

# **West Point Treatment Plant Progress Report**

Prepared in accordance with  
Motion 14813, Section C

**November 2017**



**King County**

Department of Natural Resources and Parks  
Wastewater Treatment Division

## **Table of Contents**

Introduction .....	3
Executive Summary .....	4
Current Status and Future Work .....	5
Contracts Utilized and Contracted Expenditures during the Previous Quarter .....	6
Project Expenditures to Date and Anticipated Expenditures .....	6
Status of Insurance Claims .....	6
Summary of Procurement Actions Anticipated Under Waiver Authority .....	7
Summary of Actions Taken to Obtain Competitive Procurements and Comply with Standard Contracting Requirements.....	7
Attachments:	
Attachment A – Cost Tables for West Point Treatment Plant Progress Report	

## **Introduction**

On February 27, 2017, the Council approved Motion 14813 which extended the County Executive's February 9, 2017 Determination of Emergency and waiver of competitive procurement requirements through May 31, 2018. This action allowed the Wastewater Treatment Division (WTD) of the Department of Natural Resources and Parks to continue its emergency response to the flood event which occurred at the West Point Treatment Plant on February 9, 2017, inundating critical treatment plant equipment and systems. Section C of Motion 14813 requires the King County Executive to transmit a quarterly report to the Council on the expenditures and contracting necessary to restore the West Point Treatment Plant to full operations.

Specifically, the Motion requires the report to include:

- a) Expenditures during the previous quarter and anticipated for the next quarter;
- b) Project expenditures to date;
- c) A current estimate of the total costs of the repairs;
- d) A list of the contracts or agreements undertaken under the authority in this waiver, including for each contract or agreement: the name of the vendor, the type of work, the value of the contract or agreement and the level of compliance with the contracting requirements of K.C.C.3.15.100, K.C.C. chapters 72.16\*, 12.17, 12.18 and 12.19 and related administrative rules;
- e) A summary of procurement actions anticipated, but not yet undertaken under the authority of this procurement waiver; and
- f) A discussion of specific actions taken during the previous quarter to continue to obtain competitive prices on behalf of the rate payers despite this waiver, including but not limited to procurements let or to be let in accordance with the requirements of K.C.C. chapters 2.93 and achieving compliance with K.C.C. 3.15.100, K.C.C. chapters 12.16, 12.17, 12.18 and 12.19 and related administrative rules.

This report addresses each requirement under a separate heading that corresponds to the particular requirement.

\* May intend to refer to chapter 12.16.

## **Executive Summary**

On February 9, 2017, a severe flood occurred at the West Point Treatment Plant. The flooding inundated electrical and mechanical equipment resulting in emergency bypasses of sewage through the emergency outfall, and discharge of partially treated sewage through the off-shore outfall. WTD began emergency response and restoration work immediately using existing contracts and emergency contracts under a waiver of competitive procurement requirements. The use of emergency contracts ensured that cleanup, repair and replacement of damaged systems and equipment could proceed in an expeditious manner.

During the second quarter of 2017, WTD staff and contractors together achieved the significant milestone of restoring critical plant treatment functions and returned operations to full compliance with the plant's permit and water quality requirements. Through the end of the second quarter, almost \$11 million was spent on this effort, reflecting the extraordinary efforts of both wastewater staff and the contractors and consultants to restore operations. An additional \$5.5 million was spent this past third quarter, bringing the plant restoration closer to completion and replacing temporary equipment and support systems with long-term sustainable equipment and parts. It is anticipated that WTD will expend between approximately \$4.4 million and \$6.7 million during the fourth quarter on remaining restoration efforts. (There is a delay between performance of work and contractor submittal of invoices to WTD for payment; thus this report relies on both actual payments and estimates of expenditures based on work progress). A list of contracts associated with restoration project work is provided in Attachment A to this report.

