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## SCOPE OF SERVICES FOR CITY OF CALISTOGA

### Contract Amendment No. 8 Ongoing Permit Assistance (July 1, 2015 to June 30, 2016)

The City of Calistoga (City) has requested a scope of services and cost estimate from Larry Walker Associates (LWA) for assistance with conditions specified by the Wastewater Treatment Plant (WWTP) NPDES permit, Sanitary Sewer System Waste Discharge Requirements (WDRs), the Recycled Water Use permit, and the Drinking Water System NPDES permit. The following Scope of Services describes the tasks predicted during Fiscal Year (FY) 2015/16. The tasks include preparing regulatory compliance reports, consulting on regulatory issues, implementing special study requirements, implementing an electronic data management tool, and adoption of new NPDES permits for the WWTP and potable water systems.

A cost estimate for FY 2015/16 activities is provided as Attachment A. The cost estimate is presented in terms of the specific tasks outlined in this scope and includes the number of hours for each LWA staff member that may assist with the project.

#### **Task 1 – Preparation of Regulatory Compliance Reports**

Periodic reporting of operational information, regulatory compliance, and monitoring data is required by the WWTP NPDES permit (Order No. R2-2010-0104), the recycled water permit (Order No. 96-011), Cease and Desist Order No. R2-2014-0034, and the Drinking Water System NPDES permit (Order WQ-2014-0194-DWQ). Incident reporting is required to document the occurrence, cause, and response to spills, bypasses, and unauthorized discharges. WWTP effluent and receiving water monitoring data must be submitted online through the California Integrated Water Quality Management System (CIWQS) on a monthly basis. A cover letter is provided with each monthly report to explain operational changes and identify violations of effluent limits or water quality objectives. Annual reporting is required to document WWTP performance, biosolids disposal, and recycled water program implementation.

As requested by City staff, LWA will prepare regulatory compliance reports or review draft reports prepared by City staff. Draft versions of all reports will be provided to City staff for review and comment prior to finalizing for submittal to the San Francisco Bay Regional Water Quality Control Board (Regional Water Board).

#### **Task 2 – General Consulting**

Under the General Consulting task, funds are allocated to assist the City with new or emerging issues that are not included under the other identified contract tasks. During previous years, this task was used for evaluating compliance concerns, reviewing/editing spill reports,

communicating with Regional Water Board staff, obtaining emergency bypass approval, responding to Notices of Violation, and following regulatory developments. The significant activities anticipated during FY 2015/16 include implementation of the statewide toxicity plan, monitoring in the collection system for constituents of concern, developing local limits (if needed to protect influent quality), possible citizen enforcement actions related to bypass operations, and modifications to operation/configuration of the Riverside Ponds. Upon request of City staff, LWA will utilize these funds for assistance with issues that arise during the contract term.

### **Task 3 – Pollution Prevention Assistance**

As specified in the NPDES permit, the City must undertake pollution prevention activities to reduce the amount of pollutants received at the WWTP. Pollutants of concern are identified by the City and the Regional Water Board and include those constituents that could cause or contribute to an exceedance of water quality objectives in the Napa River. Current pollutants of concern are mercury, antimony, cyanide, chlorodibromomethane, dichlorobromomethane, copper, oil and grease, and PCBs. LWA will provide advice to the City when identifying and implementing appropriate pollution prevention activities. LWA will prepare the draft 2015 Annual Pollution Prevention Report. The draft report will be submitted to City staff for review and approval before finalizing for submittal to the Regional Water Board.

### **Task 4 – Disinfection Byproducts Compliance**

Cease and Desist Order No. R2-2010-0107 contains interim limits and a time schedule for compliance with final limits for chlorodibromomethane and dichlorobromomethane (disinfection byproducts). The interim limits expired on August 31, 2014 and the Regional Water Board issued a Notice of Violation (NOV) to the City on December 3, 2014. The City has determined that compliance is possible for the tertiary effluent, but additional time is needed to achieve secondary effluent compliance. The City is currently investigating methods of reducing disinfection byproducts in secondary effluent and providing monthly reports to the Regional Water Board on the efforts and results. LWA will assist the City with reviewing monitoring results, identifying/assessing operational changes, and preparing monthly progress reports.

### **Task 5 – Napa River Collaborative Monitoring**

Collaborative monitoring of upstream Napa River quality (a shared effort between Calistoga, Yountville, and St. Helena) was completed in early 2015 in accordance with current WWTP NPDES permit requirements. The next NPDES permit is expected to specify upstream and downstream monitoring (one time during 5 years). The monitoring effort will be conducted towards the end of the permit term (by 2020). As a result, no activities are predicted under this task during FY 2015/16.

### **Task 6 – Project Management**

LWA activities under this task include managing budgets and schedules, implementing contract conditions, and preparing monthly progress reports for City staff.

