

Department of Energy

Oak Ridge Office of Environmental Management P.O. Box 2001 Oak Ridge, Tennessee 37831

June 17, 2019

Mr. Kenneth J. Rueter President and Project Manager URS | CH2M Oak Ridge LLC Post Office Box 4699 Oak Ridge, Tennessee 37831-7294

Dear Mr. Rueter:

URS | CH2M OAK RIDGE LLC CONTRACT NUMBER DE-SC0004645, AWARD FEE DETERMINATION FOR PERIOD 15

The U.S. Department of Energy (DOE) Oak Ridge Office of Environmental Management Award Fee Board has completed its evaluation of the URS | CH2M Oak Ridge LLC (UCOR) performance for Award Fee Period 15 from October 1, 2018 through March 31, 2019. In its deliberations, the Board considered the Award Fee Evaluation Report and your self-assessment. As the Fee Determination Official, I have determined that UCOR has earned the following Award Fee for Period 15: \$2,462,292 for the Project Management Incentive and \$2,513,541 for the Cost and Schedule Incentive. The total Award Fee is \$4,975,833, against an available Award Fee of \$5,585,647 for Period 15. Ratings are as follows:

Objective Number	Performance Description	Performance Weight	Available Award Fee Pool	Performance Score	Award Fee Earned	Adjectival Rating
Α.	Project Management Incentive					
A.1	Project Management and Business Systems	25%	\$768,027	96%	\$737,305	Excellent
A.2	Operations Management	55%	\$1,689,658	69%	\$1,165,864	Good
A.3	Regulatory and Stakeholder Activity	20%	\$614,421	91%	\$559,123	Excellent
Project Management Incentive Total		100%	\$3,072,106	80%	\$2,462,292	Very Good
В.	Cost and Schedule Incentive	100%	\$2,513,541	100%	\$2,513,541	High Confidence

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UCOR has performed 82 percent of their contract baseline scope with a cumulative Schedule Performance Index of .99, Cost Performance Index of 1.05, a To-Complete Performance Index based upon Estimate at Completion of .95, and a favorable Variance at Completion against the Performance Measurement Baseline of \$89 million. These indicators continue to reflect a contract that is performing well against the cost and schedule plan, the Estimate at Completion is reasonable, and actual costs will be less than the contract value.

During this six-month performance rating period, UCOR has continued to successfully conduct Environmental Management operations, and efficiently advance and complete cleanup projects that reduced risks at the East Tennessee Technology Park (ETTP), Oak Ridge National Laboratory (ORNL), and Y-12 National Security Complex (Y-12) including:

- 1. Improved worker productivity and reduced the cost of demolition of Building K-1037, the largest remaining facility at ETTP.
- 2. Developed and implemented an acceptable approach to remediate the K-631 F tank. This approach facilitated the completion of the last major deactivation activity in Building K-631, so demolition could begin and keep the completion of the Poplar Creek Facilities Project on track.
- 3. Implemented an integrated approach to planning and executing building slab removal with building demolition that resulted in significant cost savings and reduced schedule.
- 4. Provided excellent support to keep the Mercury Treatment Facility on track by coordinating with other DOE contractors and Consolidated Nuclear Security, LLC to safely and compliantly complete early site preparation activities under budget and ahead of schedule.
- 5. Successfully managed Environmental Management Waste Management Facility and Liquid Low-Level Waste System waste waters during record breaking rainfall events. UCOR also implemented early actions that prevented major erosion on the roads and soils in the Solid Waste Storage Areas.
- 6. Worked closely with Idaho National Laboratory, planning and executing mercury fixative fogging demonstrations to develop more efficient methods for mercury cleanup at Y-12 former mercury process buildings.
- 7. Provided excellent support to DOE to continue progressing the On-Site Waste Disposal Facility project, which will provide future disposal capacity for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) waste generated through the future cleanup of Y-12 and ORNL.
- 8. Recognized the opportunity for significant cost savings on the Biology Complex Project by changing to a different, yet equally certified/protective, Powered Air Purifying Respirator. This change is expected to have a cost savings of \$116,000 per month.
- 9. Worked with Subject Matter Experts at Savannah River National Laboratory to finalize a conceptual feasibility study for the Molten Salt Reactor Experiment (MSRE) Facility In-Situ Decommissioning (ISD) option. This included holding a workshop for the regulators at the Savannah River Site to discuss successful ISD initiatives of several reactor facilities at that site.

