



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

*Ensuring clean and safe water
Partnering with states and other stakeholders*

City of Houston Complied with Clean Water State Revolving Fund Requirements

Report No. 19-P-0041

December 4, 2018



Report Contributors:

Angela Bennett
Jan Lister
John Trefry

Abbreviations

CFR	Code of Federal Regulations
CWSRF	Clean Water State Revolving Fund
EPA	U.S. Environmental Protection Agency
FY	Fiscal Year
MWBE	Minority and Women Business Enterprises
OIG	Office of Inspector General
TWDB	Texas Water Development Board

Cover Photos: At left, sewer line cleaning in Houston. At right, repairs to a steel sanitary sewer force main in Houston. (Photos from city of Houston website)

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At a Glance

Why We Did This Project

The Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA) initiated this audit of the city of Houston's use of funds and contracting practices under the Clean Water State Revolving Fund (CWSRF) to determine whether:

- The CWSRF funds are being properly used to fund eligible projects.
- Contracts awarded for CWSRF projects are in compliance with applicable eligibility requirements.
- The city adequately monitors and appropriately reports the results of its prime contractor's use of Minority and Women Business Enterprises.

Eligible CWSRF uses include constructing publicly owned wastewater treatment works, implementing a nonpoint source pollution control management program, and developing and implementing an estuary conservation/management plan.

This report addresses the following:

- *Ensuring clean and safe water.*
- *Partnering with states and other stakeholders.*

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City of Houston Complied with Clean Water State Revolving Fund Requirements

What We Found

We found that the procurement practices followed by the city of Houston in the award of contracts for its sanitary sewer and collection system rehabilitation projects complied with CWSRF requirements. Also, the city adequately monitored its prime contractor's use of Minority and Women Business Enterprises. The city has no requirement for reporting Minority and Women Business Enterprises utilization to the EPA; rather, the Texas Water Development Board is required to submit annual utilization reports of its loan recipients to the EPA based on 40 CFR Part 33.

We questioned whether point repairs to address customer complaints under four Houston contracts were eligible under the CWSRF, and EPA Region 6 concluded that they were.

Regarding project eligibility, we found that certain work orders for point repairs issued under contracts for the collection system rehabilitation project may not be considered eligible under the CWSRF. The point repair work resulting from customer complaints could be considered operation and maintenance and, as such, would not be eligible for funding under the CWSRF. The city issued several point repair contracts to help address the high volume of customer complaints throughout the city. We were told by the city that similar repair work performed by city crews is usually considered operation and maintenance work while the work performed by the contractors is considered a capital improvement. If the contractors and city crews are doing similar work, the OIG sees no basis for the city to treat the work differently.

Of the six contracts sampled, the OIG determined that only two of the contracts, totaling \$6,908,318, for the sanitary sewer rehabilitation project, were eligible under the CWSRF. The four remaining contracts, totaling \$10,049,971, for the collection system rehabilitation project, include point repair work to address customer complaints. The OIG was unable to draw a definitive conclusion on the eligibility of the work performed under these contracts.

Recommendation and Agency Response

We recommended that the Regional Administrator, EPA Region 6, determine whether the point repair work performed is eligible under the CWSRF and recoup any expenses for work determined not eligible. EPA Region 6 has addressed the recommendation and has determined that the work is eligible. The region's determination meets the intent of the recommendation. The OIG considers the corrective action complete.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

December 4, 2018

MEMORANDUM

SUBJECT: City of Houston Complied with Clean Water State Revolving Fund Requirements
Report No. 19-P-0041

FROM: Charles J. Sheehan, Acting Inspector General

A handwritten signature in blue ink that reads "Charles J. Sheehan".

TO: Anne L. Idsal, Regional Administrator
Region 6

This is our report on the subject audit conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). The project number for this audit was OA-FY17-0380. This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends.

In accordance with EPA Manual 2750, your office completed an acceptable corrective action in response to the OIG recommendation. The recommendation is resolved and no final response to this report is required. However, if you submit a response, it will be posted on the OIG's website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

We will post this report to our website at www.epa.gov/oig.

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Chapter 1

Introduction

Purpose

The Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA) conducted an audit of the city of Houston’s use of the Clean Water State Revolving Fund (CWSRF) to determine whether:

- Federal CWSRFs are being properly used to fund eligible projects.
- Contracts awarded for CWSRF projects are in compliance with applicable eligibility requirements.
- The city adequately monitors and appropriately reports the results of its prime contractor’s utilization of Minority and Women Business Enterprises (MWBEs).

