

## Metro Plant Fourth Incinerator Design-Build Information Session





You are muted and your video is disabled upon entry. Participants are in listen-and-view mode.



If you experience any technical difficulties, please call or text 651.691.9124 or email info@metrosolids.com.



Utilize the QA (lower right corner of the screen) to type in questions throughout the session. Questions will be answered after the presentation during the Q & A session. Questions can also be submitted by calling 651.691.9124 or emailing info@metrosolids.com.

The meeting will begin at 10 a.m.

# Metro Plant Fourth Incinerator Design Build Information Session



December 8, 2021 - 10:00 AM Rene Heflin / Stephen Norton Auburn Dees / Amanda Beaulieu





## Meeting Logistics

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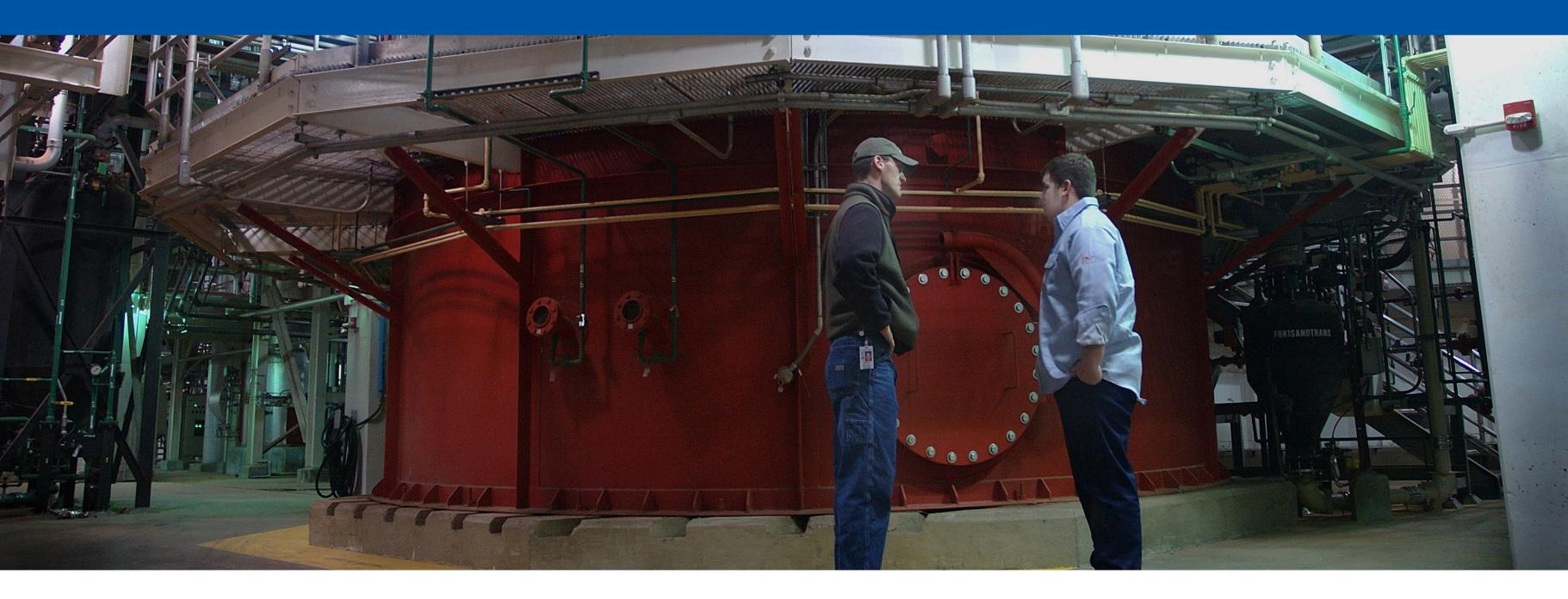
After the meeting, the recorded video and presentation will be posted to the event page on the project website (<a href="www.metrocouncil.org/metrosolids">www.metrocouncil.org/metrosolids</a>). A thank you email and link to the event page will be emailed to meeting attendees.



## Information Session Objectives



Inform contractor and engineering companies about the upcoming fourth incinerator design-build project.





## Topics



Overview



Background



Project Scope



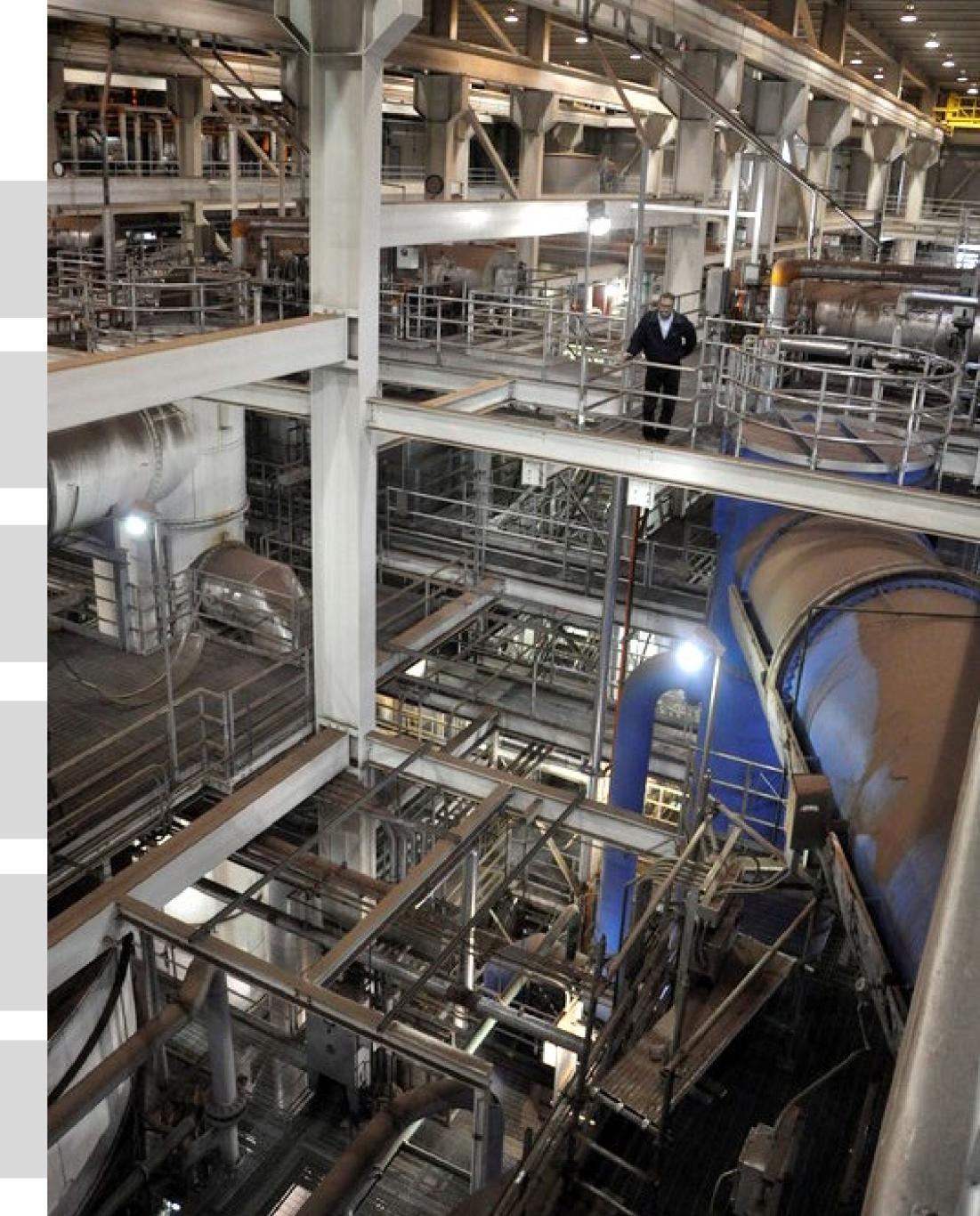
Procurement



MCUB Program



Next Steps



## Overview

## Rene Heflin

Plant Engineering Manager





## Metropolitan Council

#### **Metro Transit**

Operate regional transit system

#### **Environmental Services**

 Planning and operation of the regional wastewater collection and treatment system

#### **Metropolitan Transportation Services**

Transit planning and Metro Mobility

#### **Community Development**

- Affordable housing plans & programs
- Plan and fund development of regional parks and trails









The Council's mission is to foster efficient and economic growth for a prosperous region.



