



## Performance Fee Agreement

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PBI Number: SRNS2012TP

**Activity Name:** Tritium Programs

WBS Number: 1.03

Performance Period: October 1, 2011 - September 30, 2012

Allocated Fee:	Objective Amount: <i>(45% of allocated fee)</i> Nominal \$6,252,750	Subjective Amount: <i>(55% of allocated fee)</i> Nominal \$7,642,250
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Revision Number: Revision 0

Senior level manager name:  
Douglas Dearolph

Senior level supervisor/division manager name:  
Tim Fischer

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### **Performance Outcome:**

The Contractor shall manage the Tritium program as a defined severable work activity within the Management and Operating (M&O) contract structure so that it will be positioned to be responsive to any future direction with the National Nuclear Security Administration (NNSA) Nuclear Security Enterprise (NSE).

### **Contract Output:** SRNS2012TP

The Tritium Performance Fee Agreement has eight contract outputs which are fully developed in the Tritium Performance Based Incentives (PBI). A summary of each contract output is provided below. The Performance Outcome and associated Contract Outputs and Completion Criteria are based on anticipated fully-funded NNSA-Headquarters (HQ) program level Work Authorizations. In the event there are any substantive differences identified in work scope or funding, this PBI will be modified in a timely manner to allow the allocated fee to be earned in FY 2012. The PBI includes both objective and subjective performance elements. The subjective elements will receive an adjectival rating using the enclosed Subjective Rating and Criteria Description table.



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Number	Value	Indicator
SRNS2012TP-01	\$3,473,750	Support the nuclear weapons stockpile by safely providing tritium and non-tritium loaded reservoirs to the Department of Defense and NNSA (i.e., Pantex Plant) in accordance with NNSA guidance and direction. Provides incentive to the contractor to meet all requirements associated with the Helium 3 mission. Provide the contractor incentive to achieve NNSA Reservoir Surveillance Operations work scope that is required for continuing Stockpile certification, Life Extension Program, First Production Unit and related functions. Includes receipt and extraction of tritium from irradiated Tritium-Producing Burnable Absorber Rods (TPBARs).
SRNS2012TP-02	\$694,750	Conduct research and development and Science, Technology and Engineering (ST&E) sustainment activities that solve complex problems related to mission of SRSO and the NNSA. These activities are sponsored by the Readiness and Engineering Campaigns, and Plant-Directed Research & Development (PDRD) and support development activities for NNSA missions at Savannah River and other NNSA sites and maintain skill and core competencies that are critical to mission sustainability and execution.
SRNS2012TP-03	\$694,750	Support the Tritium Programs mission by safe and efficient execution of projects.



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SRNS2012TP-04	\$1,389,500	NNSA Multi-Site Incentives
SRNS2012TP-05	\$694,750	Governance:  Support the NNSA Governance Reform initiative being implemented across the Nuclear Security Enterprise (NSE).
SRNS2012TP-06	\$2,779,000	Operations: Maintain the Tritium Facilities in a safe, secure and responsive operating condition.  Facility and Site Management/ Maintenance Operations and Work Planning Quality Assurance Engineering Nuclear Safety and Fire Protection Radiation Protection Training and Qualification
SRNS2012TP-07	\$2,084,250	ES&H and S&S: Maintain the Tritium Facilities in a safe, secure and responsive operating condition.  Emergency Management Health & Safety (excludes fire protection) Environmental and Waste Management Safeguards and Security Cyber Security Project Management
SRNS2012TP-08	\$2,084,250	Business: Maintain the Tritium Facilities in a safe, secure and responsive operating condition.  Fiscal Management Program Management Information Technology/Process Control Modernization e-Sourcing



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**Evaluation Criteria:**  
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Objective and subjective evaluation criteria will be used to document review and acceptance of this performance fee agreement.

**Objective Evaluation Criteria:**

Will be evaluated as performance is completed and will be discussed and documented in the monthly SRSO and contractor performance meeting.

**Subjective Adjectival Rating Criteria:**

For those Completion Criteria that receive an adjectival grade and numerical score the following table will be used to define the different levels of performance and the corresponding grade/score that goes with the evaluation thereof.