Background

The State Revolving Fund program, including clean water and drinking water, is the EPA’s largest single grant program, accounting for over 50 percent of all assistance awards (i.e., grants and cooperative agreements). The EPA provides funds to states through revolving fund capitalization grants.

The clean water and drinking water programs function like banks by providing low-interest loans to eligible recipients for wastewater and water infrastructure projects. When loan recipients repay the loan principal and interest, this money is recycled back into the fund to finance new projects that allow the funds to “revolve” at the state level over time. The revolving funds operate with a high degree of flexibility to meet each state’s unique needs. The EPA provides guidance and oversight to the state agencies to operate their revolving funds in accordance with applicable regulations.

Clean Water State Revolving Fund

Title VI of the Clean Water Act of 1987 established the CWSRF program. As outlined in 40 CFR Part 35, Subpart K, *State Water Pollution Control Revolving Funds*, and EPA guidance, the CWSRF is a federal-state partnership financial assistance program that enables each state to design and operate its own revolving fund to provide assistance for water pollution control activities in perpetuity. There are 51 CWSRFs nationally—for all 50 states and Puerto Rico.

Each state's CWSRF is funded by a combination of sources: EPA capitalization grants, state matches, repayments, accrued interest and leveraged funds. The states have the authority to use the CWSRF to provide various types of assistance to recipients, including issuing and refinancing loans, purchasing or guaranteeing local debt, and purchasing bond insurance. States may set specific terms on any loans they issue using the CWSRF, such as interest rates and repayment periods. Beginning with the American Recovery and Reinvestment Act of 2009, Congress authorized states to provide further financial assistance via the CWSRF program, including grants, principal forgiveness and negative interest rate loans.

Eligible uses of the CWSRF include constructing publicly owned wastewater treatment works, implementing a nonpoint source pollution control management program, and developing and implementing an estuary conservation and management plan.

Congress provides the EPA an annual appropriation for funding the CWSRF. The EPA then awards CWSRF capitalization grants to each state based on its applications and intended use plans. Intended use plans provide information on the state's proposed use of CWSRF funds. Each plan includes details on key aspects of the state's CWSRF, including the long- and short-term goals, priority-setting criteria, a fundable projects list, and the expected project funding schedule. States are required to provide funding that is equal to at least 20 percent of federal funds.

State of Texas' Clean Water State Revolving Fund

The purpose of the Texas CWSRF is to provide affordable financing to assist applicants in meeting the wastewater needs of their communities. Funding through the CWSRF goes toward addressing needs in the areas of primary, secondary and advanced treatments; recycled water distribution; new collector sewers; and sewer system rehabilitation, consistent with the Clean Water Act. The overall goals of the Texas CWSRF program are to prevent the discharge of pollutants from point and nonpoint sources; identify and provide funding for maintaining and/or bringing publicly owned treatment works into compliance with EPA clean water standards; support affordable and sustainable wastewater treatment processes; manage, reduce and/or treat stormwater; and maintain the long-term financial health of the program. The Texas Water Development Board (TWDB) administers Texas' CWSRF program.

City of Houston's Wastewater Program

The city of Houston operates 40 wastewater treatment plants that collect and treat an average of 239 million gallons of wastewater per day. The city's collection system includes over 6,100 miles of sewer pipe lines and 382 lift stations designed to move wastewater from lower to higher elevation. On November 9, 2005, the Texas Commission for Environmental Quality issued an Agreed Order assessing administrative penalties and requiring certain actions by the city. The order related to an enforcement action for unauthorized discharges from the city's collection system.

The city’s Collection Systems Analysis Section, within the Department of Public Works and Engineering, Wastewater Operations Branch, is responsible for implementing the plan to meet the requirements of the Agreed Order. The city’s *Wastewater Collection System Sanitary Sewer Overflow Plan and Schedule* contains the steps to comply with the requirements of the Agreed Order. The plan is focused on reducing the environmental impacts of sewer overflows in 29 of the 40 service areas within the city for both structural and non-structural components.