CH2M, an engineering consultant with extensive knowledge of the treatment plant, prepared prior estimates of the total cost of restoration. As this work has progressed towards completion, WTD staff have updated the estimate. Based on current actuals and projections, the total cost estimate has significantly dropped and now stands at less than \$30 million to complete full restoration of the plant. An important factor in reducing the expected cost was WTD and its contractors successfully avoiding several potentially significant risk factors which had previously been part of the overall cost estimate.

With respect to compliance with contracting requirements during the emergency, a portion of the restoration work has been performed under existing WTD contracts that were competitively procured and are in compliance with competitive contracting requirements. Where possible and to the greatest extent practical, new contracts authorized under the emergency declaration utilized labor rates and contract requirements from existing competitively procured contracts to ensure that competitive pricing was applied to the work to be performed.

While six contracts were not obtained by competitive bidding because of the need to obtain immediate help from contractors and consultants familiar with the West Point Treatment Plant, these contracts are otherwise largely consistent with normal contract requirements and cost controls. WTD is utilizing small contractor and supplier firms

where possible. As WTD has undertaken additional work to fully restore the plant, WTD has continued to competitively procure work that is not of an emergent nature. More than 30 contracts with commitments ranging from \$10,000 to over \$850,000 were obtained using standard procurement requirements.

### **Current Status and Future Work**

Significant progress was made during the 3rd quarter towards bringing the West Point Treatment Plant to full system operation with permanent equipment. The repair and replacement of equipment destroyed by the emergency flood event is nearing completion with work wrapping up in all areas of the recovery effort, including restoration of permanent power. Restoration of the secondary treatment system at West Point was completed in April, and the plant was again operating and complying with all required permit conditions by May 9. The primary and secondary treatment systems, including the digesters, dewatering and solids handling, are all operating and treating wet-weather flows.

Major work now completed for the repair and restoration of the plant's full function includes the following:

- Repaired, replaced, and tested 95 of 97 flooded pumps
- Replaced all 25 flooded electrical transformers
- Replaced or repaired all 151 damaged electric motors
- Replaced all 200 flooded electrical motor control centers
- Repaired or replaced all 125 electrical panels
- Replaced and rebuilt all of the 125 flooded local electrical control stations
- Dried and tested 100 percent of the miles of flooded electrical conduit and conductors
- Disinfected more than 2000 flooded light fixtures and replaced all of them, including exit signage
- Replaced 99 percent of the more than 1200 flooded outlets and switches
- Replaced or rebuilt 99 percent of more than 200 flooded solenoids
- Inspected, tested, and repaired or replaced 99 percent of 125 flooded instruments
- Replaced all of the miles of flooded insulation
- Replaced all six of the flooded Ovarions Controls (the automated system controls) for odor control
- Replaced the four flooded Ovarions Controls for solids handling

Major work to be done for the remainder of this year includes the following:

- Finalize "cut-over" to permanent electrical motor control centers to operate all systems
- Install three environment control panels (HVAC control panels) and balance air flow through the plant galleries
- Replace one air-handler fan that failed after installation
- Restore permanent power to Boiler #2

- Tune Boilers #1 and #3 to operate at 100 percent of designed capacity (for heating secondary treatment tanks)
- Replace 25 temporary doors with permanent doors
- Reconstruction of the flooded employee equipment locker room in 2018

### **Contracts Utilized and Contracted Expenditures during the Previous Quarter**

Attachment A to this report shows the contracts entered into by firm and the major category of service provided (e.g., electrical contractor, safety supplies). Table 2 on Attachment A lists contracts specifically procured under the waiver extended by Motion 14813, while Table 3 shows contracts utilized that were procured under normal contracting requirements. Many of the contracts in Table 3 are so-called “blanket” or goods and services contracts that can be used by multiple King County agencies and have no specific limit for WTD use. Attachment A also shows the amount committed and the amount paid in the third quarter of 2017 and life to date (LTD).

### **Project Expenditures to Date and Anticipated Expenditures**

The total restoration project expenditures for the third quarter (July-September) were approximately \$5.5 million. As shown in Table 1 of Attachment A, both the third quarter 2017 and the life to date (LTD) totals are reported. This amount includes the invoices paid to date for each major category of contract and materials or equipment, whether purchased directly by WTD or through a contractor, along with King County labor costs through September 30 which is the latest pay period available. In total, \$16.5 Million has been spent to date on restoration efforts.

