



Memorandum

Date: November 26, 2019
To: David Longtin, PE
 Shilo Williams
From: Rebecca Venot, PE – CRW Engineering Group, LLC
Project: Critical Secondary Water Supply Project
Project No: CRW# 21201.03
Subject: Recommendation for Award of Membrane System Purchase

This memorandum provides a review of proposals received and recommendation for award of the Membrane Filtration System purchase as advertised by the City and Borough of Sitka (CBS) on September 26, 2019. Two proposals were received and opened on October 30, 2019, from Pall Water (Pall) and Suez Water Technologies and Solutions (Suez). The selection committee is recommending that CBS enter into a contract with Pall to provide the filtration equipment.

Proposal Evaluation

As described in the RFP, the basis for selection is defined as the lowest cost-benefit ratio based on three key factors: capital cost, operating cost and non-monetary system features. Both proposals were evaluated by CBS staff and CRW Engineering Group, LLC, to determine which proposal had the better (lower) cost-benefit ratio, using the following equation (as described in the RFP):

$$\text{Cost Benefit Ratio} = \frac{\text{Capital Cost} + \text{Annual Operating Cost}}{\text{Benefit Score}}$$

Table 1 summarizes the information entered into this equation, and reports the cost-benefit ratio. A brief discussion on each of the equation’s variables is provided below the table.

Table 1 - Evaluation Summary

Selection Criteria	Pall	Suez
Capital Cost ¹	\$2,065,325.00	\$1,662,275.00
Total Annual Operating Cost ² (Membrane Replacement, Chemicals, Membrane System Power)	\$86,777.37	\$51,701.28
Non-Monetary Benefit Score	74.3	51.7
Cost-Benefit Ratio (award to lower value)	28,965	33,152
1. As adjusted after proposer provided post-proposal information. 2. Calculated by evaluation team (see Table 2).		

1. Capital Cost

The values shown in Table 1 were provided by the proposers, and then adjusted by the evaluation team to allow for apples-to-apples comparison of the proposals. For instance, Suez offered only a three-year warranty on mechanical components in their original proposal, while Pall offered a five-year warranty, which was what the RFP required. The evaluation team asked Suez to increase their proposed price to provide a five-year warranty. That additional expense is included in the Capital Cost reported in the table.

2. Total Annual Operating Cost

Utilizing the information provided by the equipment suppliers, an annual cost for membrane replacement, chemical costs, and power cost was developed as summarized in Table 2. The costs below assume four 14-day operating periods for the facility. The RFP only requested operating cost information that would highlight the differences between the proposed systems. The actual total operating cost for the facility will be higher than what is reported in the table.

Table 2 – Annual Operating Cost

Criteria	Pall	Suez
Membrane Replacement Cost	\$34,176.79	\$27,696.57
Chemical Cost	\$49,645.79	\$22,660.71
Power Cost	\$2,954.78	\$1,344.00
Total Annual Cost	\$86,777.37	\$51,701.28

3. Non-Monetary Benefit Score

Table 3 summarizes the non-monetary scoring criteria from the proposal, provides the results of the selection committee’s scoring, and a brief rationale for the scores shown.

Table 3 – Non-Monetary Scoring Summary

Criteria	Possible Points	Pall	Suez	Scoring Rationale
Experience, qualifications, and related project experience on projects of similar scope and size.	10	9.0	4.7	<p>Pall provided extensive list of project installations for a wide range of projects throughout the country demonstrating significant depth of experience.</p> <p>Suez provided required installations, but only one reference returned phone call for reference check.</p>
Demonstrated ability to provide a system that is able to meet the design basis and system performance (and/or functional) requirements including flux and production rate, chemical cleaning intervals, type and amount of cleaning chemicals required, proposed membrane life, system recovery, and ability to handle known and expected source water.	25	17.3	13.0	<p>Pall system capable of providing more flow under a wider range of flow conditions with more redundancy.</p> <p>Pall system uses higher chemical volumes, but fewer types.</p> <p>Pall system offered 5 year membrane warranty before prorating period is initiated, while Suez offered 1 year warranty for membranes before prorating.</p> <p>Pall system can meet the specified water quality guarantee without modification.</p>

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Criteria	Possible Points	Pall	Suez	Scoring Rationale
ADEC approved installations.	5	4.0	2.3	Pall has 8 installations in Alaska, Suez has 2. One of Pall's facilities is in Juneau which is advantageous for sharing resources and training.
Instrumentation and control features and characteristics of the equipment.	10	6.7	6.0	Both systems highly automated, Pall proposal included all VFDs and required equipment initially.
Level of maintenance and service requirements for the elements of the system and replacement cost.	10	7.3	6.0	Pall's proposal has less equipment overall with more redundancy than the Suez proposal.
Intermittent operation considerations.	15	12.3	4.3	Pall system can be brought online in 3 hours, critical factor to success of system.
Support and service program for equipment during and after installation.	5	3.3	3.3	References for both vendors indicated satisfaction with support provided.
Expected responsiveness of local service reps.	2	1.3	1.0	Both service reps are good, Goble Sampson has provided excellent service in the past.
Expected responsiveness of national service reps.	2	1.0	0.7	Pall provided rapid responses to questions during evaluation. Suez was not able to provide multiple references willing to call evaluation team, even after being notified that references were not returning calls.
Completeness of proposal content per proposal package requirements.	2	1.3	2.0	Had to request additional information from Pall twice, Suez once.
Organization and clarity of proposal.	2	1.3	1.7	Suez's proposal was well organized and easy to follow.
Unique beneficial system features.	12	9.3	6.7	Pall's system has a smaller footprint with fewer equipment components (no blowers or backwash pumps).
Total	100	74.3	51.7	