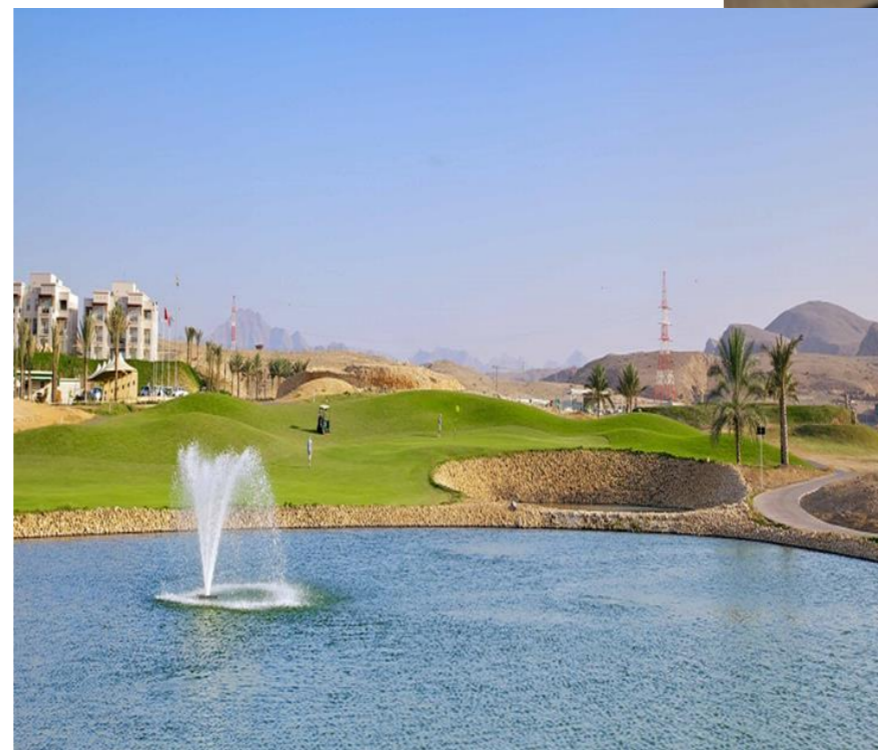
Women in Water

Muscat, Oman, September 18th, 2022

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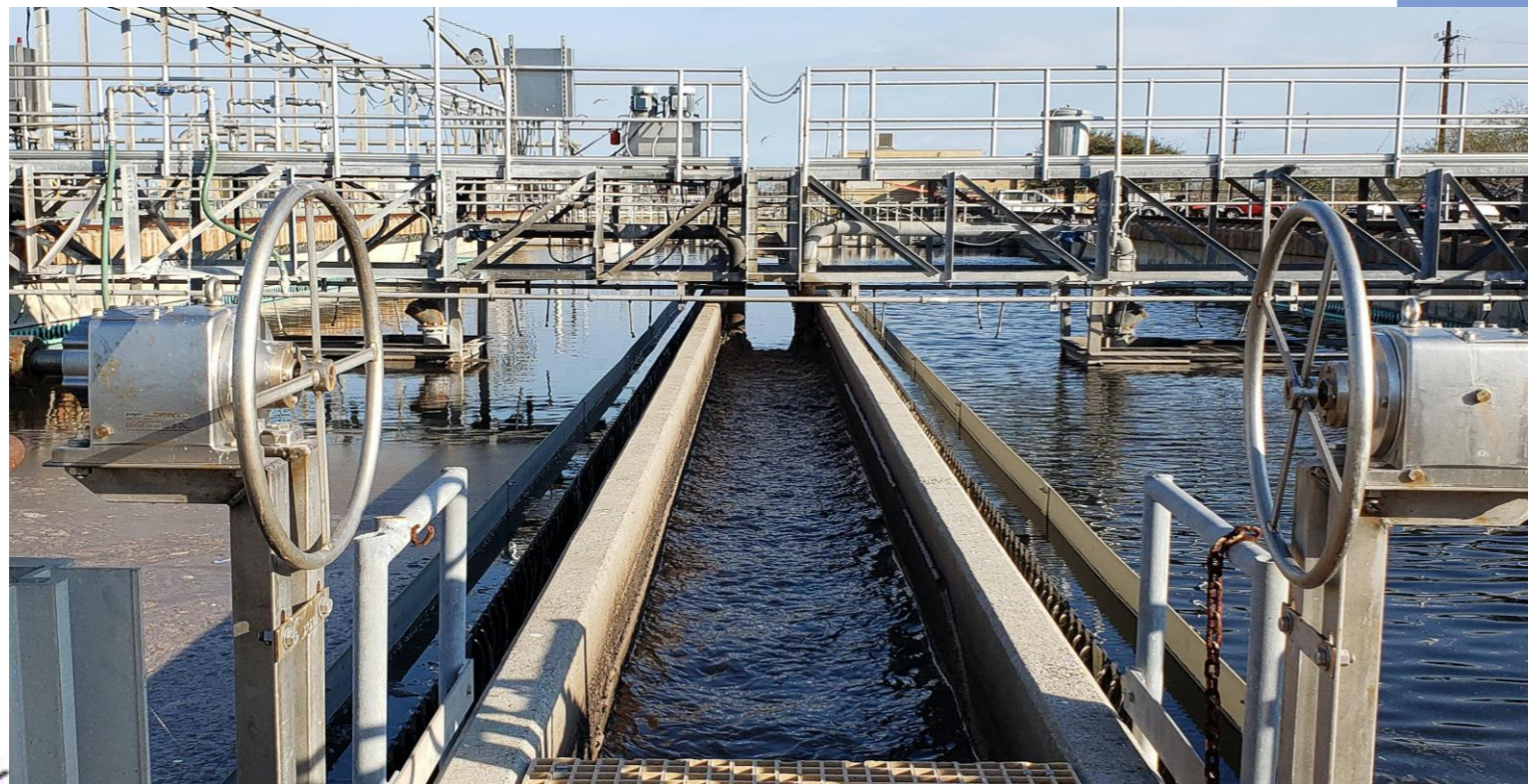
Treated water Quality