## **Environmental Services**



Protects public health and safety



Protects the environment



Fosters the economic growth of the region

#### **WHO WE SERVE**

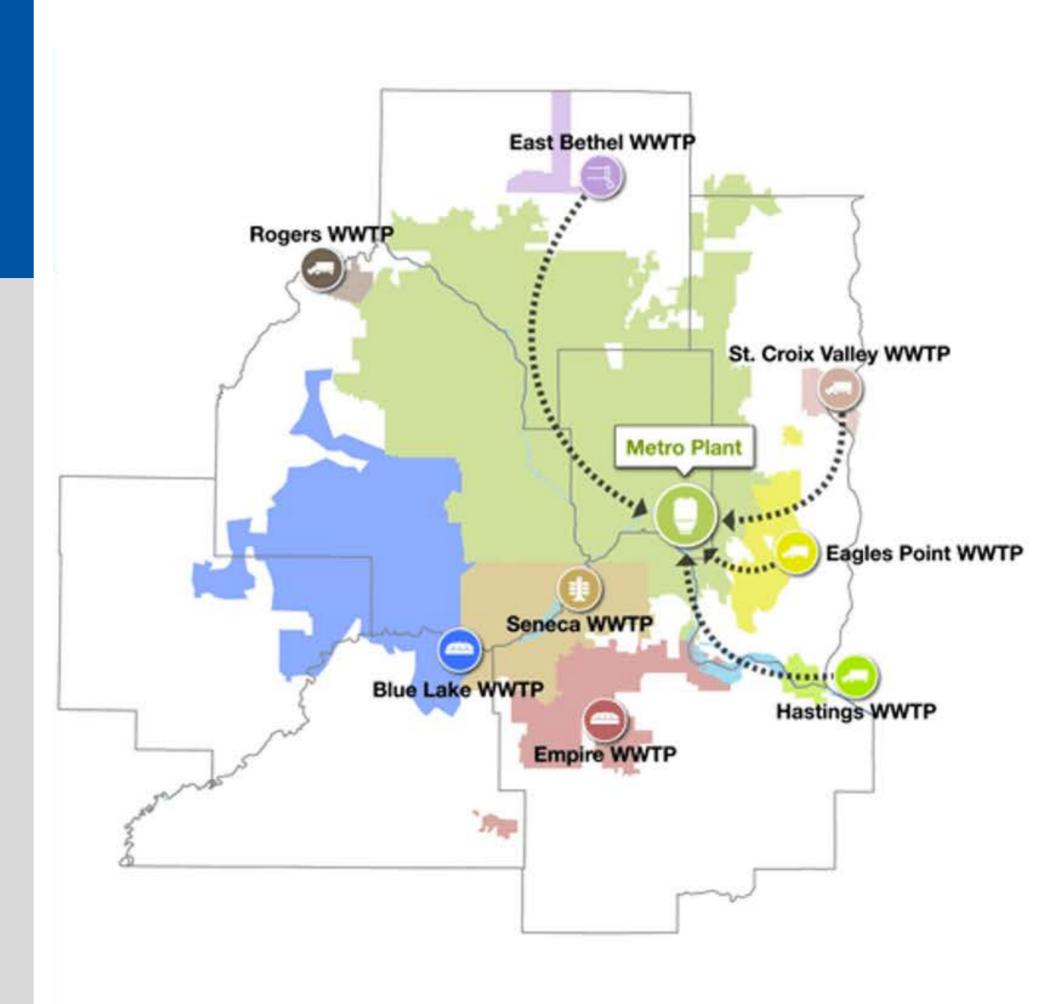
7-county Twin Cities Metro Area111 communities2,700,000 people

#### **OUR FACILITIES**

9 wastewater treatment plants640 miles of interceptors250 million gallons per day (avg)

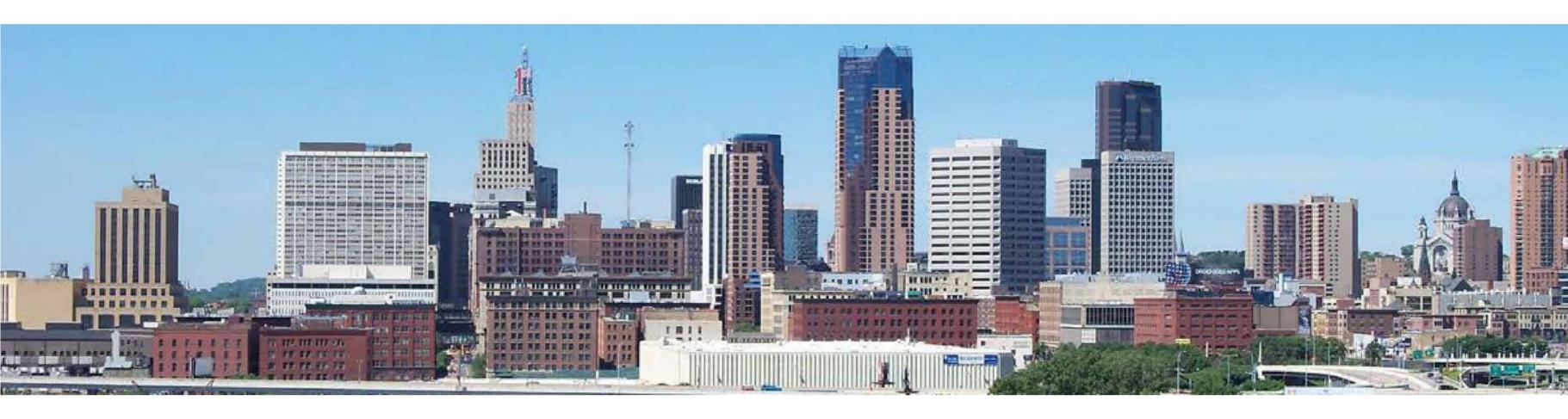
#### **OUR ORGANIZATION**

\$7 billion in valued assets\$150 million / yr capital program





## **Project Need**



#### Preserve Existing Wastewater Treatment Plant Infrastructure



## Serve Regional Population Growth



Adding Solids Processing Capacity at the Metro Plant is Important for the Region.



