



Request for Proposals
**Design and Services of a Granulated Activated Carbon
PFAS Treatment System for Well U-1 Country Place
7614 52nd Ave SW, Lakewood, WA 98498**

Proposals are Due on Wednesday, August 2, 2023

The Lakewood Water District (District) is seeking proposals from consultants to provide design and permitting assistance services for adding a granulated activated carbon (GAC) filtration system to remove PFAS at the District’s existing Well U-1 Country Place. The new PFAS treatment system shall be designed to filter approximately 900 gpm of water produced from the District’s U-1 Well at the District’s existing Country Place site. The U-1 Well draws water from is from aquifer C. The U-1 Well is currently equipped with an ATEC filter system to treat elevated iron and manganese levels in the groundwater.

Project Background

In June of 2022, the United States Environmental Protection Agency (EPA) published a proposed Maximum Contaminant Level (MCL) levels for six PFAS compounds, perfluorooctane sulfonate (PFOS) – 4 ppt and perfluorooctanoic acid (PFOA) – 4 ppt. EPA’s proposed rule includes the use of a hazard index to consider the combination of four contaminants Perfluorononanoic acid (PFNA), Perfluorohexanesulfonic acid (PFHxS), Perfluorobutanesulfonic acid (PFBS) and GenX. This project will treat the wells to filter PFAS from the drinking water to levels that meet the proposed EPA MCLs.

Per-and polyfluoroalkyl substances (PFAS) are a group of man-made toxic chemicals that include PFOA, PFOS, PFNA, PFHxS, PFBS, GenX, and many other chemicals. These chemicals are not found naturally in the environment. PFOA and PFOS have been the most extensively produced and studied of these chemicals. There is evidence that exposure to PFAS over time may lead to adverse human health effects.

In 2016, Joint Base Lewis McChord (JBLM) sent out a press release notifying the District that high levels of PFAS were found in 5 of the military base’s wells as concentration levels were in excess of the EPA’s health advisory level of 70 ppt during the UCMR3 monitoring. After sampling of water produced from District wells close to JBLM, PFAS was detected well below the EPA health advisory level of 70 ppt. As a result, the District implemented ongoing monitoring of its shallow aquifers – the A-level and C-level aquifers. PFAS levels detected at the Country Place site were below the EPA health advisory level of 70 ppt, but above the State Dept. of Health State Action Levels (SALs). Once the SALs were in effect, the U-1 Well was taken offline in accordance with District Board Policy. In anticipation of the EPA’s new proposed MCL levels, additional wells would be slightly above the proposed MCL, causing concerns about the total source capacity available to the District.

The following are the latest sample results for U-1 well.

U-1 - April 2022	ppt
PFOS	26.1
PFHxS	19.7
PFBS	7.3
PFOA	4.2
PFNA	2.1
GenX	ND

Site information

The District has a permanent easement at the Country Place site, located within the Country Place Development. The selected consultant will need to work with the District to present the project and anticipated impacts to the Country Place HOA. The District's easement allows for the installation of additional equipment and modifications to maintain and treat the well; discussions with the HOA will be approached accordingly.

Well U-1

- Constructed: 1995
- Aquifer: Aquifer C
- Size: 16-inch casing; 14-inch, 60- to 100-slot screen
- Screened zone: 198 to 293 feet bgs
- Pump: Submersible with Soft Start
- 5-year average SWL 30.5 feet bgs
- 5-year average PWL 119.4 feet bgs

Project Schedule

The District is looking to expedite the design schedule because of the possible effect of the proposed rule on PFAS levels from the EPA. Depending on need and availability, the District may use the selected consultant for construction management services in conjunction with District staff.

The District desires to have the improvements completed and in service by June 2025.

