


SUBJECT: AUTHORIZATION OF AMENDMENT NO. 14 TO CONTRACT NO. 18-116P WITH SHANNON & WILSON, INC. TO ADD \$42,567.00 FOR MSB LANDFILL WATER QUALITY MONITORING PROGRAM MANAGEMENT SERVICES.






AGENDA OF: April 5, 2022

ASSEMBLY ACTION:

Approved under the Consent Agenda 4-5-22 

MANAGER RECOMMENDATION: Present to the Assembly for consideration.

APPROVED BY MICHAEL BROWN, BOROUGH MANAGER: 

Route To:	Department/Individual	Initials	Remarks
	Originator	Brett Olson <small>Digitally signed by Brett Olson Date: 2022.03.21 09:00:09 -0800</small>	
	Solid Waste Division Manager	Jeff Smith <small>Digitally signed by Jeff Smith Date: 2022.03.21 15:10:16 -0800</small>	
	Public Works Director	Terry Dolan <small>Digitally signed by Terry Dolan Date: 2022.03.21 17:22:11 -0800</small>	
	Purchasing Officer		
	Finance Director		
	Borough Attorney		
	Borough Clerk	 3/30/22	

ATTACHMENT (S): Fiscal Note: Yes X No
FY2022 Costs Proposal from Shannon & Wilson (6pp)

SUMMARY STATEMENT: On June 5, 2018, the Matanuska-Susitna Borough Assembly approved AM-18-043 authorizing contract 18-116P, MSB Landfill Water Quality Monitoring Program Management Services to Shannon & Wilson, Inc. for the contract amount of one-hundred sixty-five thousand seven-hundred fourteen dollars and 00/100 (\$165,714.00). The scope of the contract included Program Management, Leachate Sampling, Leachate Laboratory Management, Leachate Reporting, Water Quality Monitoring, Sampling and Analysis, Water Quality Reporting, Field Work and Laboratory Services and Data Management.

The contract amount was based on the estimated number of events per year calculated by the number of monitoring wells located at each monitoring location (Central Landfill, Big Lake Landfill, Butte Landfill, and Smith Ballfields).

Since this contract was established, regulatory and reporting events have increased water sampling events annually along with miscellaneous reporting required by the Alaska Department of Environmental Conservation (ADEC).

Previous change orders have added funds for tasks required by ADEC and Anchorage Water & Wastewater Utility (AWWU), amended event rates paid due to price increases, and renewed the contract 3 times out of the allowed 4 times per contract terms. The current annual contract amount after these 13 change orders is approved at \$255,352.00.

Shannon & Wilson has provided a revised proposal for FY2022 including an estimated cost for the changes and additional monitoring events required by AWWU and ADEC. There are also increases in UPS Shipping Fees and Shannon & Wilson Labor Costs. The total proposed by Shannon & Wilson is \$334,904.00 (\$79,552.00 over the approved annual contract amount) for FY2022.

The Solid Waste Division has pursued savings by requesting ADEC to allow Central Landfill to sample leachate in house and for water sampling to be moved from quarterly to semi-annual at Central Landfill. ADEC has agreed to this request resulting in approximately \$62,000.00 in annual savings beginning in FY2023. FY2022 savings as a result of this change is a reduction of \$36,985.00 in FY2022 expenditures to a proposed \$297,919.00.

This amendment will add \$42,567.00 for FY2022 ONLY for a FY2022 contract amount of \$297,919.00. This is the final year for this contract and an RFP will be put out for FY2023.

RECOMMENDATION OF ADMINISTRATION: Authorize Amendment No. 14 to contract No. 18-116P with Shannon & Wilson, Inc. to add \$42,567.00 for MSB Landfill Water Quality Monitoring Program Management Services, for increased services and fees in Fiscal Year 2022 only.

MATANUSKA-SUSITNA BOROUGH
FISCAL NOTE

Agenda Date: April 5, 2022

SUBJECT: AUTHORIZATION OF AMENDMENT NO. 14 TO CONTRACT NO. 18-116P WITH SHANNON & WILSON, INC. TO ADD \$42,567.00 FOR MSB LANDFILL WATER QUALITY MONITORING PROGRAM MANAGEMENT SERVICES.

