

Formal Task Assignment Document

2023 – 2025 SNOHOMISH COUNTY ON-CALL TASK ASSIGNMENT

Name of Project: Paine Field Fire Department Environmental Compliance
Project Number: Airport
Discipline: Engineering Services
Task No.: TA#1 Completion Date: 12/31/2025

The COUNTY desires to authorize services pursuant to the AGREEMENT entered into with **Haley & Aldrich** and executed on December 16, 2022, and identified as Agreement No. **OCC23/2-7(X)**, On-Call Consultant Services for **Environmental Site Assessment**.

All provisions in the AGREEMENT remain in effect except as expressly modified by this TASK ASSIGNMENT and are incorporated herein by reference.

ATTACHED TO THIS TASK ASSIGNMENT

- Scope of Work
- Cost Estimate with Total Hours to Perform Work
- Items unique to the project not included in the AGREEMENT and which are to be reimbursed at cost with no markup.

Original Task Assignment Total: **\$399,986.00**
Previous Task Amendment Total: **\$0.00**
Current Task Amendment Total: **\$0.00**
Total Task Assignment Not to Exceed: **\$399,986.00**

No other payment shall be allowed unless a TASK ASSIGNMENT Amendment for changed Scope of Work has been signed and authorized before work is performed.

All work under this TASK ASSIGNMENT shall be performed pursuant to the terms, conditions, specifications, and limitations contained in the AGREEMENT.

If you concur with this TASK ASSIGNMENT and agree to the items as stated above, please sign and date in the appropriate spaces below and return to the COUNTY for final action.

Consultant Signature

Approving Authority

Date

Date



HALEY & ALDRICH, INC.
3131 Elliott Avenue
Suite 600
Seattle, WA 98121
206.324.9530

14 June 2023
File No. 0203565-001

Snohomish County
3000 Rockefeller Avenue M/S 607
Everett, Washington 98201

Attention: Lori Ericsson
Contracting Officer

Subject: Engineering Services/Environmental Site Assessment Agreement OCC23/2-7(X)
Task Assignment 1: Paine Field Fire Department Environmental Compliance
Paine Field/Snohomish County Airport
Everett, Washington

Dear Lori Ericsson:

Haley & Aldrich, Inc. (Haley & Aldrich) is pleased to submit this proposal for consulting services for this task assignment/project with Snohomish County (County).

Background

Per- and Poly-fluoroalkyl Substances (PFAS) are a class of chemicals now recognized as an emerging contaminant to the environment. PFAS is present in aqueous film forming foams (AFFF) used in firefighting. Numerous airports across the country are identifying PFAS chemicals in soil and groundwater associated with past uses of AFFF. This scope of work is necessary to allow for efficient and timely transition to non-fluorinated foams once federal regulations mandating the storage and use of AFFF by the Federal Aviation Administration (FAA) are revised and to protect human health and the environment from PFAS impacts.

We have based this proposed work on our discussions with Andrew Rardin, Fire Chief Cole, and our experience with this type of work. Work will be completed in accordance with the on-call agreement noted above.

Tasks and Deliverables

We propose the following tasks and deliverables for this work.

TASK 1 - PROJECT MANAGEMENT

Haley & Aldrich expects that project management will begin with execution of this Task Assignment and continue for the duration of the work. Specific tasks include, but are not limited to, the following:

- **Project Management and Project Controls** - Haley & Aldrich will provide project management support as needed by coordinating work activities of consultant staff, managing roles of internal team members, and monitoring progress of deliverables and ongoing support efforts. We will track and report progress on the budget, schedule, and scope in the monthly progress reports. We can work with County staff to determine work that needs more specific cost, schedule, risk, and/or scope planning/tracking of “planned” against “actual”, if requested. We can also develop and document ranges of cost and schedule impacts of potential trends.
- **Onboarding and Document Review** - Haley & Aldrich will obtain necessary documentation (e.g., reference reports, site maps, and standard operating procedures) with County assistance, organize the material, and develop a strong understanding and knowledge base of project information. Haley & Aldrich will develop a project baseline consisting of existing conditions (equipment, AFFF stockpiles) and operational history of AFFF-containing product use and disposal.
- **Site Visits and Badging** - Haley & Aldrich will coordinate with the County Project Manager and internal team members to schedule and conduct two site visits for two Haley & Aldrich staff. The Consultant will obtain security badging for up to three team members requiring access to the Secured Airport Operational Area to complete other tasks in this scope of work. We have assumed two site visits will be required for each team member obtaining a badge.

Deliverables

- Meeting agendas and summaries, if requested by the County.
- Monthly Budget Tracking Report: every month with invoices.

