

TO: Meg Williamson, Acting City Manager
FROM: Dick McKinley, Public Works Director
SUBJECT: Wastewater Local Limits Study
DATE: January 5, 2016

NEEDS: For City Council to consider authorizing the City Manager to enter into an agreement with Larry Walker Associates to develop updated local limits for the City wastewater system.

FACTS:

1. Local limits are numeric limits in the sewer use part of Municipal Code that restrict how much of certain pollutants may be discharged into the City's sewer system by industries.
2. The purpose of local limits is to protect the City's sewer infrastructure and operations staff and prevent pollution from passing into the Salinas River.
3. The existing local limits were developed in 2009, prior to upgrade of the wastewater treatment plant.
4. The upgraded treatment plant removes pollutants more effectively than the old plant, so the existing local limits are now outdated (e.g., the existing ammonia limit may be relaxed).
5. The Regional Water Quality Control Board (RWQCB) expects local limits to be developed in strict accordance with Title 40, Part 403 of the Code of Federal Regulations.
6. An experienced professional is needed to develop science-based and legally defensible local limits. Third-party objectivity is important when establishing limits.
7. Staff solicited proposals from several professional consulting firms that specialize in developing local limits for municipalities. The City received two proposals.
8. A committee of staff independently reviewed the proposals and reached consensus that Larry Walker Associates (LWA) of Davis, California, is the most highly qualified to prepare a local limits study for the City. LWA is also qualified to assist the City with next year's renewal of the City's permit to discharge wastewater to the Salinas River.
9. Staff negotiated a scope of work and fee with LWA, which is attached. Tasks include preparation of a sampling plan, analysis of all relevant data, development of local limits in accordance with federal requirements, and preparation of a report that will support an update of the sewer use part of the Municipal Code. LWA will also assist staff with preparation of the City's

application to the RWQCB for renewal of its discharge permit. The fee for this scope of work is \$64,770.

**ANALYSIS &
CONCLUSION:**

LWA is likely the most experienced firm in California at developing local limits for California municipalities. LWA has successfully completed very similar work for Richmond, Grass Valley, Santa Barbara, Goleta, and San Luis Obispo (among many others). LWA has proven methods and efficient analytical tools for developing local limits in accordance with relevant state and federal regulations. LWA has a good working relationship with the RWQCB.

Being able to maintain or possibly relax the local limits means that local businesses won't have to pay for pre-treatment, and the City will be better suited to recruit new industry.

It would be in the City's best interest to proceed with hiring of LWA for development of updated local limits and assistance with the City's discharge permit renewal application. After LWA completes its work, staff will prepare and present an update to the Municipal Code.

**POLICY
REFERENCE:**

Code of Federal Regulations, Title 40, Part 403

**FISCAL
IMPACT:**

The proposed expenditure of \$64,770 is included in the current budget (professional services) for the Sewer Enterprise Fund and will not adversely affect the fund.

OPTIONS:

- a. Adopt Resolution No. 16-XXX, authorizing the City Manager to enter into a professional services agreement with Larry Walker Associates for development of updated local limits and assistance with a discharge permit renewal application, for an amount not to exceed \$64,770.
- b. Amend, modify or reject the above option.

ATTACHMENTS:

1. Resolution No. 16-XXX
2. LWA's scope of work and fee

RESOLUTION NO. 16-XXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES
APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH LARRY WALKER ASSOCIATES
TO PREPARE LOCAL LIMITS AND PROVIDE DISCHARGE PERMIT APPLICATION SUPPORT

WHEREAS, local limits are numeric limits in the sewer use part of the Municipal Code that restrict how much of certain pollutants may be discharged into the City's sewer system by industries. The purpose of local limits is to protect the City's sewer infrastructure and operations staff and prevent pollution from passing into the Salinas River.

WHEREAS, the existing local limits were developed in 2009, prior to upgrade of the wastewater treatment plant. The upgraded treatment plant removes pollutants more effectively than the old plant, so the existing local limits are now outdated.

WHEREAS, the Regional Water Quality Control Board (RWQCB) expects local limits to be developed in strict accordance with Title 40, Part 403 of the Code of Federal Regulations.

WHEREAS, an experienced professional is needed to develop science-based and legally defensible local limits. City staff solicited proposals from several professional consulting firms that specialize in developing local limits for municipalities. The City received two proposals. A committee of staff independently reviewed the proposals and reached consensus that Larry Walker Associates (LWA) of Davis, California, is most qualified to prepare a local limits study for the City. LWA is also qualified to assist the City with upcoming renewal of the City's permit to discharge wastewater to the Salinas River.

