



California Regional Water Quality Control Board

Central Valley Region

Steven T. Butler, Chair



Winston H. Hickox
Secretary for
Environmental
Protection

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Governor

TO: Darlene Hardy, Chief
Contracts Section

FROM: Valerie Connor
Senior Environmental Specialist
Sacramento River Watershed Unit

DATE: June 21, 2000

SIGNATURE: Valerie Connor

SUBJECT: REQUEST FOR CONTRACT WITH THE DEPARTMENT OF HEALTH SERVICES: "SOURCES AND LOADS OF DRINKING WATER CONSTITUENTS OF CONCERN"

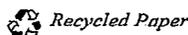
1. Timeframe: The contract needs to be executed before 1 July 2000.
2. Project Officials: The Regional Board project manager will be Valerie Connor. The Department of Health Services will be providing the funding and interagency agreement. Carl Lischeske will be the Department of Health Services contract manager. Valerie Connor will be responsible for 1) meeting the technical objectives, 2) coordinating activities with other participating agencies, 3) coordinating the technical details with the contract manager, and 4) providing status reports and the final report.

Dr. Valerie Connor
Central Valley Regional Water Quality Control Board
3443 Routier Road, Suite A
Sacramento, CA 95827
(916) 255-3111

Mr. Carl Lischeske
Department of Health Services
Division of Drinking Water and Environmental Management
Drinking Water Program
601 North 7th Street, MS 396
P.O. Box 94732
Sacramento, CA 94234-7320

3. Term of the Contract: The proposed start date will be 1 July 2000. The contract will run through 30 June 2001.
4. Scope of Work: Attachment A
5. Reporting:

California Environmental Protection Agency



- 5.1 Not later than 15 October 2000, and quarterly thereafter, during the life of this agreement, the **Project Manager** shall provide a written progress report to the **Department of Health Services' Contract Manager** outlining the work performed under each task and any problems encountered and describe measures taken to correct these problems. The **Project Manager** shall include in these progress reports a computer disk containing all test results to date in a format approved by the **Regional Water Quality Control Board**. Database format will be developed in coordination with the Department of Water Resources. Invoices submitted by the contractor shall be paid contingent upon receipt of the quarterly reports acceptable to the Contract Manager.

- 5.2 The **Project Manager** will prepare and submit a draft final report that summarizes the monitoring results of drinking water constituents of concern and progress made toward the development of a drinking water policy. Three copies of the draft final report shall be submitted to the **Contract Manager**. The report shall include, but is not limited to, the following:
 - a. Results of QA/QC work.
 - b. A summary of all work performed and data analyzed under this study. The data and statistical analyses shall be provided as raw data and in summary tables and figures.
 - c. A discussion of the results of this study. This discussion shall include:
 - 1. The location for all sampling events, including the GPS latitude and longitude of each location,
 - 2. A calculation of the loads for each constituent monitored;
 - 3. An assessment of the relative magnitude of point source discharges relative to non point sources.

- 5.3 The **Project Manager** will prepare a final report which addresses comments made on the draft final report by the **Contract Manager**.

Task Product: Database with monitoring results, Quarterly Reports, draft final report, and final report.

6. Schedule of Completion Dates:

<u>Product</u>	<u>Due Date</u>
1. Monitoring Plan including Quality Assurance Plan	15 October 2000
2. Report: Summary of First Quarter	30 days after first quarter
3. Report: Existing NPDES Data Summary	15 October 2000
4. Report: Summary of Second Quarter	30 days after second quarter

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|-------------------------------------|-----------------------------|
| 5. Report: Summary of Third Quarter | 30 days after third quarter |
| 6. Draft Final Report | April 2001 |
| 7. Final Report and Database | June 2001 |

7. Budget:**Personal Services:**

Classification	Hours	Salary (Hourly Rate)	Total Estimated Cost
ES III	1777	\$33.00	\$58,641.00
ES IV	127	\$38.00	\$4826.00
		Subtotal Base Salaries	\$63,467.00
		Fringe Benefits @ 32%	\$20,349.34
		Indirect Costs (Operating Expense and Overhead) @ 79%	\$66,183.66
		Total Personal Services	\$150,000.00

Equipment

\$0.00

Travel Expenses

\$0.00

Other:

Student Intern(s)	3,000 Hours at \$10.00 per Hour	\$30,000.00
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Note: The student intern will be used for data management and data entry.

