L A R R Y W A L K E R

ASSOCIATES

December 29, 2006

Ms. Susan Halpin Wastewater Superintendent City of Lompoc 1801 W. Central Avenue Lompoc, California 93436

Subject: Scope of Work for Molybdenum Characterization Study for the City of Lompoc

Dear Ms. Halpin:

Larry Walker Associates (LWA) is pleased to provide the City of Lompoc with a scope of work and cost estimate for work related to the characterization of molybdenum in San Miguelito Creek, groundwater wells downgradient of the City's discharge into San Miguelito Creek, and subsequently the Santa Ynez River. The primary purpose of this study is to determine if the presence of molybdenum in San Miguelito Creek is an uncontrollable water quality condition and to determine if the down gradient groundwater used for intended beneficial uses meets the adopted water quality objective contained in the Water Quality Control Plan for the Central Coast. The primary tasks included in this scope of work include the development of a study plan as will be required by the Regional Water Quality Control Board for the Central Coast (Regional Board); water quality monitoring of the City's groundwater supply wells, influent, effluent and surface and ground waters upstream and downstream of the City's discharge point; preparation of characterization study report; and regulatory assistance for activities Board associated with this project.

LWA's scope of services, schedule, and cost estimate are presented below.

SCOPE OF SERVICES

LWA tasks anticipated under this scope of work are as follows:

- Task 1 Develop Detailed Study Plans
- Task 1.1: Obtain and review existing data and information regarding molybdenum levels in the City's water supply, influent, effluent, San Miguelito Creek, and the Santa Ynez River. The existing data will be used to assist in determining the sampling locations.
- **Task 1.2:** Develop a draft study plan for the collection of additional molybdenum monitoring data.
- **Task 1.3:** Develop a Quality Assurance Protection Plan (QAPP) to ensure that all samples are properly collected and analyzed.

- **Task 1.4:** Meet with Regional Board staff to review the draft study plan and QAPP. The cost estimate is based on needing to meet with the Regional Board twice to discuss the study plan and QAPP before implementing any water quality monitoring activities.
- Task 1.5: Finalize study plan and QAPP based on comments received from the Regional Board.

Task 2 Conduct Water Quality Monitoring

- Task 2.1: Based on the Study Plan and QAPP submitted to the Regional Board, LWA will conduct 12 months of monitoring at approximately 22 sites. The primary focus of the monitoring program will be to determine the quality of San Miguelito Creek prior to the City's discharge of effluent into the creek and the quality of down gradient groundwaters used for irrigation purposes to determine compliance with the water quality objective.
- Task 2.2: After the first six (6) months of monitoring, LWA will assess the data on hand and prepare a preliminary report and presentation for the Regional Board. LWA will participate in the presentation to the Board with the City. As part of the Board presentation, the City will be seeking direction and guidance from the Regional Board regarding the efficacy of continuing forward on this study path versus building new treatment facilities to address molybdenum. The City has requested the midmonitoring review in order to make crucial facility planning decisions that must occur before the 12 month monitoring program can be completed.
- **Task 2.3:** Process data and provide post event summary reports to the City.

Task 3 Characterization Study Report

- Task 3.1 Upon completion of the 12 months of monitoring, LWA will prepare a draft Characterization Study Report based on the monitoring information collected.
- **Task 3.2** Attend two meetings with the Regional Board and the City of Lompoc to review the draft Characterization Report.
- **Task 3.3** Finalize Characterization Study Report based on comments received from the Regional Board and the City.

Task 4 Regulatory Assistance

- **Task 4.1:** Provide on-call regulatory assistance to the City of Lompoc regarding the molybdenum issue.
- **Task 4.2:** Meet with the City and the Regional Board as necessary to address on-going regulatory issues related to molybdenum. For this task, LWA has budgeted for 5 meetings, including travel time and direct travel costs.

Task 5 Project Management and Contract Administration

Task 5.1: LWA will provide on-going project management, which includes regular communications with the City regarding budgets and expenditures and other issues related to the administration of the contract.

SCHEDULE

Table 1 outlines the time frame to complete the corresponding task assuming that the City of Lompoc approves the scope of work and cost estimate at its January 16, 2007 City Council meeting. The time schedule proposed also assumes that the Regional Board does not cause significant delays in providing comments on the study plan, the QAPP and the preliminary monitoring results.

