

Liquid Waste Hauler Customer Workshop

April 6, 2021 10:00 AM – 11:30 AM



Agenda

10:00 am - 11:15 am: Workshop

- Welcome & Meeting Logistics
- > MCES Pretreatment Program Overview
- > Empire Wastewater Treatment Plant Overview
- > Finance & Budget
- Accepted Liquid Waste Types
- Permit Types and Low Impact Permit
- Disposal Sites and Updates
- > Online Reporting & Excel Load Tracking Program
- MCES Webpage & Communications
- Customer Portal Demonstration/Feedback

11:15 am – 11:30 am: Feedback, Questions & Answers



Meeting Logistics

- We are recording this meeting and will post on our website for future viewing
- Please use the Q&A window to ask questions and offer feedback during the workshop



Industrial Waste & Pollution Prevention



- ➤ We serve the Twin Cities Region of ~3 million people
- ➤ We serve 110 communities connected to our system
- We administer 915 active industrial discharge permits
 - 90 Liquid Waste Haulers
 - 518 Standard Discharge Permittees
 - 94 Special Discharge Permittees
 - 213 General Discharge Permittees
 - 874 Dental Clinics in the Amalgam Recovery Program



Clean Water Regulation

- Clean Water Act / 40 CFR Part 403
 - Categorical Standards
 - General Pretreatment Regulations
- > EPA Region 5
 - Delegated to Minnesota PCA
 - Approval of Local Pretreatment Programs
- > MCES Approved Pretreatment Program
 - Waste Discharge Rules
 - Local Limits



Empire Wastewater Treatment Plant - Overview

Angella Craft

Business Unit Manager – Empire WWTP





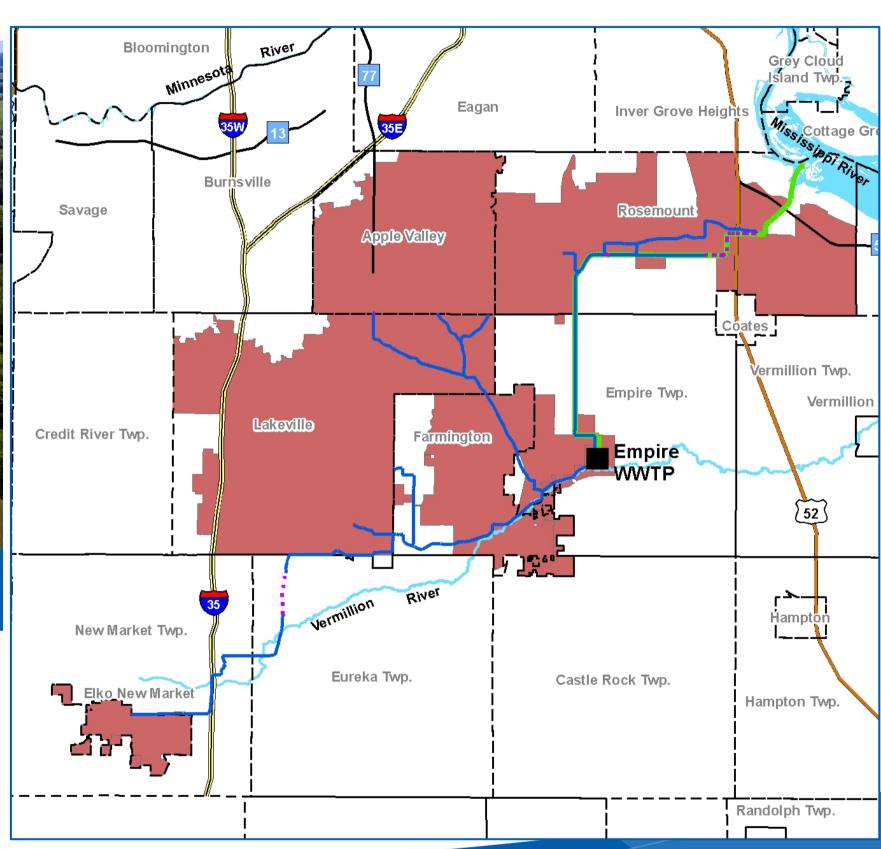
Empire Plant – Service Area



Empire treats 11 million gallons/day

Communities Served

Empire Township, Farmington, Rosemount, Elko / New Market, and Portions of Apple Valley and Lakeville



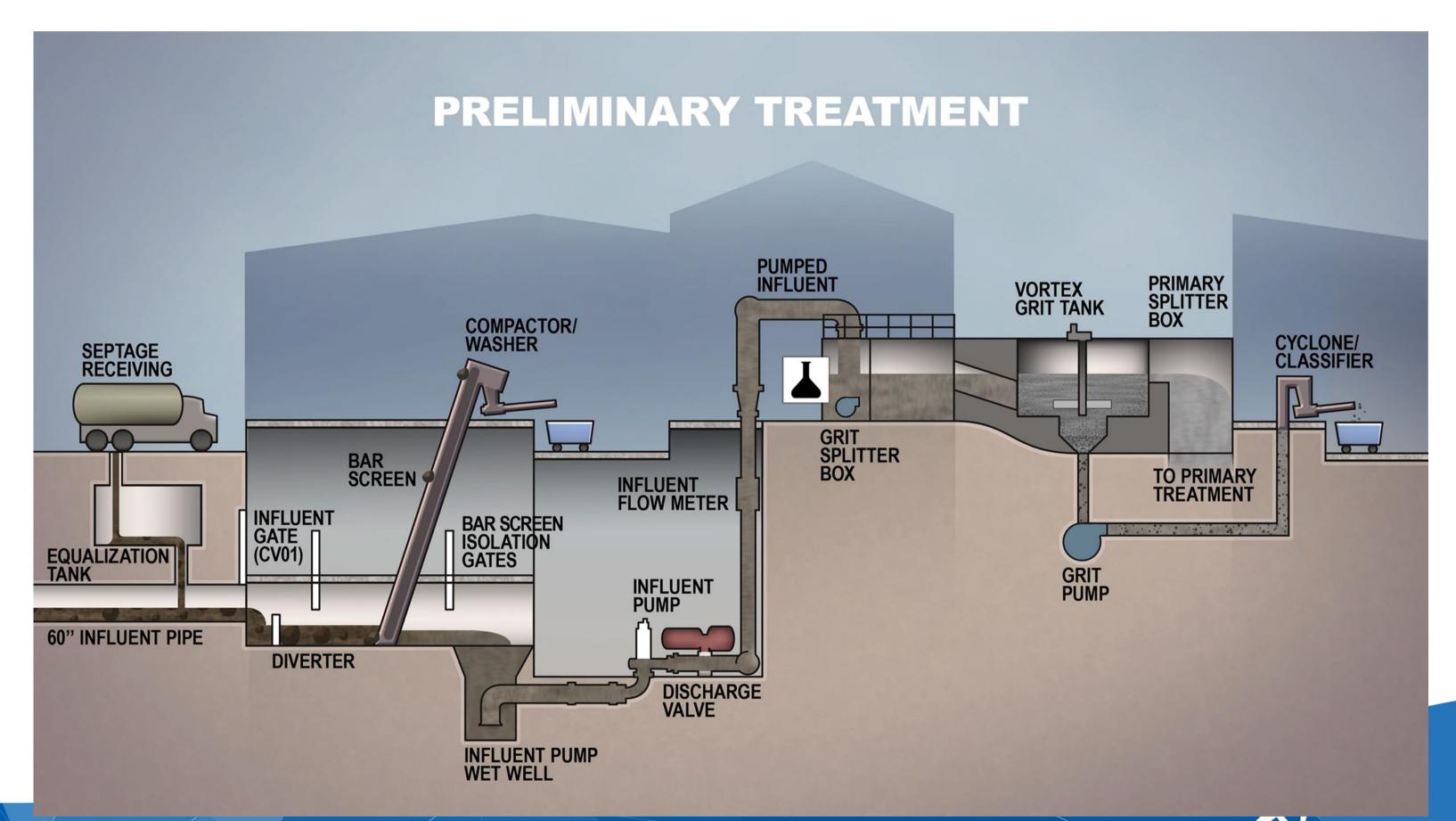


Empire Plant - General Info

- Built in 1979
- Current design capacity = 24 MGD
- Current typical flowrate = 11 MGD
- Staffed 24/7
- Exceptional compliance with many permits (NPDES, Stormwater, Title D Air, MPCA Biosolids, Hazardous Waste, etc)
- 5 MW Solar garden
 - Produces adequate power for 60 % of plant load
 - Enough power for 870 homes (11% of Farmington homes)