The structural component of the plan involves rehabilitating over 950,000 linear feet of sewer lines per year for a 10-year period, or 3 percent of the collection systems per year. Rehabilitation methods include point repair, removal and replacement of manholes, slip-lining, pipe bursting, and cured-in-place lining. The non-structural component of the plan involves cleaning the collection system and improving the information management system. This component involves the cleaning and televised visual inspection of 20 million linear feet of sewer lines during the life of the order.

According to the city’s Wastewater Operations Branch, work under the Agreed Order was completed in 2017, making it the largest rehabilitation project in the United States. It took 12 years to complete the plan and included rehabilitation or replacement of over 10 million linear feet of sewer lines. Since completion of the Agreed Order, the city has continued with the rehabilitation of the remaining service areas.

As shown in Table 1, for fiscal years (FYs) 2014 through 2017 (the period of our review), the TWDB awarded four CWSRF loans totaling \$249.1 million to the city for rehabilitation of its collection systems.

Table 1: CWSRF loan awards by fiscal year

Loan number	Award date	Award amount
2834-28 (FY 2014)	2/12/14	\$65,000,000
2834-29 (FY 2015)	1/29/15	55,005,000
2834-31 (FY 2016)	1/20/16	63,435,000
2834-33 (FY 2017)	2/15/17	65,750,000
Total		\$249,100,000

Source: OIG-generated data based on loan data provided by Houston.

As shown in Table 2, the city used the CWSRF loan funds to award 48 prime contracts totaling over \$155.5 million. In awarding the contracts, the city split the rehabilitation into two project categories: collection system rehabilitation and sanitary sewer rehabilitation. As of December 20, 2017, the city had issued 3,702 work orders under the 48 prime contracts. The city reported 340 subcontract awards totaling over \$36.5 million. At the time of our review, the city had not issued any contracts under the FY 2017 loan.

Table 2: Prime contract/subcontract awards under CWSRF loans by fiscal year

Loan no.	No. of prime contracts	Prime contract totals	No. of work orders	No. of sub-contracts	Subcontract totals
2834-28 (FY 2014)	20	\$ 62,724,032	1,337	130	\$14,517,364
2834-29 (FY 2015)	16	53,194,766	776	126	13,149,109
2834-31 (FY 2016)	12	39,672,133	1,589	84	8,857,120
2834-33 (FY 2017)	0	0	0	0	0
Total	48	\$155,590,931	3,702	340	\$36,523,593

Source: OIG-generated data based on loan data provided by Houston.

The city's Office of Business Opportunity, Contract Compliance Division, monitors all city projects in accordance with laws and regulations mandated by city, state and federal guidelines and ordinances. The division monitors for compliance with requirements for Prevailing Wage Rates, the MWBE program and Equal Employment Opportunity through auditing payrolls and other contract documents, on-site visits, and interviews with construction workers. The division makes presentations at all pre-construction conferences and meetings on Prevailing Wage Rates and MWBE compliance. The division also collaborates with other city departments in the final evaluation of all city contracts.

Responsible EPA Offices

The EPA's Office of Wastewater Management, within the EPA headquarters' Office of Water, administers the CWSRF program. EPA Region 6's Water Division provides funding and oversight of the CWSRF program in the state of Texas.

Scope and Methodology

We conducted this audit from November 7, 2017, to September 6, 2018. We conducted our audit in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We researched, obtained and reviewed existing agency policies, manuals and guidelines for the CWSRF program to gain an understanding of the state of Texas' and city of Houston's procedures and controls over CWSRF funds. We identified requirements for eligible use of CWSRF funds, procurement and MWBE utilization.

Out of the 48 prime contracts for Houston, totaling over \$155 million, we selected a judgmental sample of six contracts (two contracts per year from FYs 2014 through 2016). At the time of the sample, we selected one contract identified as a collection system rehabilitation project and one as sanitary sewer rehabilitation for each of the

3 years. It was not until we performed our testing that we learned the contract selected in 2016 for the sanitary sewer rehabilitation project was for the collection system rehabilitation project; the contract type had been mislabeled. As a result, the end sample included four contracts awarded under the collection system rehabilitation project and two awarded under the sanitary sewer rehabilitation project, rather than three of each as intended. We selected different contractors for each year because most of the contractors had several contracts in each of the 3 years. However, due to the universe of contractors in 2016, we ended up with one repeat contractor. The six contracts totaled over \$16 million and included over 3,530 work orders. We used the same six contracts for attribute testing for all three objectives.

