

# Metro Plant Solids Management Facility Plan



June 13, 2018 Open House



# Welcome

**Tim O'Donnell**  
Project Citizen Liaison



# Open House Objectives



**Share information about the Metro Plant Solids Management Facility Plan and how solids are processed at the Metro Plant**



# Open House Agenda



Open House

15 Min

Stations



Presentation

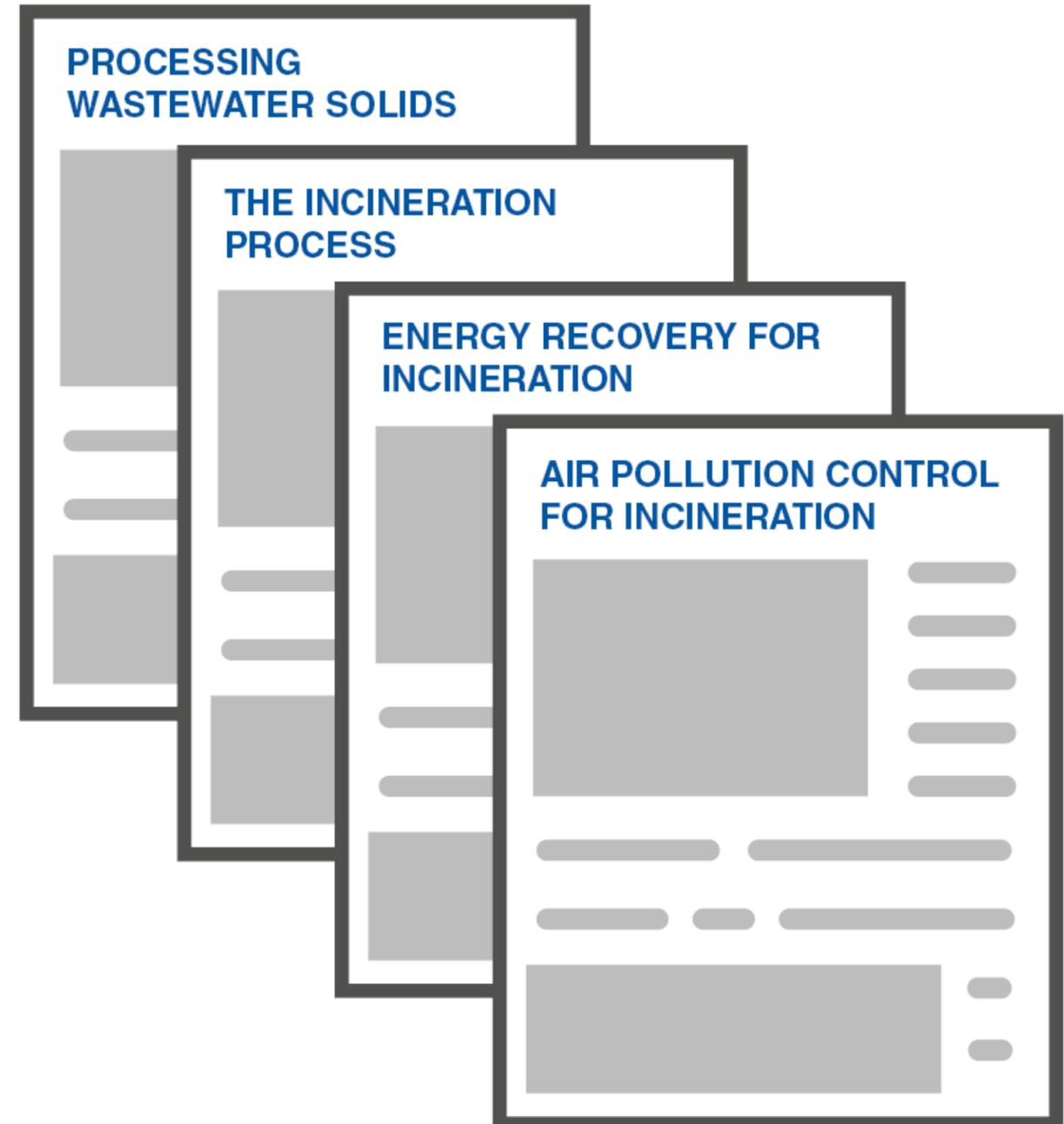
30 Min

- Facility Plan
- How it Works
  - Wastewater Solids
  - Incineration
  - Energy Recovery
  - Air Pollution Control
- Summary & Questions