## **Task 7 –Mixing Zone Study**

A dye study and calibrated mixing zone model were utilized during FY 2009/10 to characterize dilution, travel time, and mixing zone characteristics when discharging effluent to the Napa River. The results were used by the Regional Water Board to establish dilution credits in the current WWTP NPDES permit. The City is considering re-establishing an old discharge outfall at the 20 million gallon (mgal) effluent storage pond. If the Regional Water Board determines a new mixing zone study must be completed, LWA will model discharges from the 20 mgal outfall to determine dilution and mixing zone characteristics. A draft mixing zone report will be provided to the City for review and approval before finalizing for submittal to the Regional Water Board.

## **Task 8 – Sanitary Sewer Management Plan (SSMP) Internal Audit**

Provision D.13(x) of the Sanitary Sewer System WDRs (Order No. 2006-0003-DWQ) requires an internal SSMP audit every two years, at a minimum. An audit was previously conducted by LWA in April 2014 and the next audit will be conducted during the spring of 2016.

LWA will review the City's current SSMP, as well as information available on CIWQS Public Reports, to assess program effectiveness. LWA will work with City staff to assemble any information which may not be publicly available in CIWQS. Per Provision D.13(x) of the SSS WDR, the internal audit needs to evaluate the SSMP effectiveness (e.g., compile metrics such as miles of televised pipe, number of spills/volumes from year to year, etc.) and the City's compliance status with each of the required SSMP elements. LWA will analyze, tabulate, and graph historical information on the program metrics and evaluate the SSMP for compliance with all the required elements.

LWA will prepare a draft audit report that includes deficiencies and opportunities for improving the SSMP. The audit report will be finalized following review by City staff. LWA will help the City revise the SSMP as recommended in the final audit report.

## **Task 9 – CIWQS Electronic Data Management Tool (EDMT)**

Electronic reporting of data collected under the WWTP NPDES permit is currently required by the State of California and will soon be required by the U.S. EPA. Under a previous contract amendment, the City authorized LWA to develop a Microsoft Access-based Electronic Data Management Tool (EDMT) for ongoing compilation and management of the monitoring data and accommodate querying, analysis, and reporting of the data.

During FY 2014-15, LWA developed Electronic Data Deliverable (EDD) templates for use when importing internally-generated data into the EDMT. LWA also developed a data review process to receive EDDs from outside analytical laboratories and use the EDMT to automatically format data so that it conforms to CIWQS Permittee Entry Template (PET) Tool requirements. With LWA assistance, the City's self-monitoring data has been uploaded monthly to CIWQS using the EDMT.

During FY 2015-16, LWA will finalize the EDMT and provide training of City staff on EDMT use and uploading data to CIWQS. After training is conducted, LWA will prepare Standard Operating Procedures (SOPs) on electronic data reporting for City records and training.

## **Task 10 – WWTP NPDES Permit Application**

The NPDES permit application was submitted to the Regional Water Board on May 1, 2015. No activities are predicted under this task during FY 2015/16.

## **Task 11 – WWTP NPDES Permit Adoption**

The new WWTP NPDES permit is tentatively scheduled for adoption on December 16, 2015. The reissuance process will be initiated by the Regional Water Board during July 2015 to ensure adoption on this time schedule. LWA will communicate with Regional Water Board staff and City staff on a regular basis during the permit reissuance process. Communication may be needed to clarify results provided in technical study reports, discuss operational procedures, identify compliance issues, and negotiate permitting approaches.

LWA will review the Administrative Draft NPDES permit (internal version) to ensure proper implementation of regulations and policies and to identify any operational concerns. In consultation with City staff, LWA will prepare written comments on the Administrative Draft permit using “Track Changes” to indicate the proposed modifications and “inserted comments” to provide a rationale for the changes. An edited version of the Administrative Draft will be provided to Regional Water Board staff for consideration. LWA will review the Tentative Order NPDES permit (public version) to verify inclusion of Administrative Draft comments and ensure proper implementation of regulations and policies. In consultation with City staff, LWA will identify issues of concern in the Tentative Order and develop an approach for the comment letter. Formal written comments are recommended to request revisions and lay groundwork for an appeal if the requested revisions are not made. LWA will prepare a draft comment letter to provide precedents and regulatory citations to justify requested changes. The draft comment letter will be provided to the City for review/approval and production on City letterhead.

It is beneficial for City staff to attend the permit adoption hearing and either (1) express support for the permit as-is and praise assistance from Regional Water Board staff; (2) express objection to specific and significant provisions (possibly reaching an agreement with Regional Water Board staff and Board members that was not possible without the pressure of a public forum); or (3) counter comments from other entities that may be introduced during the public hearing. LWA will work with City staff to identify potential comments for the hearing. LWA will also attend the permit adoption hearing and provide technical support to the City as needed.

LWA will review the final, adopted order to identify changes or mistakes that could render the content of a particular provision different than originally intended. LWA will then compile a list of special studies, status reports, and monitoring requirements and prepare a schedule and compliance plan to help the City keep track of required activities during the 5-year permit term. A draft version of the compliance plan will be submitted to City staff for review and approval prior to finalizing.