Total Contract Amount:	\$180,000.00
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8. Payment Provisions:

- 8.1 The total amount of the contract is \$ 180,000.00
- 8.2 The Contractor will be paid, in arrears, on a quarterly basis, upon submittal of quarterly reports and invoices which properly detail all charges and expenses incurred in performance of this agreement.
- 8.3 Invoices shall be submitted to:

Ms. Beverly Henslee
Department of Health Services
Division of Drinking Water and Environmental Management
601 North 7th St., MS 396
Sacramento, CA 94234-7320

9. Property/Equipment:

No new equipment is necessary to complete this project.

ATTACHMENT A

Scope of Work:

The Central Valley Regional Water Quality Control Board is beginning a four year program to develop a basin plan amendment that will include a drinking water policy for the region. This work plan outlines the tasks to be completed during the first 12 months of the program. The tasks include conducting a monitoring study to assess the sources and loads of drinking water constituents of concern (as identified by CALFED) with an emphasis on National Pollution Discharge Elimination System (NPDES) discharges. Geographic Positioning System (GPS) coordinates (latitude and longitude) will be provided with each sampling location. The cost of sample chemical analysis is not included in this work plan or budget, but will be provided by other sources. Monitoring results will be summarized in a final report and stored in a database available to interested parties. In addition to the monitoring study, the contractor will collect and summarize existing NPDES monitoring data. The contractor will also participate in, and coordinate with the CALFED Drinking Water Constituents Group. Activities will include attending all Drinking Water Constituents Group meetings, performing applicable meeting preparation and follow-up activities, reviewing technical documents and other duties as required to ensure that the activities conducted by the group are coordinated with the Regional Board Basin Planning activities related to the development of a drinking water policy.

Relationship of proposed scope of work to Drinking Water Policy Development: This project includes only the first 12 months of a four year program that includes general tasks required to develop a Basin Plan Policy for addressing drinking water quality issues in the Delta and upstream in tributaries to the Delta. It includes three phases: 1) data collation, management, collection and evaluation; 2) compilation of information on costs of treating drinking water and costs and environmental consequences associated with implementing source reduction alternatives; and 3) development of the elements of a drinking water policy. Regional Board staff are looking to the CALFED Drinking Water Constituents Group to provide the framework for coordinating and facilitating collection of most of the information needed in the first two phases. Regional Board staff will work as an active member of the group to ensure that information collected will be adequate for development of a policy. Regional Board staff will take the lead in the third phase and rely on the CALFED Drinking Water Constituents Work Group to provide comments and guidance on draft elements of the policy. This contract specifically funds the first 12 months of work which will focus on monitoring and assessment. Funding for subsequent years will be provided by other sources.

Work to be Performed:

Task 1. Identify and Collect Existing Information on NPDES Sources

This task involves summarizing existing data on the drinking water constituents of concern being discharged by NPDES facilities in the Central Valley.

Subtask 1.1 Prepare a summary report of the status of the existing and future availability of electronic self-monitoring data of NPDES facilities. This includes evaluating the potential of the State Water Resources Control Board System for Water Information Management (SWIM) database and the proposed SWIM phase II database.

Subtask 1.2 Summarize data that is available in a representative sample of NPDES self-monitoring reports. At a minimum, the 10 largest volume NPDES facilities and 10 smaller facilities will be summarized.

Subtask 1.3 Summarize other data sources that may be available to Regional Board staff from reports of waste discharge.

Subtask 1.4 Present results to CALFED group to help evaluate the utility of additional summarizing of historic monitoring data available to staff on point source discharges.

Task Product: Report summarizing existing data on the drinking water constituents of concern being discharged by NPDES facilities in the Central Valley.

Due date: October 15, 2000

Task 2. Design NPDES Monitoring Program

This task involves preparing a monitoring and quality assurance plan to characterize the discharge of drinking water constituents of concern from NPDES facilities.

Subtask 2.1 The monitoring plan will be designed and implemented by Board staff. NPDES facilities will be selected by Regional Board staff and will encompass the range of predicted loads and sources. Sampling will occur over a six month period. Constituents of concern, analytical methods and detection limits will be approved by the Contract Manager and by the CALFED Drinking Water Constituents Group. A total of \$150,000 is available for laboratory analyses. The analytical work is being funded by another source and that source will be responsible for executing contracts with laboratories approved by the CALFED Group. The total number of sites included and the number of samples per facility will depend on the cost per analysis. It is assumed that a minimum of 12 facilities will be monitored monthly for six months.