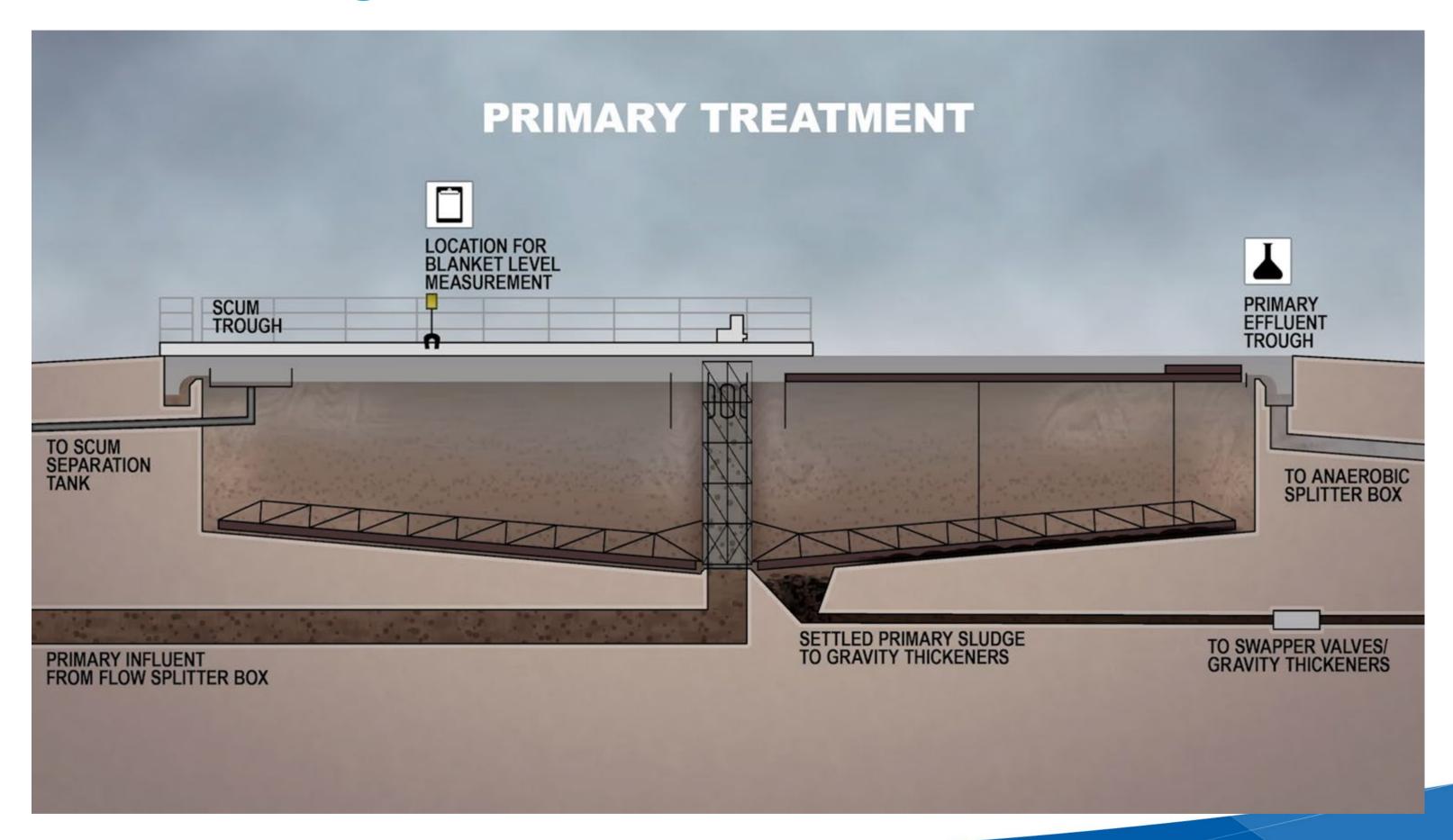


Preliminary Treatment



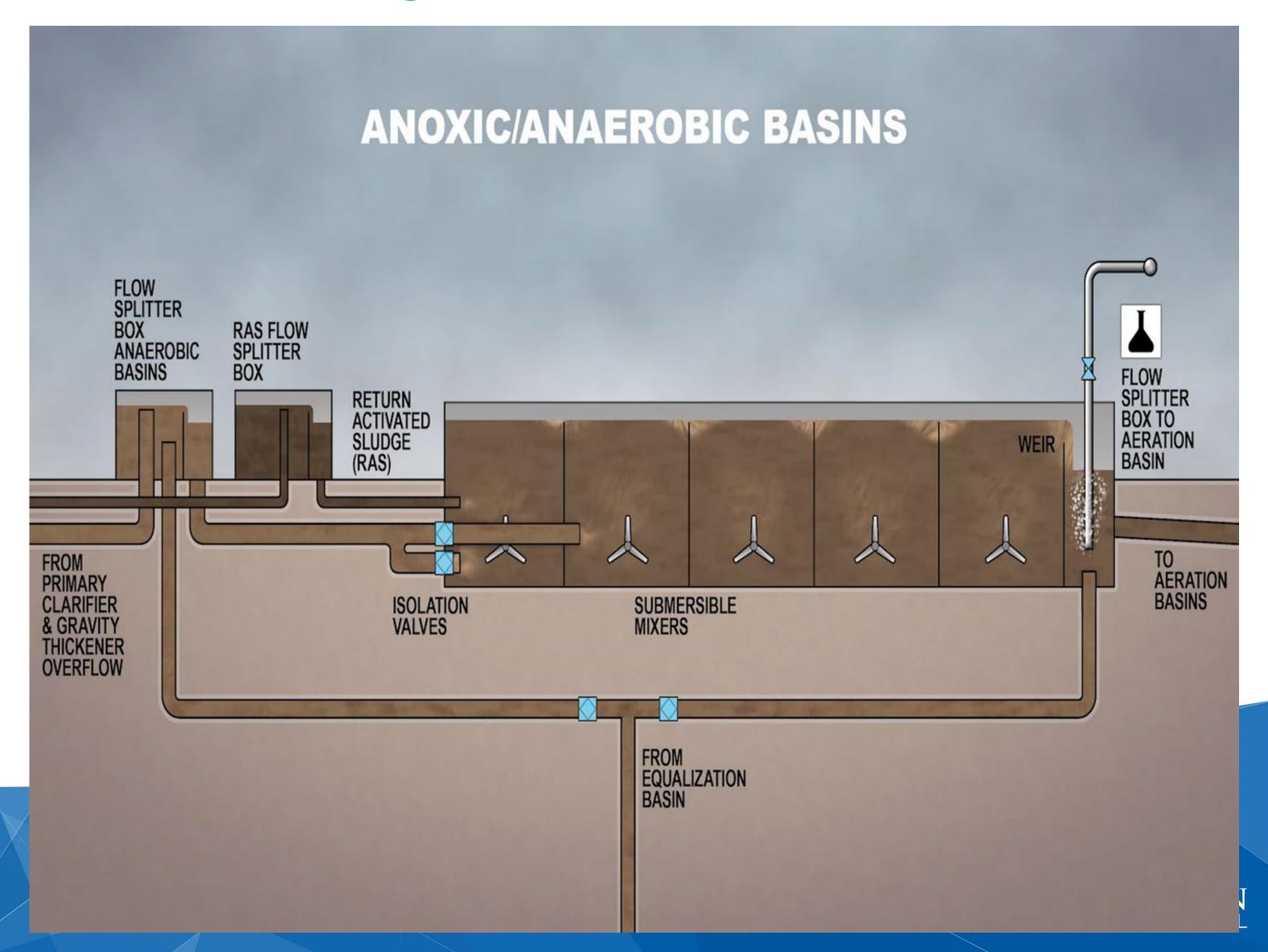


Primary Treatment

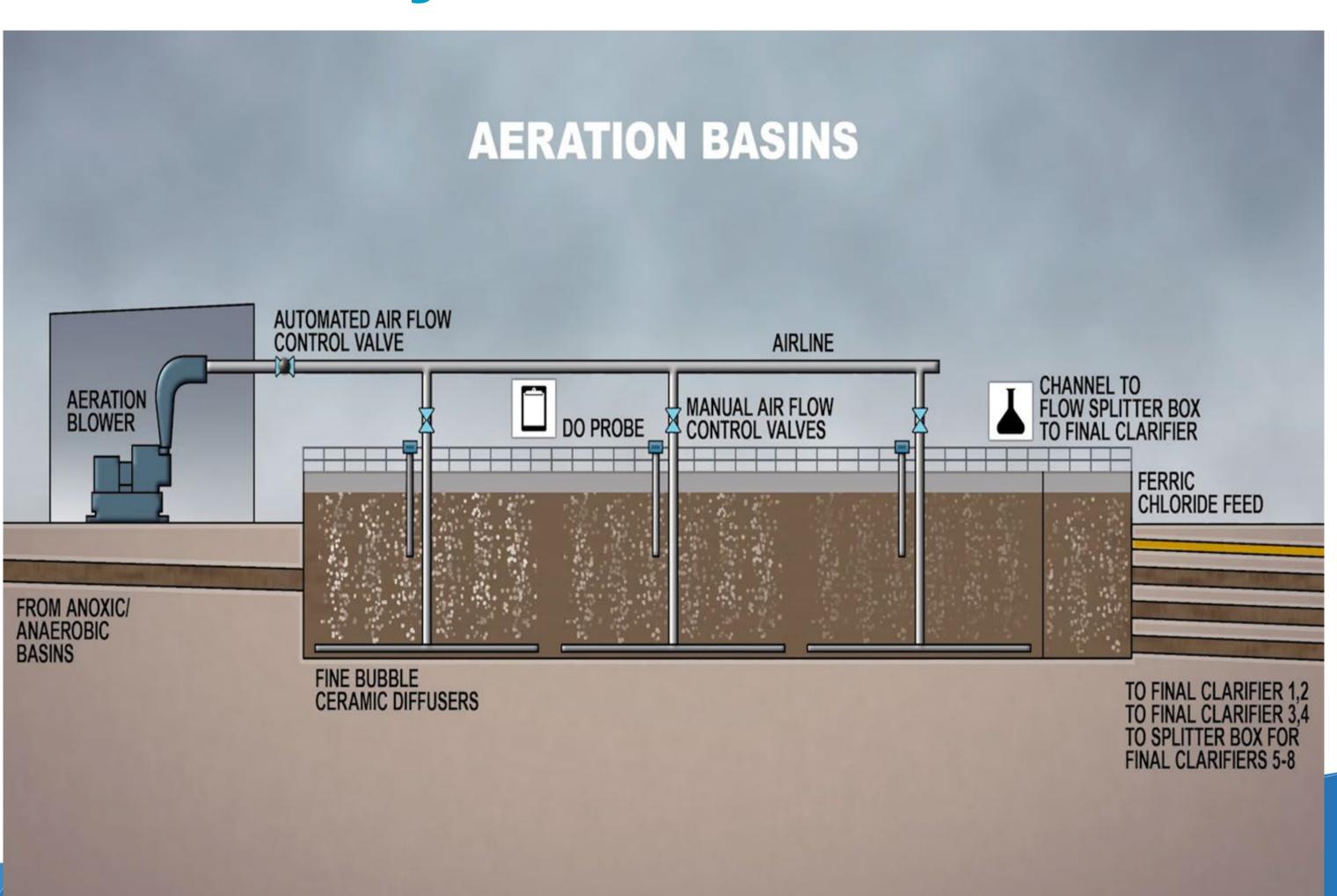




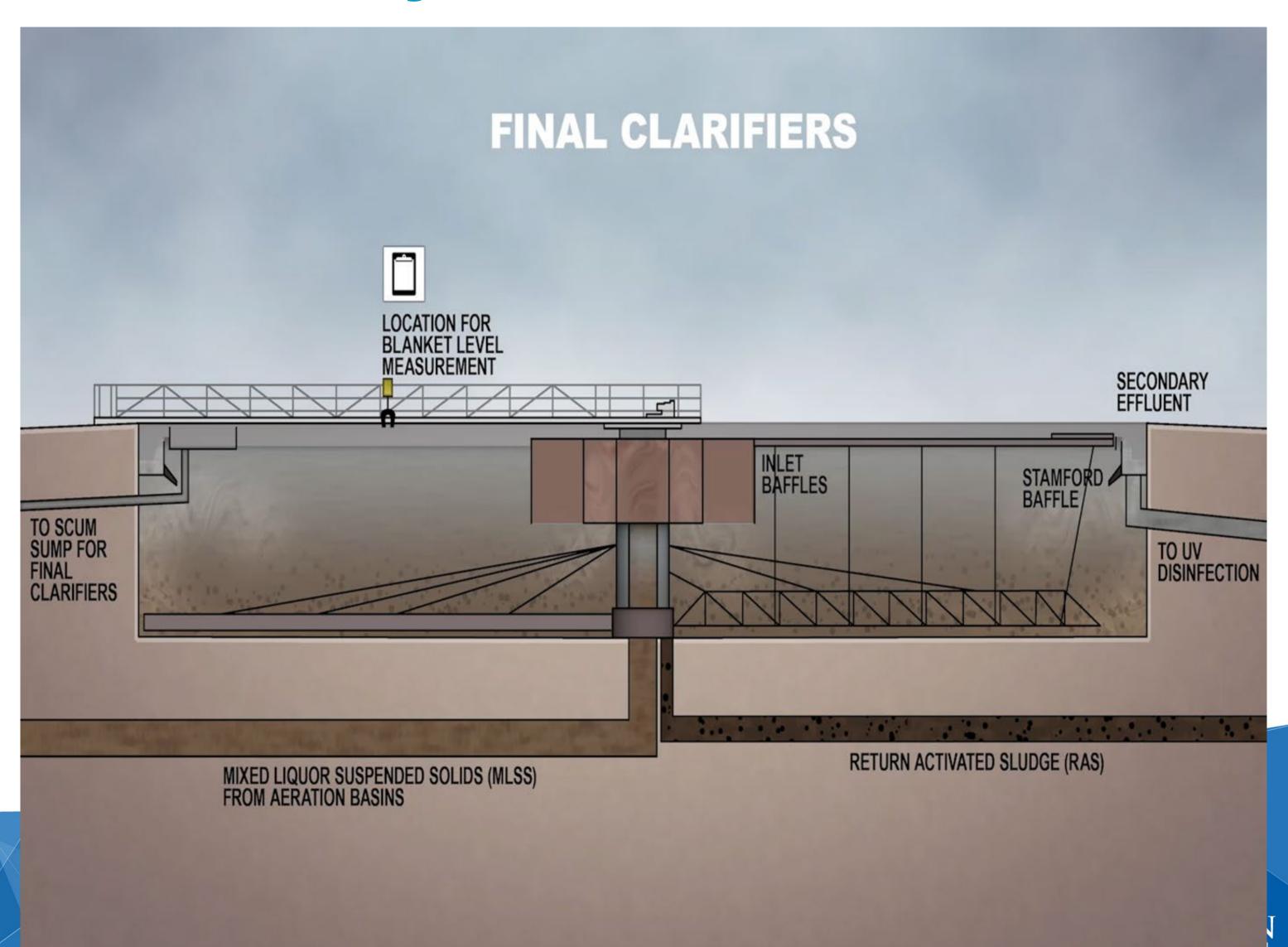
Secondary Treatment



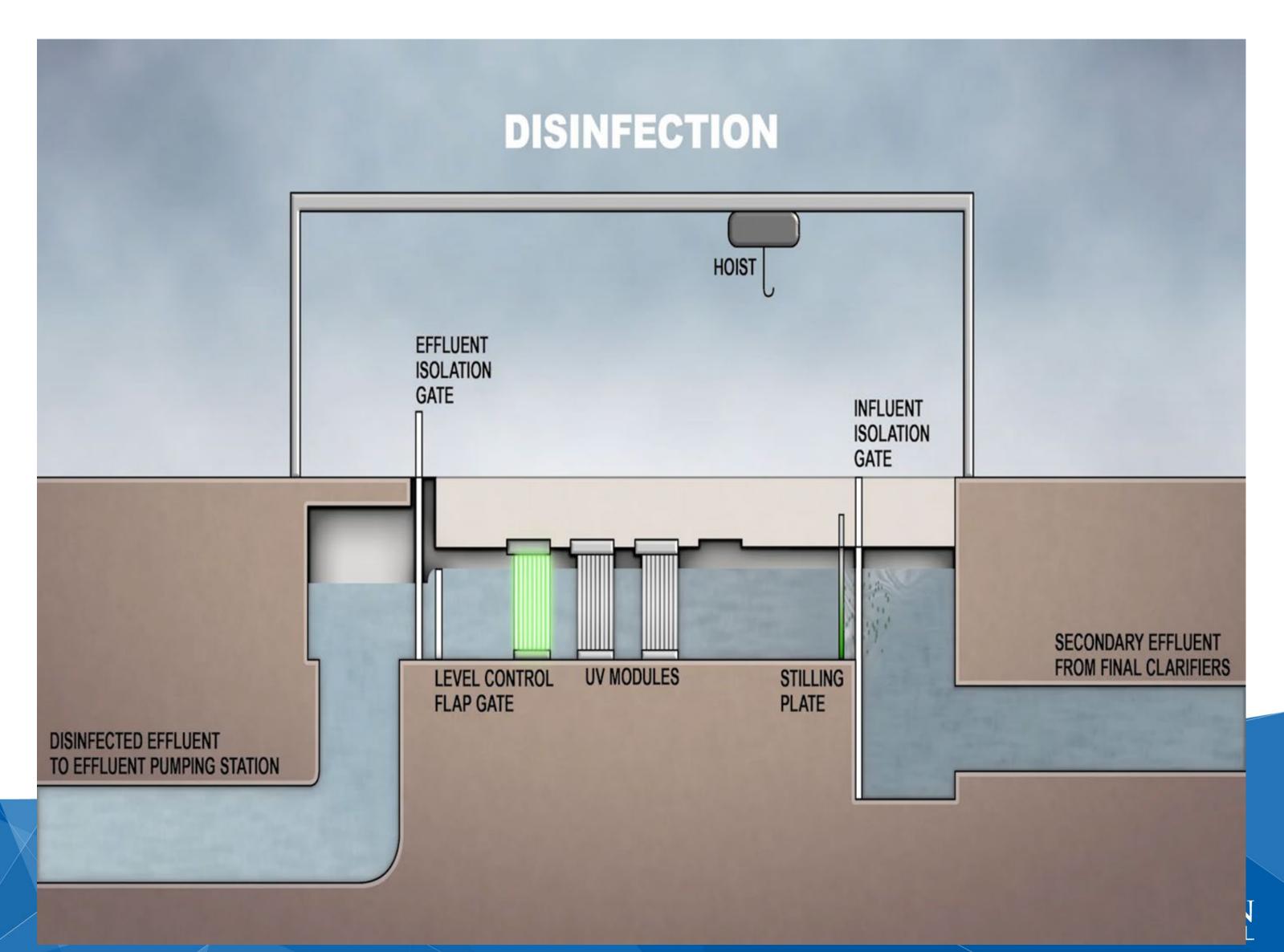
Secondary Treatment



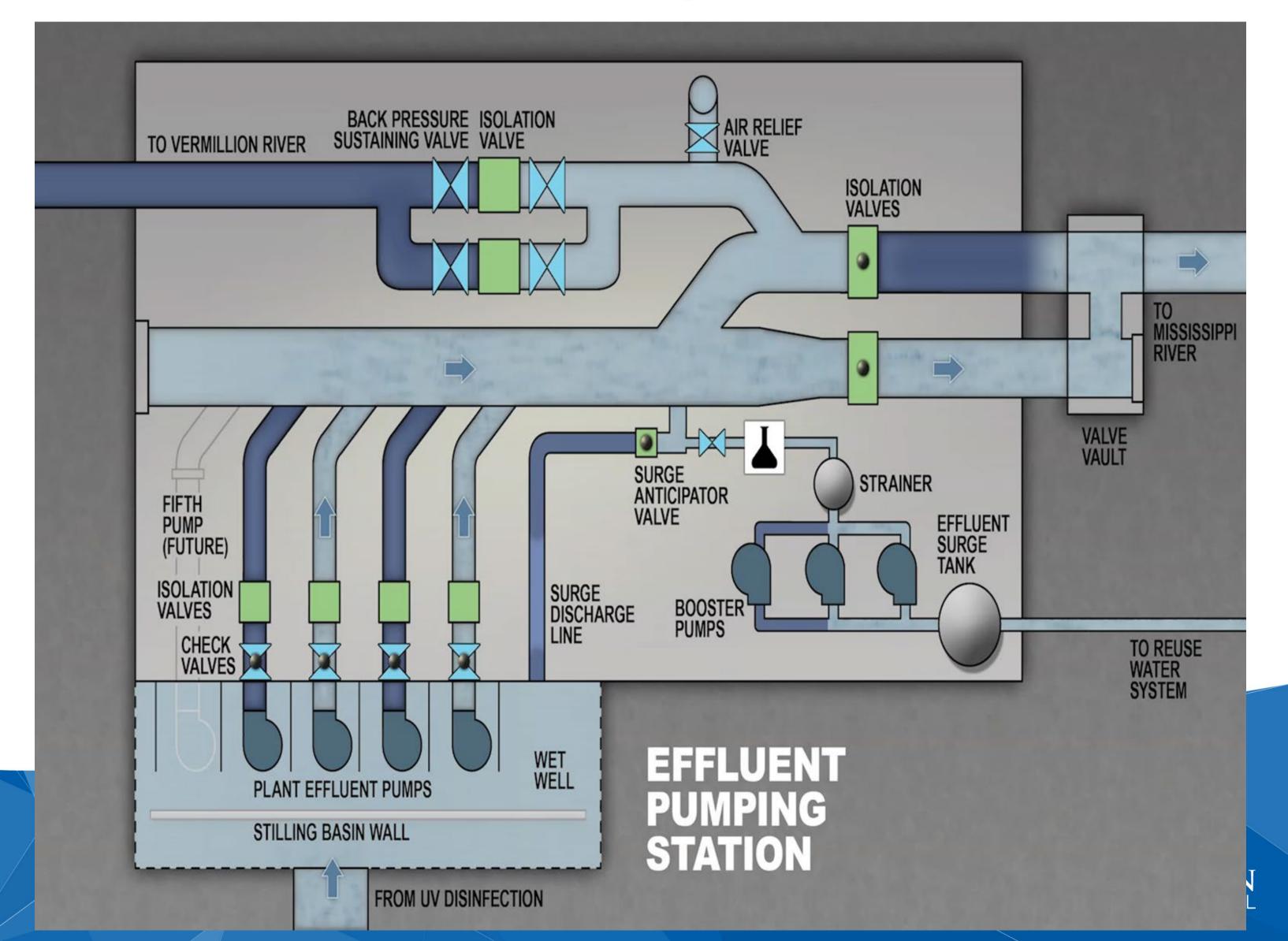
Secondary Treatment



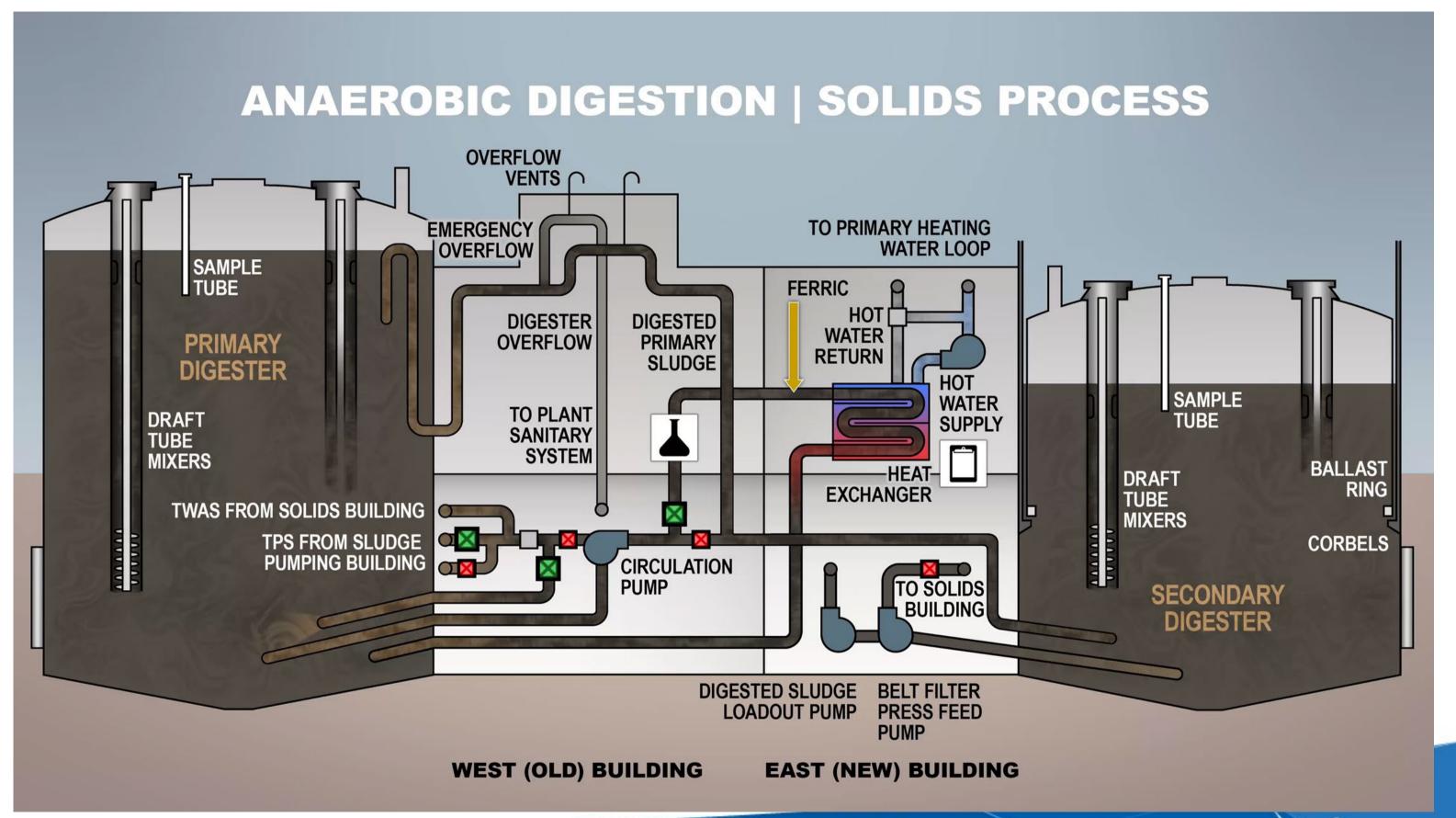
Disinfection



Effluent Pumping



Anaerobic Digestion

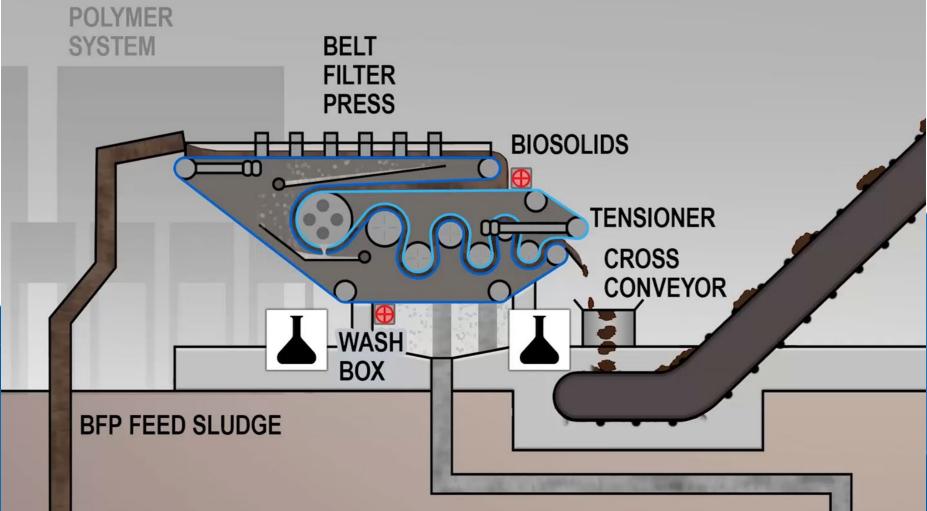




Sludge Dewatering







Land Application







Finance

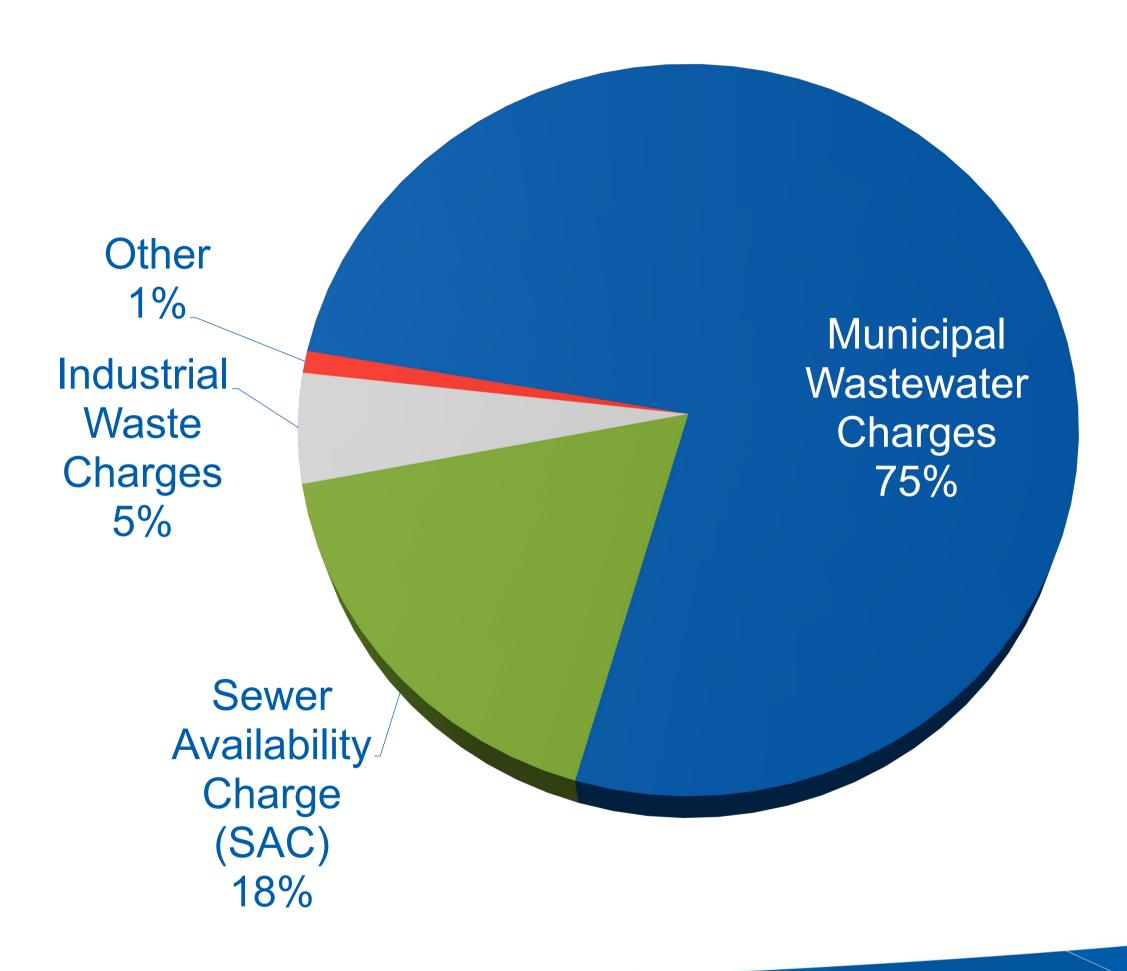
Ned Smith

Director, Pretreatment & Finance





2021 Sources - \$321M