TASK 2 - STRATEGIC AND REGULATORY SUPPORT

Haley & Aldrich expects that strategic support and regulatory negotiation support will begin with this Task Assignment, and continue for the duration of the task. Specific tasks include, but are not limited to, the following:

- **Strategic Processes Support** - Haley & Aldrich will assist the County with AFFF and PFAS strategic planning including:
 - AFFF transition planning and timelines for hangars and facilities led by tenants/consortiums and other facilities identified by the County,
 - Support with executive and County Council briefings,
 - Health and safety support, and
 - Other strategy-related tasks as requested by the County.

- **Strategic Process Recommendations, as requested** - Haley & Aldrich can provide recommendations on:
 - Applicable state, federal, and industrial regulations impacting the AFFF transition process and develop plans for transition to non-fluorinated foams, including plans for AFFF concentrate disposal and waste profiling;
 - Health and Safety procedures and protocols during transition;
 - Plans for cleaning and/or removal and replacement of equipment containing AFFF;
 - Plans for management of rinsate following system cleanout, in compliance with applicable state and federal standards; and
 - Coordination with County Environmental, County Properties, Health and Safety, Fire, Facilities Management Departments, and/or tenants.
- **Monthly Regulatory Updates** - Haley & Aldrich will provide the County with monthly updates summarizing regulatory developments relevant to the AFFF transition process at the federal and state level. Additionally, we will also include industrial or other related regulatory or technical developments related to the AFFF transition, decontamination, and disposal processes.
- **Coordination and Support with County Legal Team** - Haley & Aldrich will provide input and support to the Fire Department and Environmental in discussions and planning with the County Legal Team regarding AFFF transition of Aircraft Rescue and Fire Fighting (ARFF) and tenant facilities at Paine Field on an as-needed basis. No deliverables are anticipated for this subtask at this time.

Deliverables

- Meeting agendas and summaries, if requested by the County.
- Monthly regulatory updates, each month via email or more frequently as needed if urgently applicable to immediate site activities.
- Strategic schedules, timelines, and graphics to aid discussions with County and tenant departments and/or regulators, as requested by the County.

TASK 3 - AFFF TRANSITION SUPPORT

Haley & Aldrich expects that AFFF transition support will begin with this Task Assignment and will continue for the duration of the task. Specific tasks include, but are not limited to, the following:

- **Inventory of Existing AFFF Stockpiles and Equipment in Contact with AFFF** - Haley & Aldrich will assist the Fire Department in identifying the current status of AFFF stockpiles and equipment, physical settings, and storage areas at Paine Field. We understand that the ARFF fleet has AFFF systems and equipment. During this subtask, we will review existing documentation, including: inspection reports, testing and maintenance records, and existing AFFF replacement preliminary research. Haley & Aldrich anticipates up to two days at Paine Field to inventory these systems and equipment. The site survey will include badging as needed (under Task 1), review of ARFF fleet and AFFF storage, and visual survey of tenant facilities. The purposes of the site survey is to:

1. Familiarize the team with the AFFF equipment and stockpiles in the County's portfolio and verify existing documentation,
2. Assess cleaning or remediation requirements for inventoried equipment once a Fluorine Free Foam (F3) replacement is identified, and
3. Determine which equipment cannot be cleaned and must be replaced. The inventory will support the development of an AFFF to F3 Transition Plan.

This subtask includes developing an initial report identifying the AFFF systems and inventory within the County's portfolio.

- **Evaluation of F3 Options** - Haley & Aldrich will assist the Fire Department in the review of viable F3 options that are being considered by U.S. Department of Defense (DoD) and FAA and are expected to meet MILSPEC (DoD standard specifications) requirements. The evaluation will summarize pros/cons, availability (supply chain impediments), compatibility with existing AFFF systems, environmental and health characteristics, and performance requirements for each F3 evaluated. The evaluation will also include policies surrounding use and discharge. The findings will be incorporated into an AFFF to F3 Transition Plan. This subtask includes preparing a technical memorandum summarizing this evaluation. The findings of this evaluation will be used to support the County in the development of bid specifications for F3 product procurement.
- **Evaluation of AFFF Cleaning Technologies** - Haley & Aldrich will evaluate technologies to clean and remove PFAS from existing equipment, including performing research and coordinating with ARFF manufacturers and F3 manufacturers on replacement and cleaning options for Paine Field's fleet. The evaluation will summarize personal protection equipment, waste containment, and phasing required to reduce or remove residual PFAS from existing equipment to remain in place. This subtask includes preparing a technical memorandum summarizing this evaluation. The findings of this evaluation will be used to support the County in the development of bid specifications for decontamination services.
- **AFFF Waste Management** - Haley & Aldrich will identify the proper containment, labeling, profiling, and disposal option requirements for waste AFFF. Waste management requirements for AFFF will be in accordance with Federal, State, and local environmental regulations. This subtask includes preparing a technical memorandum summarizing this evaluation.
- **Development of Plan, Schedule, and Process for AFFF Transition** - Haley & Aldrich will provide the County with an itemized plan (Plan), detailing the sequence of events and associated timeframes to execute, for the AFFF transition process once the previous scopes of work listed in Task 3 have been completed and a decontamination vendor has been contracted. This Plan will be provided as a deliverable to the County and will be designed to allow for adequate equipment to remain operational at all times during decontamination activities to maintain FAA index compliance.
- **Execution of AFFF-to-F3 Transition Activities** - Haley & Aldrich will provide on-site support during the AFFF-to-F3 transition activities, including oversight of decontamination and waste disposal/treatment contractors as appropriate. Additionally, waste profiling of AFFF concentrate and decontamination-related waste streams will be conducted to support disposal and/or treatment options as identified in the AFFF Waste Management subtask listed above. This subtask would include the generation of a field report summarizing the transition activities,