## Project Planning

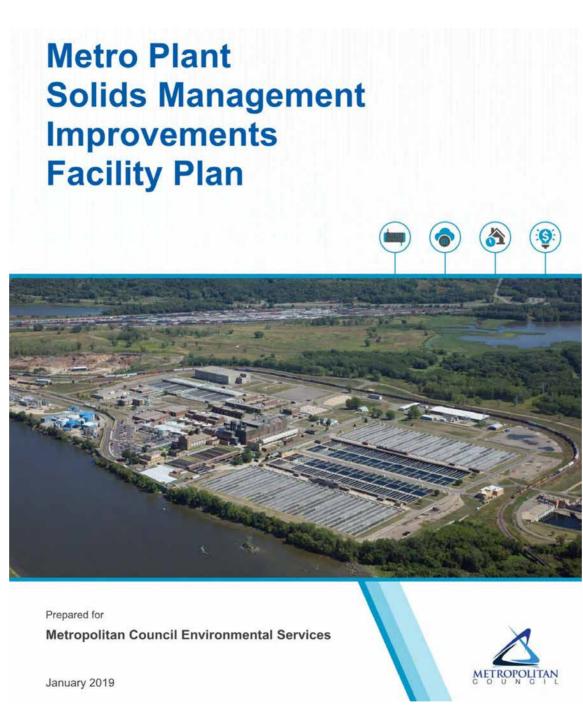


#### **Public Hearing**















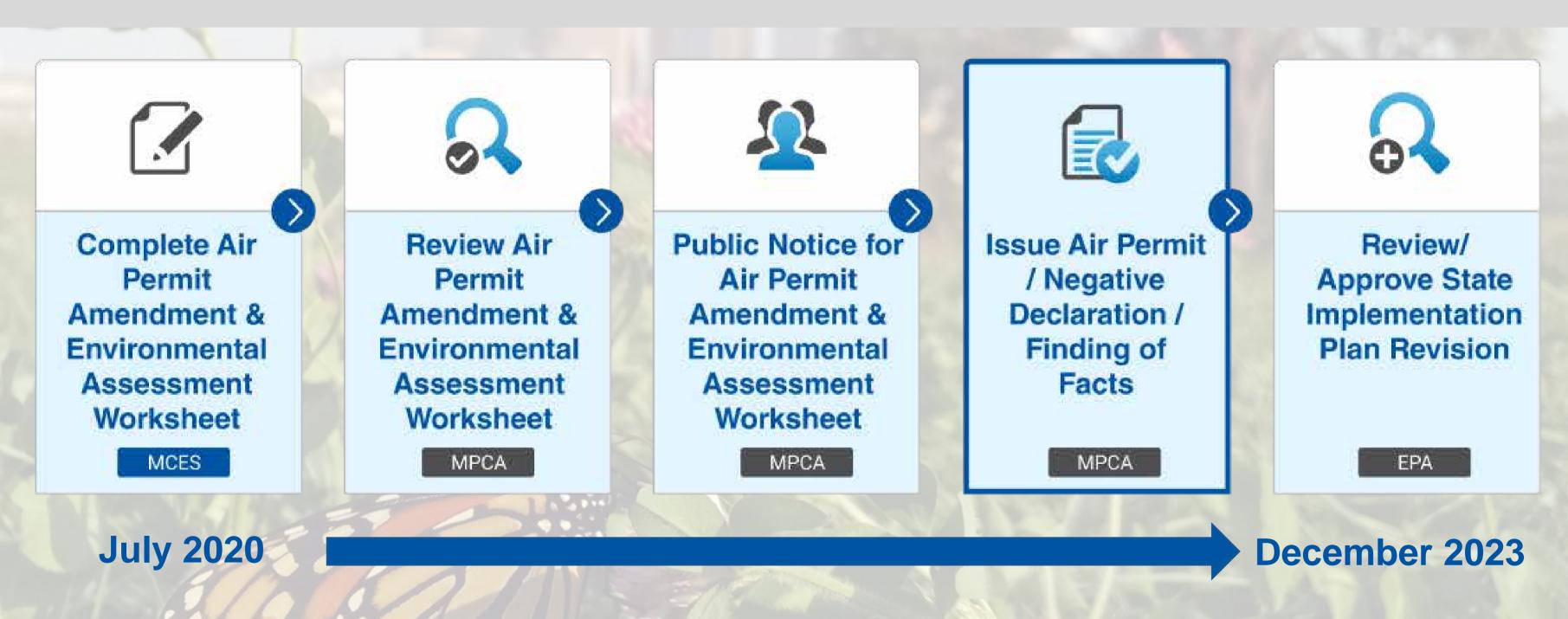
Luken Architecture

After public outreach and public hearing, the Metropolitan Council approved the Facility Plan in October of 2018.



## Air Permitting & Environmental Review

MCES has submitted a major air permit amendment and will submit a voluntary environmental assessment worksheet (EAW) to the Minnesota Pollution Control Agency (MPCA)



MCES will work with the MPCA to complete the air permitting and environmental review for the Fourth Incinerator project.