To determine whether the city properly used the federal CWSRF to fund eligible projects, we:

- Conducted meetings with representatives from the city's Department of Public Works and Engineering (both the Financial Management Services Division and the Wastewater Operations Branch) to gain an understanding on how the city determines eligibility and distinguishes between operation and maintenance versus emergency repairs (the latter of which may be eligible under the CWSRF).
- Selected a judgmental sample of 72 of the 1,504 work orders from the six contracts in our sample and analyzed them to determine eligibility of the work performed under CWSRF requirements.
- Discussed eligibility of work with the EPA Region 6 CWSRF Coordinator and staff from the EPA's Office of Water.

To determine whether contracts awarded for CWSRF projects were in compliance with applicable eligibility requirements, we conducted meetings with representatives from the city's Department of Public Works and Engineering, Wastewater Operations Branch, to obtain an understanding of the city's requirements and processes for obtaining the CWSRF loans, contract procurement, issuance of work orders, contract monitoring and payments, and capitalization of assets.

To determine whether the city adequately monitored and appropriately reported the results of its prime contractor's utilization of MWBE, we:

- Conducted meetings with staff from the city's Office of Business Opportunity to discuss the MWBE program.
- Obtained and reviewed data available for the subcontracts under the six sampled prime contracts to determine MWBE utilization and compliance with CWSRF requirements.

Chapter 2

Houston Complied with CWSRF Requirements

We found that procurement practices that the city of Houston followed in the award of six contracts in our sample, for the collection system and sanitary sewer rehabilitation projects, complied with CWSRF eligibility requirements. Also, the city adequately monitored the prime contractor’s use of MWBEs, although it has no requirement for reporting MWBE utilization to the EPA; rather, the TWDB is required to submit annual utilization reports of its loan recipients to the EPA based on 40 CFR Part 33.

Regarding eligibility, the OIG determined that the work completed for two contracts, totaling \$6,908,318, for the sanitary sewer rehabilitation project, were eligible projects under the CWSRF. However, we found the point repair work conducted to address customer complaints under the remaining four contracts, totaling \$10,049,971, for the collection system rehabilitation project, may not be eligible under the CWSRF. Point repair work conducted under these contracts could be considered operation and maintenance and, as such, would not be eligible for CWSRF funding.

Table 3 provides a summary of the projects and associated costs included in our sample; details on what we found regarding each objective follows the table.

Table 3: Summary of sampled awards and eligibility of costs

Rehabilitation project	No. of contracts	Awards for eligible projects	Awards with questionable eligibility	Total awards
Sanitary Sewer	2	\$6,908,318		\$ 6,908,318
Collection system	4		\$10,049,971	10,049,971
Total awards	6			\$16,958,289
Percent of total		41%	59%	100%

Source: OIG-generated data from Houston’s contract award data.

Contract Awards Complied with CWSRF Requirements

Our review of the procurement process for the six contracts in our sample showed that the awards complied with CWSRF eligibility requirements. As shown in Table 4, the contracts awarded for the 3-year period totaled over \$155 million and included 41 subcontracts totaling over \$5 million. Our sample included two contracts from each year, ranging in value from \$2.4 million to just over \$3.5 million. The associated subcontract amounts ranged from \$531,191 to approximately \$1.8 million.

Table 4: Sample of prime contracts and subcontracts by loan

Loan no.	Fiscal year	Total prime contracts	Prime contract totals	Sample no.	Prime sample totals	No. of sub-contracts	Sub-contract totals
2834-28	2014	20	\$62,724,032	1	\$2,447,775	7	\$530,188
				2	3,547,129	8	868,302
2834-29	2015	16	53,194,766	3	2,458,928	4	732,544
				4	3,361,189	8	1,795,271
2834-31	2016	12	39,672,133	5	2,638,439	7	606,496
				6	2,504,828	7	592,642
Total		48	\$155,590,931	6	\$16,958,288	41	\$5,125,443

Source: OIG-generated data from contract and subcontract data provided by Houston.

Under the CWSRF program, loan recipients (e.g., state of Texas) have the flexibility to operate their programs at their discretion as long as they meet CWSRF requirements.