Table 1. Estimated Time Frame to Develop and Complete Characterization Study Plan

Task		Time Frame to Complete Task
Task 1	Develop Detailed Study Plans	Jan 07 - May 07
Task 2	Conduct Water Quality Monitoring	June 07 – May 08
Task 2.2	Prepare and Present Preliminary Monitoring Results	Jan 08 – Feb 08
Task 3	Prepare Characterization Study Report	June 08 – Nov 09
Task 4	Regulatory Assistance	Ongoing
Task 5	Project Management & Administration	Ongoing

COST ESTIMATE

To conduct tasks 1-5 above, LWA has estimated its costs based on an approximated number of hours associated with each task. A detailed cost estimate per task is attached. LWA proposes to conduct tasks 1-5 for a cost not to exceed \$287,886. The cost estimate as proposed by LWA estimates labor costs based on the anticipated billing rates for each year of the project. Our current rate schedule, which is effective through June 30, 2007, is attached.

FIRM QUALIFICATIONS

Larry Walker Associates (LWA) is a privately owned firm located in Davis, Lafayette, Santa Monica, and Ventura, California that provides environmental engineering and management services throughout California. Larry Walker, who is the former Executive Officer of the California State Water Resources Control Board, founded LWA in 1979. The firm currently has a staff of 38 professional employees who provide a wide range of consulting services ranging from traditional water and wastewater engineering to highly specialized water quality, storm water and watershed management services. Examples of the specialized services provided include regulatory and NPDES permit assistance, water quality monitoring, storm water management, total maximum daily load (TMDL) development, waste minimization and pollution prevention, revenue programs, rate and impact fee studies, and construction grant/loan management.

LWA's NPDES wastewater and storm water permit assistance has included permit drafting, permit language negotiations with Regional Board staff, assistance with permit compliance issues, preparation of required technical reports, and assistance with enforcement proceedings. LWA's regulatory and NPDES permit assistance has also included the preparation of comments on important federal, state and local regulations (e.g., Bay-Delta policies, federal water quality standards regulations, draft California Toxics Rule, National Toxics Rule, Great Lakes Initiative, statewide water quality control plans, and regional Basin Plans) that might affect NPDES permit terms and conditions.

LWA's water quality monitoring work has included development and implementation of a number of large multi-agency, multi-year monitoring studies to collect specific environmental information, including the design of a comprehensive water quality monitoring program for the Sacramento River watershed. Water quality work has also included performance of ambient characterization work to support development of water quality-based effluent limits, impact assessments for proposed projects, development of site specific criteria, dilution studies, and use attainability assessments.

PRIMARY STAFF

The primary staff that LWA has identified for the project includes Ms. Tess Dunham, Mr. Chris Minton and Dr. Juliet Simpson. Ms. Dunham is an Associate with the firm and will oversee the project and act as a senior advisor. She will participate in meetings with the Regional Board and be the City's primary contact for regulatory assistance. Ms. Dunham is an attorney licensed with the State Bar of California and has over 15 years of regulatory experience, including negotiating complex permits and regulatory programs with Regional Water Quality Control Boards throughout California. Mr. Chris Minton is an experienced scientist with over seven years of experience in the environmental field. Since joining Larry Walker Associates in 2002, Chris has been heavily involved in watershed studies and planning as well as the development of Site-Specific Objectives. Additional work has included the development of a Use Attainability Analysis for the City of San Luis Obispo. Chris holds a BS in Geology from the University of Washington and a master's degree in Environmental Science & Management (MESM) from the Bren School at UC Santa Barbara, where his studies emphasized watershed planning. Dr. Simpson is a Project Scientist who recently joined the LWA team. She has a Ph.D. in Ecology, Evolution and Marine Biology from U.C. Santa Barbara, where she studied the influence of growing human populations on the ecology of streams and estuaries in southern California. Since 2003, Dr. Simpson has been working as a consultant to multiple private and non-profit firms on issues relating to water quality, algal and bacterial blooms, eutrophication, EPA Rapid Bioassessment protocols, and TMDL development. She has extensive experience with biomonitoring of plant, algal, and invertebrate communities.

LWA welcomes the opportunity to work with the City of Lompoc on this very important project. Please contact Tess Dunham in our Davis office (530-753-6400, tessd@lwa.com) if you have any questions or need additional information.

Sincerely,

Tom Grovhoug, President Larry Walker Associates, Inc.

(530) 753-6400

Enclosures:

LWA cost estimate dated December 20, 2006