## Background

## Stephen Norton

Principal Engineer

**Project Manager** 



## **Existing Solids Processing**

1938-2005

Multiple Hearth Incinerators

2005-Present

Fluidized Bed Incinerators

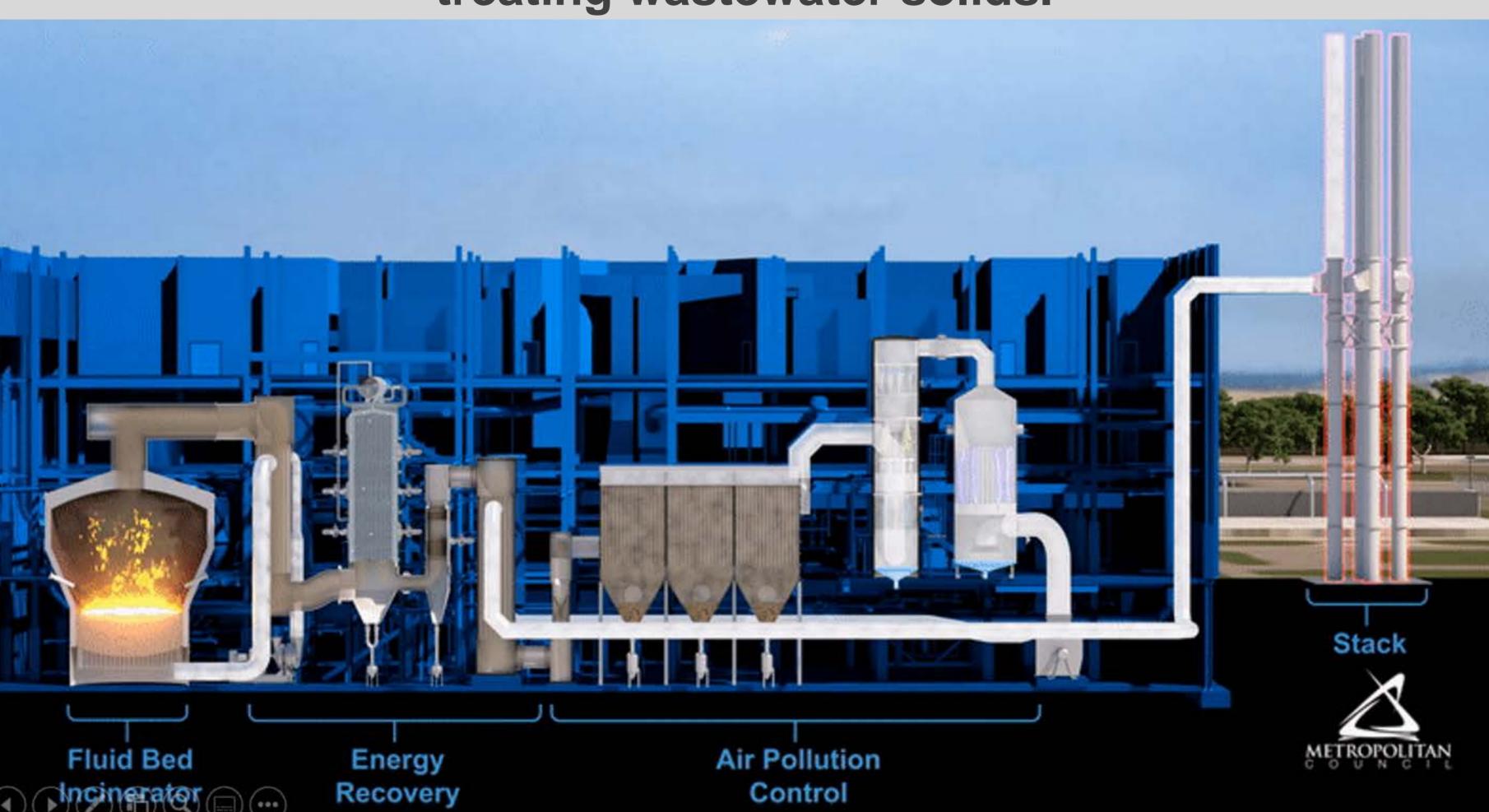


The Metro Plant has one of the most advanced and highest performing incineration systems in the country.



### **Existing Incinerator Trains**

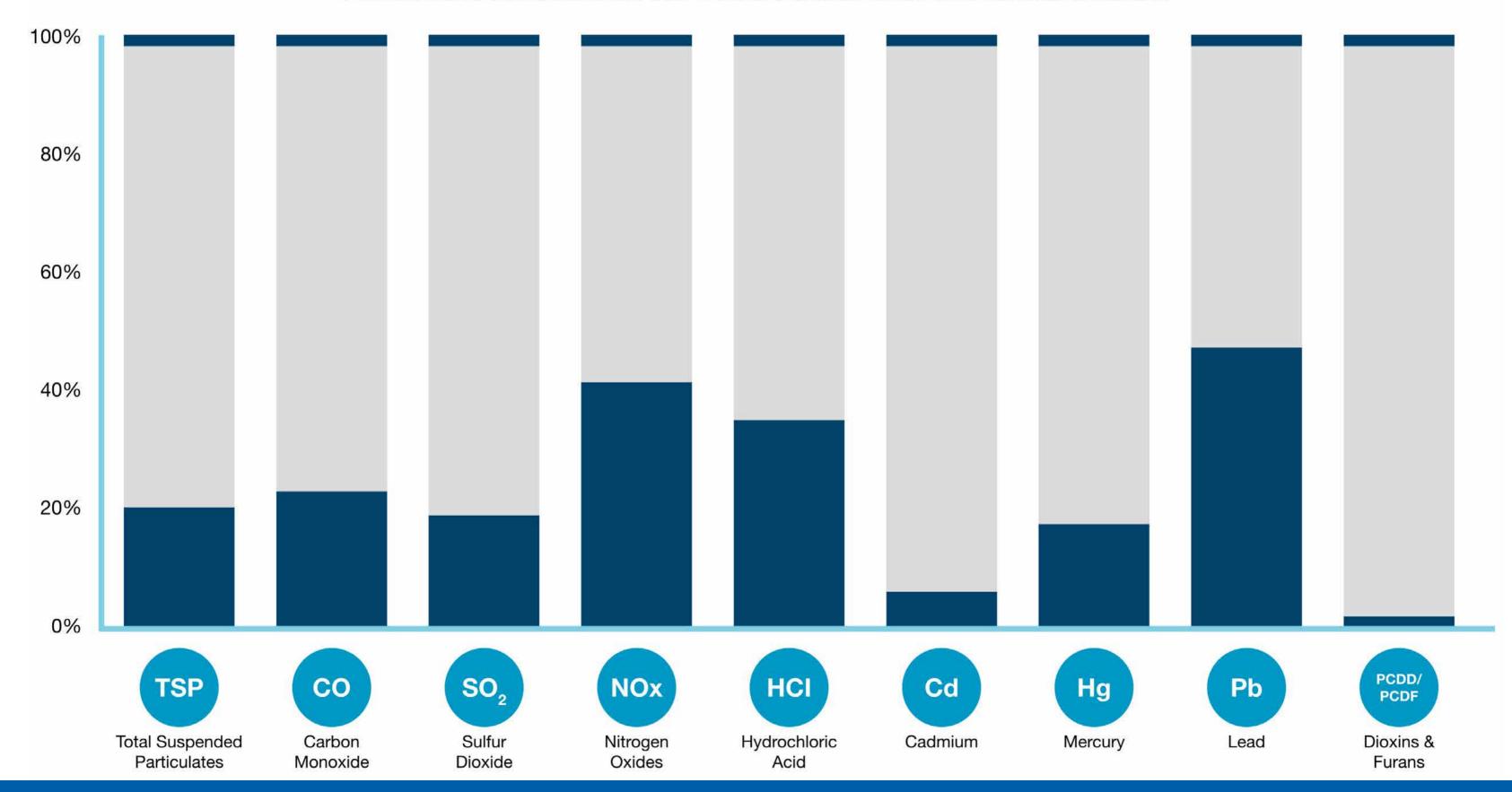
Fluid bed incineration, paired with energy recovery and stateof-the-art air pollution control, is a sustainable solution for treating wastewater solids.





## **Exceptional Air Quality**

Metro Plant Incinerator Performance Compared to EPA Emission Standards for New Fluidized Bed Incinerators



The existing incinerators meet federal emission standards for existing and new fluidized bed incinerators.