decontamination processes, subsequent testing of the ARFF vehicles, and waste characterization and disposal.

Deliverables

- AFFF System Technical Memorandum documenting inventory findings and current replacement options. Includes inventory tracking spreadsheet and supporting information. Due: As requested by the County.
- F3 Evaluation Technical Memorandum including supporting information and Bid Specifications for F3 Product procurement. Due: As requested by the County.
- AFFF Cleaning Technology Technical Memorandum and Supporting Bid Specifications for Decontamination Vendor Services. Due: As requested by the County.
- AFFF Waste Management Technical Memorandum. Due: As requested by the County.
- AFFF-to-F3 Implementation Plan and Schedule. Due: After completion of the previous scopes of work listed in Task 3 and as requested by the County.
- Transition Activity Field Summary Report. Due: 90 days after completion of transition activities.

Assumptions

- The County will provide supporting documentation needed to perform the work.
- Final deliverables will be in editable Word and PDF formats.
- Multiple waste characterization sampling events may be necessary, depending upon the nature of the disposal method and associated sampling requirements. At this time, a total of 28 samples are assumed to be required for analysis of PFAS content. However, given the uncertainties surrounding the final sample count, analytical cost during decontamination activities, and quickly changing analytical costs for this type of testing, additional budget may be required. For the purposes of this Task Assignment, a typical analytical cost of \$415 per sample has been used for cost estimating purposes. If costs for laboratory services exceed the estimated cost, an amendment will be executed prior to exceeding the budgeted amount.
- Cost of waste disposal associated with the AFFF replacement is not included within the budget. The Consultant will advise on disposal options and coordinate waste handling as needed.
- General consulting or site surveys more than which is identified within this scope of work may be considered an additional service and will require an amendment before additional work can start.
- Receipts for incurred costs, including travel per diem and vendors, will be provided to the County. Per diem costs will not exceed the U.S. General Services Administration rates.

We anticipate that the undersigned will serve as the Project Manager and the Principal Consultant on the project.

Agreement, Costs, and Schedule

Services will be provided in accordance with the On-Call Agreement between Haley & Aldrich and Snohomish County dated 17 December 2022 ("Agreement"), which is integral to this proposal.

For your present budget purposes, we estimate the total cost of services under Tasks 1 to 3 to be \$399,986 (see Tables 1 and 2 for additional details).

The estimated schedule for this Task Authorization is from notice to proceed (i.e., upon receipt of a fully executed Task Authorization) through 31 December 2025. Since the majority of work conducted by this Task Authorization is subject to regulation that is not yet promulgated, the timeframes of specific tasks cannot be accurately estimated at this time. Changes to this schedule and any future determined schedules shall be sent via email from the Snohomish County Project Manager.

This proposal is valid for a period of 120 days from the date of this letter. If acceptance and authorization to proceed are not received within that period, we reserve the right to renegotiate the estimated costs, schedule for completion, and scope of services.

If the above arrangements are satisfactory to you, please indicate your acceptance by preparing and signing the required Task Authorization paperwork. When accepted by you, this Task Assignment proposal and the On-Call Agreement noted above will constitute our Agreement.

We appreciate the opportunity to submit this proposal and look forward to working with you on this project. Please contact the undersigned if you wish to discuss this proposal or any aspect of the project.

Sincerely yours,
HALEY & ALDRICH, INC.