ORIGINATOR: Jeff Smith

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT <u>YES</u> NO
AMOUNT REQUESTED <u>\$42,567.00</u>	FUNDING SOURCE <u>Solid Waste Operating</u>
FROM ACCOUNT # <u>510-156-416 4x2xxx</u>	PROJECT
TO ACCOUNT:	PROJECT #
VERIFIED BY: <u>Cheryl W. Smith</u>	CERTIFIED BY:
DATE: <u>3-22-22</u>	DATE:

EXPENDITURES/REVENUES:

(Thousands of Dollars)

OPERATING	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
Personnel Services						
Travel						
Contractual		<u>42.6</u>				
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING:

(Thousands of Dollars)

General Fund						
State/Federal Funds						
Other		<u>42.6</u>				
TOTAL		<u>42.6</u>				

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

PREPARED BY: _____ PHONE: _____
 DEPARTMENT: Chapenne Hendall DATE: _____
 APPROVED BY: _____ DATE: 3/22/22

June 17, 2021

Matanuska-Susitna Borough
Solid Waste Division
A350 East Dahlia Avenue
Palmer, Alaska 99645

RE: COSTS FOR FISCAL YEAR 2022 MATANUSKA-SUSITNA BOROUGH LANDFILL
WATER QUALITY MONITORING PROGRAM MANAGEMENT SERVICES

Dear Mr. Brett Olson:

Shannon and Wilson is pleased to submit our Summary Cost Estimate for the fiscal year 2022 (FY2022) Matanuska-Susitna Borough (MSB) landfill water quality monitoring program management services.

The costs to conduct the MSB landfill water quality monitoring program in FY2022 have changed from FY2021 due to a variety of reasons as stated below. These cost changes have been incorporated into the attached Summary Cost Estimate.

- Central Landfill (CLF)
 - Tasks 2a and 2b. Anchorage Water & Wastewater Utility (AWWU) Industrial Wastewater Discharge Permit #4 self-monitoring requirements changed. Two additional sampling events and laboratory analysis have been added to meet the quarterly sampling requirements.
 - Task 3. Laboratory costs for rush zinc analysis on the monthly samples have been removed.
 - Task 4. Two Leachate Reporting events have been added for the two additional Task 2a quarterly sampling events.
 - Tasks 5a through 5d. The Alaska Department of Environmental Conservation (ADEC) required the compliance wells be moved to an assessment monitoring program. The Task 5 event costs have been revised to meet the requirements of the ADEC-approved Quality Assurance Project Plan (QAPP) dated February 2021. The ten compliance wells will be sampled and analyzed for Appendix I, Table F, and detected Appendix II parameters for three quarters (Tasks 5a, 5c, and 5d) and for Appendix II and Table F parameters for one quarter (Task 5b).
- Big Lake Landfill (BLLF)
 - Tasks 6a and 6b. The ADEC required time series graphs be included with the semi-annual reports. The Task 6 event costs have been increased to prepare time series graphs for each sampling event.

AM 22-020

- Butte Landfill (BLF)
 - Tasks 6a and 6b. The ADEC required time series graphs be included with the semi-annual reports. The Task 6 event costs have been increased to prepare time series graphs for each sampling event.
- Smith Ballfield Landfill (SBF)
 - Tasks 5a and 5d. As part of the requirements for long term monitoring as a corrective measure, the ADEC has increased the sampling and analysis of the Iditarod Headquarters (IDW) drinking water well from semi-annual to quarterly and reduced the gas monitoring from quarterly to semi-annual. Task 6a and 6d have been revised to reflect these monitoring frequency changes.
 - Tasks 6a through 6d. The ADEC required time series graphs be submitted with the quarterly reports. The Task 6 event costs have been increased to prepare time series graphs for each sampling event.
- UPS Shipping Fees
 - Task 5 for each landfill. UPS increased shipping fees by \$20 for each cooler. Shipping fee for coolers has been increased to cover shipping costs.
- Shannon & Wilson Labor Cost Adjustments
 - Tasks 1 through 8 for each landfill. Hourly rate increase from FY2021 to FY2022

In addition to the base MSB landfill water quality monitoring program management services, additional professional services may be conducted during FY2022. These professional services may include a seasonal variability statistical analysis which will be required by ADEC prior to approval of a monitoring frequency reduction at CLF; preparation of Python script for development of ADEC-required time series graphs for monitoring event reports (note the proposed BLLF, BLF, and SBF Task 6 event costs assumes the Python script is developed); preparation of letters requesting a reduction in the required landfill monitoring program frequencies at CLF, BLF, and BLLF; MSB Landfill Monitoring Quality Assurance Project Plan (QAPP) updates, if needed; and other professional services and regulatory coordination efforts that may arise during the fiscal year. We have included costs to provide these additional professional services under a time and expense basis. Note that the contingency funds may not be sufficient to cover each of these listed tasks. We can provide MSB with a revised summary cost estimate, for additional professional services, as the project scope is defined.