## Project Scope

## Stephen Norton

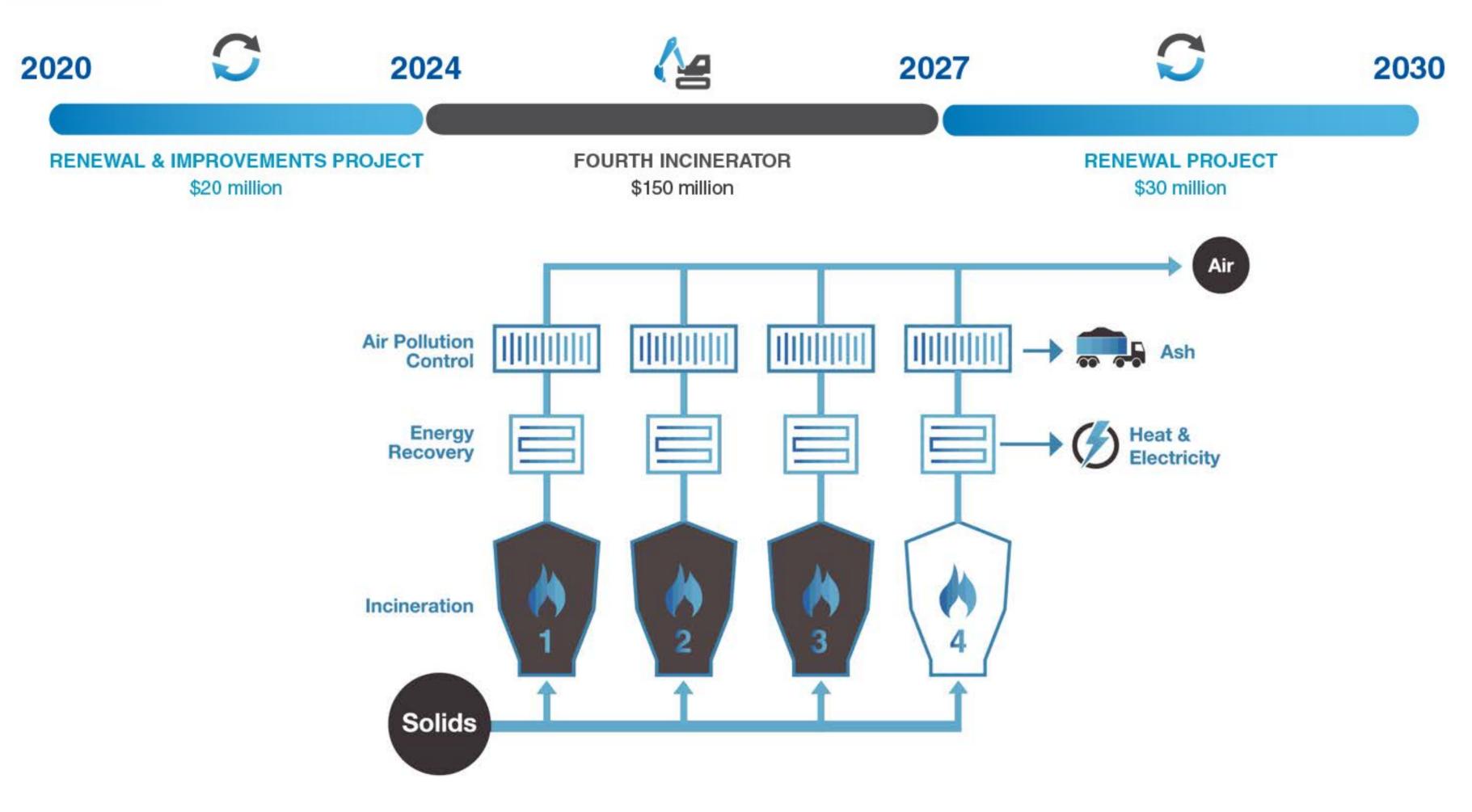
Principal Engineer

**Project Manager** 





## Program Overview



MCES will spend roughly \$200 Million on Metro Solids projects over the next eight years.



## Project Scope

Site Work / **Building Additions**  **Feed** 

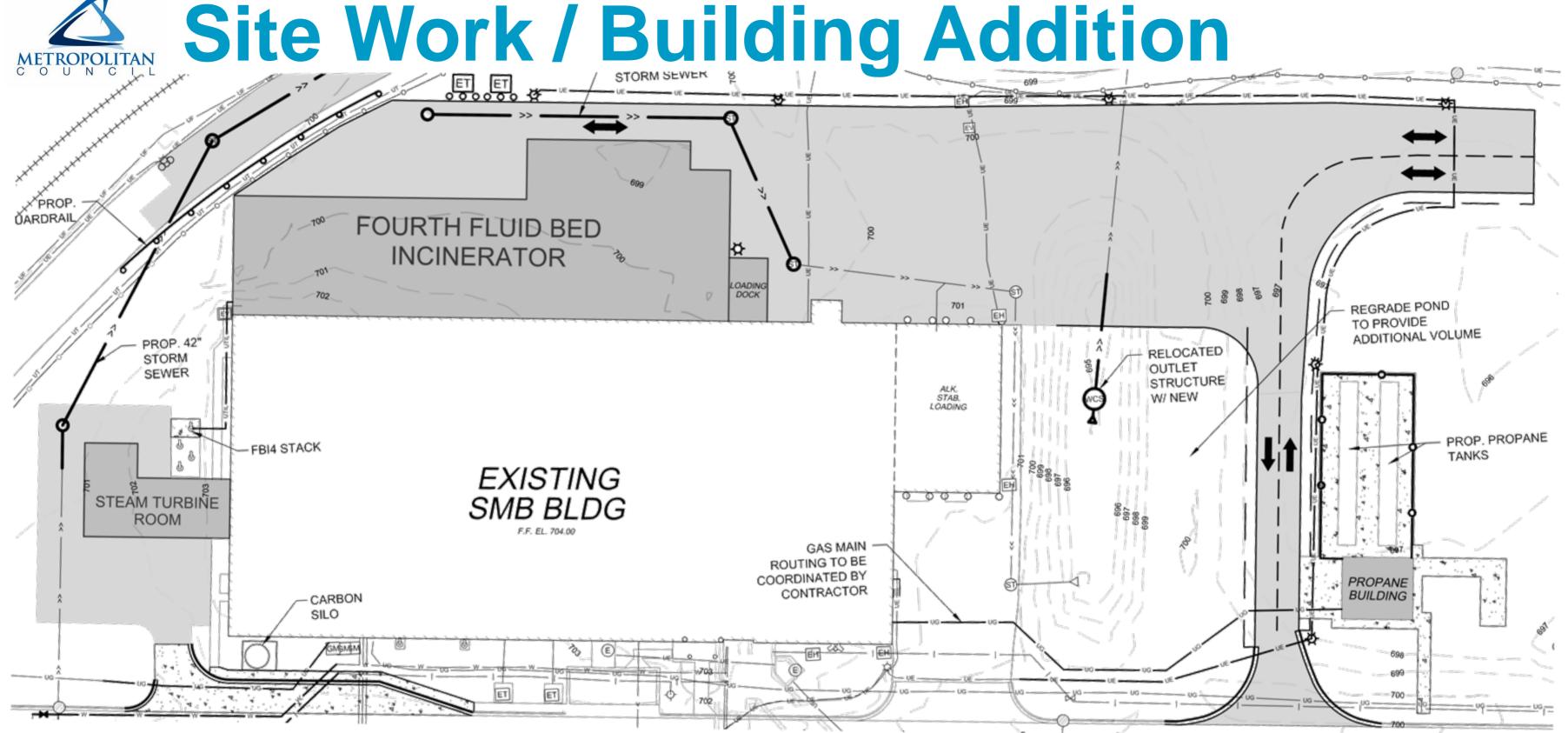
Cake Fourth Incinerator Steam Turbine **System** 

Generator

**Support Systems** 



The fourth incinerator will include 21,000 square feet in building additions.