- > Fee for service
- No state funds to run Metropolitan Disposal System
- MCES expenses only (no other Met Council expenses)

*Other includes State Appropriations (grants), Investment Earnings, and Other Misc. Revenue



Load Charges include 3 components

1. Strength Component

- Based on methodology similar to the strength charge equation except hauled waste is assumed to have a set strength
 - Collar County and Standard load charge: 10,000 mg/L for both TSS and COD
 - Portable toilet waste: 20,000 mg/L for COD, 10,000 mg/L for TSS

2. Volume Component

Based on MCES Municipal Wastewater Charge

3. Facilities Component

 The operating, maintenance and debt service cost for facilities built for receiving hauled liquid waste



2021 Load Charges

Load Charges (per 1,000 gallons) paid by liquid waste haulers for septage, leachate and other hauled wastes discharged to approved MCES disposal sites.

Charge Type	2021 Rate	% Increase
Standard Load Charge	\$60.24	0
Holding Tank Rate	\$11.29	0
Portable Toilet Waste Rate	\$77.46	0
Collar County Load Charge	\$75.24	0
Industrial Load Charge** 1. Total Suspended Solids (TSS) 2. Chemical Oxygen Demand (COD)	\$0.413 \$0.2065	0

^{**} Plus \$15 per 1,000 gallons for out-of-region haulers



Accepted Liquid Waste Types

Tim Rothstein

Principal Engineer

Tim.Rothstein@metc.state.mn.us