AM 22-020

If you have questions regarding the revised costs, please call the undersigned at (907)433-3236.

Sincerely,

SHANNON & WILSON

LeeAnne Osgood, P.E.
Associate

Enc. Summary Cost Estimate

Am 22-020

**MSB LANDFILL WATER QUALITY MONITORING PROGRAM MANAGEMENT SERVICES
FISCAL YEAR 2022 SUMMARY COST ESTIMATE**

COSTS**CENTRAL LANDFILL SAMPLING AND ANALYSIS**

\$165,683

Task 1: Program Management	2	event	@	\$1,523	/event =	\$3,045
Task 2a: Leachate Sampling (CLF Quarterly Sample)	3	event	@	\$1,049	/event =	\$3,146
Task 2b: Leachate Sampling (Annual Sample)	1	event	@	\$2,402	/event =	\$2,402
Task 3: Leachate Laboratory Management	12	event	@	\$413	/event =	\$4,958
Task 4: Leachate Reporting	16	event	@	\$90	/event =	\$1,440
Task 5a: Water Quality Monitoring, Sampling, Analysis (CLF March)	1	event	@	\$23,939	/event =	\$23,939
Task 5b: Water Quality Monitoring, Sampling, Analysis (CLF June)	1	event	@	\$30,086	/event =	\$30,086
Task 5c: Water Quality Monitoring, Sampling, Analysis (CLF September)	1	event	@	\$23,099	/event =	\$23,099
Task 5d: Water Quality Monitoring, Sampling, Analysis (CLF December)	1	event	@	\$23,939	/event =	\$23,939
Task 6a: Water Quality Reporting (CLF March)	1	event	@	\$9,665	/event =	\$9,665
Task 6b: Water Quality Reporting (CLF June)	1	event	@	\$9,665	/event =	\$9,665
Task 6c: Water Quality Reporting (CLF September)	1	event	@	\$9,665	/event =	\$9,665
Task 6d: Water Quality Reporting (CLF December)	1	event	@	\$15,125	/event =	\$15,125
Task 8a: Data Management (CLF March)	1	event	@	\$1,378	/event =	\$1,378
Task 8b: Data Management (CLF June)	1	event	@	\$1,378	/event =	\$1,378
Task 8c: Data Management (CLF September)	1	event	@	\$1,378	/event =	\$1,378
Task 8d: Data Management (CLF December)	1	event	@	\$1,378	/event =	\$1,378

BIG LAKE LANDFILL SAMPLING AND ANALYSIS

\$22,689

Task 1: Program Management	2	event	@	\$775	/event =	\$1,550
Task 5a: Water Quality Monitoring, Sampling, Analysis (BLLF March)	1	event	@	\$8,656	/event =	\$8,656
Task 5b: Water Quality Monitoring, Sampling, Analysis (BLLF September)	1	event	@	\$4,749	/event =	\$4,749
Task 6a: Water Quality Reporting (BLLF March)	1	event	@	\$4,310	/event =	\$4,310
Task 6b: Water Quality Reporting (BLLF September)	1	event	@	\$2,245	/event =	\$2,245
Task 8a: Data Management (BLLF March)	1	event	@	\$748	/event =	\$748
Task 8b: Data Management (BLLF September)	1	event	@	\$433	/event =	\$433