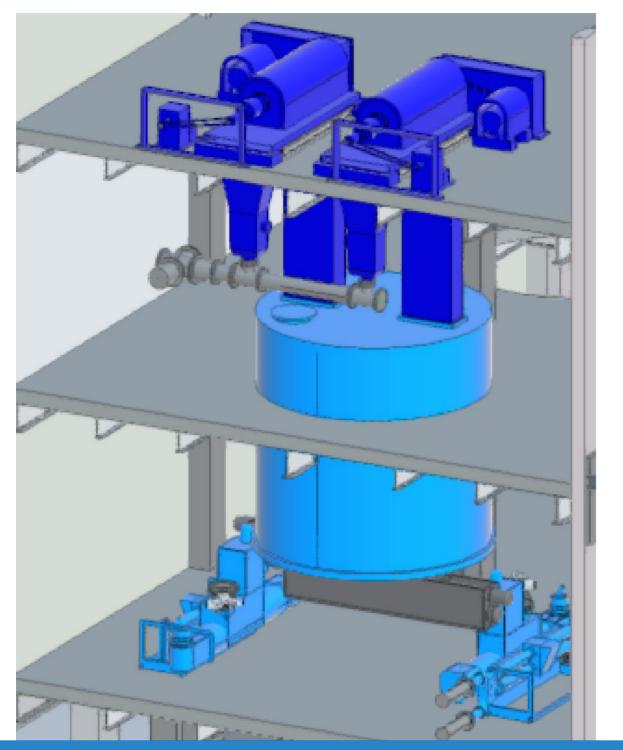


#### Major Site Work / Building Items

- Building additions will require piles
- Reconfigure existing access road
- New third electrical feed from main substation
- Rerouting stormwater piping and pond
- New propane tank and feed system



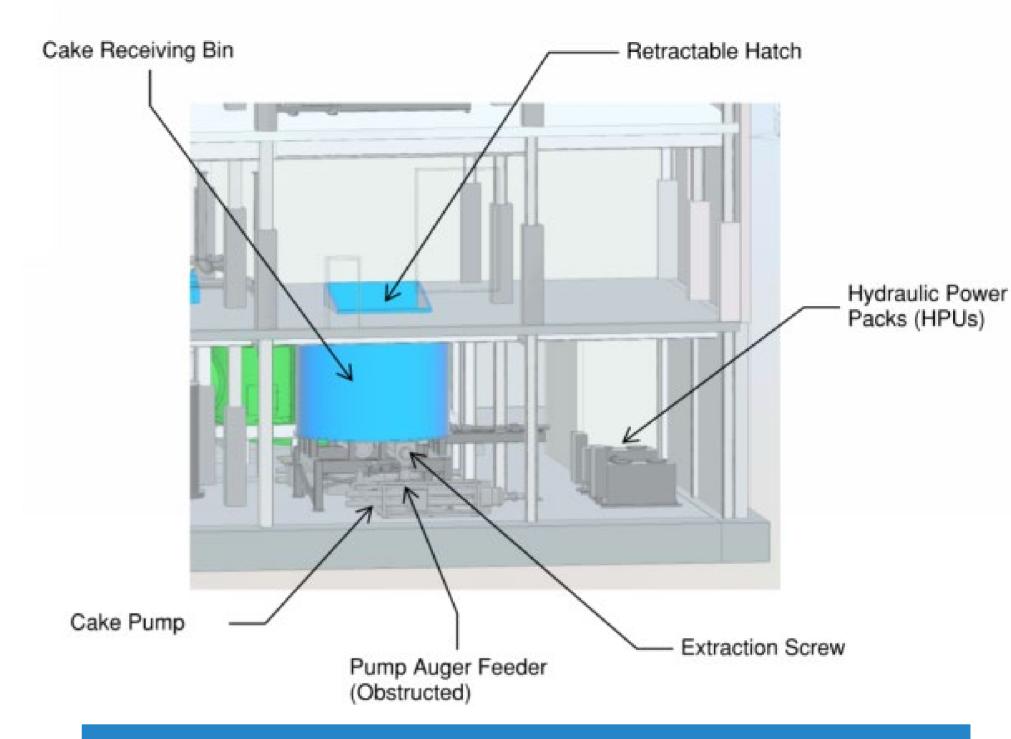
#### Cake Feed



**Dewatering Layout** 

#### **Major Dewatering Items**

- Two centrifuge feed pumps
- Two polymer feed pumps
- Two centrifuges
- One cake bin and two cake pumps



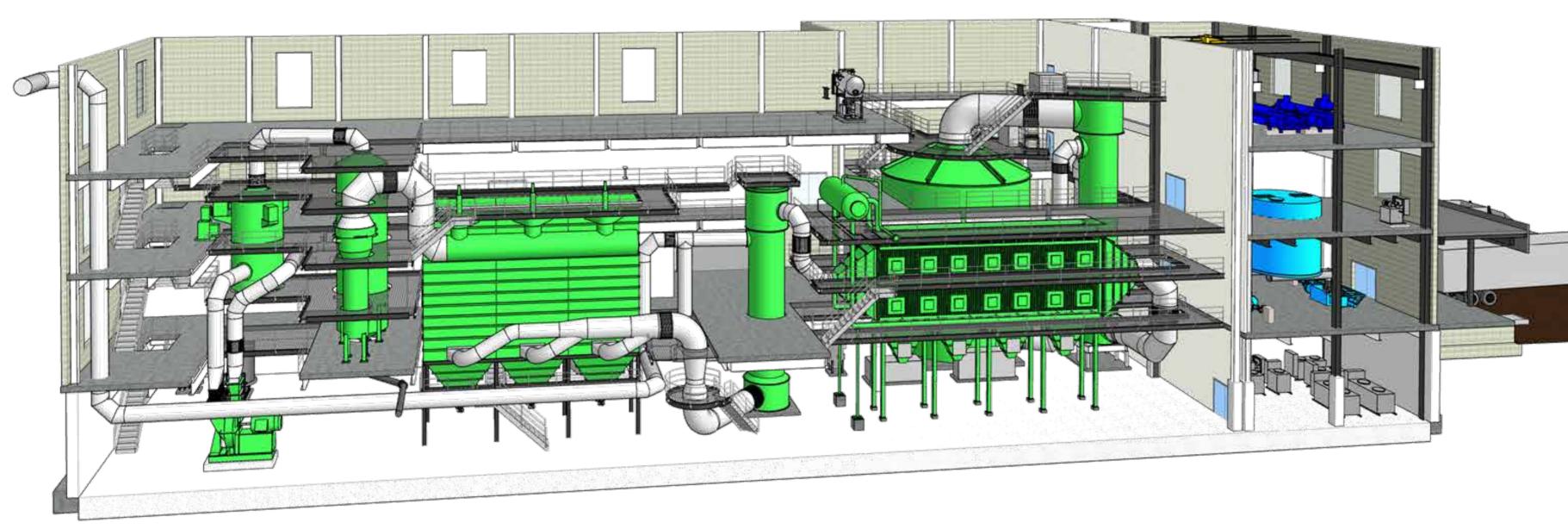
**Cake Receiving Layout** 

#### Major Cake Receiving Items

- Emergency backup for MCES WWTPs
- One cake receiving bin and pump
- Odor control
- Piping and valves to four incinerators