Domestic Waste

- Septage Septic tank with drain field
- ➤ Holding Tank Sealed tank





Commercial Waste

- Portable Toilet
- Restaurant Grease Trap
- Flammable Waste Trap/Sand Trap
- Commercial Holding Tank





Industrial Waste

All loads that do not meet the definition of a domestic or commercial waste

Require sampling and analysis, written approval

- Industrial Waste
- Landfill Leachate
- Groundwater/Surface Water



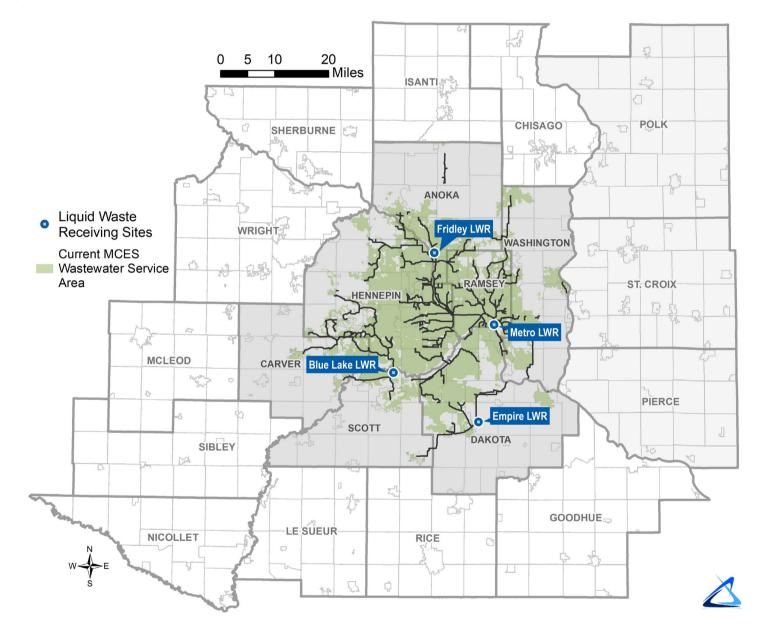


Out-of-Service Area (OSA) Waste

Domestic & Commercial Waste

- > Restaurant Grease
- Collar Counties

Chisago	Polk
Goodhue	Rice
Isanti	St Croix
LeSueur	Sherburne
McLeod	Sibley
Nicollet	Wright
Pierce	