Project expenditures anticipated for the fourth quarter of 2017 are shown in Table 1. Because of the uncertainty associated with estimating future costs of an emergency restoration of this magnitude, an expected low and high cost estimate for fourth quarter expenditures is provided to more realistically account for this variability. Relative to initial forecasts of the total restoration cost estimate there is a favorable downward trend in costs suggesting the total cost will be closer to the low end of the estimate. For the final total cost of restoration, the current updated full cost estimate for all work is anticipated to be less than \$30 million.

### **Status of Insurance Claims**

Immediately following the February 9 flooding, WTD began working with King County’s Office of Risk Management Services and Marsh LLC, WTD’s insurance broker, to initiate the insurance claims process. WTD has insurance coverage up to \$25 million from FM Global and \$75 million (from \$26 million in losses up to \$100 million) from excess insurance carriers. WTD has additional insurance policies that will cover claims for West Point up to a total of \$250 million with a \$250,000 deductible.

WTD is receiving insurance reimbursements as it submits the required documentation to demonstrate the costs that have been incurred for restoration. Through September 30, FM Global has reimbursed WTD a total of \$12.5 million.

### **Summary of Procurement Actions Anticipated Under Waiver Authority**

As previously described, the list of contracts obtained under the waiver is displayed on Table 2 of Attachment A. These emergency contracts allowed WTD to begin cleaning and restoration work immediately after the flooding event in order to fully restore treatment capabilities at the plant in the shortest time possible. No new contracts using the waiver exemption from competitive bidding requirements are expected for this effort in future work.

### **Summary of Actions Taken to Obtain Competitive Procurements and Comply with Standard Contracting Requirements**

As noted in Attachment A, WTD utilized several existing contracts that were obtained under normal procurement policy (i.e., did not use the waiver as authorized under Motion 14813) to perform work. These contracts were in place prior to the emergency waiver and, therefore, in compliance with competitive contracting requirements. The waiver allowed WTD to hire contractors without going through the competitive bid process to expeditiously begin restoration work. As directed by the King County Council, the new contracts under the waiver do include most standard contracting requirements under King County Code (referenced in Motion 14813). Specifically, the existing and new contracts for West Point restoration comply with King County Code sections 3.15.100 relating to minimum wage, 12.16 relating to nondiscrimination, 12.17 relating to unfair contracting practices, 12.17 relating to unfair employment practices, and 12.19 relating to nondiscrimination in benefits.

To further King County's equity and social justice goals, WTD is encouraging contractors to utilize Small Contractor and Supplier (SCS) firms while still working to meet schedule requirements. An example of this is the inclusion of a total of six qualified SCS firms as subconsultants to the Engineering Services (CH2M as prime) and Construction Management (Jacobs as prime) contracts obtained under the Motion's waiver exemption. These six firms have a total of \$760,000 allocated to them in the contract budgets. Several other SCS firms are also participating in the recovery effort.

WTD is also requesting that all contractors and consultants selected under the waiver exemption provide information on their use of SCS firms through the County's procurement database. To date \$561,000 has been paid to the SCS firms subcontracted under just the CH2M and Jacobs contracts cited earlier. WTD continues to engage in ongoing and comprehensive efforts to provide information to contractors about future work opportunities and to prioritize competitive bidding where possible when adding new work to complete restoration.

Moving forward, WTD will continue to use the normal competitive bid process to the greatest extent possible for any newly identified work not already covered by an existing contract. As Attachment A shows, the majority of work is being performed by firms who qualified under normal competitive processes. Small purchase amounts from competitively bid contracts are summarized in the last line of Table 3 for brevity and there are dozens of firms utilized in such purchases and all of them competitively bid. This and the other firms listed under Table 3 comprise the vast majority of the firms supporting the restoration efforts at West Point.