Through these efforts, the regulators indicated support for carrying the analysis into a revision of the CERCLA feasibility process, leading to a potential revision of the Record of Decision for MSRE. The ISD option is expected to resolve worker safety concerns related to removal of the salt tanks for disposal and significantly reduce costs.

- 10. Completed the shipment of MSRE Salt Probes and casks to Energy Solutions for size reduction and disposal, completing a Tennessee Department of Environment and Conservation (TDEC) waste disposal commitment two years ahead of schedule.
- 11. Continued to exceed Small Business subcontracting goals including the achievement of 81.1 percent versus the goal of 65 percent.
- 12. Processed Contract Change Proposals within an average of 131 days, well under the DOE goal of 180 days. Additionally, Baseline Change Proposals were submitted within 30 days of the contract modification ensuring that the contract and performance baseline remain in alignment.
- 13. Initiated periodic safety forums to facilitate communications, lessons learned, and improvement in execution of several significant programs. Among these programs are: Hazardous Energy Control, Construction and Heavy Equipment, and Hoisting and Rigging. This effort provides for consistent communication of requirements and management expectations on these important programs.
- 14. Following a 4.4 magnitude seismic event that occurred on January 12, 2018, near Spring City, Tennessee, UCOR promptly conducted inspections of more than 130 safety design features on nearly 20 facilities on the reservation. No damage from the seismic event was observed, and no deficiencies were identified.
- 15. Improved the Radiological Worker Permit (RWP) process by initiating replacement of the current units for logging on/off of RWPs with new workstations, which will be linked to real-time data in order to verify proper training, dosimetry, RWP briefing, etc., prior to allowing a worker to sign onto an RWP.
- 16. Recognition by the TDEC Division of Remediation for fostering an accident free environment on Haul Road during 2018. There were 8,777 shipments across Haul Road in calendar year 2018 with no incident.
- 17. Recorded 16 consecutive months with more than 9,000 personal sampling events without any unprotected individuals exposed to a chemical substance above an Occupational Exposure Limit.
- 18. Conducted a company-wide Safety Refocus and a Safety Stand Down at the Biology Complex Project to review recent injury trends. These interactive sessions provided opportunities for collaboration amongst management, frontline leaders, and the workforce to improve safety performance.
- 19. All 19 milestones in Appendix E of the Federal Facility Agreement for the Oak Ridge Reservation for the period were either met or successfully renegotiated with the regulators. Given the potential financial liabilities of failing to meet established milestones, this is a critical area of support to DOE.
- 20. Hosted approximately 170 onsite regulatory visits and inspections with no identified permit infractions or reportable releases. Although the UCOR COLEX project did potentially make a contribution to a single violation related to mercury releases at Y-12, overall, this represents a

significant achievement in view of the approximately 30 environmental permits and agreements managed and approximately 100 required reports, documents, and fees prepared or submitted each year. These documents, reports, and fees were submitted on schedule and without any regulator identified deficiencies. UCOR has now operated 81 months without a spill or release reportable to outside agencies.