BUTTE LANDFILL SAMPLING AND ANALYSIS

\$29,287

Task 1: Program Management	2	event	@	\$775	/event =	\$1,550
Task 5a: Water Quality Monitoring, Sampling, Analysis (BLF May)	1	event	@	\$7,753	/event =	\$7,753
Task 5b: Water Quality Monitoring, Sampling, Analysis (BLF October)	1	event	@	\$11,759	/event =	\$11,759
Task 6a: Water Quality Reporting (BLF May)	1	event	@	\$3,575	/event =	\$3,575
Task 6b: Water Quality Reporting (BLF October)	1	event	@	\$3,575	/event =	\$3,575
Task 8a: Data Management (BLF May)	1	event	@	\$538	/event =	\$538
Task 8b: Data Management (BLF October)	1	event	@	\$538	/event =	\$538

SMITH BALLFIELDS SAMPLING AND ANALYSIS

\$91,605

Task 1: Program Management	2	event	@	\$1,550	/event =	\$3,100
Task 5a: Water Quality Monitoring, Sampling, Analysis (SBF March)	1	event	@	\$14,336	/event =	\$14,336
Task 5b: Water Quality Monitoring, Sampling, Analysis (SBF June)	1	event	@	\$14,437	/event =	\$14,437
Task 5c: Water Quality Monitoring, Sampling, Analysis (SBF September)	1	event	@	\$14,437	/event =	\$14,437
Task 5d: Water Quality Monitoring, Sampling, Analysis (SBF December)	1	event	@	\$14,336	/event =	\$14,336
Task 6a: Water Quality Reporting (SBF March)	1	event	@	\$6,730	/event =	\$6,730
Task 6b: Water Quality Reporting (SBF June)	1	event	@	\$6,730	/event =	\$6,730
Task 6c: Water Quality Reporting (SBF September)	1	event	@	\$6,730	/event =	\$6,730
Task 6d: Water Quality Reporting (SBF December)	1	event	@	\$6,940	/event =	\$6,940
Task 8a: Data Management (SBF March)	1	event	@	\$958	/event =	\$958
Task 8b: Data Management (SBF June)	1	event	@	\$958	/event =	\$958
Task 8c: Data Management (SBF September)	1	event	@	\$958	/event =	\$958
Task 8d: Data Management (SBF December)	1	event	@	\$958	/event =	\$958

BASE CONTRACT FY2022 SUBTOTAL: \$309,264*AM 22-020*

SHANNON & WILSON, INC.

**MSB LANDFILL WATER QUALITY MONITORING PROGRAM MANAGEMENT SERVICES
FISCAL YEAR 2022 SUMMARY COST ESTIMATE**

CLF SEASONAL VARIABILITY STATISTICAL ANALYSIS (ANOVA)

\$7,940

(ADEC requirement to support monitoring frequency reduction)

Vice President (Database/programming expert)	4	hr.	@	\$235	/hr.	=	\$940
Associate	6	hrs.	@	\$180	/hr.	=	\$1,080
Sr. Professional I (Statistician)	40	hrs.	@	\$125	/hr.	=	\$5,000
Professional IV	8	hrs.	@	\$115	/hr.	=	\$920

PYTHON SCRIPT FOR TIME SERIES PLOT GENERATION

\$2,700

(ADEC requirement to include graphs in monitoring reports)

Vice President	8	hr.	@	\$235	/hr.	=	\$1,880
Associate	2	hrs.	@	\$180	/hr.	=	\$360
Professional IV	4	hrs.	@	\$115	/hr.	=	\$460

MISCELLANEOUS PROFESSIONAL SERVICES/REGULATORY COORDINATION

\$15,000

Contingency Funds for Miscellaneous Services/Regulatory Coordination

\$15,000

Potential additional professional services:

- CLF monitoring program reduction request to ADEC
- BLF monitoring program reduction/termination request to ADEC
- BLLF monitoring program reduction request to ADEC
- Quality Assurance Project Plan (QAPP) Updates

ADDITIONAL PROFESSIONAL SERVICES SUBTOTAL: \$25,640

MSB LANDFILL WATER QUALITY MONITORING PROGRAM FY2022 TOTAL: \$334,904

AM 22-020

MSB LANDFILL WATER QUALITY MONITORING PROGRAM MANAGEMENT SERVICES

FISCAL YEAR 2022 SUMMARY COST ESTIMATE

EVENT COST COMPARISON (FY2021 TO FY2022)

