File No	19001	Committee Item No Board Item No		
	COMMITTEE/BOARD OF SUPERVISORS			
	AGENDA	A PACKET CONTENTS LIST		

Committee:	Budget & Finance Committee	Date January 30, 2019
Board of Su	pervisors Meeting	Date
Cmte Boar	d	
	Motion Resolution Ordinance Legislative Digest Budget and Legislative Analyst Report Introduction Form Department/Agency Cover Letter and MOU Grant Information Form Grant Budget Subcontract Budget Contract/Agreement Form 126 – Ethics Commission Award Letter Application Public Correspondence	
OTHER	(Use back side if additional space is	needed)
		""
	·	
-	by: Linda Wong Date	January 25, 2019

[Emergency Declaration - Repair Southeast Treatment Plant Final Effluent Force Main - Total Estimated Cost Not to Exceed \$5,000,000]

Resolution approving an emergency declaration of the San Francisco Public Utilities Commission pursuant to Administrative Code, Sections 6.60 and 21.15, to repair the Southeast Treatment Plant Final Effluent Force Main for a total estimated cost not to exceed \$5,000,000.

WHEREAS, On October 18, 2018, the San Francisco Public Utilities Commission (SFPUC) Wastewater Enterprise detected a potential failure of the pipe that conveys the treated final effluent from the Southeast Treatment Plant (SEP) to the deep-water outfall located near Pier 80; and

WHEREAS, The pipe, which crosses under Islais Creek parallel to Third Street to convey the final effluent to the deep-water outfall, appeared to be leaking into Islais Creek; and

WHEREAS, The continuing leak of treated effluent into Islais Creek, rather than to the Bay though the deep-water outfall, requires immediate action be taken to mitigate public health risks and substantial regulatory enforcement action and penalties; and

WHEREAS, On October 22, 2018, the General Manager of the SFPUC declared an emergency, approved by the President of the San Francisco Public Utilities Commission, pursuant to Chapter 6, Section 6.60 of the Administrative Code of the City and County of San Francisco, due to the failure of, and need to repair, the SEP Final Effluent Force Main, with an amount not anticipated to exceed \$2,000,000; and

WHEREAS, The request for declaration of emergency is to enable the Wastewater Enterprise to hire a consultant and contractor to inspect the pipe, perform any necessary

surveys, provide design recommendations, plans for repairs, complete such repairs and/or potentially bypass the existing outfall pipe; and

WHEREAS, Upon further inspection, staff confirmed that the pipe is leaking into Islais Creek; and

WHEREAS, Staff learned further information about the scope of the needed repair work at the failure location, and has determined that the scope of repair is more specialized and substantial than initially identified based on further site investigations, further deteriorated points of connection, and stringent regulated operational constraints; and

WHEREAS, Administrative Code, Chapter 6, Article IV, Section 6.60, authorizes department heads responsible for public work to award an emergency contract, exempt from the competitive bidding process, in the event of an actual emergency, which is defined to include, " ... [t]he breakdown or imminent breakdown of any plant, equipment, structure, street or public work necessitating immediate emergency repair or reconditioning to safeguard the lives or property of the citizens, or the property of the City and County, or to maintain the public health and welfare ..."; and

WHEREAS, Administrative Code, Chapter 21, Section 21.15(c), authorizes department heads responsible for operations for which commodities or services are needed to declare an emergency to make repairs to maintain public health or welfare as a result of the breakdown of any plant equipment, structure, street or public work; and

WHEREAS, On December 26, 2018, due to the increased scope of work, the SFPUC General Manager issued a revised Declaration of Emergency, approved by the President of the San Francisco Public Utilities Commission, to repair the Southeast Treatment Plan Final Effluent Force Main and thereby protect public health and safety, with an increase in the estimated not to exceed amount of \$5,000,000, and clarifying that the repair work also should proceed under Chapter 21 of the Administrative Code; and

WHEREAS, Administrative Code, Section 6.60(d), requires that the General Manager immediately notify the Controller, and seek Board of Supervisors' approval of emergency public works with an estimated cost in excess of \$250,000; and

WHEREAS, Administrative Code, Section 21.15(c), requires that the General Manager seek Board of Supervisors' approval of the declaration of emergency for commodities or services with an estimated cost in excess of \$100,000; and

WHEREAS, The Controller has certified that funds are available for this emergency work and contract; now, therefore, be it

RESOLVED, That the Board of Supervisors approves the emergency declaration issued by the SFPUC General Manager on October 22, 2018, as amended on December 26, 2018, to address and complete repairs to the Southeast Treatment Plan Final Effluent Force Main; and, be it

FURTHER RESOLVED, That actions taken to date by the San Francisco Public Utilities Commission to address such emergency work and resolve the emergency condition are hereby ratified.

