The Energy Department announced Thursday that a team led by BWX Technologies and Fluor has won a maximum 10-year, $13 billion contract to take over management and closure of 177 underground nuclear waste storage tanks at the agency’s Hanford site, besting two other reported bidders, including the incumbent contractor.

As has been the case with other major DOE contract awards in recent years, the department provided little detail about why it chose the BWXT-Fluor team—which is called Hanford Works Restoration LLC—for one of its biggest and most sensitive cleanup projects.

“The proposal submitted by Hanford Works Restoration was determined to provide the best value to the government considering key personnel, technical and management approach, past performance and cost,” DOE said in a press release.

Key subcontractors on the winning team include INTERA Inc., which is based in Austin, Texas, and DBD, Inc., based in Richland, Wash., where Hanford is located.

BWXT and Fluor already jointly hold the cleanup contract at DOE’s shuttered Portsmouth uranium enrichment plant in Ohio and individually are carrying out several major nuclear cleanup and weapons projects for the department, with Fluor currently the operator of DOE’s sprawling Savannah River Site in South Carolina.

The current holder of the tank farm management contract at Hanford is Washington River Protection Systems, which is led by Amentum, the former government services arm of Aecom that the engineering giant spun off last year. That contract expires in September.

A team led by Amentum and Atkins was seeking the new tank waste management contract, and a team headed by Jacobs and Honeywell was also said to have bid for the contract. DOE did not identify the losing bidders.

Notably, DOE last December awarded another huge Hanford cleanup contract to Amentum-led Central Plateau Cleanup Co. (CPC) to conduct some $10 billion of work over 10 years, including decontamination and decommissioning of highly radioactive and aging nuclear processing buildings left over at the site from plutonium and other nuclear weapons production and research operations dating back to the Cold War.
CPC, which also includes Fluor Federal Services and Atkins Nuclear Secured, replaced Jacobs-led CH2M Hill Plateau Remediation Company, which recently completed the dismantling of Hanford’s main plutonium processing facility.

Both the central plateau and the Hanford tank farm contracts are the first to implement DOE’s new “end-state” contracting model, which was announced in 2018 and designed to give contractors more flexibility to propose innovative strategies for speeding cleanup of department sites, with a focus on setting firm end dates for completing projects.

While DOE cleanup contracts in the past were highly prescriptive—containing highly detailed deadlines and requirements for contractors to carry out specific projects—the end-state contracts call for contractors to set priorities in conjunction with federal and state regulators that oversee cleanup at all DOE sites. In contrast, DOE previously worked with regulators to set cleanup priorities and standards for contractors.

While broadly supported by contractors, the end-state initiative drew concerns about how DOE would pick contract winners when bidders propose widely varying cleanup strategies. In fact, the Government Accountability Office recently rejected a protest filed by a losing bidder on the Hanford central plateau contract, although GAO has not yet disclosed what specific issues the protestor raised in challenging the fairness of DOE’s decision picking Amentum-led CPC.

The end-state contracting model also has raised questions about whether state regulators will accept contractor-proposed cleanup strategies that do not track legally enforceable site cleanup milestones previously set by regulators in negotiations with DOE, as is the case at Hanford.

In line with the more fluid nature of the end-state contract concept, the tank waste operations contract offered by DOE contained few specifics about the scope or schedule of projects to be carried out by the winning bidder.

In general, the contract continues ongoing efforts to remove some 56 million gallons of mixed radioactive and toxic waste that have been stored in the tanks for decades, with a top priority of emptying 149 aging single-walled tanks, many of which already have leaked thousands of gallons into soil and groundwater. Hanford also has 28 more secure double-walled tanks that are to be used to send waste to huge processing plants for solidification and eventual disposal, with so-called low-activity wastes sent to shallow burial grounds at Hanford and high-level wastes sent to a geologic repository.

One near-term goal for the new tank farm operator will be to begin deploying newly designed mobile tank-side waste removal units to speed the emptying of the tanks.

In total, DOE in its request for proposals on the tank farm contract said it anticipated seeking at least $6.93 billion in tank cleanup funding from Congress over the maximum 10-year length of
the contract. However, the department said cleanup work under the contract could reach $13 billion.

The department said specific tank cleanup projects will be authorized through separate task orders after the contractor has reached agreement with regulators on key milestones and “end states”—meaning the scope of cleanup to be performed and what, if any, residual contamination will be left at the site.

Reaching agreement with state regulators on Hanford tank cleanup may be particularly challenging for the new BWXT-Fluor team because Washington state has expressed concern about DOE plans to leave residual amounts of waste in tanks to be closed in place at the site. The mostly emptied tanks are to be filled with grout to prevent leakage of contaminants, but state officials say the department under the Trump administration has asserted unilateral authority to decide how much waste can be left in the tank.

As of last year, DOE said it had removed 1.6 million gallons of waste from 16 partially filled tanks in Hanford’s so-called C Farm. However, the department said it was not technically or economically practicable to remove some 62,000 gallons of residual waste left in the bottoms of the tanks. DOE said those residues will be immobilized when the tanks are filled with grout, ensuring there will be only minimal long-term leakage into soil and groundwater at levels well below safety limits for at least 1,000 years.

However, Nuclear Regulatory Commission staff last year reviewed DOE’s C Farm closure plan and questioned whether DOE had removed as much waste from the tanks as possible, noting that the department terminated waste removal operations at multiple tanks without reaching its own goals for emptying them.

More broadly, the NRC staff questioned the “performance assessment” done by DOE to show that its plan for closing the C Farm would adequately protect the public, saying the department’s modeling failed to adequately reflect many “real-world” factors.

Washington state officials are up in arms about DOE’s decision last year to “reinterpret” federal nuclear waste laws so it can reclassify residual high-level waste in the tanks as low-level waste, thus allowing it to be buried in the tanks. DOE says it needs flexibility to reclassify tank wastes that are not actually as dangerous or long-lived as high-level waste, which by law must be disposed of in a deep geologic repository.

However, Washington Gov. Jay Inslee (D) charged DOE made the change so it can leave more waste in the tanks and thus save money on the hugely expensive tank cleanup program. Washington officials also say the unilateral reclassification scheme is unnecessary because DOE already is reclassifying some 90 percent of the tank wastes under flexibility provisions of its Hanford cleanup agreement with the state.