MEMORANDUM

To:

Jim Dinley, Administrator

Mayor Westover and Members of the Assembly

From:

Mark Buggins, Environmental Superintendent

Through:

Michael Harmon, Director of Public Works

cc:

Dave Wolff, Finance Director

Date:

April 6, 2011

Subject:

Long Term Benthic Monitoring and Bioaccumulation Survey, Sawmill Cove/Silver Bay

Professional Services - Monitoring & Report Contract Award

Background

In June 2010 the Assembly approved entering into a Professional Services Contract with Germano and Associates to assist with the long-term monitoring and adaptive management program for natural recovery of the approximate 100-acre "Area of Concern" (AOC) within Sawmill Cove. This monitoring is required by the agreement between the city and state when the mill property was transferred to city ownership. This is the "Year 10 - Milestone and Recovery Assessment for Unrecovered Areas". This monitoring cycle includes benthic monitoring similar to the previous monitoring and in addition a bioaccumulation survey. We have completed Phase I & II of this project: a historical data review, developed and received ADEC's approval for the sampling and monitoring approach and have completed a final draft of the detailed Sampling and Analysis and Quality Assurance Project Plan, which is currently under ADEC review. Germano & Associates has provided the attached not-to-exceed cost estimate for the field sampling, data analysis and interpretation and report production which should complete this monitoring cycle.

Analysis

Germano & Associates, Inc. is the firm selected last year upon review of their response to our Request for Qualifications. Joe Germano performed the original baseline survey for the city in 2000 for EVS Environmental; in addition to knowing the site, the baseline survey results, and having all the historical benthic data on file, he also has first-hand field experience at this location. This previous experience allows them to be most cost effective.

The cost estimate includes three possible tiered monitoring scenarios, based on bioaccumulation sampling results: 1) No Bioaccumulation testing required, 2) Single strata bioaccumulation (bioaccumulation tests only if sediment dioxin concentrations are elevated) and 3) Two strata bioaccumulation testing (modeling of fish tissue burdens if bioaccumulation tests trigger potential dioxin uptake). Both scenario 2 and 3 include a formal risk assessment. This tiered bioaccumulation approach follows the approved decision criteria as presented to and approved by ADEC during Phase I and was developed to be the most cost effective approach.

The final report is expected to be available in mid to late August 2011 if no bioaccumulation testing is required or by December 2011 if full bioaccumulation testing is triggered.

Fiscal Note

Sufficient funds are available in the Sawmill Cove Industrial Park Contingency Fund.

Recommendation:

Motion to authorize the Administrator to enter into a Professional Service Contract with Germano & Associates to provide services for the 2011 Long Term Benthic Monitoring and Bioaccumulation Survey and Report for Sawmill Cove and Silver Bay for their proposed "not to exceed" amount of \$238,167.

Attached:

1. Germano & Associates Cost Proposal

Cost Proposal

2011 Long Term Benthic Monitoring and Bioaccumulation Survey in Sawmill Cove, Alaska

Prepared for

Mark Buggins

Environmental Superintendent
City and Borough of Sitka
100 Alice Loop
Sitka, AK 99835

Submitted by

Germano & Associates

12100 SE 46th Place Bellevue, WA 98006

March 07, 2011



March 7, 2011

Mark Buggins Environmental Superintendent City and Borough of Sitka 100 Alice Loop Sitka, AK 99835

Re: Proposed Cost to Conduct 2011 Long Term Benthic Monitoring and Bioaccumulation Survey in Sawmill Cove,

Dear Mark:

Germano & Associates is pleased to submit complete cost estimates to conduct the 2011 Long Term Benthic Monitoring and Bioaccumulation Survey in Sawmill Cove, AK for the City and Borough of Sitka, broken down by task for each of three possible survey scenarios. These costs are based on sampling, testing, and analytical strategies presented in our recent white paper entitled "Historical Data Review & Development of Sampling Approach for 2010 Long Term Benthic Monitoring and Bioaccumulation Survey in Sawmill Cove, AK." The attached costing for the SPI and Plan-View monitoring of the areas of concern (AOC) represent the minimum level of effort needed to fulfill the requirements of the Record of Decision (ROD), and were developed as part of the Sampling and Analysis/Quality Assurance Project Plan (SA/QAPP).