RECOMMENDED:

HARLAN L. KELLY, JR.

General Manager of the SFPUC

FUNDS AVAILABLE:

BEN ROSENFIELD

Controller

Item 7	Department:
File 19-0011	Public Utilities Commission (PUC)

EXECUTIVE SUMMARY

Legislative Objectives

• The proposed resolution would approve an emergency declaration of the San Francisco Public Utilities Commission (SFPUC) to repair the Southeast Treatment Plant Final Effluent Force Main, with a total estimated cost not to exceed \$5,000,000.

Key Points

- SFPUC Wastewater Enterprise staff detected a potential leak in a pipe carrying treated wastewater into the San Francisco Bay on October 18, 2018, and the SFPUC General Manager declared an emergency on October 22, 2018. The emergency declaration was revised two months later on December 26, 2018 because SFPUC staff identified further deterioration and need for more extensive work.
- SFPUC selected Power Engineering, who was previously selected through a competitive solicitation to work on another vent pipe replacement project within the same outfall system, to perform the work. Construction is expected to begin February 2019.

Fiscal Impact

- The budget for the repair of the pipes crossing Islais Creek is \$4.9 million. According to SFPUC, a specialty engineering consultant provided cost estimates from recent projects that adhere to SFPUC estimating guidelines, as well as cost estimates from vendors to confirm material cost estimates. SFPUC's technical engineering staff has also reviewed the engineer's estimate.
- The project budget has a construction contingency of 50 percent (or \$1 million for a \$2 million construction budget); according to SFPUC, SFPUC's contracting guidelines allow contingencies of up to 30 percent but higher contingencies are allowed for complex projects. The project has additional contingencies of (a) \$200,000 in case the Islais Creek and Illinois Street Bridges (which need to be raised for construction barges to cross) do not open, requiring potential modification of construction methodology, and (b) \$450,000 in case contractor bids are high due to the specialized nature of the project and limited number of contractors.

Policy Consideration

• Replacement of the existing pipelines is included SFPUC Wastewater Enterprise Capital Program. The budget for the permanent replacement of the pipelines is currently estimated at approximately \$38,700,000 and permanent replacement of the pipelines is scheduled for 2023. The proposed emergency repair work is intended to maintain the existing pipelines until permanent replacement can be completed.

Recommendations

- Amend the proposed resolution to reduce the not-to-exceed amount by \$88,000, from \$5,000,000 to \$4,912,000.
- Approve the proposed resolution as amended.

MANDATE STATEMENT

Administrative Code Section 6.60(d) states that contracts entered into for emergency work that are more than \$250,000 are subject to Board of Supervisors approval. Prior to the commencement of emergency work above the \$250,000 threshold, the Department must also secure approval in writing from the Mayor, the President of the Board, or the Commission.

According to Administrative Code Section 6.60(d), if the emergency does not permit the required approvals of the emergency determination to be obtained before work begins; the Department head must submit a resolution approving the emergency determination to the Board of Supervisors within 60 days.

BACKGROUND

The San Francisco Public Utilities Commission's (SFPUC) Southeast Treatment Plant, located in Bayview Hunters Point, provides wastewater collection and treatment of approximately 80 percent of the city's flows. The Southeast Treatment Plant treats approximately 57 million gallons of wastewater and 160 wet tons of biosolids per day. Capacity may reach 250 million gallons per day during rainstorms.