## **Task 12 – Drinking Water System NPDES Permit**

The State Water Resources Control Board (State Water Board) adopted the “Statewide NPDES Permit for Drinking Water System Discharges to Waters of the U.S.” on November 18, 2014. The Drinking Water System NPDES Permit Order (WQ Order 2014-0194-DWQ) is a general permit that covers some planned discharges and most emergency discharges from potable water

pipelines, tanks, reservoirs, and water treatment plants. The City is seeking NPDES permit coverage for pipeline breaks, transmission system failures, equipment maintenance activities, and emergency overflows at the Kimball Water Treatment Plant. A Notice of Intent (NOI) must be submitted by September 1, 2015.

LWA will prepare a draft NOI for review and approval by City staff. The NOI will include a description of the drinking water system, a list of potentially affected water bodies, and Best Management Practices (BMPs) that will be implemented. The final NOI package will be submitted to the State Water Board. When approved, the State Water Board will issue a Notice of Applicability (NOA) to the City.

Attachment A  
City of Calistoga  
Professional Services by Larry Walker Associates  
Contract Amendment No. 8

**Estimated Costs for Ongoing Permit Assistance**

(July 1, 2015 through June 30, 2016)

Task	Description	LWA Labor Hours and Rates (1)						Total Hours	Total Labor Costs	Other Direct Costs	Total Costs
		Project Manager:	Senior Engineer	Project Engineer II:	Project Engineer I:	Project Engineer I:	Contract Administrator:				
		Denise Conners	Mike Trouchon Gorman Lau	Alina Constantinescu	Elizabeth Yin Danielle Moss	Jenny Bayley	Michelle Benson				
		\$240	\$210	\$190	\$155	\$135	\$140				
1	<b>Preparation of Permit Compliance Reports</b> Prepare monthly SMRs, annual reports, technical memoranda, or workplans specified by the Regional Water Board, NPDES permits, CDO, and recycled water permit.	40		80	24	40		184	\$33,920	0	\$33,920
2	<b>General Consulting</b> Address questions from City staff, respond to compliance issues that may arise, and update City of new/projected regulatory requirements.	60	24	24	24	40		172	\$33,120	\$100 (2)	\$33,220
3	<b>Pollution Prevention Assistance</b> Assist with implementation of the pollution prevention program, revise program (as needed) to address identified constituents of concern, and prepare 2015 Annual Pollution Prevention Report.	4			20			24	\$4,060	0	\$4,060
4	<b>Disinfection Byproducts Compliance</b> Review monitoring results, identify/assess operational changes, and prepare monthly progress reports.	16	8			24		48	\$8,760	0	\$8,760
5	<b>Napa River Collaborative Monitoring</b> The next collaborative monitoring event will occur during the upcoming WWTP NPDES permit term (estimated 2017 to 2019).							0	0	0	0
6	<b>Project Management</b> Prepare monthly progress reports, track budgets and schedules, ensure implementation of contract conditions.	16					40	56	\$9,440	0	\$9,440
7	<b>Mixing Zone Study</b> If required, model discharges from the outfall at the 20 million gallon storage pond to determine dilution and mixing zone characteristics. Prepare mixing zone report for Regional Water Board review and approval.	24			24			48	\$9,480	\$400 (2,3)	\$9,880
8	<b>Sanitary Sewer Management Plan (SSMP) Internal Audit</b> Review SSMP and Sanitary Sewer Overflow (SSO) reports, evaluate effectiveness of the SSMP and compliance with WDR provisions, identify deficiencies and recommend revisions. Prepare internal audit report and assist the City with revising the SSMP.			36		8		44	\$7,920	\$100 (2)	\$8,020
9	<b>CIQWS Electronic Data Management Tool (EDMT)</b> Finalize the EDMT, provide training of City staff in using EDMT, document electronic data reporting procedures.	4	56	32				92	\$18,800	\$200 (2)	\$19,000
10	<b>WWTP NPDES Permit Application</b> This task was completed on May 1, 2015. No additional activities are predicted during FY 2015-16.							0		0	0
11	<b>WWTP NPDES Permit Adoption</b> Review and edit Administrative Draft permit, provide edits to Regional Water Board staff. Review Tentative Order Permit and identify issues of concern, prepare formal comment letter. Identify comments for permit adoption hearing, support City staff during hearing. Review final adopted Order and develop 5-year schedule of compliance activities and monitoring requirements.	48		24	24	40		136	\$25,200	0	\$25,200
12	<b>Drinking Water System NPDES Permit</b> Prepare draft NOI that includes description of the drinking water system, list of potentially affected water bodies, and Best Management Practices (BMPs) that will be implemented. Prove NOI to State Water Board for approval.	8			36			44	\$7,500	0	\$7,500
<b>TOTAL PROJECT COSTS (4)</b>		<b>220</b>	<b>88</b>	<b>196</b>	<b>152</b>	<b>152</b>	<b>40</b>	<b>848</b>	<b>\$158,200</b>	<b>\$800</b>	<b>\$159,000</b>

(1) The LWA hourly rates for 2015/16 are shown. Rates are typically adjusted on July 1st of each year.

(2) Estimated transportation costs for trips to/from Calistoga.

(3) Estimated equipment costs if dye study is needed to determine mixing zone characteristics.

(4) The cost estimate is based on best available information and a projections of activities required during FY 2015/16. If it appears the budget will be exceeded, LWA will notify the City and discuss approach before proceeding with additional work.