OSA Industrial Waste

- Upfront, non-refundable application fee of \$300
- > Sample analysis required
- OSA Attachment
 - Must list two non-MCES disposal options





Liquid Waste Hauler Permits

Laura Engen

Principal Engineer

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Liquid Waste Hauler (LWH) Permits

The Purpose of the Liquid Waste Hauler Program:

- To Regulate the Discharge of Hauled Liquid Wastes into the Metropolitan Disposal System
- ➤ To Designate Approved Disposal Sites for Discharge of Hauled Liquid Wastes (Access Controlled Disposal Sites)
- > To Collect Equitable Loads Charges for the Waste Discharged

In summary, the LWH Permit allows LWH Hauler to use MCES Approved Disposal Sites for the discharge of approved wastes and MCES to recover costs associated with treating these wastes

90 Active LWH Permits (2021)



LWH Permits

- > 3 Year Permit Cycle
- Semi-Annual &/or Quarterly Reporting Requirements
- **→** Waste Definitions
- ➤ Disposal Site Use Rules
- ➤ General & Specific Permit Conditions
- List of Approved Trucks

Permit Documents Sent Electronically & All Reports Completed through the Electronic Reporting System



Low Impact LWH Permit

A Low Impact LWH Permit is Currently Under Development:

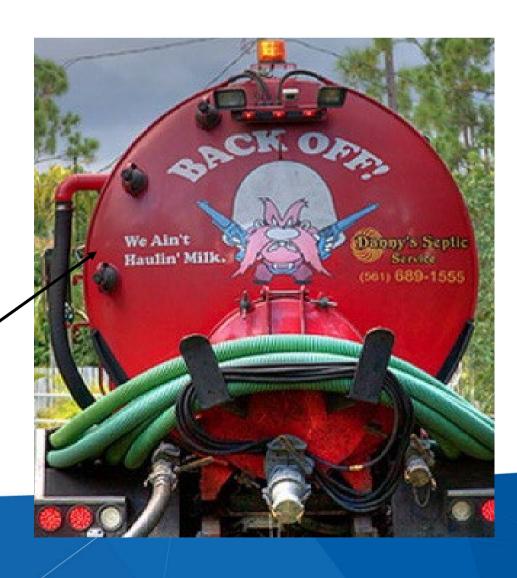
- LWH Permittees discharging less than 50,000 gallons/year & for future applicants needing a Contingency Permit
- 3 Year Permit Cycle (no change)
- Annual Reporting Requirement
- Reduced Annual Permit Fee
- Approximately 20 LWH Permittees Fit into Criteria
- Projected Implementation: Mid-2021
- Notification will be sent out Permittees



Liquid Waste Receiving (LWR) Sites

Bob Golden, Assistant Manager, Field Monitoring & Response Laura Engen, Principal Engineer Isaac Raser, ABUM Interceptor Operations

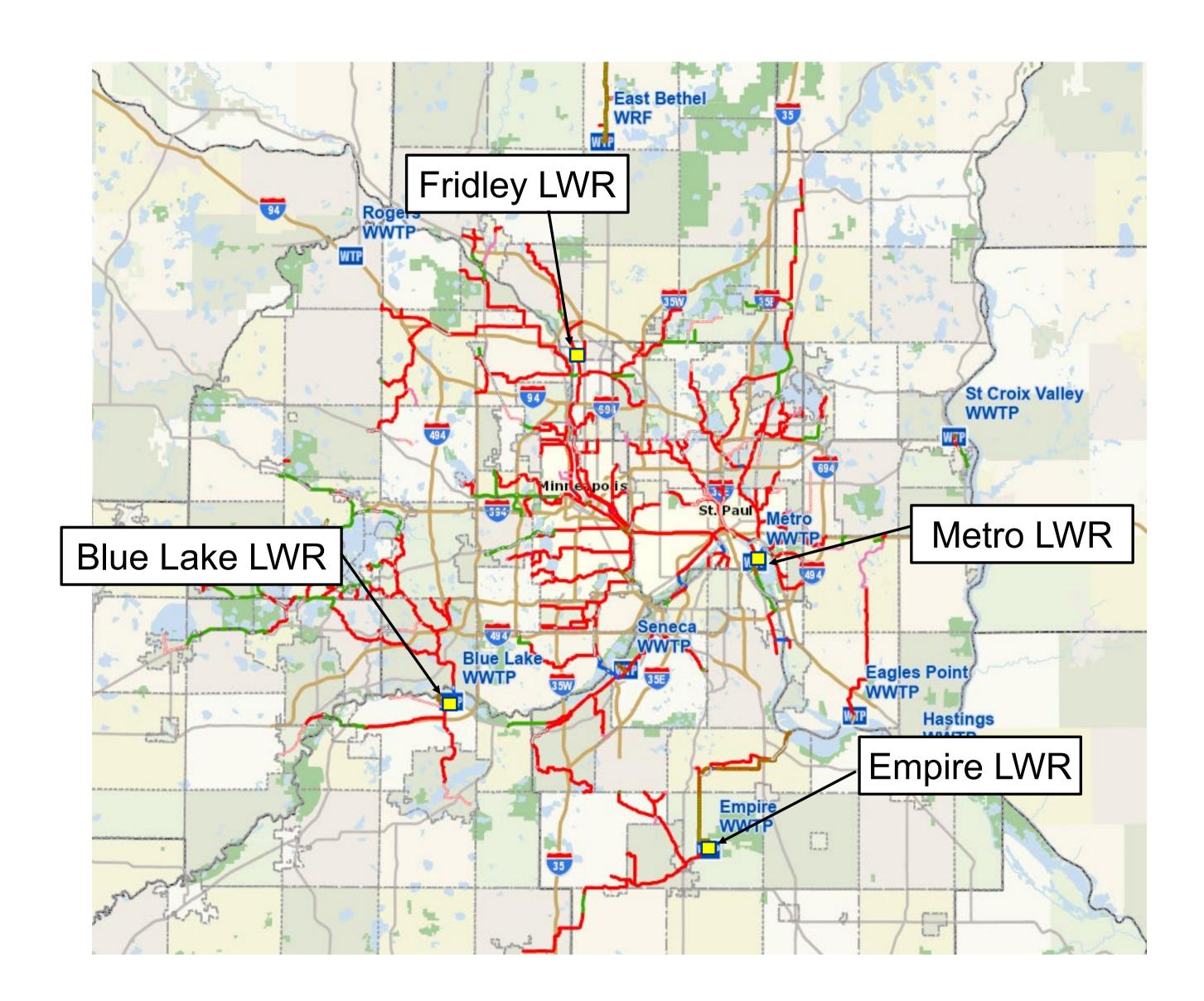
We Ain't Haulin' Milk.







LWR Site Locations



Metro LWR

Located at the Metropolitan WWTP in St. Paul, MN



- > Controlled Access: 70' Truck Scale, Card Readers, & Traffic Control Signs
- > 6 Discharge Holes
 - 2 discharge holes dedicated to MCES Trucks only
 - 2 discharge holes with yellow piping for landfill leachate
- 2 Water Cabinets
- Driver's Lounge & Restroom
- > **2020 Discharge Volume** = 45,000,000 Gallons