WHEREAS, staff negotiated a scope of work and fee with LWA. Tasks include preparation of a sampling plan, analysis of all relevant data, development of local limits in accordance with federal requirements, and preparation of a report that will support an update of the Municipal Code. LWA will also assist staff with preparation of the City's application to the RWQCB for renewal of its discharge permit. The fee for this scope of work is \$64,770.

WHEREAS, the expenditure of \$64,770 is included in the current budget (professional services) for the Sewer Enterprise Fund and will not adversely affect the fund.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1. The City Council hereby authorizes the City Manager to enter into a professional services agreement with Larry Walker Associates for development of updated local limits and assistance with a discharge permit renewal application, for an amount not to exceed \$64,770.

PASSED AND ADOPTED by the City Council of the City of El Paso de Robles this 5th day of January 2016, by the following votes:

AYES:

NOES:

ABSTAIN:

ABSENT:

Steve Martin, Mayor

ATTEST:

Kristen L. Buxkemper, Deputy City Clerk



Effective Communication: In our experience, many projects hinge on successful communication between the client and LWA. As a result, our approach is for **Gorman Lau**, the Project Manager, to be the key point of contact for the City. **Mr. Lau** has successfully guided local limits projects for numerous municipal agencies throughout the state, including several municipal agencies in the Central Coast region, worked effectively with regulatory agencies to get proposed local limits approved, and presented topics about local limits at conferences and workshops.

Proposed Scope of Work

Task 1. Conduct Kick-off Meeting/Site Visit

To effectively initiate the project, LWA will conduct a meeting with City staff to kick-off the project. The purpose of this meeting is to confirm the project understanding, discuss the project approach and schedule, identify the project responsibilities and persons of contact, and gather relevant information or data needed as part of this effort. LWA will prepare an agenda for the meeting. As part of the kick-off meeting, LWA will also conduct a site visit of the Wastewater Treatment Plant (Plant) to understand wastewater treatment processes used by the City, Plant upgrades, and identify existing and potential monitoring locations.

Task 2. Review Existing Data and Information

LWA will review relevant background data and information to determine the extent of any additional sampling that may be required for updating or developing local limits. The data and information to be reviewed will include, at a minimum, the following:

- Sewer Use Ordinance;
- Recent Annual Reports;
- Current industrial user survey;
- Recent industrial monitoring data;
- Current National Pollutant Discharge Elimination System (NPDES) permit;
- Recent Water Quality Control Facility data (influent, effluent, biosolids);
- Recent collection system data; and
- Process unit diagrams and design capacities.

LWA anticipates that the City will provide the above information in electronic format (e.g., Excel, PDF).

Task 3. Conduct Reasonable Potential Analysis and Calculate Estimated Effluent Limitations

The City is in its final year of its NPDES permit (expires June 25, 2016), and it is unclear if the Central Coast Regional Water Quality Control Board (Regional Water Board) will re-issue the City's NPDES permit prior to the expiration date of the current NPDES permit. Because it is anticipated that a new NPDES permit may be re-issued in the relative near term, it is critical to determine if NPDES permit effluent limitations may change because local limits for some pollutants may be dependent on those effluent limitations.

The Regional Water Board conducts a reasonable potential analysis (RPA) to identify pollutants that may require effluent limitations in an NPDES permit. Procedures for conducting an RPA and calculating effluent limitations is in the State Water Resources Control Board (State Water Board)'s *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries*. LWA will conduct a reasonable potential analysis (RPA) and calculate estimated effluent limitations in order to understand the potential implications of effluent limitations in the City's next NPDES permit on the local limits. LWA will prepare a technical memorandum summarizing the RPA and the estimated effluent limitations. While the data set that may be used for the Regional Water Board's RPA and effluent limitation calculations during the City's NPDES permit renewal, this information can also be used to provide the City with some



guidance of future NPDES permit effluent limitations. LWA will prepare a technical memorandum summarizing the RPA that can be submitted to the Regional Water Board as part of Task 8 described below.

Task 4. Develop Local Limits Sampling and Analysis Plan

In accordance with USEPA's 2004 Local Limits Development Guidance (Local Limits Guidance), sampling is typically conducted for a minimum of two to fourteen consecutive days depending on the pollutant. Typical sampling locations for local limits studies include the following:

- Domestic collection system – A minimum of one representative collection system trunk line that does not contain permitted flows (i.e., residential/commercial, residential) is sampled to characterize “uncontrollable” pollutant sources. This information is necessary to accurately assess the maximum allowable industrial loading (MAIL) for pollutants.
- Headworks – The influent is sampled to determine the presence of pollutants of concern (POCs) and to provide data to conduct headworks loading analyses and calculate treatment process removal efficiencies. Removal efficiencies are used to convert biological process inhibition restrictions into corresponding allowable headworks loadings (AHLs). This sampling location may or may not include septage waste.
- Primary treatment effluent – The primary treatment effluent is sampled to provide data to calculate AHLs to protect biological treatment processes.
- Final effluent – The final effluent is sampled to provide data to calculate treatment plant removal efficiencies and to calculate AHL limits.
- Anaerobic digester effluent – The anaerobic digester is sampled to provide data to convert digester inhibition levels into corresponding AHLs.
- Biosolids disposal – Waste activated sludge is sampled for the purpose of comparing results to State and Federal biosolids regulations. Additionally, sample results are used to determine AHLs based on these biosolids regulations. Biosolids data may also be used to estimate in-plant removal efficiencies for conservative pollutants with insufficient detected final effluent results.

