

## **FY2019 Performance Evaluation Summary**

**Contractor:** Triad National Security, LLC (Triad)

Contract: 89233218CNA000001

Evaluation Period: November 1, 2018 – September 30, 2019

**Basis of Evaluation:** Fiscal Year (FY) 2019 Performance Evaluation and Measurement Plan (PEMP)

The FY 2019 PEMP for this contract is available at:

https://www.energy.gov/sites/prod/files/2020/01/f70/FY19%20Triad%20PEMP%20Change%201%20-

Signed Redacted.pdf

The Contract is available at: https://www.energy.gov/nnsa/los-alamos-national-laboratory-contract

#### **Award Fee Scorecard**

<u>Goal</u>	<u>Rating</u>		A/D: 1 A 2111	F' 1
	<u>Adjectival</u>	Percent	At Risk Available	<u>Final</u>
Goal-1: Manage the Nuclear Weapons Mission	Very Good	90%	\$8,012,793	\$7,211,514
Goal-2: Reduce Nuclear Security Threats	Satisfactory	25%	\$3,434,054	\$858,514
Goal-3: DOE & Strategic Partnership Projects Mission Objectives	Excellent	99%	\$ -0-	\$ -0-
Goal-4: Science, Technology & Engineering (ST&E)	Excellent	99%	\$ -0-	\$ -0-
Goal-5: Operations & Infrastructure	Satisfactory	50%	\$6,868,109	\$3,434,054
Goal-6: Leadership	Very Good	80%	\$4,578,739	\$3,662,991
<b>Total Award Fee</b>	Good	66.3%	\$22,893,695	\$15,167,073

In addition, the fixed fee and total fee summaries are provided below:

	<u>Available</u>	<u>Final</u>
Fixed Fee	\$17,955,839	\$17,955,839
SPP (Fixed Fee)	\$2,663,836	\$2,663,836
Total Fixed Fee	\$20,619,675	\$20,619,675
Total Fee (Award Fee and Fixed Fee)	\$43,513,370	\$35,786,748

Triad continues to balance mission with safety improvements and pursuit of operational excellence, and they continue to emphasize professionalism and partnership with NNSA as they meet highly difficult and long-standing challenges. Triad earned Excellent ratings on Goals 3 and 4 and Very Good ratings in Goals 1 and 6. Triad earned Satisfactory ratings in Goals 2 and 5. In particular, Triad failed to ensure safe and secure execution of subcontractor work under the source recovery program which delayed important programmatic activities to secure radioactive sources in FY 2019 and FY 2020. Triad was challenged in several areas including breakdowns in subcontractor management, oversight, and safety issues, Enduring Waste Management, formality/conduct of operations, construction safety, and material control and accountability compliance. Overall, Triad experienced numerous repeat issues, impacting progress towards becoming a learning organization.

Overall, Triad earned a Good rating for FY2019, exceeding some of the objectives and key outcomes under the PEMP goals, meeting overall cost, schedule, and technical performance requirements with accomplishments that slightly outweigh issues.

## **Accomplishments:**

### Goal 1

- Triad, with Lawrence Livermore, completed criteria for the Level One Milestone for developing simulation capabilities for Secondary Off-Nominal Performance.
- Cycle 24 Annual Assessment activities completed and Director's Assessment Letter delivered.
- 160/162 Level 2 milestones completed for 99% Completion Rate.
- Manufactured five development unit pits.
- Completed Vendor Selection Review Process for the Crossroads Supercomputing Platform.
- Supported W76-1 Last Production Unit and initiation and completion of W76-2 Production.
- The Laboratory delivered an integrated Plutonium Requirements document capturing all mission requirements for TA-55 and completed all planned pit and advanced surveillance activities.
- Completed remediation of the final containment vessel in the CVD Campaign.

## Goal 2

- Triad provided key support to high profile domestic and international source recovery missions.
- Continued Delivery and Launch Support of Global Burst Detector sensor systems.
- Executed three Dry Alluvium Geology Experiments for the Source Physics Experiment Series.
- Successfully hosted the Marble Challenge 19-02 national field level exercise.

# Goal 3

- Triad utilized its expertise in nuclear research and development and its leadership in MicroReactor design to scale up TerraPower's design supporting energy security goals.
- Discovered the potential of Squeezed Quantum Dots for future sensor, imaging, and quantum communication applications and a new reactor-liner alloy material.

#### Goal 4

- The Laboratory team working on the Kilowatt Reactor using Stirling Technology program was awarded the "Gears of Government President's Award".
- Executed a cooperative research and development agreement (CRADA) to develop 3-D hydromechanical modeling code for oil and gas recovery.
- Two Laboratory researchers won "Women in Technology" awards.
- Triad received nine R&D 100 awards as well as three Special Recognition Category awards.

# Goal 5

- Triad implemented a characterization and certification schedule for waste streams and collaborated for successful TRU waste shipments from TA-55, improving waste storage conditions and reducing risk to mission interruptions.
- Triad is improving Criticality Safety Evaluation Determinations for new construction and excavation and decommissioning gloveboxes, resulting in a simplification of criticality safety postings and reducing the potential for level 1-NC infractions.
- Triad is leading the enterprise counter unmanned aircraft system to meet program objectives and FAA requirements.
- Triad's radiation protection maintained a high level of performance while high explosive safety continued to improve.
- Triad delivered efficient and effective business operations, financial management, and budget formulation and execution and provided outstanding support of the National Security Enterprise Security Strategy.
- Triad completed startup of the Radioassay and Nondestructive Testing facility to support waste shipments to WIPP.

#### Goal 6

- Triad was recognized as having a "best-in-class" governance system by its peers.
- Triad delivered a pit production plan after receiving contractual relief reducing the requirement.
- Triad demonstrated an aggressive approach to evolving the laboratory culture and the new conduct of operations model is helping to drive the Laboratory learning culture.
- Triad leadership set a strong safety culture by focusing on transparent communications.
- Triad effectively leveraged parent company resources.
- Triad and its Corporate Board worked closely with NNSA and stakeholders to identify opportunities to improve performance, specifically in Facility Operations and Business.
- Triad accepted a new role of managing design and procurement of experimental vessels.
- Triad provided strong support in response to a release of Cesium 137.

### **Issues:**

#### Goal 1

• Pu Castings were developed but not able to be further processed, delaying Pu aging research. Triad negotiated a change to the Level II milestone from FY19 to FY20.

## Goal 2

• The cesium release and its associated response and remediation forced the Office of Radiological Security to delay important programmatic activities to secure radioactive sources.

#### Goal 3

• Triad did not meet FY19 delivery requirements for DHS plutonium pucks.

## Goal 5

- Triad has not proven to be a learning organization, as evidenced by many significant safety issues, repeat injuries, and waste management issues.
- Triad experienced several safety and subcontract management issues both on and off-site including a breach of a sealed source causing a release of Cesium-137 resulting in multi-million dollar cleanup costs and delays in important programmatic activities.
- Conduct of Operations weaknesses in operational performance still persisted as evidenced by safety process deviations and issues with waste management execution.
- Triad struggled in implementing an effective transuranic waste management program.
- Triad showed improvement in material control and accountability compliance, but needs to accelerate the improvement process.
- Triad has not completed reviews of cyber security vulnerabilities.

#### Goal 6

- Triad did not always engage and obtain a NNSA position prior to engaging outside entities.
- Adverse trends in Category B incidents have risen and Category A incidents trend above average.
- Triad's Issues Management System is not adequate to capture and trend operational compliance resulting in increased risk to the institution.
- Triad did not consistently deliver adequate quality and signature ready documentation and did not perform adequate due diligence on submittals.