1. Plant performance
2. Process Optimization
3. Treated water quality
4. Treated water Reuse and applications



Nature of work

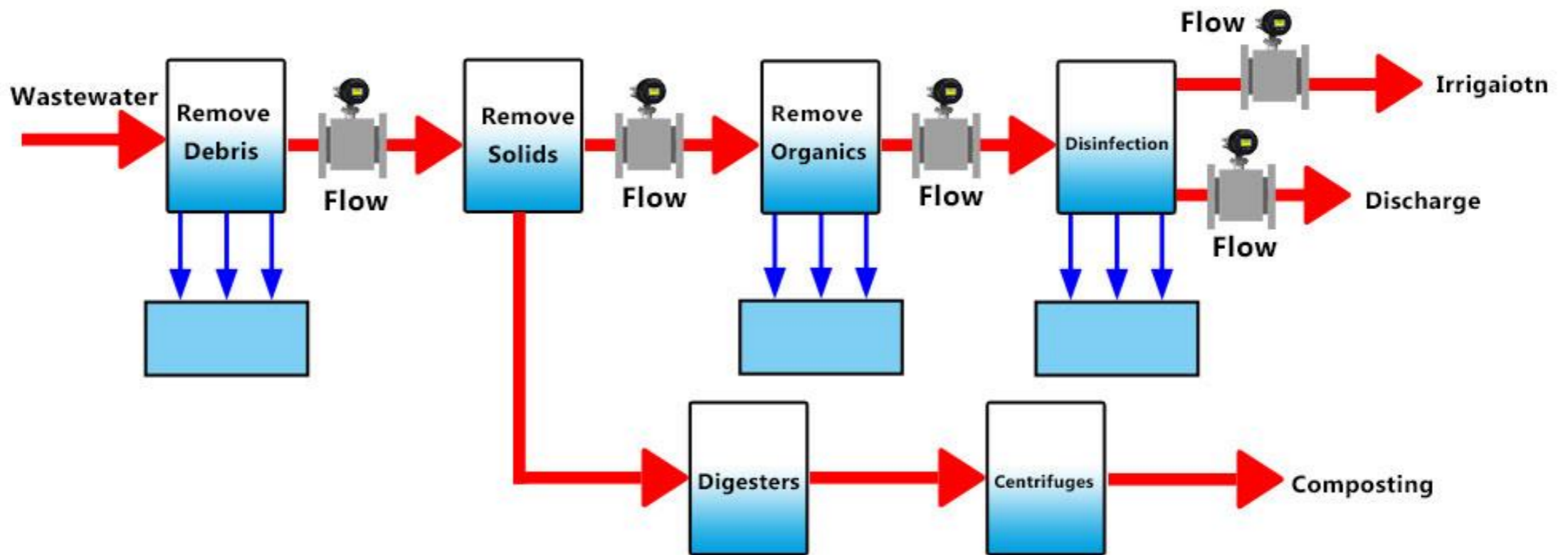
1. Exposing to Pathogens
2. Foul odors



GENERAL WASTEWATER TREATMENT PROCESS



Wastewater treatment Schematic diagram



Wastewater source and TE quality

Influent characteristics

Although OWWSC treatment plants are designed to treat municipal wastewater however the received sewage is above the designed limits interim of BOD, COD, FOG.. etc. in consequence this leads to high OPEX in term of chemical and power consumption than the designed projects.



Treated effluent quality standards

Due to different sources of the received sewage by tankers, the potential of heavy metal contaminates makes the treatment and TE quality is much harder. Moreover, parasites contaminants like Fecal coliform and Helminth Ova is the most critical parasitic to be removed in order to ensure standard A compliance.