Contracting activities by the city of Houston must meet Texas' procurement requirements. The TWDB's *CWSRF Program Guidance Manual*, dated January 2017, lists the program requirements and notes that competitive bidding is a widely used method of obtaining and selecting contractors for construction projects. The TWDB reviews bidding documents and authorizes awarding of the contracts. After the awards are made, the TWDB reviews the fully executed contract documents and concurs with the issuance of the notices to proceed.

Houston has a citywide process used for all procurements. For the six contracts reviewed, the city advertised for bids, held pre-bid conferences, and awarded contracts to the lowest bidders. All contracts identified up to eight subcontract awards to mostly MWBEs. The TWDB authorized the six contract awards and concurred with issuing the notices to proceed.

As shown in Table 5, most of the core work under the contracts was similar, with variations on emphasis or quantities in certain categories.

Table 5: Breakdown of contract type and core work by contractor

	Contract 1	Contract 2	Contract 3	Contract 4	Contract 5	Contract 6
Contract type	Collection system	Sanitary sewer	Collection system	Sanitary sewer	Collection system	Collection system
Construction method	Slip-lining & pipe bursting*	Cured-in-place	Slip-lining & pipe bursting*	Slip-lining & pipe bursting	Slip-lining & pipe bursting*	Pipe Bursting*
No. of point repairs	160	27	160	12	337	265
No. of service reconnects		140		1,500		
Additional sewer replacement (LF)	2,480	270	2,480	1,280	4,470	3,790
Clean/televised visual inspection (LF)	160,000	21,900	160,000	46,500	216,000	6,250
Slip-line/pipe burst or cured-in-place (LF)	8,500	31,100	8,500	70,500	8,400	8,000
No. of new manholes	5	11	5	25	5	8
Manhole rehab (VF)	120	1,500	120	950	110	160
Manhole inserts	10					
Pavement/concrete (SY)	150		1,500	2,600	1,800	1,900
Asphalt (SY)	1,200		3,000	11,000	2,800	4,000
Ancillary work performed?	Yes	Yes	Yes	Yes	Yes	Yes

Source: OIG-generated data from contract data provided by Houston.

*Collection system contracts also included pipe replacement as a construction method.

LF: Linear feet

VF: Vertical feet

SY: Square yards

The contracts are awarded for a 1.5 to 2-year period that begins with issuance of the notice to proceed. City officials said that sometimes there is a time lag between the notice to proceed and the issuance of the first work order. The city will not issue a work order unless a city inspector is available to oversee the work. If the contract expires before the funds are expended, the city issues a change order to extend the timeframe until the contract funds are expended. The contract may also include a 5-percent contingency to allow for change orders; change orders above 5 percent are not considered because they would require review and approval by the City Council.

Monitoring and Reporting of MWBE Use Was Adequate

The city adequately monitored its contractors' use of MWBEs. The city's Office of Business Opportunity, responsible for implementing the city's Disadvantaged Business Enterprise¹ program, provides rigorous oversight. Our analysis showed that the utilization of subcontractors under all six prime contracts closely aligned with the EPA-negotiated fair-share goals for construction.

¹ Includes MWBEs, Disadvantaged Business Enterprise and Small Business Enterprise.

EPA regulations require recipients of EPA financial assistance agreements (including loan recipients under the CWSRF) to make “good faith efforts” to award a fair share of work to contractors who are certified as Minority Business Enterprises and Women Business Enterprises—referred to in this report as MWBEs—whenever procuring construction, supplies, services and equipment. The EPA has negotiated fair-share goals for construction with the state of Texas of 12.94 percent for Minority Business Enterprises and 8.72 percent for Women Business Enterprises. The city follows Texas’ fair-share goals. Although the TWDB does not require that loan recipients meet the fair-share goals, the samples reviewed were closely aligned with the goals. Loan recipients are required to remain in compliance with MWBE requirements throughout all phases of the project.

Examples of contract progress payments provided by the city showed monitoring of MWBE use by the city’s Department of Public Works and Engineering and by the Office of Business Opportunity. The Department of Public Works and Engineering generates an internal report called a *M/W/DBE Goal Report*, which is an overview of total MWBE utilization progress. The report tracks the total contract goal and progress toward the goal by contract payments. The Office of Business Opportunity produces another internal report, called a *Compliance Audit Report*, that contains details on MWBE use and tracks overall use by the prime contractor and individual subcontractor.

The city has no requirement for reporting MWBE utilization to the EPA. Rather, the TWDB is required to submit annual utilization reports to the EPA based on 40 CFR Part 33.