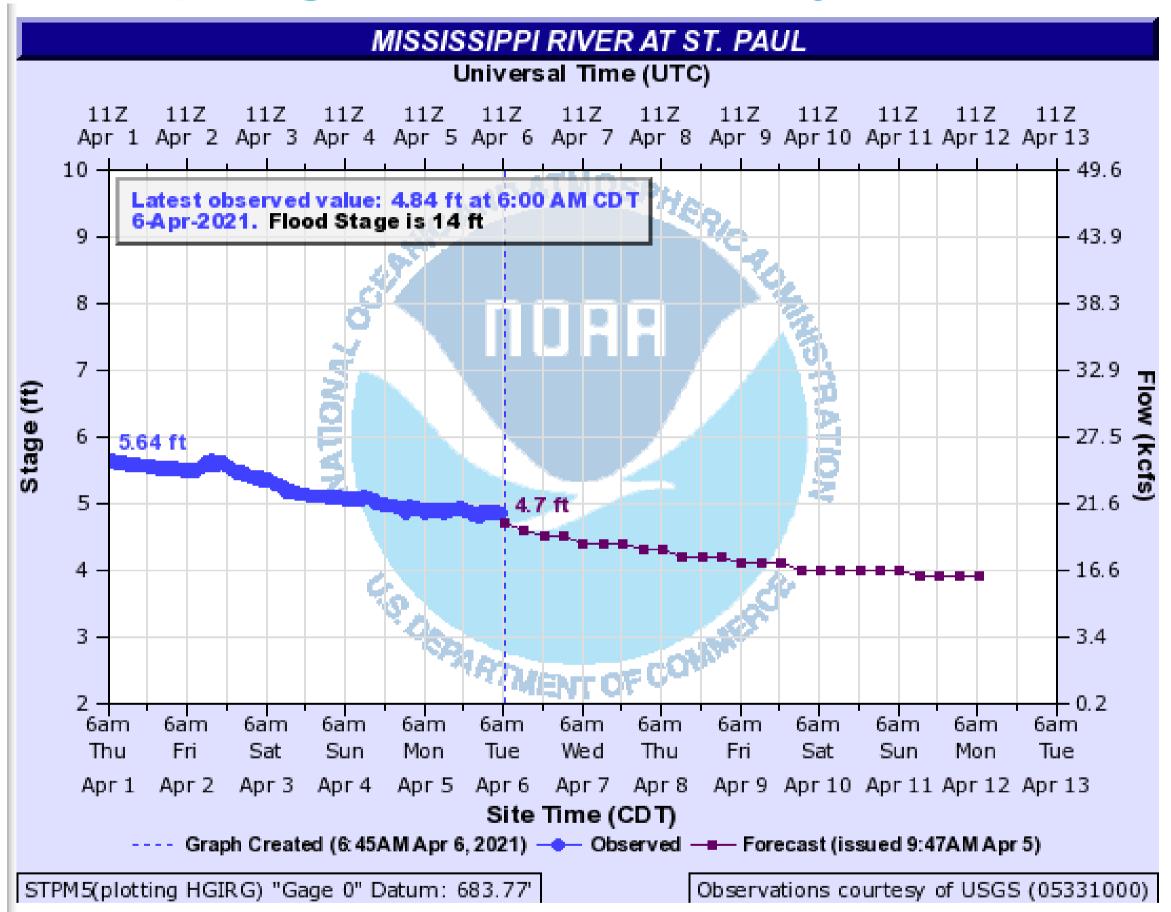
Loads = 15,000 Loads (60-92 Loads/day)

> 2021 Repair Projects- walkway, pipe leak





Spring River Level Projections



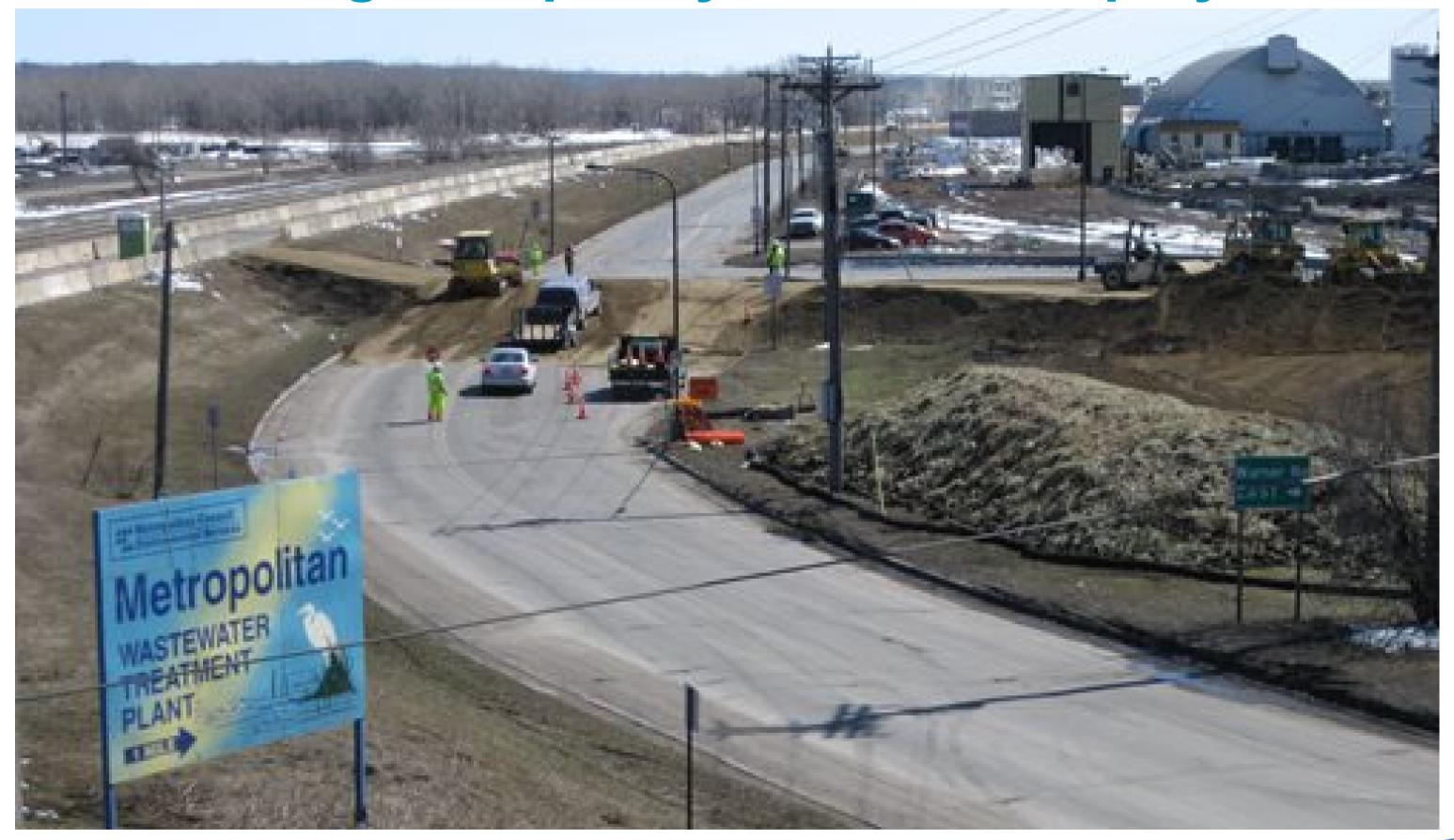


Typical Flooding Preparations

- ➤ Metro not expected to close based on stream gage levels
 - > When St Paul Gage is at 9 ft, Metro begins taking action
 - > When hits about 17 ft, Childs Road is closed
 - > LWH's rerouted to 3rd & Commercial
- Communication GovDelivery, Postings at LWR



Flooding- Temporary Road for Employees





Past Flooding on Childs Road (Metro Plant)





Empire LWR

Located at the Empire WWTP in Empire Township, MN

- Controlled Access: Security Guard
- 2 Discharge Holes
- Types of Waste Accepted: Domestic Waste,
 Holding Tank Waste and Portable Toilet Waste
- Water Cabinet
- > No Restroom Facility Available
- Haulers required to complete Receipts at Security
- 2020 Discharge Volume = 6,000,000 Gallons

Loads = 2,300 loads







Blue Lake LWR

Located at the Blue Lake WWTP in Shakopee, MN



- Controlled Access: Card Readers Control Entrance & Exit
- > 50' Truck Scale & Traffic Control Signs Net Weight Converted into Volume
- ➤ 2 Discharge Holes Discharge goes directly into the influent pipe to the Plant
- ➤ Water Cabinet For Clean-up Purposes
- Pavement Deicing System Push Button Activation
- No Restroom Facility Available
- > **2020 Discharge Volume** = 23,300,000 Gallons

Loads = 12,500 Loads





Fridley LWR

Located in Business Park in Fridley, MN

- > Tributary to the Metro WWTP
- Wastewater Pretreated Prior to Discharge to MCES' Interceptor
- Disposal Site Access: Security Guard
- 2 Indoor Discharge Sites: Couple Up Connections
- > Card Reader Controlled Discharge
- Volume Measurement: Magnetic Flow Meters
- Water available in bay for cleanup
- Restroom Available
- 2020 Discharge Volume = 8,760,000 Gallons

