

Wastewater Treatment Process

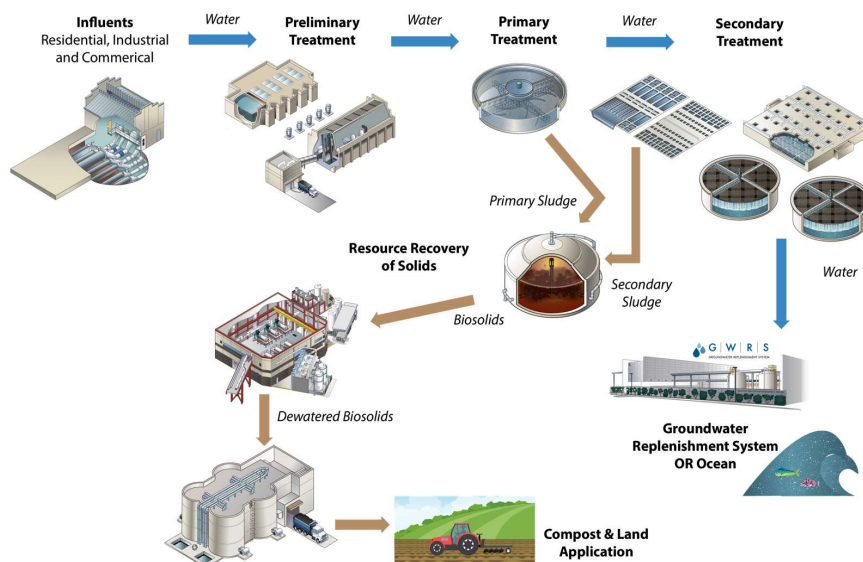
Presented by:
Jon Bradley
Operations Manager

Operations Committee
May 7, 2025

OC SAN
ORANGE COUNTY SANITATION DISTRICT

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Plant Process Overview



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Metering & Diversion Structure



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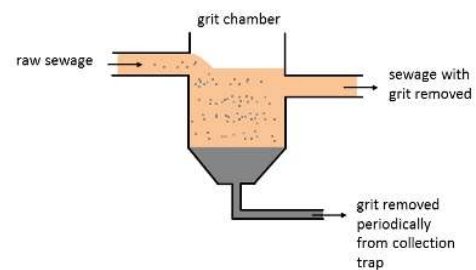
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Preliminary Treatment

Barscreen



Grit Chamber

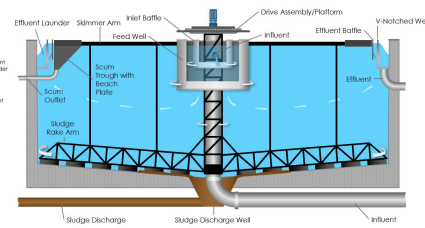
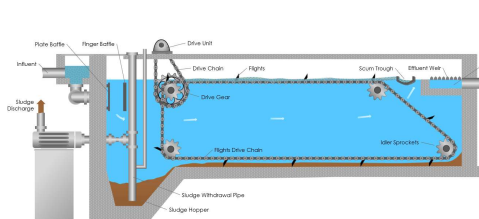


- Grit is mostly inorganic material (i.e. sand, gravel, eggshells)
- Grit is very abrasive and heavy. It clogs flow channels, digesters and wears out pumps.

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Primary Treatment

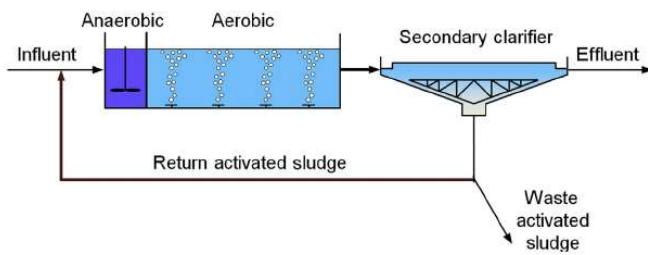


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Secondary Treatment

Activated Sludge Process



Trickling Filter Process



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Solids Removal During Treatment



Raw Sewage



Primary Treated Effluent



Secondary Treated Effluent

OCWD



Purification
(GWRS Final Effluent)

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Solids Recovery Process

Anaerobic Digestion



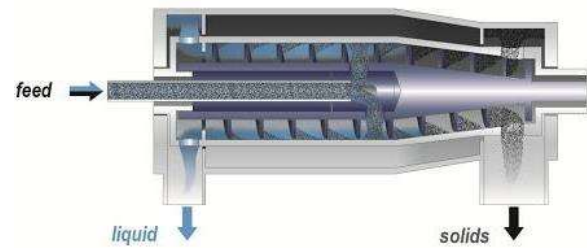
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Dewatering Operation



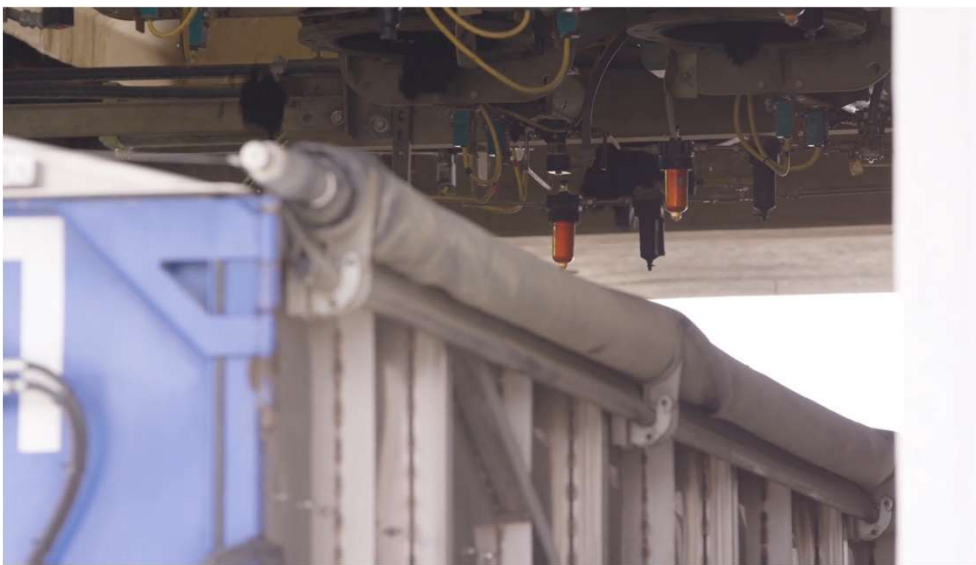
Centrifuge System at Plant No. 1



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Truck Loading



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BIOGAS



Heat &
Electricity

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Questions?

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