## Fourth Incinerator System



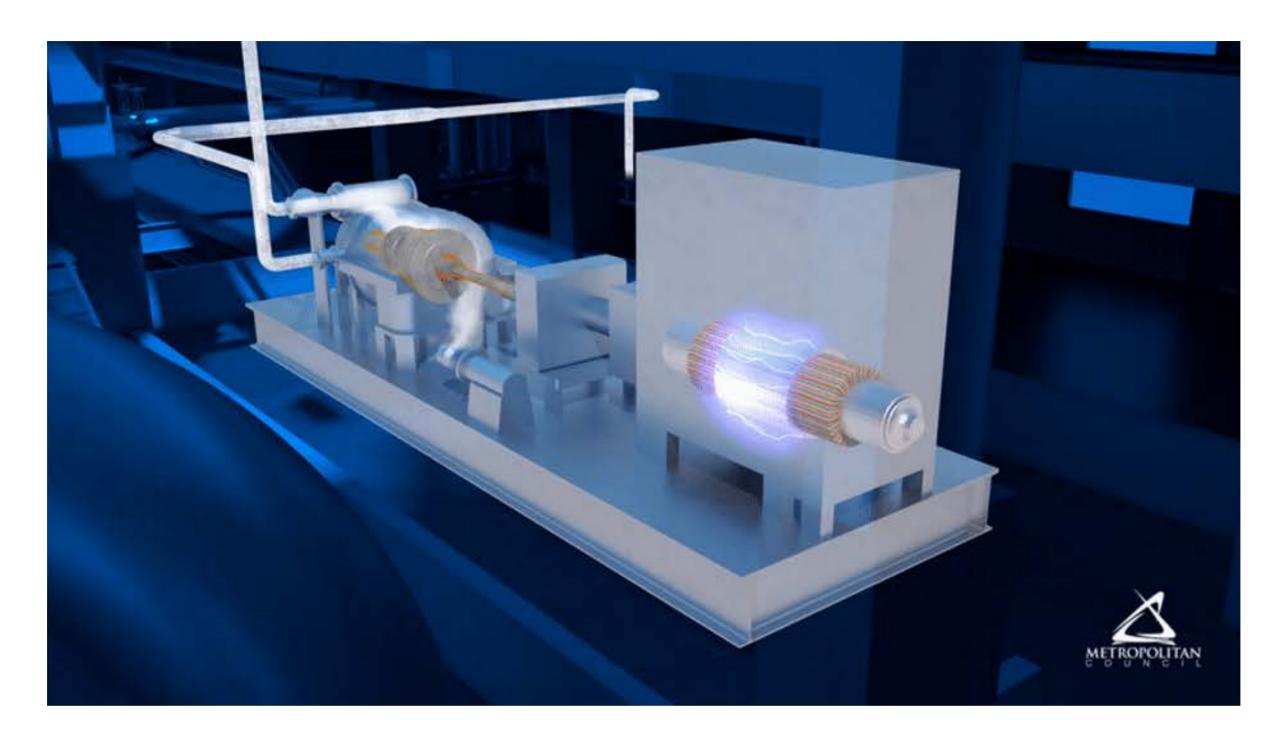
#### **Major Incinerator System Items**

- Sized for 130 dry tons per day
- Meet MACT standards for new fluid bed incinerators
- Horizontal waste heat boiler
- Improved materials of construction

A fourth incinerator with state-of-the-art energy recovery and air pollution controls, fully integrated with the existing incinerators



#### Steam Turbine Generator



#### **Major Steam Turbine Generator Items**

- Slab-on-grade building addition north of SMB with electrical rooms attached
- 1-MW to 7-MW capacity with 15 psi and 150 psi extraction zones
- Grade level condenser using effluent water

The energy recovered is used within the plant and saves customers roughly \$2.0 million per year.



## **Support Systems**

#### Vacuum Ash Conveyance

New ash vacuum system for all four incinerators.

#### Housekeeping Vacuum

 New blower and dust collector for ash housekeeping in SMB

#### Carbon Storage Silo

New carbon silo on west of SMB

#### **Sand Storage**

New sand booster station

#### **Effluent Water**

- Convert high pressure to low pressure system
- One new effluent pump
- Scrubber booster system at SMB

#### **Boiler Feedwater**

- One new desuperheater
- One new deaerator
- Two condensate pumps
- Two boiler feedwater pumps
- New boiler feedwater chemical and RO system for all incinerators

#### **Propane System**

 Two 60,000-gallon storage tanks and feed system for backup fuel

#### **Auxiliary Condensers**

Two new auxiliary steam condensers

#### **Ammonia System**

 Provided if needed during commissioning

## Procurement

## Auburn Dees

**Program Manager** 

**Project Contract Administrator** 





## Procurement Objectives

- 1. Single fixed-price design build contract
- 2. Best value selection of both Incinerator Vendor and Design Builder
- 3. Competitive and transparent process
- 4. Compliant with all applicable laws, regulations, and Council policies



## Procurement Approach

#### 1. Incinerator Vendor RFP

- a.Request qualifications and pricing commitment for goods and services and select single vendor based on best value
- b.Contract with vendor to support design builders during the Design-Build RFP
- c.Include vendor scope and fee in the Design-Build RFP
- d. Vendor to subcontract with the selected Design-Builder

#### 2. Design-Build RFQ

a. Shortlist the three most qualified proposers

#### 3. Design-Build RFP

- a. Fixed price design-build request for proposal
- b. Selection based on best value



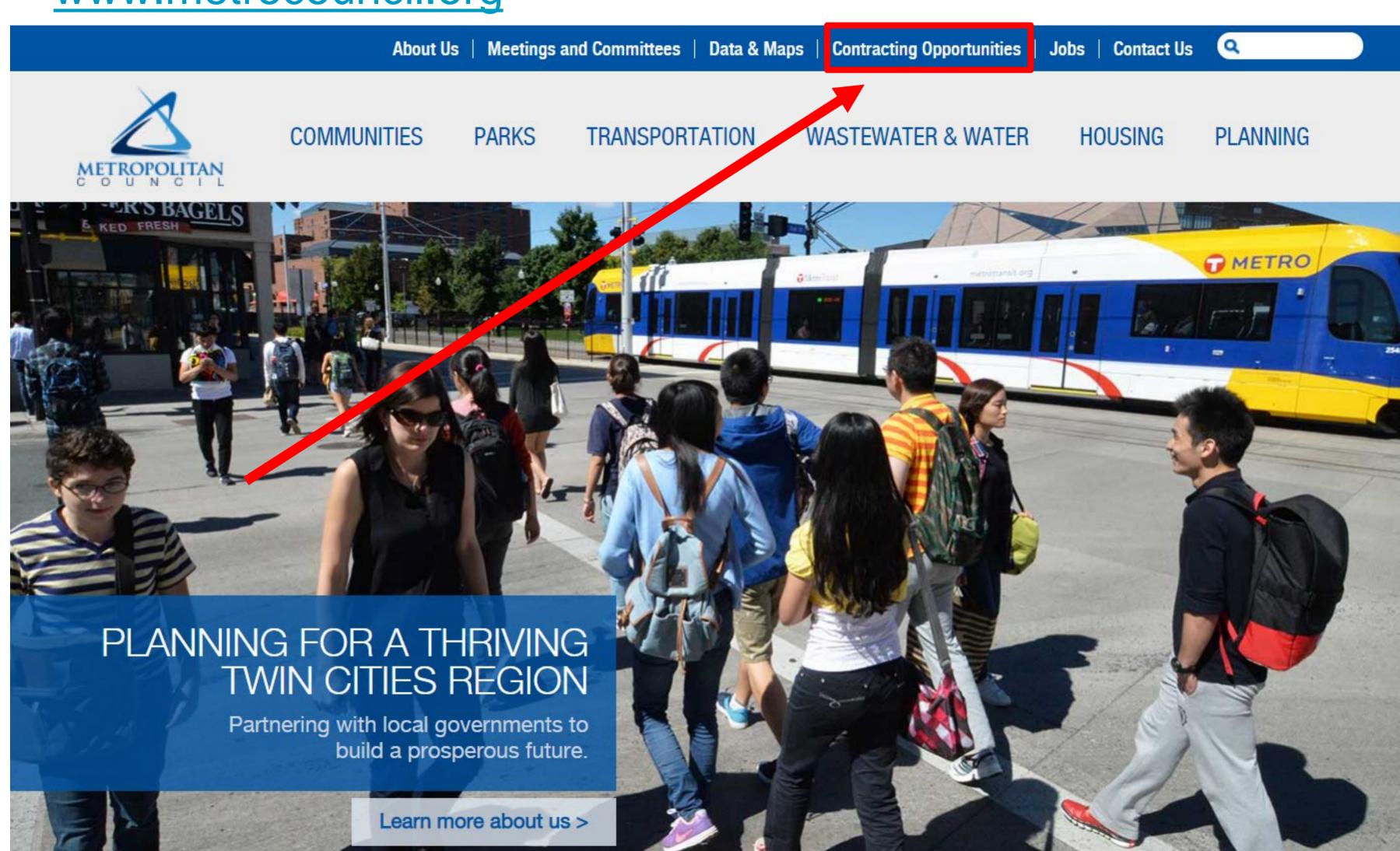
#### RFQ/RFP Advertisements

- Solicitation advertised on the Council's Contracting Opportunities page
- Register to receive email when new opportunities are posted
- Online RFP/RFQ document download and proposal submittal through QuestCDN
- Advertisement contains link to QuestCDN