<b>Subjective Rating Criteria</b>	<b>Subjective Rating Evaluation Criteria Description</b>	<b>At Risk Fee Earned</b>
Excellent	Contractor has <u>exceeded almost all</u> of the significant award fee criteria and has met overall cost, schedule and technical performance requirements of the contract as defined and measured against the criteria in the award fee plan for the award fee evaluation period.	91 – 100%
Very Good	Contractor has <u>exceeded many</u> of the significant award fee criteria and has met overall cost, schedule and technical performance requirements of the contract as defined and measured against the criteria in the award fee plan for the award fee evaluation period.	76 – 90%
Good	Contractor has <u>exceeded some of</u> the significant award fee criteria and has met overall cost, schedule and technical performance requirements of the contract as defined and measured against the criteria in the award fee plan for the award fee evaluation period.	51 – 75%
Satisfactory	Contractor has met overall cost, schedule and technical performance requirements of the contract as defined and measured against the criteria in the award fee plan for the award fee evaluation period.	1 – 50%
Unsatisfactory	Contractor has failed to meet overall cost, schedule and technical performance requirements of the contract as defined and measured against the criteria in the award fee plan for the award fee evaluation period.	0%



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**Contract Output 1.** Support the nuclear weapons stockpile by safely providing tritium and non-tritium loaded reservoirs to the Department of Defense and NNSA (i.e., Pantex Plant) in accordance with NNSA guidance and direction.

This work is the highest priority Stockpile Stewardship mission at the Savannah River Site. This Contract Output provides the contractor incentive to meet all Production Directive and shipping commitments on schedule. The work covered by this Contract Output is to accomplish the Directed Stockpile Work (DSW) mission to provide loaded reservoirs in support of the nuclear weapons stockpile, and to meet all monthly directive commitments for delivery of Limited Life Components (LLC) to the Department of Defense and Pantex Plant.

In addition to providing reservoirs to meet LLC directive commitments, a goal of this PBI is to drive the improvement of reservoir quality for each weapon system. The goal is to achieve a high Tritium Production Acceptance Group (TPAG) acceptance rate for each reservoir system.

This Contract Output provides contractor incentive to meet all requirements associated with the Helium-3 mission.

This Contract Output also provides the contractor incentive to achieve NNSA Reservoir Surveillance Operations (RSO) work scope that is required for continuing Stockpile certification, Life Extension Program First Production Unit, and related functions. The Gas Transfer System (GTS) testing program is a key activity in the Nuclear Weapons Stockpile Surveillance Program. The NNSA and Design Agencies have placed a high priority on timely GTS testing and reporting. The on-time delivery of GTS test data provides key information on the performance and aging effects of GTS components, and support decisions for future weapon design.

The work scope consists of function testing, burst testing, nondestructive examinations, and metallographic examination of Stockpile Laboratory Tests (SLTs), Retrofit Evaluation System Tests (RESTs), and similar testing of units from the Life Storage Program (LSP). The work scope also includes testing of production samples. Other activities in support of the surveillance program include loading, unloading, reclamation, and storage of LSP reservoirs. Work scope is considered complete when 1) GTS performance data is documented in Rapid Analysis Promulgated To Obtain Results (RAPTOR) reports and 2) destructive examination results are documented in Reservoir and Integrated Surveillance Information Network (RAISIN) reports for SLT and REST units, Metallurgical reports for LSP units, and annual production sample pinch weld reports for production samples. Specific work scope is documented and tracked to completion in the RSO schedule.



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Extract tritium from irradiated Tritium-Producing Burnable Absorber Rods. The work scope consists of completing selected tritium production-related milestones that are significant to support the Tritium Readiness Program and operation of the Tritium Extraction Facility (TEF) to receive and extract TPBARs. The TEF will be operated in accordance with the TEF Annual Operating Plan and the Responsive Operations Plan.

ARMS: This contract output provides incentive to the contractor in FY12 for scope associated with the ARMS II computer system as described in the post project scope cost, plan, and schedule transmitted in FY10 (Tritium Automated Reservoir Management System (ARMS) Modernization Post-Project Plan (Rev. 0) dated January 28, 2010). Stretch completion criteria have been identified that ensure progress is being made towards supporting the July 2013 ARMS II implementation date.