Eligible Projects Funded Under the CWSRF

Based on our analysis and discussions with EPA Region 6 and headquarters staff, work orders issued under the collection system rehabilitation project for point repair work may not be eligible for CWSRF funding. Point repair is defined as a repair of a failed or deteriorated section of pipe. This work is often done under emergency conditions. We identified seven contracts under the collection system rehabilitation project that are used for point repair work resulting from customer complaints. Our sample of six contracts included four of these contracts, identified in Table 6 as nos. 1, 3, 5 and 6.

Sample Selection

We selected a judgmental sample of work orders from the six contracts used in our sample of contract awards. As shown in Table 6, we sampled 72 out of 1,504 work orders (approximately 5 percent) issued under the six contracts. For those contracts with a large amount of work orders (sample nos. 1, 3 and 5 in Table 6), we selected every 25th work order for review. To obtain adequate coverage for the contracts with a small number of work orders (nos. 2, 4 and 6 in Table 6), our selection varied by contract based on the number of work orders issued. Our sample methodology resulted in the selection of 65 work orders issued under the contracts for the collection system

rehabilitation project and seven issued under the contracts for the sanitary sewer rehabilitation project.

Table 6: Summary of work orders sampled by loan and contract type

No.	Loan no.	Type of prime contract	No. of work orders*	No. of sampled work orders
1	2834-28 (FY 2014)	Collection system (point repair work)	401	16
2	2834-28 (FY 2014)	Sanitary sewer	15	3
3	2834-29 (FY 2015)	Collection system (point repair work)	609	24
4	2834-29 (FY 2015)	Sanitary sewer	10	4
5	2834-31 (FY 2016)	Collection system (point repair work)	427	17
6	2834-31 (FY 2016)	Collection system (point repair work)	42	8
Total			1,504	72
Percent of total				5%

Source: OIG-generated data based on the city of Houston’s contract data.

* The work order totals are those issued at the time of our sample selection; as these contracts are ongoing, the number of work orders has very likely increased.

Testing Methodology

We tested the work orders for eligibility based on the types of eligible projects identified in CWSRF guidance. Our testing focused on whether the work performed represented a capital improvement. Capital improvement projects are eligible under the CWSRF; operational and maintenance activities are not. To determine this, we considered the city’s approach to identifying capital improvements. It is the city’s expectation that if the work performed results in no further breakages, rehabilitates the infrastructure, and adds to the useful life of the infrastructure, it should be capitalized. We also considered whether the work was performed on public (right-of-way) property and if the city capitalized the costs.

Analysis Discussion

Our analysis showed that the work performed under the work orders for the two contracts for the sanitary sewer rehabilitation project (nos. 2 and 4 in Table 6) were considered eligible under the CWSRF. However, it was unclear whether the work performed under the work orders issued for point repairs under the four contracts (nos. 1, 3, 5 and 6 in Table 6) for the collection system rehabilitation project are capital improvements or operation and maintenance activities.

As shown in Table 7, we identified that 17 of the sampled work orders, or 24 percent, originated from customer complaints, and 11, or 15 percent, originated based on work identified by the city. It was unclear from the work order documents how the remaining 44, or 61 percent, originated.

Table 7: Origination of work orders sampled under collection system rehabilitation project

No.	Unclear	Customer complaints	City-originated			Total sample
			City identified	Neighborhood analysis	Critical sewer repair	
1	13	1	2	-	-	16
2	-	-	-	2	1	3
3	21	3	-	-	-	24
4	-	1	-	3	-	4
5	10	7	-	-	-	17
6	-	5	-	-	3	8
Total	44	17	2	5	4	72
%	61%	24%	(Note 1)	(Note 1)	(Note 1)	100%

Source: OIG-generated data based on work orders provided by Houston.

Note 1: City-originated combined for a total of 11 work orders, or 15% of total.

Our analysis of the 17 work orders identified in Table 7 as “customer complaints” and the 44 identified as “unclear” showed that the work pertained mostly to sewer problems at residential properties (i.e., overflows, backups, standing water, cave-in). Our review of work orders showed that the city initially completes an assessment and determines the type and amount of work required to complete the repair. The assessment may include line cleaning and a televised visual inspection to determine the cause and location of the problem. Based on the assessment, the city crew may recommend issuance of a work order to a point repair contractor for subsequent repair work. These work orders may involve the repair or replacement of the service line (public property side) or the connector, and installation of a city cleanout. The work conducted under the 44 work orders classified as “unclear” were similar in nature to the 17 work orders classified as “customer complaints.” These similar work orders represent over 85 percent of those sampled.