Open House

45 Min



**Metro Plant  
Solids Management  
Facility Plan  
Project Overview**

**Jeannine Clancy**  
**Assistant General Manager**



# 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 Area

109 communities

2,600,000 people

## OUR FACILITIES

8 wastewater treatment plants

610 miles of interceptors

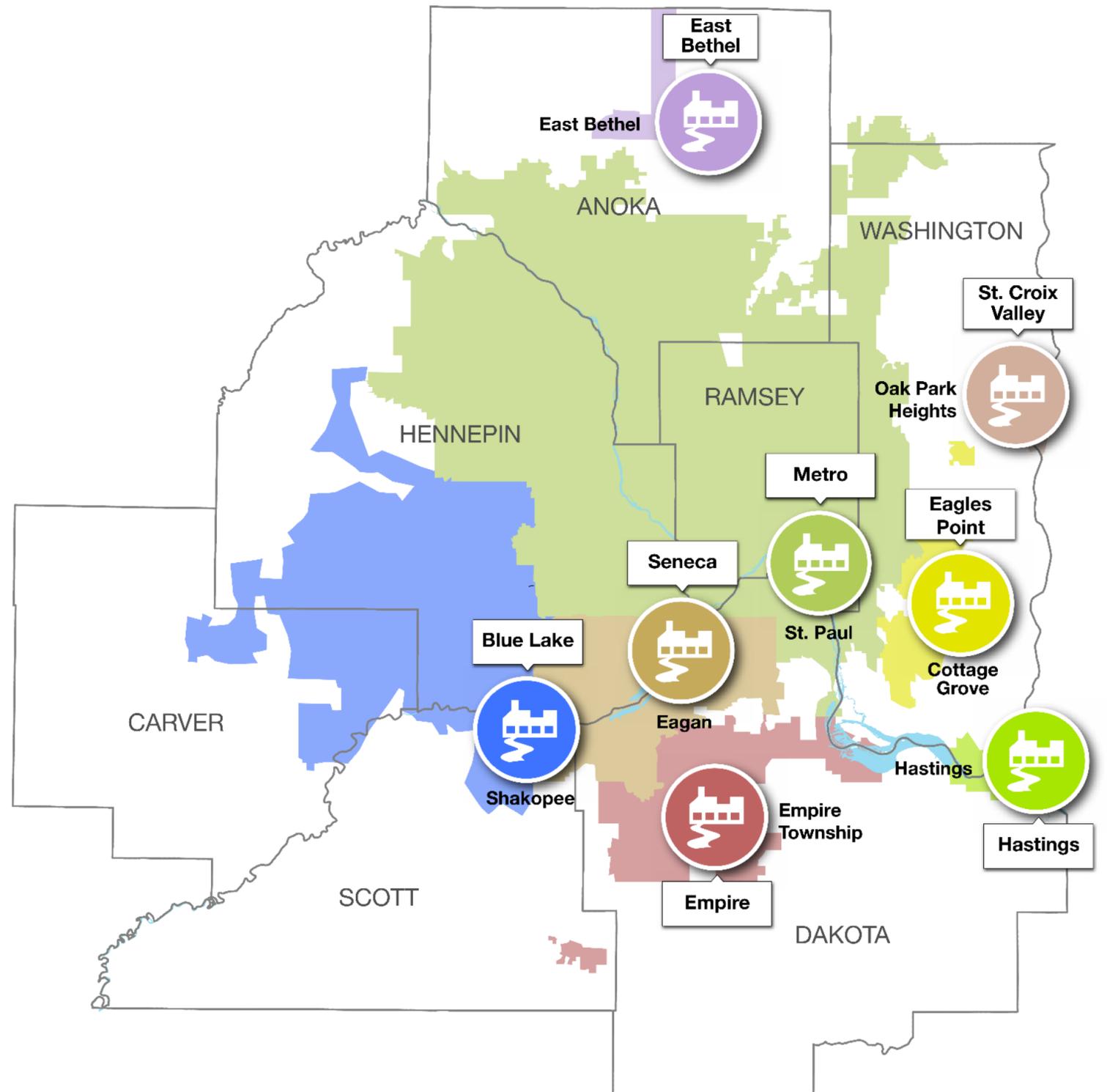
250 million gallons per day (avg)