Marissa Goodman, P.E.
Project Manager, Env. Engineer



Tiffany Thomas, Ph.D.
Principal Chemist

Attachment:

Table 1 - Haley & Aldrich Estimated Level of Effort

Table 2 - Direct Cost Breakdown

https://haleyaldrich.sharepoint.com/sites/SnohomishCounty/Shared Documents/0203565.SnohomishCntyEnvSiteAssessOnCall2023-2025/-001 Paine Field Fire Dept Env Compl/Deliverables/Proposal Final 6.14.23/2023_0614_HAI_PAE Fire Dept Env Compl Proposal_F.docx

ENGINEERING SERVICES; ENVIRONMENTAL SITE ASSESSMENT AGREEMENT OCC23/2-7(X)
 PAINE FIELD/SNOHOMISH COUNTY AIRPORT
 EVERETT, WASHINGTON

Task Assignment TA1 - Paine Field Fire Department Environmental Compliance
Table 1 - Haley & Aldrich Estimated Level of Effort

Task #	Task/Subtask Names and Descriptions	Labor Hours							Other Direct Costs (ODC)			Task Subtotal												
		Contract Labor Rates	Scientist/Engineer Regional Subject Matter Expert	Scientist/Engineer Regional Subject Matter Expert	Sr. Technical Specialist	Project Manager	Technical Specialist	Project Controls	Total Hours	Total Labor Cost	Vendor (Table 2)		Other ODC (Table 2)	Total ODC										
Task 1	Project Management																							
	Project Management and Project Controls		72	36	80	20	20	20	8	22	32												\$50,862	
	Onboarding and Document Review		20	20	32	18	18	18	32	16	2												\$20,597	
	Site Visits and Badging		20	20	32	18	18	18	32	16	2												\$18,400	
			112	56	120	38	38	40	120	40	34												\$89,859	
	Subtotal Hours and Costs																						\$1,721	
																							\$1,721	
																							\$91,580	
Task 2	Strategic and Regulatory Support																							
	Strategic Processes Support		80	40	16	40	40	40	16	40	2													\$53,028
	Monthly Regulatory Updates		18	18	36	36	36	36	18	18	2													\$20,459
	Coordination and Support with County Legal Team		36	18	36	36	36	36	8	10														\$26,216
			134	76	24	112	112	68	24	68	2													\$99,703
	Subtotal Hours and Costs																							\$0
																								\$0
																								\$0
Task 3	AFFF Transition Support																							
	Inventory of Existing AFFF Systems and Equipment in Contact with AFFF		4	12	24	24	24	40	4	40	2													\$16,358
	Evaluation of Fluorine Free Foam Options		4	8	40	40	40	8	8	8	2													\$12,787
	Evaluation of AFFF Cleaning Technologies		4	8	60	60	60	8	8	8	2													\$16,687
	AFFF Waste Management		4	4	40	40	40	24	8	24	2													\$15,480
	Development of Plan, Schedule, and Process for AFFF Transition		16	40	114	114	58	12	12	204	2													\$49,901
	Execution of AFFF-to-F3 Transition Activities		24	40	160	160	24	204	36	342	12													\$83,172
			56	112	438	438	36	342	180	450	48													\$194,385
	Subtotal Hours and Costs																							\$2,142
																								\$2,142
																								\$2,698
	Task Assignment Subtotal Hours and Costs																							\$11,620
																								\$11,620
																								\$4,419
																								\$16,039
																								\$16,039
																								\$399,986

CONTRACT COMPLIANT
 Initial gm Date 6/12/23

ENGINEERING SERVICES, ENVIRONMENTAL SITE ASSESSMENT AGREEMENT OCC23/7-7(X)
 PAINE FIELD/SNOHOMISH COUNTY AIRPORT
 EVERETT, WASHINGTON

Table 2 - Direct Cost Breakdown

Task	Unit	Unit Rate	Quantity	Total
Task Assignment Tasks				
Task 1				
Vendor ODC Items				\$0.00
Other ODC Items				
Travel Mileage (10 total visits)	Mi	\$0.655	1460	\$956.30
Field Supplies	Day	\$7.00	10	\$70.00
Per Diem Lodging	Day	\$139.00	2	\$278.00
Per Diem M&IE (First/last travel day)	Day	\$55.50	4	\$222.00
AOA Badge - Initial	Each	\$25.00	3	\$75.00
AOA Badge - Renewal	Each	\$20.00	6	\$120.00
Other ODC Items Subtotal				\$1,721.30
Task Total				\$1,721.30
Task 2				
Vendor ODC Items				\$0.00
Other ODC Items				\$0.00
Task Total				\$0.00
Task 3				
Vendor ODC Items				\$0.00
Other ODC Items				
Analytical laboratory (Eurofins, average shown over work duration)	Sample	\$415.00	28	\$11,620.00
Vendor ODC Items Subtotal				\$0.00
Other ODC Items				\$11,620.00
Field Supplies	Day	\$7.00	8	\$56.00
Truck Rental	Day	\$95.00	8	\$760.00
Truck Rental	Week	\$380.00	4	\$1,520.00
Field Supplies	Week	\$28.00	4	\$112.00
Sampling Bundle	Day	\$250.00	1	\$250.00
Other ODC Items Subtotal				\$2,698.00
Task Total				\$14,318.00
Overall Total				\$16,039.30