On October 18, 2018, SFPUC Wastewater Enterprise staff detected a potential leak in a pipe carrying treated effluent into the San Francisco Bay. The two pipelines that cross Islais Creek — one 36-inch diameter and one 42-inch diameter, conveying treated effluent from the Southeast Treatment Plant to the deep-water outfall located in the San Francisco Bay — appeared to be leaking into Islais Creek rather than the Bay. The leak into Islais Creek could result in substantial regulatory enforcement action and penalties, as well as potential public health risks. On October 22, 2018, the SFPUC General Manager declared an emergency, which was approved by the SFPUC Commission President. The project cost to hire a consultant to inspect and repair and/or bypass the existing pipe was estimated to not exceed \$2,000,000.

SFPUC contracted divers who confirmed on November 3, 2018 that the 36-inch diameter pipeline is leaking. On December 26, 2018, or more than two months after the original emergency declaration, the SFPUC General Manager submitted a revised emergency declaration to the SFPUC Commission President, stating that, after further investigating the pipe failure, SFPUC staff determined that the needed work was more specialized and substantial than had been initially estimated. According to the December 26, 2018 memorandum to the SFPUC Commission President, the points of connection for the pipe were further deteriorated than originally estimated. SFPUC estimated that the cost of the work had increased from \$2 million to \$5 million. SFPUC estimated that the cost of the work had increased from \$2 million to \$5 million. According to Mr. Christopher Whitmore, SFPUC Policy and Government Affairs, SFPUC needed two months to identify the further deterioration and need for more extensive work because field investigation work required multiple coordinated Southeast Plant shutdowns for confined space entries, physical confirmation of existing conditions due to limited as-built information, accessibility of restricted and difficult pipeline points of entries, discovery of long-lead specialized material and equipment procurement to

build the emergency bypass. In addition, Southeast Treatment Plant shutdowns are generally limited to an 8-hour window once a month depending on weather conditions.

DETAILS OF PROPOSED LEGISLATION

The proposed resolution would approve an emergency declaration of the SFPUC to repair the Southeast Treatment Plant Final Effluent Force Main, with a total estimated cost not to exceed \$5,000,000.

According to Mr. John Scarpulla, SFPUC Policy and Government Affairs, Power Engineering was identified as the most qualified and available contractor to complete the project. Power Engineering is currently contracted under an existing competitively solicited SFPUC Job Order Contract (JOC) #59, specifically Task Order 15 to work on another vent pipe replacement project within the same outfall system. SFPUC selected Power Engineering to conduct the emergency repair of the Southeast Treatment Plant Final Effluent Force Main without undergoing a competitive solicitation process because its staff is very familiar with plant operational constraints, local tidal influence and impacts on construction, and familiarity with site access constraints. Power Engineering also has personnel and equipment available and capabilities to perform complex construction in marine environments.

Construction is expected to begin February 2019 with substantial completion within nine months. According to Mr. Scarpulla, the project will include installation of a new temporary bypass system at the Southeast Outfall Islais Creek Crossing and tie it to the existing outfall system at Islais Creek. The bypass system will consist of 310 linear feet of pipe, two knife gate valves, and two sets of support systems at the tie-in points.

FISCAL IMPACT

The budget for the repair of the pipes crossing Islais Creek is \$4.9 million, as shown in Table 1 below. According to Mr. Whitmore, the specialty engineering consultant provided cost estimates from their experience with projects similar in scope while adhering to SFPUC estimating guidelines. In addition, SFPUC technical staff has reviewed the Engineer's Estimate in detail and independently confirmed material and equipment availabilities and cost from vendors.

Table 1: Project Budget

Item Description	Cost
Initial inspection / site exploration	\$177,025
Initial design	34,895
Final design estimate	300,000
Construction cost estimate	2,000,000
Contingency (50%)	1,000,000
Bidding climate (additional 15% of construction total)	450,000
Emergency construction management estimate	350,000
Environmental permitting and compliance	200,000
Unforeseeable site condition allowance	200,000
Specialized engineering staff support & augmentation	200,000
Total	\$4,911,920

The \$4.9 million budget for the proposed emergency repair to the pipeline includes contingencies of \$1.65 million, or 34 percent of total project costs. These contingencies include (a) \$1 million for construction, or 50 percent of the construction budget of \$2 million; (b) \$450,000 to account for a limited number of potential bids for design work; and (c) \$200,000 for unforeseeable site condition allowance.