Subtask 2.2 A Quality Assurance (QA) Project Plan will be developed. The QA plan must be approved by the Contract Manager and the SWRCB QA officer prior to the implementation of the monitoring program.

Task Product: Monitoring Plan containing an approved Quality Assurance Project Plan.
Due date: October 15, 2000.

Task 3. Implement Monitoring Program

This task involves coordinating the collection of samples and providing all samples to the selected analytical lab(s).

Subtask 3.1 NPDES facilities will be notified of the monitoring study. Facilities will be required (section 13267 of the water code) to participate in the study by providing effluent samples and chain of custody forms collected according to the detailed procedures specified in the monitoring and QA plan.

Subtask 3.2 NPDES facilities will be asked to collect effluent samples and ship them via overnight delivery service to the Regional Board office in Ranch Cordova.

Subtask 3.3 Regional Board staff will coordinate the arrival of samples and the distribution of samples to the selected analytical lab (s).

Subtask 3.4 Regional Board staff will provide blind QA blanks, splits and duplicates, as specified in the QA Plan. Staff will also collect samples concurrently with one to two facilities during each sampling period.

Subtask 3.5 Regional Board staff will receive analytical reports from selected lab(s).

Task Products: NPDES facilities' Notification letter and response summary; completed chain of custody forms, analytical laboratory reports to be submitted as an appendix with each quarterly report. Due date: Monitoring will occur for 6 months following acceptance of the monitoring and QA plan. It is anticipated that monitoring will begin in October 2000 and end in March 2001.

Task 4. Evaluate Monitoring Program Results

This task involves summarizing the results of the monitoring study by compiling data from all sources into the database, evaluating the data quality according to the QA plan, calculating load information and assessing all source and load results. A student intern will be responsible for the data management and data entry portions of the project.

Subtask 4.1 All data will be entered into the database by a student intern developed in Task 5 (see below).

Subtask 4.2 Data quality will be evaluated by reviewing the QA results provided by the analytical lab(s) and an analysis of the blind QA samples. Deviations from the QA requirements contained in the QA plan will be immediately brought to the attention of the Contract Manager and the Analytical Lab. Recommended solutions will be implemented and tracked for effectiveness.

Subtask 4.3 Data will be used to determine the NPDES sources and loads for each constituent of concern. NPDES data will be compared to available ambient data to assess the relative contribution of point source NPDES discharges relative to nonpoint sources.

Task Products: Database, Data summary and analysis to be submitted in quarterly and final reports.

Task 5. NPDES Drinking Water Constituents Database

This task involves the creation of a database that can be used by Regional Board staff, DHS, CALFED and other interested parties. Attributes of the database include that it be easily uploaded into the IEP database maintained by the Department of Water Resources and that NPDES self-monitoring reports can be easily loaded into the database. Database format will be developed in coordination with the Contract Manager and the Department of Water Resources (Karl Jacobs).

Task Product: Formatted database. Due Date: December 2000.

Task 6. Participate in CALFED Drinking Water Constituents Workgroup

This task involves working with the CALFED Group to collect and summarize existing ambient data on constituents of concern, identifying supplemental monitoring needs, and designing a detailed monitoring program. CALFED Group will:

- Analyze existing data from all sources at benchmark locations.
- Identify potential existing significant sources.
- Gather and synthesize existing data on loadings.
- Identify supplemental monitoring needs.
- Evaluate potential changes to existing Regional Board self-monitoring requirements.
- Determine data sufficiency overall and identify basin-wide data gaps.
- Develop detailed monitoring program.
- Determine entities to be responsible for monitoring elements.
- Work with other groups to encourage monitoring to fill data gaps.

It is impossible to predict the pace and the detailed activities of the CALFED Group. The contractor will devote 25% of the staff time for this project to assisting the CALFED group with the activities outlined above.

Task Product: A summary of activities conducted under this task will be included in each quarterly report.

Task 7. Reporting:

This task involves all the report preparation associated with the project.

Subtask 7.1 Not later than 15 October 2000, and quarterly thereafter, during the life of this agreement, the Project Manager shall provide a written progress report to the Department of Health Services' Contract Manager outlining the work performed under each task and any problems encountered and describe measures taken to correct these problems.

Subtask 7.2 The Project Manager will prepare and submit a draft final report that summarizes the monitoring results of drinking water constituents of concern and progress made toward the development of a drinking water policy. Three copies of the draft final report shall be submitted to the Contract Manager. The report shall include, but is not limited to, the following:

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A discussion of the results of this study.

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