Wastewater Bio solid treatment and reuse

Wasted sludge management

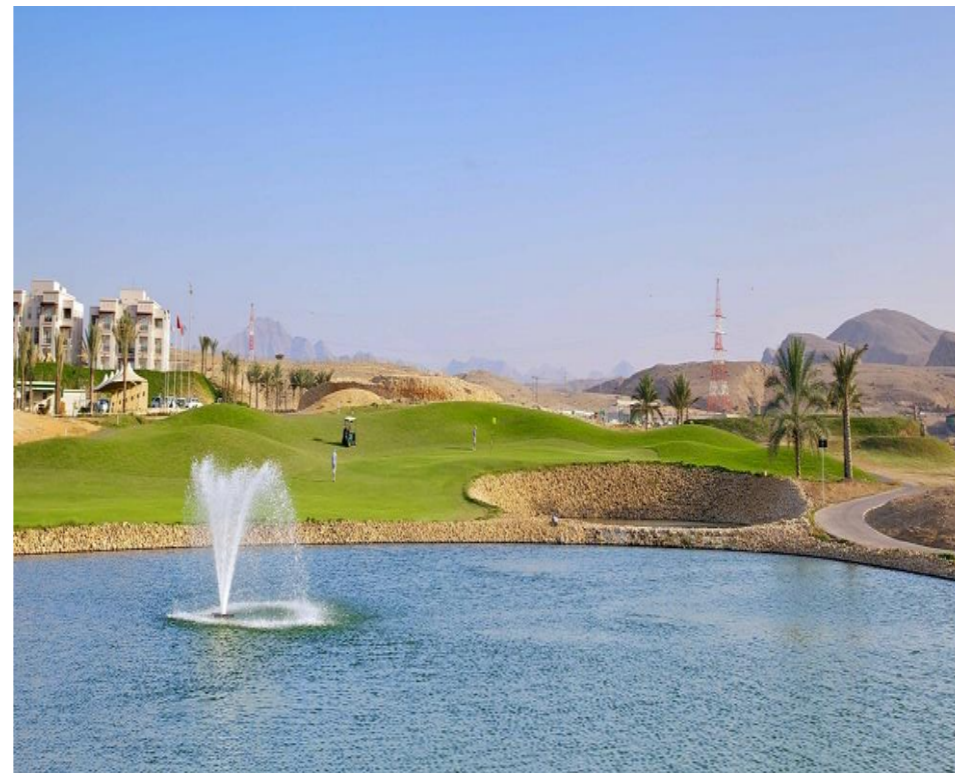
Recently, sludge generation has become a prominent environmental problem due to the marked increase in the number of wastewater treatment facilities. Thus, OWWSC Management takes this issue in high consideration to implement best practices for sludge recycling and disposal.



Treated water Reuse

Public acceptance

water recycling and wastewater reuse is considering as an alternative water source and a feasible solution prevent desertification. Thus, we should spread the awareness to the public to reuse the water in the planting and irrigation instead of the potable water.



Exploring applied Technologies



Technologies are daily developed
Exploring best practices around the world
Water researches and applications



THANK YOU!