#### CenterPoint Energy Rebate

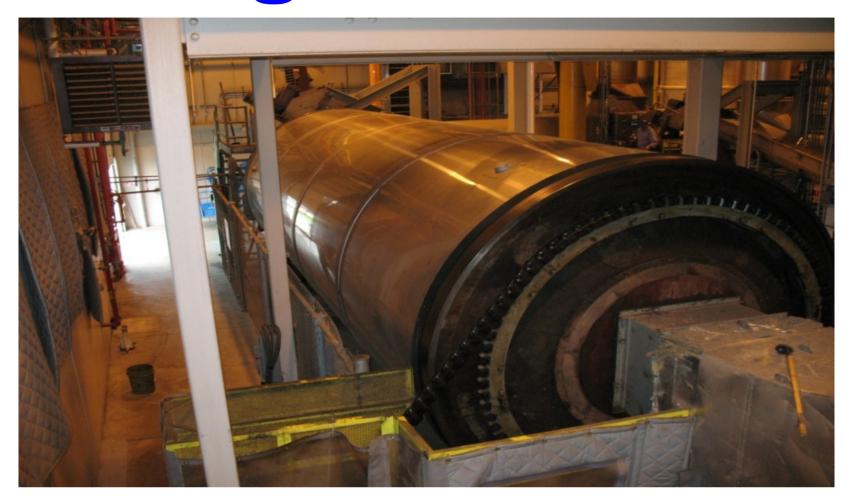
Carol Mordorski, Principal Engineer, Engineering Services



### Biosolids Processing

#### From Flush to Field

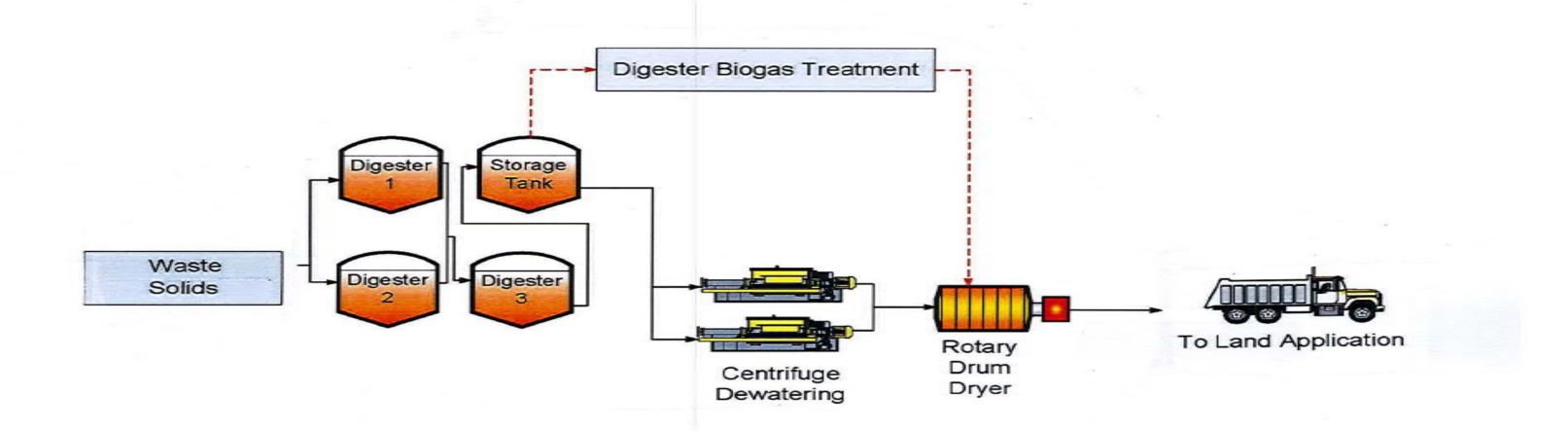
- Biosolids: residuals from wastewater treatments
- Rotary drum dryer makes fertilizer pellets
- Apply to cropland
- Single dryer







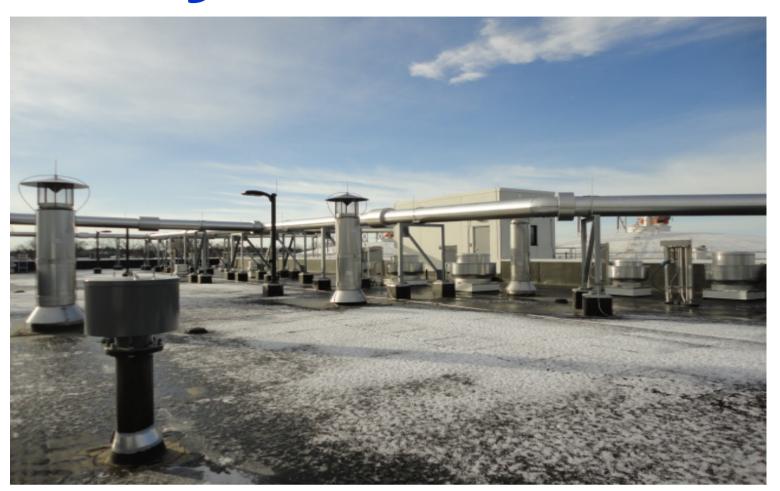
# Digestion and Drying: Process Synergy





#### Biogas Delivery & Use

- Gas conditioning
- Extensive pipe system from digesters to dryer
- Membrane cover 8 hour "cushion" of gas
- Dryer feed matches gas production





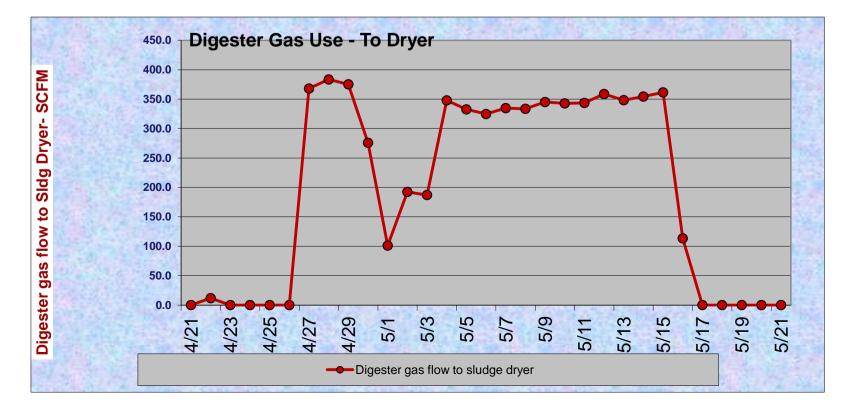


#### "Green" Energy Savings

- Digester gas replaces 80 to 100% of purchased natural gas to fuel the dryer
- Reduces 200 300 therms/ hour NG use
- Annual Savings: ~\$500,000

Equivalent of ~900 MN households' annual natural gas

use





#### CenterPoint Rebate

- First CenterPoint Energy custom rebate for anaerobic digester construction project
- MCES available as resource for other projects
- Document use and construction costs
- Demonstrate for 6 months on biogas





## Biogas—Renewable Energy



