



Orange County
Sanitation District
70th Anniversary

Digester Replacement at Plant No. 2, Project No. P2-128

Presented by:
Mike Dorman, Director of Engineering

Operations Committee
November 6, 2024

Professional Design Services Contingency Increase

1

Plant No. 2 Anaerobic Digesters



Raw Sludge



Digesters (98° F)



15+ Days



Class B Biosolids



After Dewatering



18 Digesters

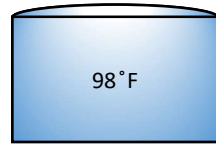
Project Drivers

- 46-65 years old
- Some are nearing end of useful life
- Seismic deficiencies cannot be cost effectively addressed (2015 Study)
- Liquefaction risks

2

2

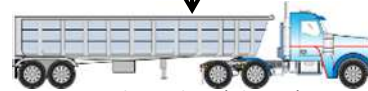
Existing Plant No. 2 Digestion



Mesophilic Digestion



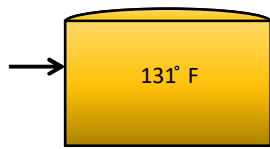
Centrifuge



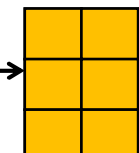
Truck Loading (Class B)
(non-food crop or composting)

3

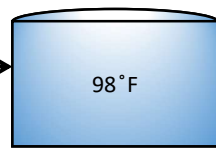
TPAD Digestion Process



Thermophilic Digestion



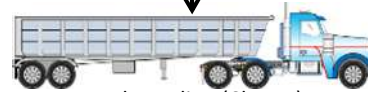
Batch Tanks/
Sludge Cooling