**Up to \$3,473,750 of the allocated Tritium Programs PBI fee may be earned by Contract Output 1. The available fee, portion of the maximum Contract Output 1 fee, and criteria for payment are as follows.**

### Essential Fee

1. \$972,650 available fee for Completion Criterion 1. Monthly fee payments (1/12th of the available fee) will be earned, consistent with successful monthly performance of Completion Criterion 1.
2. \$694,750 available fee of the Contract Output may be earned at the end of the assessment period for the completion of Completion Criterion 2.
3. \$277,900 available fee of this Contract Output may be earned for the completion of Completion Criterion 3.
4. \$416,850 available fee for Completion Criterion 4. Fee payments will be made quarterly, consistent with completed performance of Completion Criterion 4 at the end of each quarter (December 31, 2011; March 31, 2012; June 30, 2012 and September 30, 2012).
5. \$277,900 available fee for Completion Criterion 5. Fee payments will be made quarterly consistent with completed performance of Completion Criterion 5 at the end of each quarter (December 31, 2011; March 31, 2012; June 30, 2012 and September 30, 2012).
6. \$138,950 available fee for Completion Criterion 6. Fee payments will be made at the completion of Criterion 6.
7. \$416,850 available fee for Completion of Criterion 7. Fee payments will be made at the completion of Criterion 7.
8. \$277,900 available fee for Completion of Criterion 8. Fee payments will be made at the completion of Criterion 8.



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### Completion Criteria

1. Complete the monthly loading, packaging, and shipping of reservoirs per Savannah River Site Office (SRSO) Production Directive and the monthly shipping schedule. Perform delegated stamping authority and ship product as scheduled that meets NNSA quality acceptance and shipping requirement.
2. The total reservoir product of all weapon systems will have a facility TPAG acceptance rate of 98.5% or greater for completed items. The weapon systems to be measured are B61, W76-0, W76-1, W78, W80, B83, W87, and W88. The calculation will be annualized such that the defect rate will be based on the total number of reservoirs submitted for inspection during the year. If the TPAG acceptance rate performance is 98.5% or greater, then 100% of the available fee will be earned. The fee earned for this Completion Criterion will be determined as follows:
  - a. TPAG acceptance rate greater than or equal to 98.5%, fee earned will be 100% of the available fee.
  - b. TPAG acceptance rate equal to 98.0% but less than 98.5%, fee earned will be 75% of the available fee.
  - c. TPAG acceptance rate equal to 97.0% but less than 98.0%, fee earned will be 50% of the available fee.
  - d. TPAG acceptance rate less than 97.0%, no fee will be earned for this Completion Criterion.
3. The Helium-3 program is executed to support the Memorandum of Understanding between the NNSA-SRSO and the Department of Energy (DOE) Isotope Program.
  - a. Process Helium-3 by-product so that it is available for sale through the DOE Isotope Program. This is to be accomplished without adverse impact to the central mission of the H-Area New Manufacturing (HANM) facility.
  - b. Complete first byproduct loading run for Project Y504, He-3 Separation and Bottling Process by June 30, 2012. Completion is recognized at receipt of satisfactory mass spectroscopy results.
  - c. Complete operations plan (schedule and cost estimate) for extraction of He-3 from process beds by February 29, 2012, if funded.
4. Function Testing. Completion of 140 Function Test Equivalent with test data documented in RAPTOR reports.



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5. Post-Function Testing. Completion of destructive examinations of 35 LSP units and documentation of results in Metallurgical reports.
6. Receive Cycle 10a and 10b TPBARS and place in storage by December 30, 2011. Activity is complete when Cycle 10a and 10b TPBARS are in storage location in the TEF Remote Handling Building.
7. Extract Cycle 10a TPBARS by July 31, 2012. Tritium extraction activity is complete when gas has been extracted and is accounted for in ARMS.
8. Continue to follow the baseline (ref. FY10 PBI ARMS 2 Implementation Cost Plan & Schedule) from the ARMs implementation plan for FY 12 to include:
  - a. Accelerate the H1616 container certification and management scope from the plan. Complete the outlined scope and have operational by March 31, 2012.
  - b. Accelerate the Non-robust container scope from the plan and have programming completed by April 30, 2012
  - c. Accelerate and complete post project scope programming and validation testing on the W80 and W87 (tritium filled) programs by March 31, 2012.