Proposed program costs are based on:

- 1. Collection and analysis of SPI and Plan View photographs from 83 locations within Sawmill cove.
- Collection of whole sediments at 10 locations in Sawmill Cove and 5 Galankin Island reference locations.
 - All sediments are analyzed in the field for products from wood waste degradation (ammonia, total sulfides).
 - b. All sediments are analyzed in the laboratory for dioxin concentration.
- 3. Laboratory tissue bioaccumulation testing using the polychaete *Nereis virens* on sediments meeting criteria defined in the SAP.
- 4. Interpretation and reporting of all data collected, including dioxin risk assessment if bioaccumulation testing is conducted.

As presented in the SAP, the number of bioaccumulation tests required can vary from 0 (sediment dioxin threshold concentrations below testing criteria), to 10 (one test strata exceeding SAP criteria), to 15 (all test strata exceeding SAP criteria). Given this, complete project costs have been provided for each of the three testing scenarios. Table 1 summarizes costs for all three scenarios and tables 2-4 provide detailed cost breakdowns for each scenario.

We look forward to your review of these costs and the upcoming SAP. I will be out of the country for the next several weeks, so if you have any questions regarding these costs, please feel free to contact Cynda Maxon at 858.552.0964.

Best regards,

Joe Germano, PhD - signed by Cynda Maxon

Germano & Associates 12100 SE 46th Place

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Bellevue, WA 98006

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Table 1. Cost summary for Long Term Benthic Monitoring and Bioaccumulation Survey in Sawmill Cove, AK. Costs presented by major task and testing scenario.

Scenario	Mobilization/Demobilization Includes Travel and ODCs	Field Activity	Weather Days	Analysis and Interpretation	Management and Reporting	Total Scenario Cost
1. No Bioaccumulation						13.11
Testing	\$49,161	\$66,223	\$12,442	\$37,030	\$30,769	\$195,624
2. Single Strata						
Bioaccumulation Testing	1					
(includes risk assessment)	\$49,161	\$66,223	\$12,442	\$60,240	\$36,133	\$224,198
3. Two Strata						
Bioaccumulation Testing	1	ļ				
(includes risk assessment)	\$49,161	\$66,223	\$12,442	\$68,718	\$41,624	\$238,167

Assumptions: Please note that these assumptions apply to all testing scenarios.

- 1. Costs are based on the scope of work defined in the corresponding SA/QAPP.
- 2. Costs are based on the assumption of a T&M contract with field work and stand-by due to bad weather.
 - a. Standard 12-hour working field day: \$11,037.
 - b. Stand-by day due to bad weather or boat problems will be billed as an 8-hour lay day: \$6,221.
- Costs are based on the use of G&A's new digital sediment profile unit. The actual number of plan view images recovered cannot be guaranteed since their image quality is dependent on water clarity conditions.
- 4. The cost for the photographic analysis included in the final report is based on an estimate of 249 images each of SPI and PV. A copy of all catalogued digital images and a narrative interpretation of the pictures will be included in the report. If the final number of images is different than 498 (83 stations, 3 reps each, SPI and PV), the price will be adjusted up or down accordingly.
- 5. Deliverables include 10 copies of the final report (estimated reproduction cost, \$175 per report); client will be billed for actual reproduction costs plus handling fee.
- 6. Travel and other direct costs (ODCs) are best estimates and will be billed at actual cost plus stated handling fee.
- 7. Invoices will be submitted monthly with payments due Net 30 days with a 1.5% per month late fee for overdue payments.

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