We were told by city staff that all work orders issued under the contracts for the collection system rehabilitation project are considered eligible under the CWSRF and are capitalized as a city asset. We confirmed with staff in the city’s asset division that the costs incurred for the point repairs under the contracts for the collection system rehabilitation project are being capitalized.

Analysis Results

Based on our testing methodology, the work performed could be considered eligible capital improvements as it met the city’s expectation for capitalization, it was conducted on public property, and the city capitalized the costs. However, comments by the city about operation and maintenance and repair work to address customer complaints raised questions about the eligibility of the work being performed.

We were told by the city that repair work performed by city crews is usually considered operation and maintenance work, while similar work performed by a contractor is considered capital improvement work. We were also told that due to the

high volume of customer complaints throughout the city, the city had issued a few contracts for point repair work to resolve the customer complaints. The city noted that, in comparison to a typical rehabilitation contract, the number of work orders under these point repair contracts are significantly higher. The city also stated that, in the past, point repair contracts were awarded for approximately \$2.5 million, with about 450 work orders issued. If the contractors and city crews are doing similar work, the OIG sees no basis for the city to treat work performed by the contractors any different from the work performed by the city crews.

As previously discussed, four of these point repair contracts are included in our sample. As shown in Table 6, three of the four contracts (nos. 1, 3 and 5) have hundreds of work orders compared to the contracts under the sanitary sewer rehabilitation project, which have significantly fewer work orders issued. Contract no. 6 also included point repair work to address customer complaints; as shown in Table 6, compared to the contract nos. 1, 3 and 5, it had significantly fewer work orders issued. As shown in Table 4, under the “Prime sample totals” column, the amount awarded for each of the four contracts for the collection system (nos. 1, 3, 5 and 6) fall within the award amount of \$2.5 million discussed by the city. These contracts, along with the city’s comments regarding the use of point repair contracts to support city crews, indicates that the costs associated with this work may be for operation and maintenance activities rather than capital improvements. As such, the OIG was unable to draw a definitive conclusion on the eligibility of the work performed under these contracts.

Concerns over Eligibility Discussed with EPA

On April 2, 2018, the OIG met with the EPA Region 6 CWSRF Coordinator and a representative from the EPA Office of Water’s State Revolving Fund Branch to discuss our concerns regarding the eligibility of the point repair work under the CWSRF. At that time, based only on the information provided by the OIG, Region 6 and the Office of Water believed that the point repair work would be considered eligible as part of the citywide rehabilitation project. In a follow-up to our meeting, on May 11, 2018, Region 6 informed the OIG that it had sent a request to the TWDB for additional information on the city’s use of contracts for the collection system rehabilitation project under the CWSRF for point repair work to address customer complaints. The request stated that the region is unable to determine whether the work orders for the point repairs are expenses for “Operation & Maintenance” or for “Capital Improvement.” The state responded after the draft report was issued as identified in the Agency Comments and OIG Evaluation section below.

Conclusion

Overall, we found no exceptions with the city’s procurement practices or its monitoring of MWBE utilization. However, we found that the city may have used CWSRF loan funds for work that would not be eligible expenses under the CWSRF.

Recommendation

We recommend that the Regional Administrator, EPA Region 6:

1. Determine whether the point repair work performed under the city of Houston's collection system rehabilitation project is eligible under the Clean Water State Revolving Fund and recoup any expenses for work determined to not be eligible.

Agency Comments and OIG Evaluation

We issued a discussion document to Region 6 on September 6, 2018. As noted in the report, the matter of eligibility was initially discussed with Region 6 and the Office of Water in April 2018. In May 2018, the region requested that the TWDB address several questions on the city's use of the CWSRF to fund projects for point repair work to address customer complaints. On May 16, 2018, the TWDB forwarded the request to the city of Houston. On August 6, 2018, Houston provided a response to the TWDB that addressed the region's questions. Houston's letter transmitting its responses to the questions stated:

As detailed in our attached responses, the "point repair" work order contracts are consistent with City of Houston capitalization policies and practices. In addition, by reducing sanitary sewer over flows in the wastewater collection system these activities are critical to fulfilling our enforcement action obligations and the pollution control and water quality objectives of the CWSRF. As such, we believe these contracts are eligible for CWSRF financing and should remain so.

