



**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

**ATTACHMENT A: SCOPE OF WORK**

**GOODS AND SERVICES CONTRACTS**

**RFP 20-PR-DPO-34**  
**Odor Control Facilities Media Replacement - Labor**  
**Attachment A: Scope of Work**

**BACKGROUND**

DC Water is an independent multi-jurisdictional regional utility that provides drinking water, wastewater collection and treatment to more than 672,000 residential, commercial and governmental customers in the District of Columbia, and also collects and treats wastewater for an additional 1.6 million customers in Montgomery and Prince Georges counties in Maryland and Fairfax and Loudoun counties in Northern Virginia.

DC Water is seeking a vendor to remove the “spent” or old odor control media (potassium permanganate and carbon) from our Odor Control Facilities, inspect the systems and refill the odor control vessels with new media. The vendor will provide all labor, materials, tools, and equipment required to replace the media, protect the landscape from damage and clean the facilities of any loose or spilled media at each of the six (6) DC Water Potomac Interceptor (PI) Odor Control Facilities (OCF) located in Washington DC, Maryland and Virginia.

**ODOR CONTROL FACILITIES DESCRIPTIONS MEDIA REPLACEMENT SCHEDULING**

Six Odor Control Facilities (OCF) have been constructed along the main sections of the Potomac Interceptor (PI) for the long-term abatement of odors generated by the sewer. The six sites are located in the District of Columbia (Site 1995); Montgomery County, Maryland (Sites 4, 17, and 27); and Fairfax County (Site 31) and Loudoun County (Site 46), Virginia. The foul air is pulled from the interceptor with a fan and moves radially through the media bed, where odorous compounds are removed by the two-stages of media installed in the vessels. Table 1 presents a summary of information on the PI OCFs.

**MEDIA REPLACEMENT SCHEDULING**

It is DC Water’s intent to schedule the media replacement of all 6 OCF facilities via three (3) options as follow:

**Option 1:** Media replacement of all 6 OCF sites at once, for completion within a 3-week period

**Option 2:** Media replacement at three OCF sites at a time, in two phases for completion within a 2-week period:

- Phase 1: Site 1995, 17 and 27
- Phase 2: Site 46, 31 and 4

**Option 3:** Media replacement at each OCF, as needed, within seven (7) calendar days of receiving notice from DC Water

**CONTRACTOR MINIMUM QUALIFICATIONS**

The Contractor **must** maintain the following minimum qualifications:

- The Contractor’s Site Supervisor(s) must each have a minimum of 3 years of relevant experience and shall be Confined Space Certified, as well as certified in first aid and CPR.

DC Water reserves the right to review and deem satisfactory the qualifications of all individuals having Management Authority in the project. Management Authority is defined as above the level of trade foreman.

## **1. REPLACEMENT MEDIA**

DC Water shall supply the following media for replacement at the OCFs:

- 1.1. PureAir 8 Absorbent Media - 8% potassium permanganate-impregnated activated alumina for use in the inner polishing layer.
- 1.2. Pelletized, bituminous-based high-H<sub>2</sub>S capacity activated carbon.

## **2. GENERAL REQUIREMENTS**

- 2.1. Prior to commencing work, the Contractor shall submit the following documents to the COTR for approval:
  - Name(s) of field supervisor(s)
  - Additional information may be required
- 2.2. Contractor shall submit a copy of their Health and Safety Plan along with their Pricing proposal. Refer to Attachment M of RFP document, "Safety Provisions".
- 2.3. The Contractor shall provide media replacement services at various locations along the Potomac Interceptor (PI), as shown in Table 1. All work shall be performed under the direction of DC Water's Contracting Officer's Technical Representative (COTR) or their assigned representative and in accordance with the guidelines and specifications detailed herein.
- 2.4. The Contractor shall submit a copy of each media replacement Work Order with the exact specifications of the tools, cleanup and site landscape protection plan to the COTR or assigned representative prior to each media replacement task.
- 2.5. Contractor shall be aware of any site-specific access issues, including one-way traffic patterns, vehicle weight and size limitations, access road conditions, media delivery/storage/lay down constraints, and other considerations. Avoidance of damage to the landscape around each OCF site is critical. The contractor will plan and take the necessary precautions to avoid damaging the landscape. The goal is to "leave no trace" on the landscape of the contractor site visit.
  - 2.5.1. Prior to starting each site Work Order, the contractor will photograph the area of the landscape where the trucks and equipment will be located or cross to reach the OCF to document the condition of the area prior to beginning work.
  - 2.5.2. Upon completion of the media replacement and clean up the contractor will photograph the same area to document the condition of the landscape.
  - 2.5.3. The photographic documentation of the Before and After landscape condition will be submitted to the COTR or assigned representative for review, approval or rejection of the site's condition.
  - 2.5.4. The contractor will be responsible for the costs to repair any damage to the landscape.
- 2.6. For the sites identified in Table 1, the contractor shall inspect, prior to media replacement and repair any holes in the screens and other damages that impair OCF function, prior to the installation of the replacement media.
- 2.7. The contractor shall remove the spent media through vacuum conveyance, utilizing dust mitigation measures.