- 21. Completed all exit pathway, integration point, and performance assessment monitoring of groundwater, surface water, sediments, and biota throughout the Oak Ridge Reservation in accordance with the six governing Remedial Action Report Comprehensive Monitoring Plans. Conformance with agreed-upon sampling is key to developing and maintaining cost-effective long-term monitoring programs for the Oak Ridge watersheds.
- 22. TDEC performed their unannounced quarterly inspection of landfills V and VII on Chestnut Ridge. No violations were noted. This inspection was one of the longest and most detailed solid waste inspections the landfill have experienced.
- 23. TDEC Division of Solid Waste Management conducted a Resource Conservation and Recovery Act hazardous waste inspection at ETTP using the largest inspection team in numerous years and with less than a one-week notice. The inspection teams toured the permitted facilities and waste generator areas, and conducted an extensive documentation review. The Hazardous Waste Compliance Evaluation Inspection report received from TDEC confirmed that no violations were identified.
- 24. Received approval for a number of requests to the TDEC Division of Solid Waste Management for listed hazardous waste environmental media "contained-in" determinations for ETTP CERCLA soil investigations and potential excavations. The approvals will allow for soils and sediments to be disposed at the Y-12 Industrial Landfill V or the Environmental Management Waste Management Facility instead of offsite listed waste landfills, resulting in potentially significant cost avoidance.
- 25. Excellent funds management by UCOR resulted in no appropriation or administrative violations for the fiscal year. UCOR utilized their internal funds management and variance analysis processes to identify and adjust available funding to maximize the use of funding resources while minimizing impacts to the workforce.
- 26. UCOR variances are positive, as evidenced by the cumulative cost and schedule performance indices. UCOR monitored Earned Value Management System data to ensure root causes of variances were understood and took prompt action on negative variances. UCOR management actively reviewed both positive and negative variances, as well as to-go cost projections during their plan of the month meeting. Corrective actions were tracked and reviewed for effectiveness.

During this performance period, DOE identified some opportunities for improvement that require continued attention including:

- UCOR selected a vendor to inspect the 3039 stack at ORNL who was not able to meet DOE/Federal
 Aviation Administration licensing requirements, causing the inspection to be delayed while UCOR
 procured another vendor.
- 2. DOE has expressed concerns about the timeliness of addressing the maintenance issues associated with the gates at the White Oak Dam. The inability to operate the gates as designed and required by

regulatory documents was identified over two years ago, and has yet to be resolved. While a strategy has now been developed and submitted to the regulators for approval, UCOR was encouraged to make implementation of the plan a priority so that the ongoing issues with these gates can be resolved.

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- 3. The Oak Ridge Office of Environmental Management completed a quality assurance audit in October 2018, which included an assessment of the UCOR Contractor Assurance Statement. The audit resulted in four findings related to the Contractor Assurance Statement in the areas of proper flow-down to subcontractors, nonconforming issues not entered into the UCOR Nonconformance Report process, and unqualified assessors conducting assessments.
- 4. UCOR has continued to experience incidents involving equipment operation related to consistent application of its work planning and control program.
- 5. UCOR experienced two findings requiring management attention associated with asbestos abatement work on the Biology Project dealing with air sampling not being conducted in accordance with UCOR procedures, and documentation of alternate control measures in lieu of continuous operation of negative pressure enclosures in accordance with regulations.
- 6. UCOR continued to experience system operational issues at the Liquid Gaseous Waste Operations and MSRE. For example, single-point failures of critical equipment and failed/inoperable equipment critical for continuity of operations of the Liquid Low-Level Waste system were not being addressed in a timely manner.
- 7. UCOR continued to experience issues related to electrical safety and lockout/tagout.
- 8. UCOR continued to experience respirator use issues.
- 9. UCOR experienced radiological issues during the first six months of Fiscal Year 2019. Examples include various instances of workers entering Radiological Areas without the required training, Radiological Control Technician support, or signed permit.
- 10. UCOR experienced issues related to excavation and trenching such as impacts to active storm drain lines, lack of barricades to the excavation edge, ingress/egress, and improper sloping/shielding.
- 11. UCOR did not keep the fish barrier panel screens closed at the K-1007-P1 pond during the flooding that occurred the weekend of February 23, 2019. This is inconsistent with the fish management process documented in the removal action.

This Award Fee Determination provides reasonable assurance that DOE fairly executed the Performance Evaluation Management Plan and Award Fee process for Period 15. Please express our sincere thanks to your entire team for their continuing support of the DOE mission.

If you have questions or if we can be of any further assistance, please contact me at 576-0742 or Laura Wilkerson at 576-9900.

Sincerely

John A. Mullis I

Fee Determination Official

Enclosure:

Award Fee Evaluation Report of the Performance Evaluation Board, East Tennessee Technology Park, Contract Number DE-SC0004645

cc w/enclosure:

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