Mesophilic Digestion



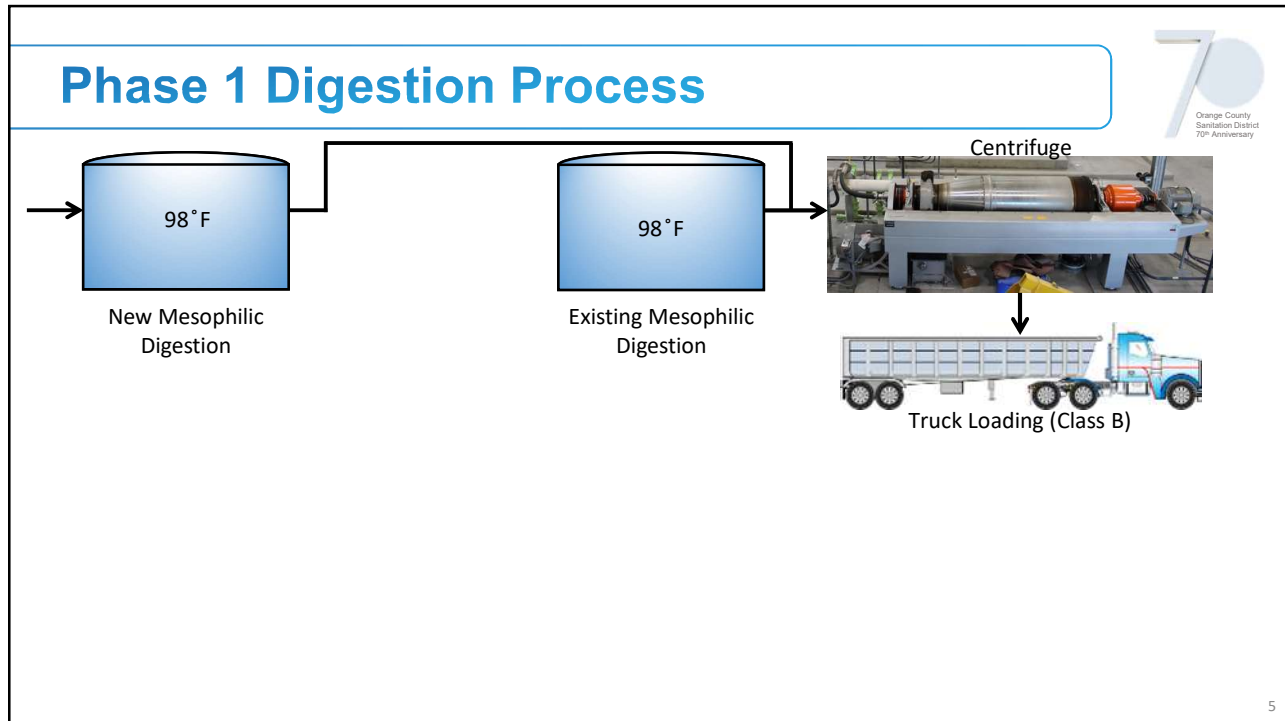
Centrifuge



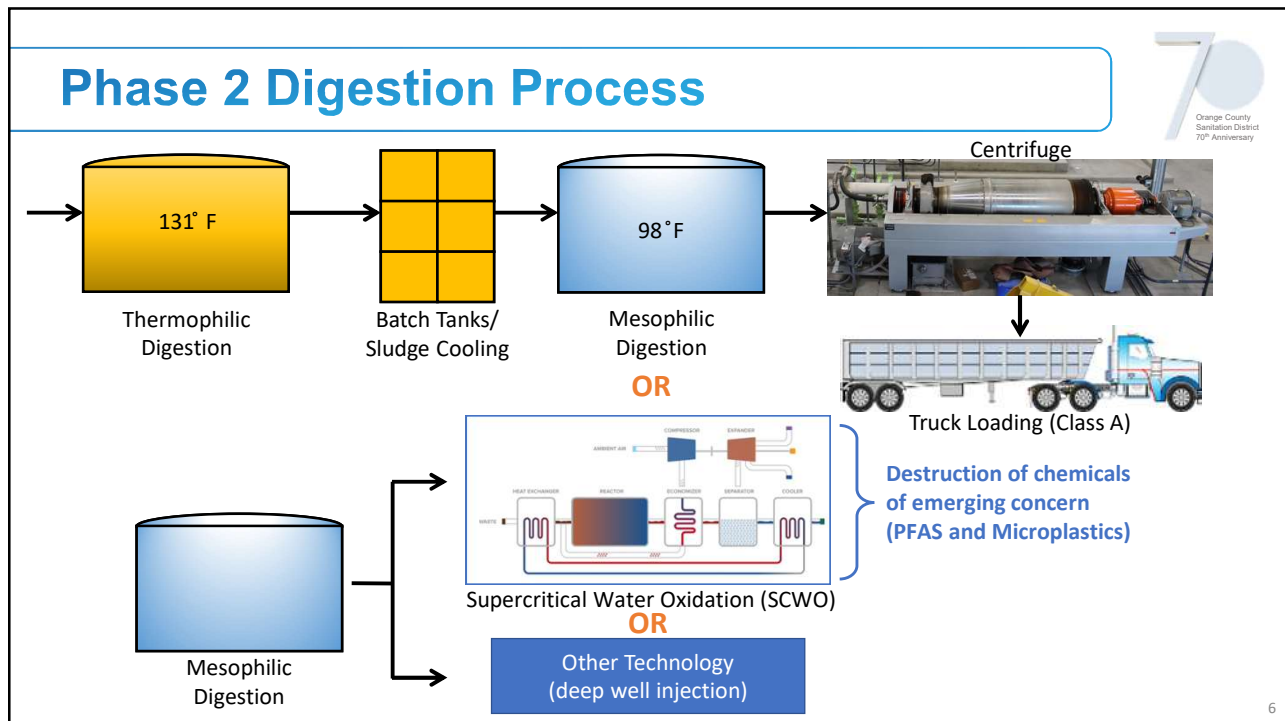
Truck Loading (Class A)
(food and non-food crops and
landscaping amendments)

TPAD = Temperature Phased Anaerobic Digestion

4

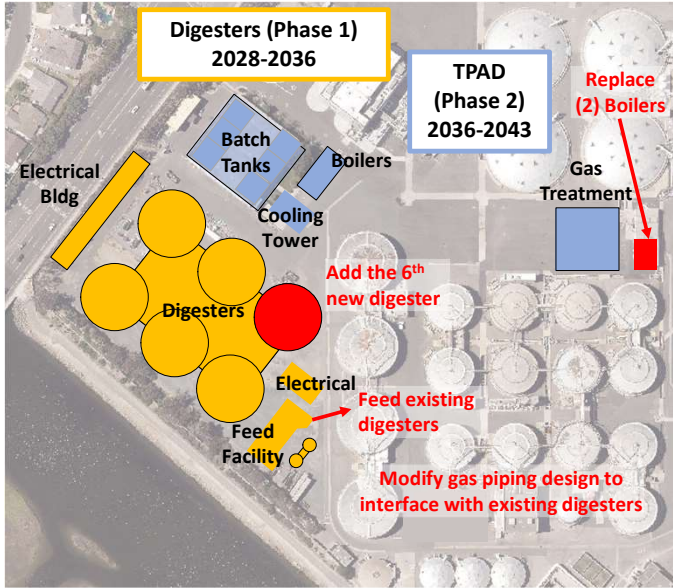


5



6

Phasing and Revised Scope



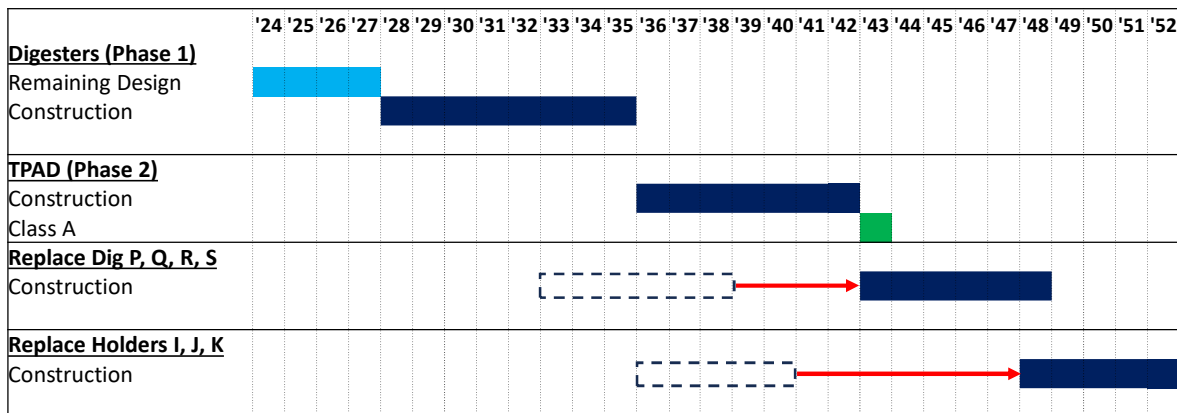
Additional Scope:

- Expand CenGen sludge heating system to heat the new digesters
- Design interface points for future Phase 2

We are building what we need now

7

Future Project Phasing



8

8

Design Cost Summary



Description	Cost
Additional Design Costs	\$5.7M
Additional Design Contingency	\$0.6M
Total Contingency Increase	\$6.3M

Recommendation



Recommend to the Board of Directors to:

Approve a Contingency increase of \$6,288,000 (16%) to the existing Professional Design Services Agreement with Brown and Caldwell for the Digester Replacement at Plant No. 2, Project No. P2-128, for a new total contingency amount of \$10,218,000 (26%).