Based on the data and information reviewed and developed in Tasks 2 and 3, LWA will work with the Industrial Waste Manager, Wastewater Treatment Plant Supervisor, and Wastewater Resources Manager to develop a Local Limits Sampling and Analysis Plan that outlines any additional sampling that must be conducted to obtain sufficient data to develop technically-based local limits. The Local Limits Sampling and Analysis Plan will be developed following Local Limits Guidance and 40 CFR Part 403 regulations and include the following elements:

- Plant description;
- Local limits development approach;
- Proposed sampling plan, including POCs and sampling locations and procedures;
- Appropriate analytical detection limits for each POC;
- Sampling containers, container cleaning procedures, and sampling procedures to avoid contamination; and
- Appropriate quality assurance/quality control (QA/QC) program for sampling and analytical control.

As stated previously, LWA will use existing data to supplement any additional sampling that is needed in order to reduce costs associated with sampling. LWA has used this approach effectively in other municipalities to reduce the number of consecutive days of sampling needed and associated labor, equipment, and analytical costs. LWA will prepare and submit a draft Local Limits Sampling and Analysis Plan to the City for review and comment. Based on comments received from the City, LWA will finalize the Local Limits Sampling and Analysis Plan. Submittal of the Local Limits Sampling and Analysis Plan to the Regional Water Board approval is not necessary. LWA staff are not health and



safety experts and any sampling conducted as part of this effort must adhere to the applicable City's health and safety requirements.

Task 5. Provide Local Limits Sampling Support

Local Limits Guidance recommends that all sampling be conducted under normal operating conditions. Sampling will follow the flow of the treatment process based on the hydraulic residence time (i.e., effluent sampling will be taken after influent sampling and lagged, to the extent practicable, by the hydraulic residence time). City staff will implement the Local Limits Sampling and Analysis Plan and conduct all sampling activities.

LWA will only provide technical support, including training for the sampling effort and assisting, as needed, with analytical laboratory coordination. All necessary analytical and sampling equipment procurement costs associated with local limits sampling will be borne by the City.

Task 6. Update/Develop Local Limits

Using site-specific data, historic data, and data obtained during local limits monitoring, LWA will calculate local limits for POCs following Local Limits Guidance. Local limits will be based on current NPDES permit requirements and collection system and Plant performance data. Numeric local limits, based on AHL loading criteria, will be established based on one or more of the following criteria:

- Pass-through;
- NPDES permit effluent limitations;
- Interference with or inhibition of treatment process operations;
- Biosolids disposal restrictions; or
- Other applicable limitations.

LWA will prepare a draft Local Limits Report presenting the proposed local limits and technical justification for their establishment. Local limits will be presented as maximum allowable industrial loads (MAILs), which will be submitted to the Regional Water Board for approval. LWA will collaborate with the City to determine the appropriate allocation method (e.g., uniform concentration limits, mass load limits) for distributing the MAILs to the City's industrial users.

The draft Local Limits Report will be submitted to the City for review and comment. LWA will meet with City staff to present the draft report and to discuss comments that the City may have on the draft report. LWA will prepare a final draft Local Limits Report for the City.

Task 7. Assist with Public Notice of Local Limits Update/Development

The City is required to provide public notice of the update to the local limits. This requirement may be met upon completion of the draft Local Limits Report phase, final draft Local Limits Report, or following Regional Water Board review. LWA will work with City staff to determine the appropriate time to provide public noticing. LWA will assist the City with providing public notice of the update of the City's local limits in addition to providing necessary presentation material and responding to questions and comments from the City Council and the public.

Task 8. Provide As-Needed NPDES Permit Support

As discussed above, the City is in initial steps of applying for a new NPDES permit. To assist the City in this process, LWA will provide as-needed NPDES permit support. This work effort may include:

- Providing technical support in preparing the Report of Waste Discharge (ROWD);
- Reviewing the existing NPDES permit and providing informal recommendations for any additional monitoring that should be conducted ahead of the NPDES permit renewal process;
- Reviewing the basis of existing copper and selenium effluent limits and developing a recommendation as to whether or not a translator study is needed;
- Preparing technical communication (e.g., appendix to ROWD) to justify application of intake water credit to



the selenium effluent limit; and

- Recommending alternative language in the NPDES permit related to chlorine based on the latest State Water Board guidance.