As plant operations have been successfully brought back online, two waiver-eligible projects were selected to be competitively procured in an effort to further execute work under standard contracting requirements. These projects are the replacement of the 25 damaged gallery doors, and reconstruction of the flooded and damaged employee equipment locker room. These two projects will total approximately \$1,000,000 in new contracts.



Cost Tables for West Point Treatment Plant Report

Table 1:

West Point cleanup costs:			forecast	forecast	forecast low	forecast high
	2017 Q3	Life to Date (LTD)	low expend. 2017 Q4	high expend. 2017 Q4	LTD through 2017 Q4	LTD through 2017 Q4
Total contracted	\$ 5,170,091	\$ 12,997,168	\$ 4,136,073	\$ 6,204,109	\$ 17,133,241	\$ 19,201,277
Total King County labor	\$ 259,718	\$ 3,060,408	\$ 194,789	\$ 389,578	\$ 3,255,197	\$ 3,449,986
Total materials/equip. (direct purch. other)	\$ 64,674	\$ 400,986	\$ 25,869	\$ 80,842	\$ 426,855	\$ 481,828
Total	\$ 5,494,483	\$ 16,458,561	\$ 4,356,731	\$ 6,674,529	\$ 20,815,293	\$ 23,133,091

Table 2:

Contract costs: Contracts procured under emergency waiver

Vendor Name	Contract #	Type of work	Current Total \$ Authorized	Current Total \$ Committed *	Paid 2017 Q3	Paid LTD
Burke Electric	C001148C17	Electrical Contractor	\$5M	\$ 2,437,891	\$ 567,066	\$ 1,075,276
Dutton Electric	C001149C17	Electrical Contractor	\$5M	\$ 2,915,578	\$ 590,347	\$ 1,277,850
Valley Electric	C001150C17	Electrical Contractor	\$5M	\$ 2,950,764	\$ 684,621	\$ 1,134,409
Hawk Mechanical	C001151C17	Mechanical Contractor	\$5M	\$ 4,420,500	\$ 1,504,272	\$ 2,768,249
CH2M	E00484E17	Planning & Engineering Services	\$5M	\$ 3,089,493	\$ 535,868	\$ 2,082,550
Jacobs	P00216P17	Construction Management	\$5M	\$ 873,251	\$ 438,030	\$ 763,243
Subtotal:			\$30M	\$ 16,687,477	\$ 4,320,204	\$ 9,101,576

\* Note: Total \$ Committed is the contractual "Not to Exceed" value of work orders issued, and is not a guarantee of final contract payout (cost).

Table 3:

Contract costs: Contracts procured under Normal procurement requirements (not via emergency waiver)