According to Mr. Whitmore, the project team recommends a 50 percent construction contingency (\$2,000,000 construction budget and \$1,000,000 contingency) due to unforeseen conditions based on recently completed field evaluations. Staff has identified deteriorated concrete and metal pipes exposed to decades of saltwater and potential corrosion. According to Mr. Whitmore, SFPUC Infrastructure Procedure PD1.10 allows contingencies up to 30 percent at the project's 50 percent design level, unless project complexity warrants a larger contingency. Based on the project's scope and current field findings, a higher contingency of 50 percent is included in the overall project budget.

In addition to the \$1,000,000 construction contingency, the project includes \$200,000 for unforeseeable site conditions. According to Mr. Whitmore, the project budget has two contingencies for unforeseen site conditions totaling \$1,200,000, equal to 60 percent of the \$2,000,000 construction budget, because the project requires Islais Creek Bridge and Illinois Street Bridge to be functional for barge access to the construction site. While Public Works and Port staff has confirmed that the bridges are functional, it is unknown when they were last opened. The additional \$200,000 allows for potential delays and potential modification of construction methodology in the event that the bridges do not open.

The proposed project budget also includes \$450,000 to account the construction bidding climate, which according to Mr. Whitmore, is due to the limited number of construction contractors who are qualified to perform the complex and high-risk scope of work in a marine environment.

Because the project budget of \$4,911,920 is approximately \$88,000 less than the resolution not-to-exceed amount of \$5,000,000, the proposed resolution should be amended to reduce the not-to-exceed amount by \$88,000, from \$5,000,000 to \$4,912,000.

POLICY CONSIDERATION

According to Mr. Whitmore, the existing pipelines crossing Islais Creek are at the end of their useful life. SFPUC staff has not previously conducted inspections of these pipelines because the configuration of the existing pipelines prohibits safe entry for detailed inspection or rehabilitation. Replacement of the existing pipelines is included SFPUC Wastewater Enterprise Capital Program. The budget for the permanent replacement of the pipelines is currently estimated at approximately \$38,700,000 and permanent replacement of the pipelines is scheduled for 2023. The proposed emergency repair work is intended to maintain the existing pipelines until permanent replacement can be completed.

RECOMMENDATIONS

- 1. Amend the proposed resolution to reduce the not-to-exceed amount by \$88,000, from \$5,000,000 to \$4,912,000.
- 2. Approve the proposed resolution as amended.



525 Golden Gate Avenue, 13th Floor San Francisco, CA 94102 T 415.554.3155 F 415.554.3161

TTY 415,554,3488

INTER-OFFICE MEMORANDUM

December 26, 2018

TO:

The Honorable Vince Courtney,

President, San Francisco Public Utilities Commission

FROM:

Harlan L. Kelly, Jr., SFPUC General Manage

SUBJECT:

Revised Declaration of Emergency: Repair Southeast Treatment Plant Final Effluent Force Main

On October 18, 2018, the SFPUC Wastewater Enterprise detected a potential failure of the pipe that conveys the treated final effluent from the Southeast Treatment Plant to the deep-water outfall located near Pier 80.

In my memorandum to you dated October 22, 2018, I declared an emergency due to the failure of, and need to repair, the Southeast Treatment Plant Final Effluent Force Main, with an amount not anticipated to exceed \$2 million. You provided your written concurrence and approval.

I declared the emergency pursuant to Chapter 6, Section 6.60 of the Administrative Code of the City and County of San Francisco, which pertains to emergency contracting for public works. Staff has now learned further information about the scope of the needed repair work at the failure location. The existing pipe that crosses under Islais Creek parallel to Third Street is confirmed to be leaking into Islais Creek. In addition, staff has determined that the scope of repair is more specialized and substantial than initially identified based on further site investigations, further deteriorated points of connection, and stringent regulated operational constraints. With this additional information, staff estimates that the anticipated cost of the work will be more than the initial \$2 million estimate. Staff now estimates the cost of the work beyond the capabilities of City forces is not anticipated to exceed \$5 million. Furthermore, in consultation with the City Attorney's Office. staff has determined that in addition to the definition of "public work" under Chapter 6, the needed emergency repair work also meets the definition of "commodities" and "services" under Section 21.15 of the San Francisco Administrative Code. Accordingly, the appropriate authorization for this emergency declaration is both Administrative Code Section 6.60 and Section 21.15(c).