Scope of Services

The Consultant shall:

- Attend a pre-design meeting to confirm the design scope.
- Participate in one to two meetings with the Country Place HOA. The meetings will include but are not limited to, providing conceptual drawings and renderings of the new GAC system, answering questions, and providing responses as needed.
- Perform site assessment to determine the location of the treatment system (Attached is a concept drawing for the location of the GAC system and backwash tank).
- Prepare site surveys as needed for the proposed design, permitting, and construction.
- Perform soil investigations.
- Prepare SEPA documents for the proposed project.
- Prepare the complete plans, specifications, and contract documents (using the District's standard contract documents) for the construction of a new Country Place GAC filtration system, including new piping and electrical controls as necessary, all necessary stormwater facilities, and landscaping as required by the permitting authority.
- If necessary, prepare separate specifications and bid documents for any equipment needing pre-purchased.
- Attend monthly status meetings with the District during the design to seek input from the District.
- Submit 30, 60, and 90 percent design drafts as well as a final draft for District approval.
- Prepare a Design Report for submittal and approval from the Department of Health.
- Obtain permits through the City of Lakewood.
- Obtain construction document approval from the Department of Health.
- As part of the overall project, GAC system and design, if necessary, system improvements to the existing distribution system.
- Design any necessary modifications to existing chlorination and filtration systems to accommodate the new GAC filtration system.
- Prepare estimates of construction costs as part of the 60%, 90%, and final design submittal.
- Include scope and costs for construction management services with staff interaction.

Schedule

The anticipated project milestones are:

Proposals for professional services due	August 2, 2023
Internal Review and Selection	August 11, 2023
Complete contract negotiations	August 18, 2023
Approve consultant's contract	August 22, 2023
Begin design	September 5, 2023

The District will expedite the internal review, contract negotiations, and contract approval at its discretion based on staff capacity, the number of proposals received, and the efficiency of contract negotiations.

Proposal Requirement

Proposals shall include the following information:

Project approach	Describe each task and project team member(s) responsible for task; identify issues to be resolved.
Project schedule	For design phase and construction management. The District is hopeful of securing Public Works Board Loan for this project.
Project team	Each team member's role and directly relevant experience, organization chart.
Relevant project experience and References	Similar projects completed within the last five years (including role of proposed team members, estimated and actual construction cost, amount of change orders, and client contact and phone number for each project).
Insurance	Statement that consultant and sub-consultants, if any, currently have the required levels of insurance (attached)

The proposals shall be limited to twelve 8-1/2 x 11 single-sided pages, including cover letter but excluding resumes, and a maximum of three 11 x 17 pages to show past design work.

For information or questions about the project, contact the Engineering Manager who is listed below and is the Project Manager. Submit your proposal via email in electronic format before **4:30 p.m. on Wednesday, August 2, 2023** to: Randall Black, General Manager: rblack@lakewoodwater.org Office Phone: (253) 588-4423

Consultant Selection and Evaluation Process

District staff will evaluate the consultants' proposals based on the following criteria:

1. Project approach and resolution of issues	30%
2. Project <u>personnel's</u> directly relevant experience on projects with similar issues (schedule, permits, noise, aesthetics, PFAS mitigation etc.)	30%
3. Available staff to meet an expedited design schedule.	20%

4. Record of performance (based on information from references regarding meeting budgets and schedules, completeness of design, documents, record of change orders, etc.)	20%
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All firms submitting proposals will be notified in writing by August 11, 2023, as to their status in the selection process. District staff will work with the most qualified consultant to prepare an Agreement for Consulting Services, including a Scope of Work and an estimated budget for the Project. The General Manager will approve the recommended consultant and Agreement. The selected consultant will be approved by internal staff, General Manager, Engineering Manager, Pumping Water Treatment Dept. Head, and Pumping and Water Treatment Lead.

Attached is a copy of the District's standard Architecture and Engineering agreement for Consulting Services, including the necessary insurance requirements, which will be used with the selected firm. If the District and the selected firm are unable to agree on the terms and conditions of the Agreement, the District will terminate negotiations and the next best qualified firm will be contacted for contract negotiation.

The District may waive any informalities or irregularities in the proposal and reserves the right to accept, reject, or negotiate any or all proposals, including the right to award the contract in whole or in part if it is deemed in the District's best interests. The District shall not be liable for any cost incurred by consultants in responding to this RFP.

Attachments:

- Proposed Conceptual Site Plan
- District's Standard Architecture and Engineering Agreement