### **Assumptions**

1. For Completion Criterion 1.
  - a. The basis for evaluation will be loading / shipping of Production Directive requirements as specified to the contractor by NNSA-SRSO in a 3 month "look ahead" Production Directive schedule. A new Production Directive will be issued by NNSA-SRSO each month. If SRNS considers that the specified schedule changes will increase costs or delay any delivery, SRNS shall promptly notify the NNSA-SRSO Contracting Officer, orally, followed by confirmation and explanation of the notification in writing within 5 working days. Following submission of the written notice of impacts, SRNS shall await further direction. Shipping is performed in accordance with a monthly shipping schedule. If packaging is completed but a shipment is missed for some reason beyond SRNS control, the Completion Criteria shall be considered complete.
  - b. Performance is evaluated monthly. Any missed shipment as a result of SRNS performance will result in nonpayment for that month's portion of this Contract Output.
  - c. Failure to maintain acceptable quality performance, as indicated by the following established metrics will subject SRNS to the following described fee reductions.
    1. Cost of Non-Conformance (CONC) evaluates the Tritium Facilities cost of nonconformance as compared to the Tritium Facilities total product cost. A fee deduction may be imposed if cost exceeds 1.5% in any month. At the





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end of the PBI period if the annual CONC is less than or equal to 1%, SRSO may grant payment of any previously unearned CONC fee.

2. The maximum total fee deduction associated with any month's reservoir shipment (Completion Criteria 1) cannot exceed the monthly maximum fee payment.
2. For Completion Criteria 2, TPAG formula is based on the following;
  - a. The formula for arriving at a Fiscal Year To Date (FYTD) percentage for First-Time Use Evaluation (FUE) is as follows: Combined percentage ((Monthly percentage of finished units accepted + Monthly percentage of reclamation units accepted) / 2) provides the average monthly percentage. To annualize the monthly averages are added together YTD divided by the number of months YTD.
3. For Completion Criterion 4.
  - a. This PBI will use the Function Test Equivalents which have been developed and jointly agreed upon by SRSO and SRNS. Test equivalents may be modified to respond to changes in testing requirements or methodology by SRSO or the Design Agencies.
  - b. Completed function tests that have not had their respective RAPTOR reports issued before the next fiscal year begins for reasons not attributable to SRNS performance shall not be cause for fee reduction.
  - c. Completion Criteria delays resulting from a function test system or environmental conditioning system malfunction not attributable to SRNS performance will allow the adjustment of the Completion Criteria and reallocation of the fee. SRSO has accepted risk for single-point failure in lieu of additional costs to provide redundant and backup capability.

### **Government Furnished Services / Items**

1. War Reserve components required from other sites to support the Production Directive must be received at SR, free of defects, with sufficient plant required lead time in advance of the scheduled ship date. Processing and shipping of components not meeting these requirements, and / or due to changes to the Production Directive less than 90 days in advance of the ship date, will be accomplished in a "best effort" manner, and SRNS will not be penalized for failure to meet the scheduled date.
2. Supporting agencies must provide timely delivery of components required for testing.
3. There will not be a delay in testing that is directed from the Design Agencies due to systematic anomaly not associated with SRNS negligence.



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4. For Completion Criteria 6 and 7 related to receive and extract TPBARS, the TPBARs must be received on the SRS property from TVA and NAC by October 24, 2011. If the casks are received beyond this date, there will be a day-for-day slip in the completion dates for these activities.



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**Contract Output 2.** Conduct Research and Development and Science, Technology and Engineering (ST&E) sustainment activities that solve complex problems related to mission of SRSO and the NNSA.