Vendor Name	Contract #	Type of work	Current Total \$ Authorized	Current Total \$ Committed	Paid 2017 Q3	Paid LTD	Notes (see below)
CH2M	E00159E09	Assessment Engineering & Cost Estimating	\$100K	\$ 100,000	\$ 96,696	\$ 96,696	1
Aerzen USA Corporation	Multiple POs Issued	Centrifugal blower package		\$ 122,320	\$ -	\$ 122,320	
Applied Industrial Technologies, Inc.	Multiple POs Issued	Bearings, belts and related items		\$ 19,864	\$ 2,580	\$ 18,861	
Apsco LLC	5578958	Pumps, Parts & Service		\$ 21,923	\$ 11,799	\$ 11,799	
Cole Industrial, Inc.	Multiple POs Issued	Boiler		\$ 136,788	\$ 54,579	\$ 133,500	
Day Wireless Systems, Inc.	Multiple POs Issued	Portable radios		\$ 66,716	\$ -	\$ 58,943	
Delta Electric Motors, Inc.	5851106	Motor		\$ 258,716	\$ 8,007	\$ 254,561	
Electrical Reliability Services, Inc.	Multiple POs Issued	Electrical equipment diagnostics		\$ 12,929	\$ -	\$ 10,624	
Ferguson Enterprises, Inc.	480020	Plumbing parts/supplies		\$ 29,368	\$ 3,881	\$ 29,368	
Flowhawks/Skagit Transportation	525799	Sludge hauling		\$ 290,858	\$ -	\$ 290,858	
Fluid Components International	Multiple POs Issued	Flow meters and related services		\$ 16,838	\$ -	\$ 15,293	
Grainger	5739895	Supplies		\$ 119,468	\$ 48,637	\$ 117,318	
Granich Engineered Products, Inc.	Multiple POs Issued	Pumps and related equipment		\$ 13,862	\$ -	\$ 13,862	
Graybar Electric Company	5443005	Electrical and electronic supplies		\$ 13,666	\$ 252	\$ 13,666	
Hach Company	Multiple POs Issued	Turbidity meters & chlorine analyzers		\$ 13,116	\$ 5,308	\$ 13,116	
Industrial Boiler Service, Inc.	5921638	Boiler service and repair		\$ 41,648	\$ -	\$ 41,648	
JWC Environmental	5809030	JWC proprietary equipment, parts and services (Grinder repair)		\$ 32,397	\$ -	\$ 11,713	
Marsh Risk Consulting	5925418	Forensic accounting and claims services		\$ 135,529	\$ 135,529	\$ 135,529	
Micro Motion, Inc.	Multiple POs Issued	Electronic control equipment		\$ 34,587	\$ -	\$ 34,587	
Motion and Flow Control Products, Inc.	5617876	Hoses and fittings		\$ 41,981	\$ 20,202	\$ 26,492	
National Safety, Inf.	Multiple POs Issued	Safety supplies		\$ 44,524	\$ 5,628	\$ 44,230	2
Nelson Petroleum	5422698	Lubricants		\$ 10,087	\$ -	\$ 10,087	
North Coast Electric Company	5401608	Electric supplies		\$ 60,640	\$ 857	\$ 60,640	
NRC Environmental Services	5921053	Site cleanup & disinfection		\$ 851,536	\$ -	\$ 851,536	
Pacific Mobile	5943625	Temporary facilities		\$ 34,578	\$ 33,697	\$ 34,578	
Pacific Power Group LLC	222872	Low Emission Diesel Engine Generator Sets		\$ 44,460	\$ 44,460	\$ 44,460	
Paramount Supply Company, Inc.	Multiple POs Issued	ASCO valves & related parts		\$ 26,687	\$ 357	\$ 26,687	
PCE Pacific, Inc.	Multiple POs Issued	Process control supplies		\$ 20,932	\$ 4,825	\$ 13,503	
PumpTech, Inc.	5890559	Pumps		\$ 43,603	\$ 11,487	\$ 43,603	
Recology Cleanscapes, Inc.	5540200	Waste disposal/garbage pick-up		\$ 10,639	\$ -	\$ 10,639	
Red Hawk Fire & Security (CA) LLC	5492659	Fire Alarm Equipment		\$ 62,983	\$ 62,983	\$ 62,983	
Rosemount, Inc.	Multiple POs Issued	Measurement equipment		\$ 48,786	\$ 4,179	\$ 48,785	
Seattle Public Utilities	5412501	Water		\$ 451,197	\$ -	\$ 451,197	
Stellar Industrial Supply	Multiple POs Issued	Industrial items (small tools/supplies)		\$ 19,361	\$ 6,539	\$ 19,157	
Value Management Strategies, Inc.	Multiple POs Issued	Consulting		\$ 43,192	\$ 43,192	\$ 43,192	
Walashek Industrial & Marine	Multiple POs Issued	Boiler		\$ 561,413	\$ 198,475	\$ 561,413	
Multiple Vendors (each < \$10,000)		Various Miscellaneous purchases		\$ 150,308	\$ 45,736	\$ 118,146	
Subtotal:				\$ 4,007,500	\$ 849,887	\$ 3,895,592	

Notes for Table 3

- 1. Existing contract bid normally (not under waiver) - Authorized limit is for tasks related to emergency
- 2. Existing King County Solid Waste Emergency Cleanup Work Order Contract