## OUR ORGANIZATION

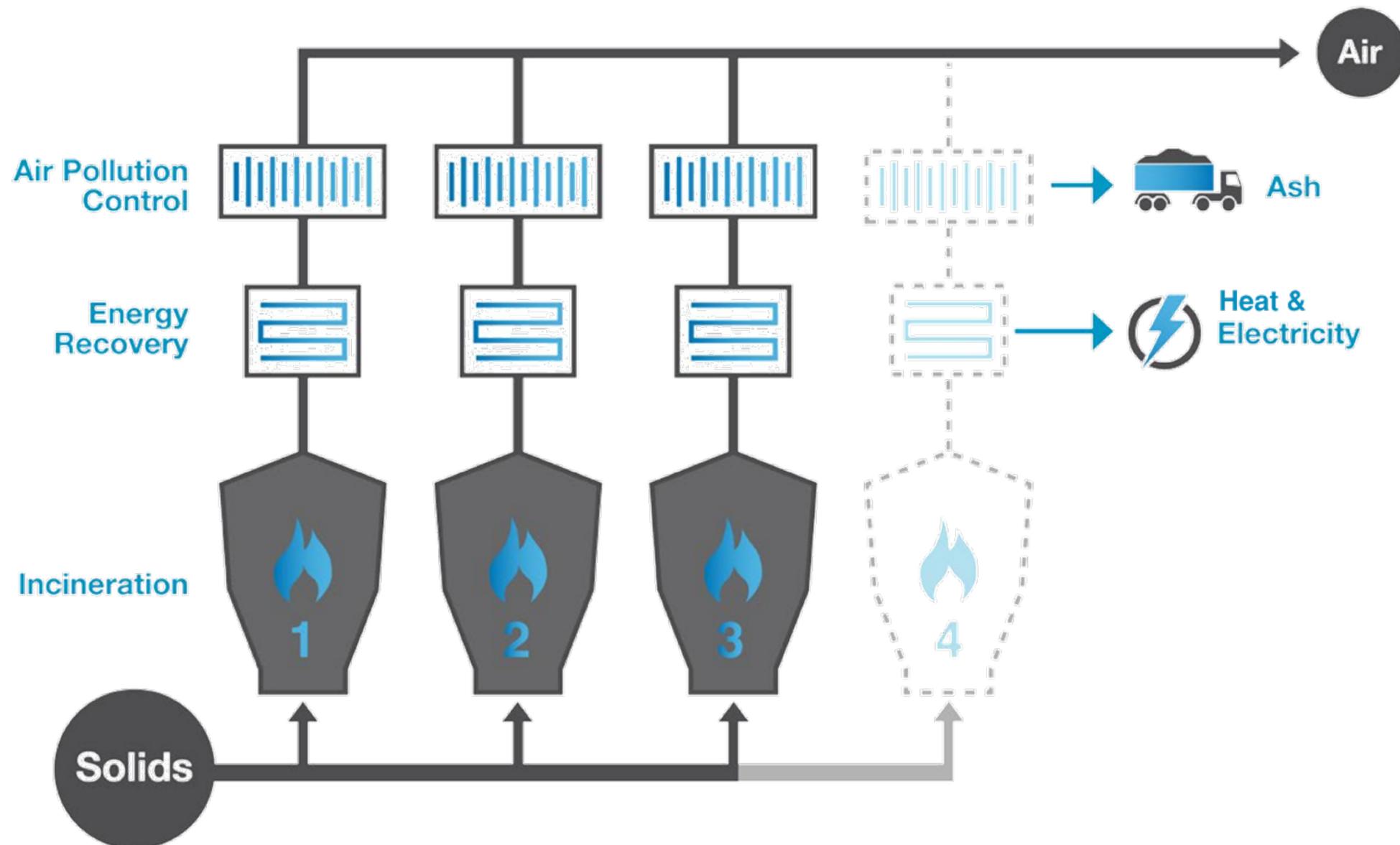
600+ employees

\$7 billion in valued assets

\$140 million / yr capital program



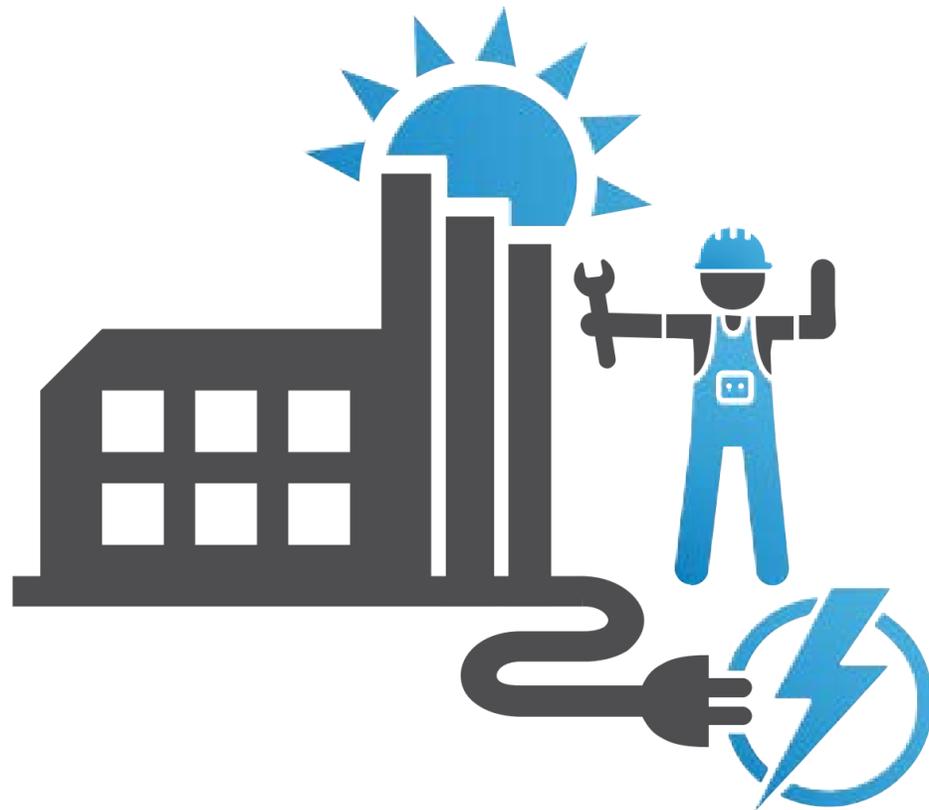
**MCES proposes construction of a fourth incinerator followed with renewal of existing incinerator facilities.**



