Program 8074 – Empire WWTP Solids Improvements

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

Purpose and justification
The program provides for planning and implementation of projects to address capacity constraints and improve performance for wastewater solids processing at the Empire WWTP.

Program location
The active projects within this program are in the following Council district: 16

Active projects in program

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>807401</td>
<td>Empire WWTP Solids Improvements Phase II</td>
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Environmental Services 2024 through 2029 Capital Program

- Authorized Capital Program (ACP): $43,881,876
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2024 through 2029
Note: the ACP is the total amount of all past and present authorizations including pre-2024 expenses.
Empire WWTP Solids Improvements Phase II
Program family 8074
Project #807401

Project location: Council district #16, Empire Township, Empire WWTP

**Project type**
Plants

**Objectives**
Asset Preservation, Quality Improvements

**Scope**
Modify existing digesters to increase solids processing capacity. Add advanced biogas treatment to remove hydrogen sulfide and siloxanes from biogas prior to use as fuel in a combined heat and power engine generator (CHP). CHP will generate heat and electricity for onsite use.

**Project need**
Solids treatment capacity at the Empire Plant must be increased to accommodate future growth in the service area. CHP will generate approximately one third of the plant's heat and power demand utilizing biogas generated onsite as fuel.

**Project schedule:**
- Planning: 2011 through 2013
- Design: 2019 through 2020
- Construction: 2021 through 2025

**Financial analysis**
- 2024 cash flow: $5,000,000
- Current ACP: $19,010,000
- 2024 through 2029 cash flow: $5,000,000
- Total project cost: $16,001,000