City of Baytown
Sanitary Sewer Overflow Elimination Plan

2013 – 2023
Executive Summary

- The City of Baytown has elected to participate in the Texas Commission on Environmental Quality’s Sanitary Sewer Overflow Initiative (SSO).
- The City of Baytown, Texas is the fourth largest City in the Houston metropolitan area.
- Service area roughly encompasses 39.5 square miles and is comprised of a mix of residential, commercial and light industrial users.
Since the early 90’s, the City has been proactive in sewer evaluation and rehabilitation efforts and capital projects to improve the sanitary sewer infrastructure.

Historical overflow records show a steady and definite reduction in overflow occurrences.

Utility capital improvement initiatives are critical to the growth and development of the City’s infrastructure. Past, as well as current, projects represent over $137 million in improvements since 2002.
Program elements include the evaluation of:

- Wastewater Treatment Plant flow rates – Trending of dry and wet weather flow rates indicate decrease (or increase) of Inflow and Infiltration to system.
- Reports of sanitary sewer overflows – reports from residents or City workers initiate the reporting and investigation process.
- Sewer service request from residents – may be an indicator of a surcharge condition in a specific service area.
Visual manhole inspections – inspections may indicate the need for repair, elevation adjustments, or installation of rain guard insert.

Lift Station Run–times – trending of dry and wet weather run–times provide a clear indication of which service areas are most impacted and where more investigation and rehabilitation efforts should be directed.

Accurate rainfall data – amount of rainfall may correlate to the overall effectiveness of the program. Amount and duration of a rainfall event is important in analyzing flow rates and run–times of the pumps at the lift stations.
Plan Elements Flow Chart

- Notification
- Quantification
- Investigation
- Elimination
- Evaluation
- Rehabilitation
Evaluation / Inspection

- Wet weather manhole surveys
- Force main inspections
- Flow monitoring / quantification
- Lift station run time
- CCTV mainline inspections
- Manhole inspection

Contract CCTV and cleaning
Update GIS mapping
Record Keeping, Reporting & Quantification

- Flow quantification
- Track rehabilitation efforts
- Rain event data
- Quantify effectiveness of efforts
- Lift Station runtimes
- Reports to regulatory agency
Pollution Control

- Control of Fats, Oil, and Grease
  - Schedule cleaning of troubled areas
  - Public Education
    - Water bill stuffers / door hangers
  - Grease Trap Ordinance
    - Grease Trap Inspections
  - PSLIP Ordinance
    - Private Sewer Line Inspection
Operation and Maintenance Program

- The City assigns four lift station operators to monitor 81 lift stations.
- One operator is on call 24 hours a day for emergency situations.
- Currently 75 percent of the City’s lift stations have generator quick-connect capabilities.
- The City has 15 employees assigned to maintain and repair the collection system.
In the event that a project is too large for City crews to accomplish, the project will be contracted out. The City annually budgets funds for professional contract services specializing in:

- sewer line rehabilitation (pipe bursting)
- Cleaning and televised inspection
- Manhole sealing
The City’s fiscal year is October 1 through September 30.
The 2013–2023 wastewater Capital Improvement Plan demonstrates the City’s continued commitment to improving our wastewater collection system.
The City has made funding of wastewater infrastructure a priority, committing roughly $137 million in improvements since 2002.
The City utilized Certificates of Obligation and directed capital operational funds for funding improvements to the City’s wastewater system.
Planned Future Projects

- Allenbrook Subdivision I
- Slapout Gully Lift Station
- Hugh Wood Lift Station
- Allenbrook Subdivision II
- Garth Road Lift Station
- Little Missouri Lift Station
- Lakewood Lift Station
- McKinney Lift Station
- Pelly Area
- Craigmont Lift Station
- Pruett Estates

- Cedar Bayou Lynchburg Lift Station
- West Baytown
- Ward Road/Eva Maud
- Quail Hollow
- Baker Road Subdivision
- Oakwood Subdivision
- Wright Boulevard
- Plumwood Subdivision
- Abbe Addition Lift Station
QUESTIONS

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