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

**The Metro Plant needs additional solids processing capacity to:**

**Preserve Existing Wastewater Treatment Plant Infrastructure**



**Serve Regional Population Growth**



***The existing incinerators will be 20 years old in 2025.***



## **Metro Plant Solids Management Facility Plan**

### *Project Overview*

### **Video**

# **Alternatives Analysis and How it Works**

## **Processing Wastewater Solids at the Metro Plant**

**Rene Heflin**  
**Plant Engineering Manager**





**Fourth  
Incinerator**



**Digest /  
Incinerate**



**Digest / Dry /  
Sell Product**



**Digest / Land  
Apply Cake**

***Adding a fourth incinerator costs 50% less to construct, operate, and maintain than any other alternative.***



**Lowest Air Emissions**



**Superior Energy Recovery**



**Similar GHG Emissions**



**Ash Reuse Potential**



***The fourth incinerator was found to be the most sustainable alternative.***



## How it Works

### *Processing Wastewater Solids at the Metro Plant*

### Video

# **How it Works**

## **The Incineration Process at the Metro Plant**

**Peter Sandberg**  
**Metro Plant Solids Business Unit Manager**



## How it Works

# The Incineration Process at the Metro Plant

## Video

# **How it Works**

## **Energy Recovery for Incineration at the Metro Plant**

**Stephen Norton**  
**Senior Engineer**



Metro Plant Solids Management Facility Plan

## How it Works

# Energy Recovery for Incineration at the Metro Plant

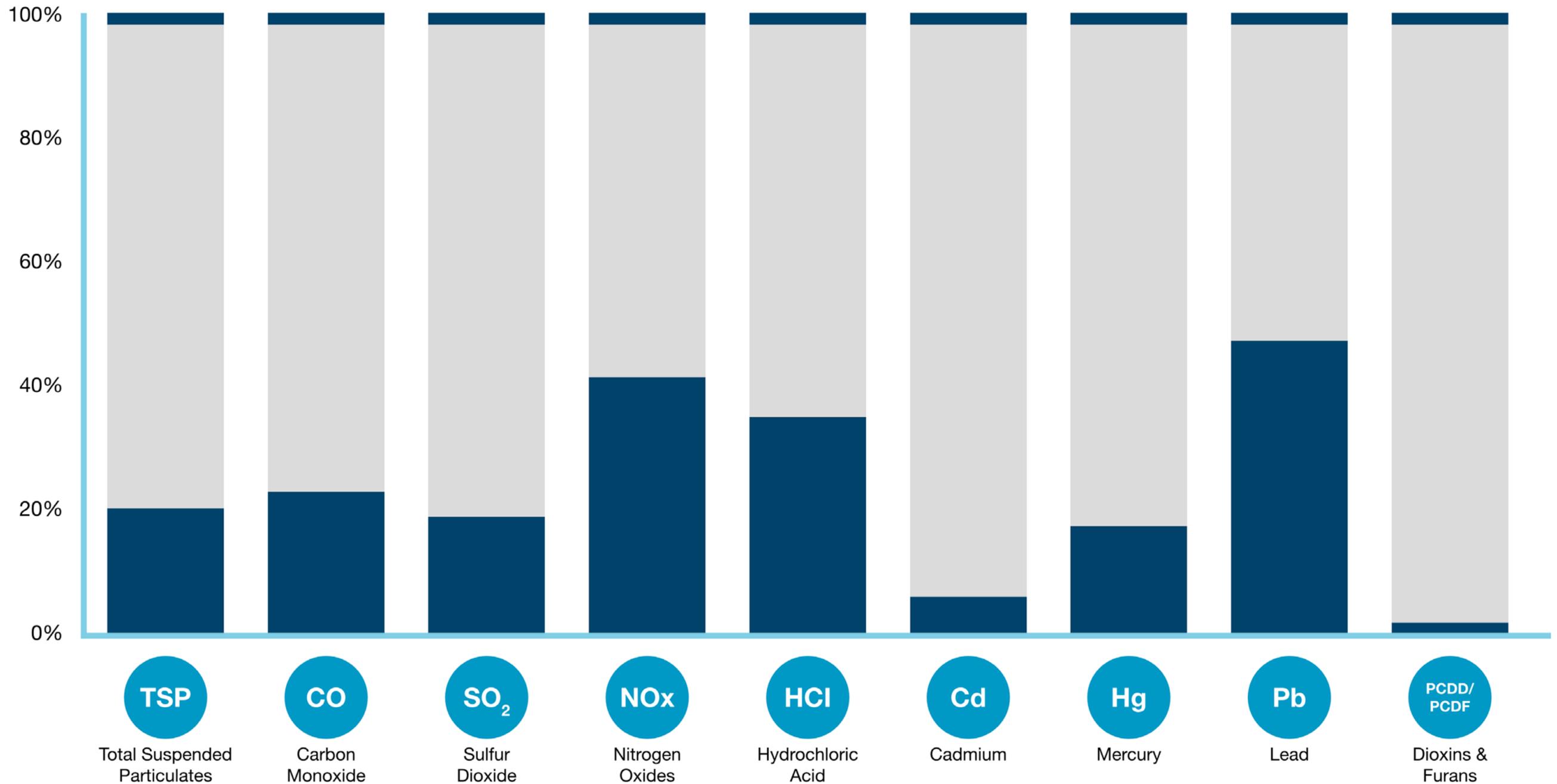
## Video

# **How it Works**

## **Air Pollution Control for Incineration at the Metro Plant**

**Dave Quast**  
**Principal Engineer**

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



***Existing incinerators meet EPA emission standards for existing and new fluidized bed incinerators.***



**METROPOLITAN**  
C O U N C I L

Metro Plant Solids Management Facility Plan

## How it Works

# Air Pollution Control for Incineration at the Metro Plant

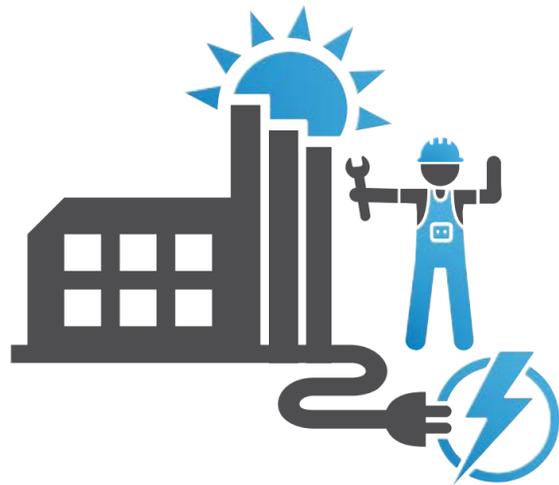