Task 9. Project Management

LWA will provide sufficient management resources to track project schedule and maintain sufficient personnel for project completion. LWA will also track and verify all expenses and ensure the accuracy of each invoice and consistency with the approved fee schedule. LWA will be responsible for resolving discrepancies as necessary.

Project Schedule

LWA developed a tentative project schedule below based on the proposed scope of work outlined in the Section 5. We have successfully implemented similar schedule approaches on previous projects that have the similar requirements and relevant scope. LWA will work with the City to revise the tentative project schedule during the kick-off meeting (Task 1) to meet the needs of the City.

Task	Task Description	Tentative Schedule from Notice to Proceed
1	Conduct Kick-off Meeting/Site Visit	1 week
2	Review Existing Data and Information	3 weeks
3	Conduct Reasonable Potential Analysis and Calculate Estimated Effluent Limitations	4 weeks
4	Develop Local Limits Sampling and Analysis Plan	
	- Prepare Draft Sampling and Analysis Plan	6 weeks
	- Prepare Final Sampling and Analysis Plan	8 weeks
5	Provide Local Limits Sampling Support	16 weeks ⁽¹⁾
6	Update/Develop Local Limits	
	- Prepare Draft Local Limits Report	20 weeks
	- Meet with City to discuss Draft Local Limits Report	21 weeks
	- Prepare Final Draft Local Limits Report	22 weeks
7	Assist with Public Notice of Local Limits Update/Development	⁽²⁾
8	Provide As-Needed NPDES Permit Support	As-needed
9	Project Management	Ongoing

(1) Local Limits Guidance recommends conducting sampling for local limits update/development during dry weather to limit the potential impacts from inflow, infiltration, and precipitation. Tentatively, local limits sampling is anticipated to take three weeks, including two weeks for preparation (e.g., coordination with analytical laboratory, procuring sampling bottles and equipment) and one week for sampling. This schedule also anticipates a one-month turnaround time for receiving sample results from the analytical laboratory.

(2) LWA will work with the City to determine the appropriate time to conduct this task.

Fee Estimate

The fee estimate to perform the proposed scope of work presented in Section 5 is provided in **Appendix B**. Fees will be charged on a time and material basis according to LWA's most current standard rate schedule. Analytical and sampling equipment procurement costs associated with local limits sampling will be borne by the City.

Other Information

This proposal will remain valid for ninety (90) days. LWA does not have potential conflicts of interest associated with the provisions of these services or the RFP. LWA has reviewed the City's Master Consultant Services Agreement and does not request modifications to it.

APPENDIX B

City of El Paso de Robles
Development Industrial Waste Local Limits

Cost Estimate
Larry Walker Associates
October 23, 2015

Task	Description	Labor Hours						Total Hours	Total Labor Costs	Other Direct Costs	Total Cost
		Senior Advisor (\$240/hr)	Project Manager (\$215/hr)	Senior Engineer (\$215/hr)	Project Engineer II (\$190/hr)	Project Engineer I (\$135/hr)	Contract Administrator (\$140/hr)				
1	Conduct Kick-off Meeting/Site Visit		12					12	\$ 2,580	\$ 200	\$ 2,780
2	Review Existing Data and Information	2	4			16		22	\$ 3,500		\$ 3,500
3	Conduct Reasonable Potential Analysis and Calculate Estimated Effluent Limitations		4		20			24	\$ 4,660		\$ 4,660
4	Develop Local Limits Sampling and Analysis Plan										
	- Prepare Draft Sampling and Analysis Plan		4			24		28	\$ 4,100		\$ 4,100
	- Prepare Final Sampling and Analysis Plan		2			4		6	\$ 970		\$ 970
5	Provide Local Limits Sampling Support			12				12	\$ 2,580		\$ 2,580
6	Update/Develop Local Limits										
	- Prepare Draft Local Limits Report	2	2	48		12		64	\$ 12,850		\$ 12,850
	- Meet with City to Discuss Draft Local Limits Report		12					12	\$ 2,580	\$ 200	\$ 2,780
	- Prepare Final Draft Local Limits Report	2	2	12				16	\$ 3,490		\$ 3,490
7	Assist with Public Notice of Local Limits Update/ Development	2	4	16				22	\$ 4,780	\$ 200	\$ 4,980
8	Provide As-Needed NPDES Permit Support										\$ 20,000
9	Project Management		4				8	12	\$ 1,980	\$ 100	\$ 2,080
Total		8	50	88	20	56	8	230	\$44,070	\$ 700	\$ 64,770