Task	FY2021 Cost/Event	FY2022 Cost/Event	Cost Change	Reason for Event Cost Change
CLF Task 1	\$1,450	\$1,523	\$73	Hourly rate increase
CLF Task 2a	\$1,731	\$1,049	-\$683	FY2021 cost/event was equally spread over two sampling events (Tasks 2a and 2b)
CLF Task 2b	\$1,731	\$2,402	\$670	
CLF Task 3	\$433	\$413	-\$20	Hourly rate increase, remove monthly lab costs for rush zinc
CLF Task 4	\$85	\$90	\$5	Hourly rate increase
CLF Task 5a	\$17,656	\$23,939	\$6,283	Hourly rate increase, assessment monitoring required by ADEC
CLF Task 5b	\$27,069	\$30,086	\$3,017	Hourly rate increase, assessment monitoring required by ADEC
CLF Task 5c	\$16,955	\$23,099	\$6,144	Hourly rate increase, assessment monitoring required by ADEC
CLF Task 5d	\$24,722	\$23,939	-\$784	Hourly rate increase, assessment monitoring required by ADEC
CLF Task 6a	\$9,200	\$9,665	\$465	Hourly rate increase
CLF Task 6b	\$9,200	\$9,665	\$465	Hourly rate increase
CLF Task 6c	\$9,200	\$9,665	\$465	Hourly rate increase
CLF Task 6d	\$14,420	\$15,125	\$705	Hourly rate increase
CLF Task 8a	\$1,115	\$1,378	\$263	Hourly rate increase
CLF Task 8b	\$1,115	\$1,378	\$263	Hourly rate increase
CLF Task 8c	\$1,115	\$1,378	\$263	Hourly rate increase
CLF Task 8d	\$1,315	\$1,378	\$63	Hourly rate increase
BLLF Task 1	\$740	\$775	\$35	Hourly rate increase
BLLF Task 5a	\$8,458	\$8,656	\$198	Hourly rate increase
BLLF Task 5b	\$4,635	\$4,749	\$114	Hourly rate increase
BLLF Task 6a	\$3,540	\$4,310	\$770	Hourly rate increase; time series graphs required by ADEC
BLLF Task 6b	\$1,570	\$2,245	\$675	Hourly rate increase; time series graphs required by ADEC
BLLF Task 8a	\$713	\$748	\$35	Hourly rate increase
BLLF Task 8b	\$415	\$433	\$18	Hourly rate increase
BLF Task 1	\$740	\$775	\$35	Hourly rate increase
BLF Task 5a	\$7,575	\$7,753	\$178	Hourly rate increase
BLF Task 5b	\$11,571	\$11,759	\$188	Hourly rate increase
BLF Task 6a	\$2,840	\$3,575	\$735	Hourly rate increase; time series graphs required by ADEC
BLF Task 6b	\$2,840	\$3,575	\$735	Hourly rate increase; time series graphs required by ADEC
BLF Task 8a	\$515	\$538	\$23	Hourly rate increase
BLF Task 8b	\$515	\$538	\$23	Hourly rate increase
SBF Task 1	\$1,480	\$1,550	\$70	Hourly rate increase
SBF Task 5a	\$14,192	\$14,336	\$144	Hourly rate increase; removed methane gas monitoring
SBF Task 5b	\$14,113	\$14,437	\$324	Hourly rate increase
SBF Task 5c	\$14,113	\$14,437	\$324	Hourly rate increase
SBF Task 5d	\$14,192	\$14,336	\$144	Hourly rate increase; removed methane gas monitoring
SBF Task 6a	\$5,680	\$6,730	\$1,050	Hourly rate increase; ADEC required time series graphs, trend analysis, WQS evaluation
SBF Task 6b	\$5,680	\$6,730	\$1,050	Hourly rate increase; ADEC required time series graphs, trend analysis, WQS evaluation
SBF Task 6c	\$5,680	\$6,730	\$1,050	Hourly rate increase; ADEC required time series graphs, trend analysis, WQS evaluation
SBF Task 6d	\$5,680	\$6,940	\$1,260	Hourly rate increase; ADEC required time series graphs, trend analysis, WQS evaluation
SBF Task 8a	\$915	\$958	\$43	Hourly rate increase
SBF Task 8b	\$915	\$958	\$43	Hourly rate increase
SBF Task 8c	\$915	\$958	\$43	Hourly rate increase
SBF Task 8d	\$915	\$958	\$43	Hourly rate increase