## Video

# SUMMARY

**Jeannine Clancy**  
**Assistant General Manager**



## Preserve Existing Wastewater Treatment Plant Infrastructure



## Serve Regional Population Growth



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



**No Impact to Air Quality**



**No Additional Odors**



**No Offsite Land Impacts**

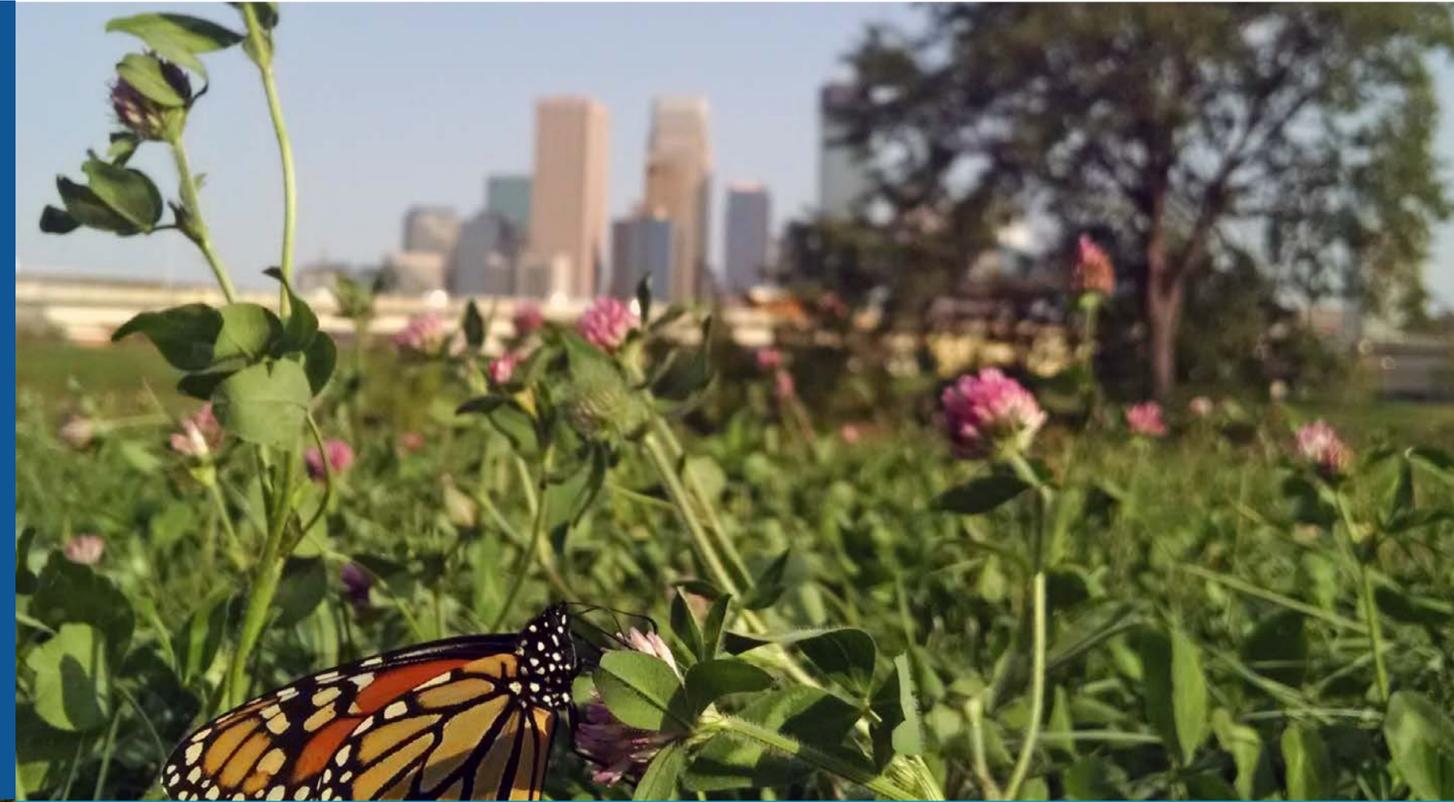


**Fewest Trucks**



***A fourth incinerator provides the lowest impact to surrounding communities.***

The fourth incinerator is the most **cost-effective** and **sustainable** alternative to meet the region's wastewater needs.



It will have the **lowest community impact**, and will improve the **reliability** of the wastewater treatment system.



Action	Timeframe
Public Outreach	4/23/18 – 6/26/18
Public Hearing for Facility Plan	8/30/18
Council Adopts Facility Plan	9/26/18
Design & Permitting	2019-2020
Fourth Incinerator Construction	2021-2024
Existing Incinerator Renewal	2025-2027



Web

[www.metrocouncil.org/metrosolids](http://www.metrocouncil.org/metrosolids)



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Public Hearing

**August 30, 2018\***

Pending Council Approval

# Questions?