## How to Access Contracting Opportunities

#### www.metrocouncil.org





## How to Access Contracting Opportunities

ABOUT US	+						
What We Do	·						
Our response to COVID- 19							
Divisions & Departments	+						
> Doing Business	$\Rightarrow$						
Contracting Opportunitie	es						
Contracts & Procurement	+						
Small Business Programs	+						
Council Invoice Payments							
Equal Opportunity	+						
Real Estate Acquisition & Relocation Assistance							
Social Media							

## DOING BUSINESS WITH THE COUNCIL

#### Contracts & Procurement

The Council frequently lists contracting opportunities for businesses. Interested parties are encouraged to regularly review the Council's list of publicly advertised solicitations for contracts.

- . What we buy & how we buy it
- Preparing & submitting a bid or proposal
- After award: Contract & reporting requirements
- See all current contracting opportunities

#### Small Business Programs

The Council participates in two small business programs:

- Disadvantaged Business Enterprise Programs (DBE)
- Metropolitan Council Underutilized Business Program (MCUB)

#### New subcontracting policy and procedure

The Met Council recently updated the DBE/MCUB Subcontracting Policy and Procedure. Among other enhancements, the procedure change now requires bidders/proposers to submit DBE/MCUB documents at the time of bid. This will likely be a change in business practice and process for many of our bidders and proposers. Contact the Office of Equal Opportunity at DBE@metc.state.mn.us or 651-602-1163 if you have any questions regarding the new policy or procedure.

- Disadvantaged Business Enterprise Subcontracting Policy and Procedure (PDF)
- Good faith efforts reference (PDF)
- Solicitation log (Excel file)
- Quotes received log (Excel file)



## How to Access Contracting Opportunities

For details about specific contacts, select the contract number to see the details in PDF format. For best results, use the latest version of Acrobat Reader.





Sign up to receive email updates when new contracting opportunities are posted



#### Requests For Proposals (RFP) and Invitations For Bids (IFB)

These opportunities include contracts with and without small business goals.

We try to ensure that information about contracts is current and accurate. However, the only information to be relied upon for a contract solicitation is the information that is distributed to persons listed with the Met Council as plan holders for that solicitation. Learn how to register as a plan holder (PDF).

#### Note:

- The non-refundable fee to download solicitation documents is \$6. Documents are viewable at no charge.
- . See FTA terms: clauses that may be included in the contract if the services or goods you provide are paid for with federal funds.

Division	Number	Title/General Description	Issue Date	Due Date	Туре
ES	21P214	Security Officer Services (Contracting - with Small Business Goal)	10/26/2021	11/30/2021	RFP
Transit	21P263	2022 SmartCard Procurement	10/28/2021	12/7/2021	IFB
MTS	21P225	Principal Arterial Intersection Mobility Study, Phase 2	10/29/2021	12/7/2021	RFP
ES	21P055	NEW Metro Plant Fourth Incinerator Design-Build Information Session	11/29/2021	12/8/2021	D/B



#### RFQ/RFP Process

- Carefully read and follow all instructions in the RFQ/RFP Documents
- Submit proposal online as a complete PDF or zip file containing all required documents as instructed
- Proposals are reviewed for responsiveness and responsibility
- An Evaluation Panel reviews and evaluates all proposals based on the Evaluation Criteria published in the RFP
- The Evaluation Panel determines the proposal most advantageous to the Council and makes a recommendation to award to the Council Selection Official

# Metropolitan Council Underutilized Business (MCUB) Program

Amanda Beaulieu

**Small Business Specialist** 





## MCUB Program

- The Met Council is committed to utilizing businesses owned by socially and economically disadvantaged individuals in its procurement and contracting efforts.
- To support that commitment, the Met Council facilitates the MCUB program for locally funded projects.
- The Office of Equal Opportunity (OEO) will be setting a numeric MCUB goal on this project.



#### MCUB - Who is Included?

- Minnesota based firm
- Not a separate certification
- Includes existing certifications
  - -Targeted Group Business (TGB), Dept of Administration
  - -Veteran Owned Small Businesses, Dept of Admin or VA
  - -Disabled Owned Small Businesses, Dept of Admin
  - -Disadvantaged Business Enterprise (DBE), MNUCP
  - -Central Certification Program (CERT), City of St Paul



## **MCUB Directory**

- MCUB firms can be found listed in the MCUB directory
- https://mcub.metc.state.mn.us/
- Firms can be searched via NAICS codes and/or keyword searches – Please contact if you need assistance in using the directory

## Next Steps

Rene Heflin
Plant Engineering Manager





## Project Schedule

#### **Anticipated Upcoming Key Dates**

- Issue Incinerator Vendor RFP January 2022
- Issue Design-Build RFQ February 2022
- Issue Design-Build RFP July 2022

2022		2023		2024			2025				2026				
J F M A M J	J A S O N D	JFMAMJJAS	SOND	JFMAN	N J J A	SOND	JFM	1 A M	JJA	SON	D J F	МА	MJ.	J A S	OND
	AIR PERMITTING / ENVIRONMENTAL REVIEW SCHEDULE														
MPCA Reviews Permit and EAW															
	EPA Review	s SIP Revision													
	PROCUREMENT SCHEDULE														
Incinerator Vendor RFP															
Design-Build RFQ															
	Design	-Build RFP													
	CONSTRUCTION SCHEDULE														
						D	esign	-Build	d Cons	structio	on				



## The Council will be offering site visits in early January to those engineers and contractors interested in the project.

#### **January 4, 2021**

- 8:00 10:00 AM
- 10:00 12:00 PM
- 1:00 3:00 PM
- 3:00 5:00 PM

#### **January 5, 2021**

- 8:00 10:00 AM
- 10:00 12:00 PM
- 1:00 3:00 PM
- 3:00 5:00 PM

#### **January 6, 2021**

- 8:00 10:00 AM
- 10:00 12:00 PM
- 1:00 3:00 PM
- 3:00 5:00 PM



Scheduling Site Visits

**Stephen Norton 651-602-1551** 

stephen.norton@metc.state.mn.us



#### Learn More & Contact Information



Web

www.metrocouncil.org/metrosolids



MCUB Questions

**Amanda Beaulieu 651-602-1160** 

amanda.beaulieu@metc.state.mn.us



**Procurement Questions** 

**Auburn Dees** 651-602-1346

auburn.dees@metc.state.mn.us



**Project Questions** 

**Stephen Norton 651-602-1551** 

stephen.norton@metc.state.mn.us

## Questions



## Closing

## Rene Heflin Plant Engineering Manager

