Program 8062
Metro WWTP Solids Improvements

Description:
This program provides funding for planning and implementation of improvements to wastewater solids processing facilities at the Metropolitan Wastewater Treatment Plant (Metro WWTP).

Purpose and Justification:
The program provides for planning and implementation of projects to address capacity and renewal needs for continued, reliable and sustainable wastewater solids processing at the Metro WWTP through the year 2050.

Program Location:
The active projects within this program are in the following Council Districts: 13

Active Projects in Program:

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>806210</td>
<td>Metro WWTP Solids Management Improvements Facility Plan</td>
</tr>
<tr>
<td>806230</td>
<td>Metro WWTP Fluid Bed Reactor 4</td>
</tr>
<tr>
<td>806240</td>
<td>Metro WWTP Renewal of Fluid Bed Reactors 1, 2 &amp; 3</td>
</tr>
</tbody>
</table>
MCES 2022 – 2027 Capital Program:

Authorized Capital Program (ACP) $173,828,000

Capital Improvement Plan (CIP) $30,000,000

Estimated Program Cash Flow 2022 - 2027:

Note: The ACP is the total amount of all past and present authorizations including Pre-2022 Expenses.
Metro WWTP Solids Management Improvements Facility Plan

MCES customers participate in a tour of the Metro Plant’s Solids Management Building.

**PROJECT TYPE:** Plant Improvements

**OBJECTIVES:** Preservation and Expansion

**CUSTOMER LEVEL OF SERVICE:** Comply with Permits, Minimize Impacts, Lead by Example, Be A Good Neighbor, Optimize Budget Plan, and Preserve Assets

**SCOPE:**
Develop a facility plan for Council approval. Conduct planning activities necessary to support facility plan development: evaluate current and future wastewater solids production, evaluate air emissions, assess existing solids treatment facilities, develop and evaluate alternatives. Identify the recommended alternative(s) and the implementation plan.

Develop and execute a communications plan for internal and external outreach, including a public hearing for facility plan review.

**PROJECT NEED:** The Metro WWTP needs additional solids treatment capacity to preserve existing wastewater infrastructure and to serve regional population growth.

**PROJECT SCHEDULE**

<table>
<thead>
<tr>
<th>Planning</th>
<th>Design</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2018</td>
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**FINANCIAL ANALYSIS**

<table>
<thead>
<tr>
<th>2022 Cash Flow</th>
<th>Current ACP</th>
<th>2022 – 2027 Cash Flow</th>
<th>Total Project Cost</th>
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</thead>
<tbody>
<tr>
<td>$500,000</td>
<td>$4,287,546</td>
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Metro WWTP Fluid Bed Reactor 4

Project Location:
Council District # 13
City of Saint Paul
Metro WWTP

Program Family: 8062
Project # 806230

Metro WWTP Fluid Bed Reactor 4

3D rendering design of future 4th Incinerator at Metro WWTP

PROJECT TYPE: Plants

OBJECTIVES: Preservation and Expansion

CUSTOMER LEVEL OF SERVICE: Meet Capacity Need and Preserve Assets

SCOPE: Expand the Metro WWTP solids management building and install a fourth incinerator train next to the existing three. The fourth train will include energy recovery, air pollution control, and related solids processing equipment.

PROJECT NEED: The Metro WWTP needs additional solids treatment capacity to preserve existing wastewater infrastructure and to serve regional population growth through the year 2050.

PROJECT SCHEDULE

Planning
N/A

Design
2020-2022

Construction
2023-2025

FINANCIAL ANALYSIS

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<th>Year</th>
<th>Cash Flow</th>
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Project Location:  
Council District # 13  
City of Saint Paul  
Metro WWTP

**Program Family:** 8062  
**Project #** 806240

**Project Location:**  
Council District # 13  
City of Saint Paul  
Metro WWTP

**Metro WWTP Renewal of Fluid Bed Reactors 1, 2 & 3**

**PROJECT TYPE:** Plants  
**OBJECTIVES:** Preservation and Improvement  
**CUSTOMER LEVEL OF SERVICE:** Communicate Information and Preserve Assets

**SCOPE:** Implement renewal and level of service improvements (e.g., increased reliability, flexibility, operability, maintainability) to the three existing fluid bed reactors and associated solids treatment facilities.

**PROJECT NEED:** In 2025, the existing incinerators will be 20 years old and in need of major renewal work to extend service life and to recover capacity.

**PROJECT SCHEDULE**

<table>
<thead>
<tr>
<th>Planning</th>
<th>Design</th>
<th>Construction</th>
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<tbody>
<tr>
<td>N/A</td>
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<td>2024-2027</td>
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**FINANCIAL ANALYSIS**

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