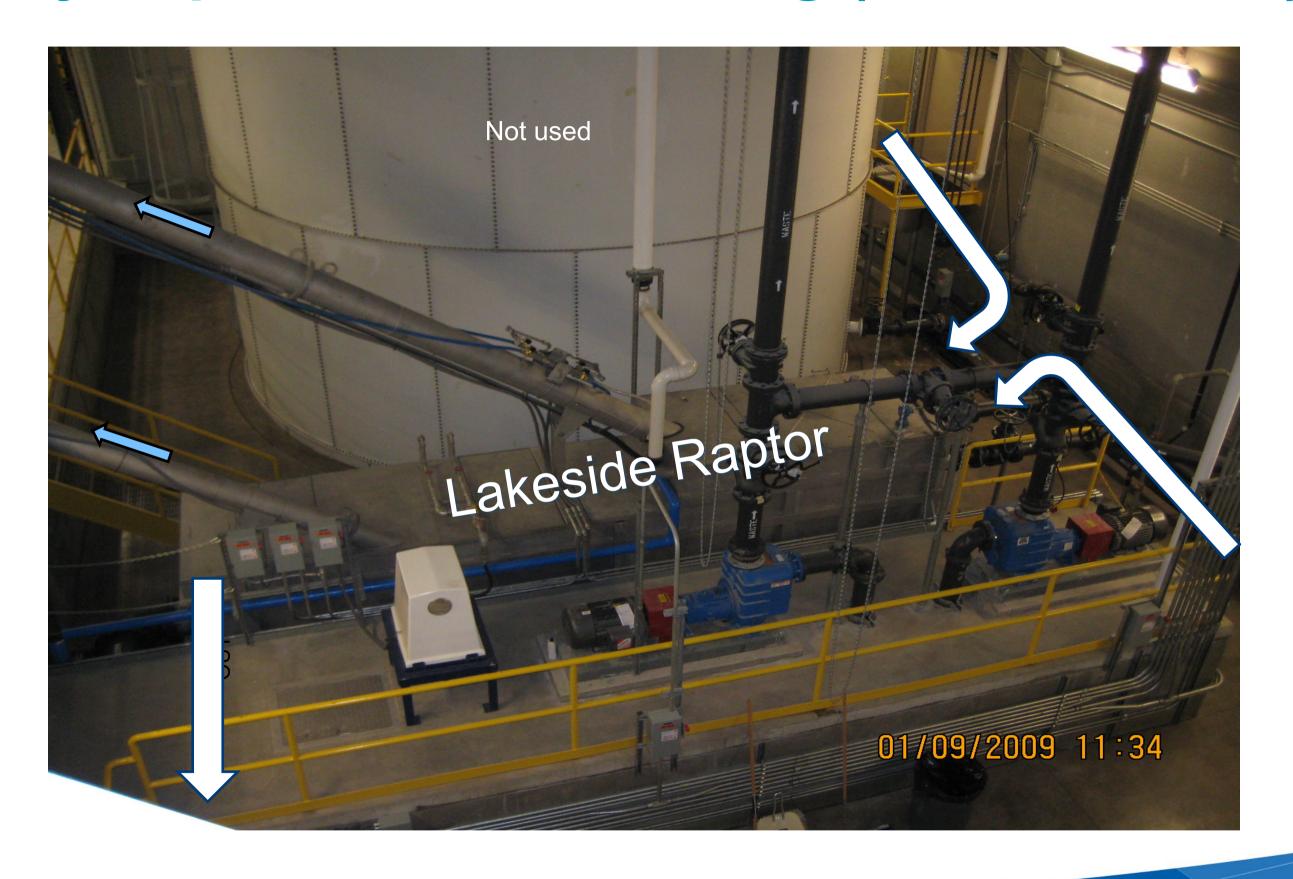
Loads = 4,200 loads







Fridley Liquid Waste Receiving (Lakeside Unit)





Fridley LWR (Continued)

- > Facility maintenance
- Changes we've been making at the facility
- Shared Use Agreement with City of Fridley
- Possible future upgrades





Any Feedback or Questions?





COVID-19 Procedures

- MCES takes COVID very seriously
 - Prevent the spread of COVID-19 in the workplace and to our customers
 - > Reduce the risk of disruption to our essential services
 - Support employee well-being
- Masks are required onsite
- Please practice social distancing
- > Truck sampling will be starting up again
- Please notify us if your employee tests positive and has had contact with any of our staff



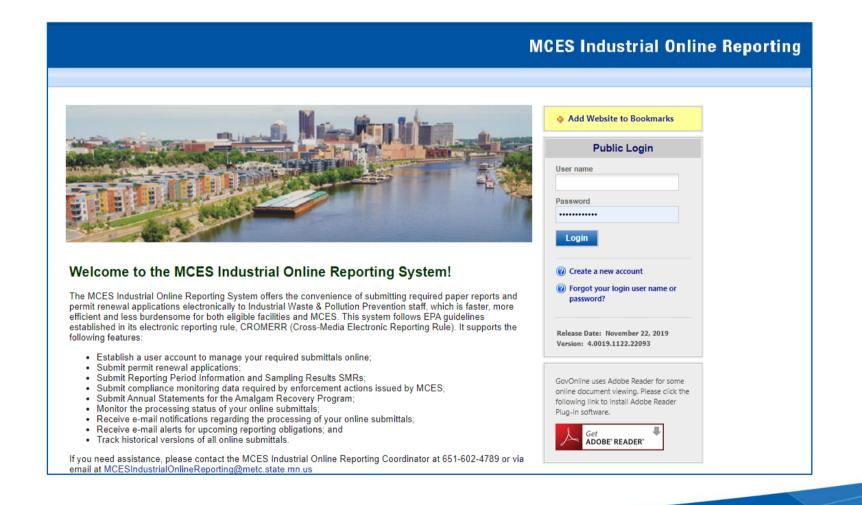
Online Reporting & Communications

Matthew Michealis

Engineer

Matthew.michealis@metc.state.mn.us







Industrial Online Reporting System (IORS)

- The MCES IORS launched June 30, 2016
- ➤ Online reporting became mandatory as of 2/1/2019
- Use to submit discharge reports and permit renewal applications
- Must attach log sheets or summary and detail files from the Excel Load Tracking Program

We welcome feedback on the IORS. Email us at:

MCESIndustrialOnlineReporting@metc.state.mn.us



Excel Load Tracking Program



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	Sheet	view	Workbook V	iews	Show	Zoom		Window	
	Hauler Name (Permit #8888) Load Volume Summary - 1st Quarter 2021								
			Volumes (gallons) by Location					Total Volumes	
	Wa	Vaste Type	Metro LWR	Fridley LWR	Blue Lake	Empire	Seneca	(Gallons)	
[()	Domestic Septage							88
		Industrial							
-		Landfill Leachate							
		Commercial Portable Toilet		*			1		
H		Holding Tank		3			:		
		OSA-Hauled		*			*		
1		Total							
			Select Year 2021			Reporting Period Jan Mar.			-
	Click to Open Load Entry Form		Click to Search Load Records		Click for Instructions	Click to Backup or Archive Data		Click to Create your Summary Report	
Comments You can enter any type of comments or notes in here to submit with your Quarterly Self Monitoring Report.									
	Hauled MCES-Waste (If applicable - Not included in Volume Summary or Billing): Not Applicable								
version 1.0.8 (beta)									
■ (t	M Accessibility:	Investigate Log_Pa	ge Customers_Pa	ge Hauler_Info	(+)				

- Easy to use and provides value to LWHs
- Uniform method to record and report LWH load volumes
- Organizes information to match the flow of data entry for online reporting
- 20 haulers installed this program

Contact Dave Rude at dave.rude@metc.state.mn.us for installation







- Training by requests over phone or Microsoft Teams
- Training materials available on the <u>IORS Homepage</u>
- >IORS Support Team is available to help you!
 - Monday Friday from 8 AM to 4 PM
 - MCESIndustrialOnlineReporting@metc.state.mn.us



Communication - IWPP Website https://metrocouncil.org/LWH







Other Communication

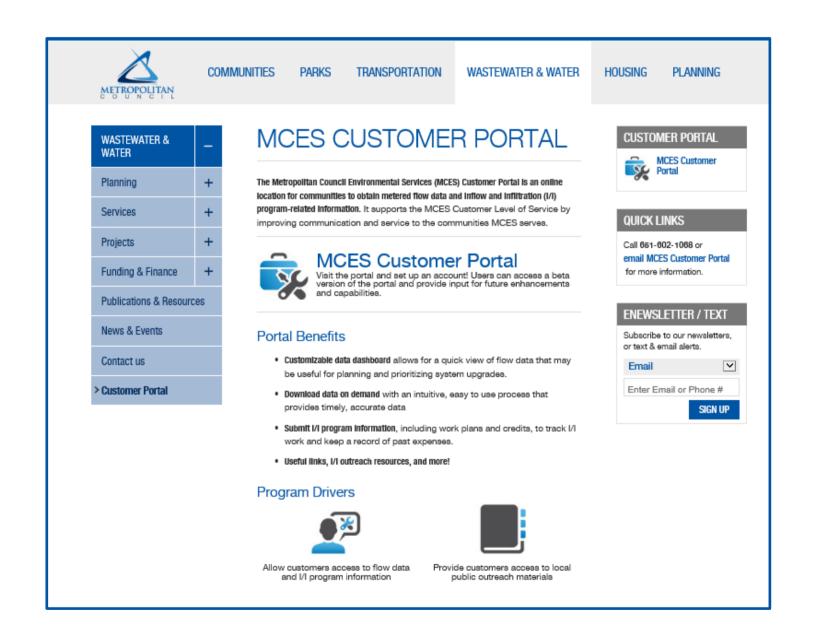
- Transaction Emails (optional)
- ➤ Open Channel News
- GovDelivery
 - METC@public.govdelivery.com
 - Report Due Dates
 - Workshops and Trainings
 - Disposal Site Notifications
 - NOT SPAM!!
 - We send important information via the GovDelivery email.
 Please add to your contacts so you do not miss out!





Customer Portal Demo

Ricky Arora, Manager, Performance Excellence & Analytics
Dave Rude, Business Analyst 2





Customer Portal

We want to build a secure page specifically for you.

What do you want to see?





Any Feedback or Questions?





The Me