I am therefore updating the October 22, 2018 declaration of an emergency to reflect these changes - (1) authorization of the declaration under both Administrative Code Section 6.60 and Section 21.15, and (2) an increase in the anticipated not to exceed cost from \$2 million to \$5 million. I trust that this meets with your concurrence and approval.

CONCUR AND APPROVE:

Vince Courtney, President

San Francisco Public Utilities Commission

cc:

A. Caen

K. How

F. Vietor

E. Sandler

A. Moran

M. Carlin

I. Kwon

G. Norby

London N. Breed Mayor

Vince Courtney

President

Ann Moller Caen Vice President

Francesca Vietor Commissioner

Anson Moran

Commissioner

Ike Kwon Commissioner

Harlen L. Kelly, Jr. General Manager





525 Golden Gate Avenue. 13th Floor San Francisco, CA 94102 T 415.554.3155 F 415.554.3161 TTY 415.554.3488

INTER-OFFICE MEMORANDUM

October 22, 2018

TO:

The Honorable Vince Courtney,

President, San Francisco Public Utilities Commission

FROM:

Harlan L. Kelly, Jr., SFPUC General Manager

SUBJECT:

Declaration of Emergency: Repair Southeast Treatment Plant Final Effluent Force Main

In accordance with Chapter 6, Section 6.60 of the Administrative Code of the City and County of San Francisco, I am declaring an emergency on behalf of the San Francisco Public Utilities Commission.

On October 18, 2018, the SFPUC Wastewater Enterprise detected a potential failure of the pipe that conveys the treated final effluent from the Southeast Treatment Plant (SEP) to the deep-water outfall located near Pier 80. The pipe crosses under Islais Creek parallel to Third Street and appears to be leaking into Islais Creek. This continuing leak of treated effluent into Islais Creek, rather than to the Bay through the deep-water outfall, could result in substantial regulatory enforcement action and penalties. Immediate action also is required to mitigate potential public health risks.

This request for emergency declaration is to enable the Wastewater Enterprise to hire a consultant and contractor to inspect the pipe, perform any necessary surveys, provide design recommendations, plans for repairs, complete such repairs and/or potentially bypass the existing outfall pipe by installing a new 36-inch diameter pipe with a valve at each end of the new bypass pipe. The repairs and/or bypass solution will also include hiring divers to supervise the work. This work is beyond the capabilities of City forces. The estimated cost for the work is not anticipated to exceed \$2,000,000.

I am therefore declaring the existence of an emergency. I trust that this meets with your concurrence and approval.

CONCUR AND APPROVE:

A. Caen

F. Vietor

A. Moran

I. Kwon

cc:

Vince Courtney, President

San Francisco Public Utilities Commission

London N. Breed Mayor

ividyoi

Vince Courtney President

riesinem

Ann Moller Caen

Vice President

Francesca Vietor

Commissioner

Anson Moran

Commissioner

Ike Kwon Commissioner

Harlan L. Kelly, Jr. General Manager

K. How

E. Sandler

M. Carlin

G. Norby



т 415.554.3155 F 415.554.3161

TTY 415.554.3488

2019 JAN -7 AM II: 16

TO:

Angela Calvillo, Clerk of the Board

FROM:

Christopher Whitmore, Policy and Government Affairs

DATE:

January 7, 2019

SUBJECT:

Emergency Declaration – Repair Southeast Treatment Plant

Final Effluent Force Main - Total Estimated Cost Not to

Exceed 5,000,000

Attached please find an original and one copy of a revised proposed resolution approving an emergency declaration of the San Francisco Public Utilities Commission (SFPUC) pursuant to San Francisco Administrative Code, Section 6.60 and Section 21.15, to construct repair the Southeast Treatment Plant Final Effluent Force Main; with a total estimated cost not to exceed \$5,000,000.

The following is a list of accompanying documents (2 sets):

- 1. Board of Supervisors Resolution
- 2. Letter from the PUC Commission President Ratifying Declaration

Please contact Christopher Whitmore at 415-934-3906 if you need additional information on these items.

> London N. Breed Mayor

Vince Courtney President

Ann Moller Caen Vice President

Francesca Vietor Commissioner

Anson Moran

Commissioner lke Kwon

Commissioner Harlan L. Kelly, Jr.

General Manager