- 2.8. The contractor shall fill the media in a dustless manner up to the vessel lid baffle with no free headspace in order to prevent channeling and/or bypassing of the media.
- 2.9. The contractor shall re-adjust system air flow to the design flow upon completion of each media replacement event at the sites listed in Table 1. Air flow shall be adjusted by use of an air flow measurement device such as a hot-wire anemometer, and a facility's VFD or influent air damper.
- 2.10. The contractor shall adequately clean each Site after media installation activities are complete.
- 2.11. The contractor shall haul and dispose of spent media in accordance with local and federal laws.
- 2.12. The mist eliminator at each site shall be cleaned by the vendor after the media is replaced.

### **3. FINAL INSPECTION AND ACCEPTANCE**

- 3.1. The Contractor shall remove all remaining equipment, debris, unused material and unwanted evidence of the project from the work site upon completion of media replacement activities.
- 3.2. Upon completion of all work, a final inspection of the site will be undertaken at which time representatives of DC Water and Contractor will be in attendance. Any unsatisfactory cleanup will be indicated by DC Water and the Contractor shall promptly and properly correct all such deficiencies to the satisfaction of DC Water.
- 3.3. Acceptance of work shall occur at the completion of work and upon determination that work meets DC Water's standards and the work site is fully demobilized to the satisfaction of the COTR.
- 3.4. Within 7 business days of final inspection and acceptance, the Contractor shall provide a Final Report to the COTR to include, at a minimum, the following:
  - A summary of the work completed
  - A summary of any unexpected issues occurring in the media replacement process
  - Recommendations for future tasks
  - A copy of invoices to be submitted to DC Water for payment
  - Before and After area Photographs

### **4. PERSONNEL**

- 4.1. The Contractor's employees assigned to work at the Odor Control Facilities shall be in good health and free from infectious diseases and illness.

### **5. EQUIPMENT**

- 5.1. The Contractor shall furnish, erect, dismantle and remove all rigging and scaffolding on the interior of the Odor Control Facility necessary to perform the required work. Scaffolding and rigging shall be erected in a manner that will permit access for visual inspection of all interior surfaces. Scaffolding shall be so designed and constructed as to assure structural stability and carry all construction loads without excessive deflection or vibration. Scaffolding design and installation shall meet all applicable requirements of OSHA and other applicable regulations. All scaffolding and rigging shall be erected in a manner that will prevent interference with surfaces to be used.

- 5.2. The Contractor shall ensure that all equipment is maintained properly and that all personnel using the equipment are trained and use all equipment properly.
- 5.3. Dust collection or dust mitigation equipment must be used to clean the facility after the media replacement task is done.

## **6. SITE ACCESS**

- 6.1. The Contractor shall be allowed to access the sites identified in Table 1 as required.

## **7. QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)**

- 7.1. The Contractor shall maintain an internal QA/QC program to be submitted to and approved by the COTR prior to the commencement of any work.
- 7.2. The work shall be performed in accordance with the best practices of the industry and workmanship shall be of the best quality. The specifications call attention to certain features but do not purport to cover all details entering into the required work.

## **8. LIQUIDATED DAMAGES FOR DELAYS**

- 8.1. Delay in completion of the project will jeopardize DC Water's interests. However, it is impossible to ascertain with reasonable certainty the direct/indirect real damages, which DC Water could sustain if the project is not performed and completed in a timely manner.
- 8.2. DC Water will deduct and retain out of any money due, or to become due hereunder, the amount of liquidated damages and, in case retained amounts are less than the amount of liquidated damages, the Contractor shall be liable to pay the difference upon demand by DC Water.
- 8.3. Nothing herein shall be deemed to limit any of the rights and remedies available to the DC Water or in any way to create an exclusive remedy between the parties.
- 8.4. DC Water reserves the right to pursue any and all remedies available to it in any manner permitted at law or in equity.

**Table 1: PI Odor Control Facility (OCF) Summary**

| Facility  | Location              | Latitude/<br>Longitude       | Total Media Volume<br>(ft <sup>3</sup> ) | Air Flow<br>(cfm) |
|-----------|-----------------------|------------------------------|--|-------------------|
| Site 1995 | District of Columbia  | 77°6'3.88"W/ 38°55'11.43"N   | 678                                      | 10,000            |
| Site 4    | Montgomery County, MD | 77°7'38.07"W/ 38°57'0.95"N   | 678                                      | 10,000            |
| Site 17   | Montgomery County, MD | 77°10'37.94"W/ 38°58'21.73"N | 542                                      | 8,000             |
| Site 27   | Montgomery County, MD | 77°13'36.89"W/ 38°58'53.13"N | 771                                      | 12,000            |
| Site 31   | Fairfax County, VA    | 77°16'56.73"W/ 39°2'16.01"N  | 828                                      | 12,250            |
| Site 46   | Loudoun County, VA    | 77°22'31.2"W/ 39°3'16.73"N   | 579                                      | 8,000             |

| PIOCF Volumes by Site |   |                   |
|-----------------------|---|-------------------|
| Site#                 | Pure Air 8 -<br>Permanganate<br>Cu. Ft. | Carbon Cu.<br>Ft. |
| 1995                  | 292                                     | 386               |
| 4                     | 292                                     | 386               |
| 17                    | 233                                     | 309               |
| 27                    | 332                                     | 439               |
| 31                    | 356                                     | 472               |
| 46                    | 249                                     | 330               |