On September 11, 2018, the TWDB provided Houston's response to Region 6. In the transmittal letter, the TWDB stated that it had reviewed the city's response and does not object to its practices as described. The TWDB further stated that it considers all Houston activities currently funded through the CWSRF program to be eligible and in conformance with program requirements.

On September 19, 2018, the OIG met with Region 6 to discuss its proposed response to the discussion document. At that time, the region stated it had reviewed the TWDB's and Houston's response to its request. Region 6 also stated that it had discussed the matter with the Office of Water. The region concluded that the projects are eligible for funding under the CWSRF.

The region's formal comments and corrective actions received on September 20, 2018 (see Appendix A) are consistent with our discussion on September 19, 2018. The response stated that based on Houston's responses, the TWDB's determination and conversations with the Office of Water, the region concurs with the TWDB that the work in question is eligible for CWSRF funding. The region's determination meets the intent of the recommendation. The OIG considers the corrective action complete.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS

Rec. No.	Page No.	Subject	Status ¹	Action Official	Completion Date	Potential Monetary Benefits (in \$000s)
1	13	Determine whether the point repair work performed under the city of Houston's collection system rehabilitation project is eligible under the Clean Water State Revolving Fund and recoup any expenses for work determined to not be eligible.	C	Regional Administrator, EPA Region 6	9/20/18	

¹ C = Corrective action completed.
 R = Recommendation resolved with corrective action pending.
 U = Recommendation unresolved with resolution efforts in progress.

Agency's Comments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 6
 1445 ROSS AVENUE, SUITE 1200
 DALLAS, TEXAS 75202 – 2733

Office of the Regional Administrator

September 20, 2018

MEMORANDUM

SUBJECT: Response to Office of Inspector General Discussion Document Report No. OA-FY17-0380 “City of Houston Complied with Clean Water State Revolving Fund Requirements, but Eligibility of Some Work Is Questionable,” dated September 6, 2018

FROM: Anne L. Idsal
 Regional Administrator *Anne L. Idsal 9/20/18*

TO: John Trefry, Director
 Forensic Audits

Thank you for the opportunity to respond to the issues and recommendation in the subject discussion document. On September 11, 2018, EPA received additional information from the Texas Water Development Board (TWDB) including responses to EPA questions provided by the City of Houston. Based on the City of Houston’s responses and the TWDB determination provided and conversations with EPA Office of Water, Region 6 concurs with the TWDB’s determination that the work in question is eligible for Clean Water State Revolving Fund (CWSRF) funding. The work meets the CWSRF eligibility criteria as part of the capital improvement plan to address Houston’s sanitary sewer overflows. We are attaching the additional information provided by the TWDB. Below is a summary of the agency’s position on the document’s recommendation.

AGENCY’S RESPONSE TO DISCUSSION DOCUMENT RECOMMENDATION

EPA Region 6 has addressed the recommendation and has determined that the costs are eligible.

No.	Recommendation	Agency Explanation/Response	Proposed Alternative
1	We recommend that the Regional Administrator, EPA Region 6, determine whether the point repair work performed under the city of Houston’s collection system rehabilitation project is eligible under the CWSRF and recoup any expenses for work determined not eligible.	This recommendation has been implemented. The Texas Water Development Board has provided additional information to EPA Region 6. This information supports a determination of eligibility and conformance with CWSRF program requirements. EPA concurs with the TWDB’s determination that the work in question is eligible under the CWSRF requirements. The city confirmed that capital work order improvements are capitalized and are budgeted in the Capital Improvement Plan. In addition, the city responded that in-house city crews and/or separate work order contracts are funded using operating funds. Capital improvements such as those funded using CWSRF loans, are performed under separate contracts and documented to support the capitalization of the work consistent with the Unified Grant Guidance (2 CFR 200.13).	Delete the recommendation.

CONTACT INFORMATION

If you have any questions regarding this response, please contact Charles W. Maguire, Director of the Water Division, at (214) 665-7101 or Claudia Hosch, Associate Director of the Assistance Programs Branch at (214) 665-6464.

Attachments

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