These activities are sponsored by the Readiness and Engineering Campaigns, and Plant-Directed Research & Development (PDRD) and support development activities for NNSA missions at Savannah River and other NNSA sites and maintain skill and core competencies that are critical to mission sustainability and execution.

Research and development activities are conducted to solve complex problems related to the mission of SRSO and the NNSA.

A focused research and development program advances the design and manufacture of Gas Transfer System components and manufacturing methods.

This Contract Output provides the contractor incentive to complete research and development activities that support NNSA missions at Savannah River and other NNSA sites and maintain skill and core competencies that are critical to mission sustainability and execution.

**Up to \$694,750 of the allocated Tritium Programs PBI fee may be earned by Contract Output 2 as follows.**

### **Essential Fee**

1. \$69,475 available fee for this Contract Output may be earned for the completion of Criterion 1.a.
2. \$69,475 available fee for this Contract Output may be earned for the completion of Criterion 1.b.
3. \$138,950 available fee for this Contract Output may be earned for the completion of Criterion 1.c.
4. \$138,950 available fee for this Contract Output may be earned for the completion of Criterion 2.a.
5. \$69,475 available fee for this Contract Output may be earned for the completion of Criterion 2.b.
6. \$69,475 available fee for this Contract Output may be earned for the completion of Criterion 2.c.
7. \$138,950 available fee for this Contract Output may be earned for the completion of Criterion 2.d.



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### Completion Criteria

#### 1. STOCKPILE SUPPORT

##### 1.a Annual Stockpile Aging Assessment Report.

Deliverable: Perform tests to quantify and understand tritium effects on fracture toughness properties of reservoir structural materials as directed by the weapons Design Agencies. Prepare samples, expose to tritium and/or hydrogen, and perform mechanical tests. Complete an annual Enhanced Surveillance stockpile aging assessment and Issue annual report to NNSA-HQ by November 30, 2011.

Why it's Important: Provides input to Los Alamos and Sandia to support the annual assessment process and the Technical Basis for Stockpile Planning (TBSTP).

Funded by Engineering Campaign.

##### 1.b Stockpile Surveillance Transformation Support.

Deliverable: Annual report of aging studies and diagnostic development activities to NNSA- HQ March 31, 2012

Why It's Important: Supports the development of aging models and assessments, diagnostics, and tools needed to achieve science based lifetime predictions and stockpile surveillance transformation (MYSO). Funded by Engineering Campaign.

##### 1.c Aging Studies of EPDM O-Ring Material for H1616 Containers

Deliverable: Perform testing to develop technical bases to extend the life time of EDPM O-Rings used to seal the H1616 Containers. Provide a status report on Phase I of the testing.

Why It's Important: The purpose of this scope of work is to evaluate O-ring material performance to determine whether the EPDM seals can withstand a lifetime within the H1616 (-1 &-2) containers of up to at least two years and possibly longer. This is a substantial cost savings.

FUNDED in DSW.

#### 2 MODERNIZATION

##### 2.a Mini-TCAP System Demonstration.

Deliverable: Design and develop engineering Design Input Document for a Plant Configured Mini-TCAP System; fabricate, and demonstrate a plant-configured Pd/K –MS experimental unit with D2/H2 separation by 9/30/2012.

Why It's Important: To totally eliminate the use of hot/cold nitrogen in the Process, the 3 current users, namely 1) current TCAP units, 2) Flow Through Beds (FTBs), and 3) hydride storage beds must be re-designed to perform without the hot/cold nitrogen system. This project will demonstrate acceptable operation of a HOT/Cold nitrogen free Mini-TCAP plant configured unit.

FUNDED by continuing PDRD activity into FY12.



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### **2.b Tritium Advanced Research Test Facility (Function test station and tritium gas handling glove box) conceptual design.**

Deliverable: Complete conceptual design study and cost estimate for a R&D Function Test Station & Glovebox at SRS by 9/30/12.

Why It's Important: Provides cost estimate and schedule information to enable the proposed project. Sandia intends to establish on-going tritium R&D activities at Savannah River in support of Sandia GTS development. Having the ability to perform R&D function tests without displacing Surveillance tests will support both GTS development and Surveillance. This supports and enables the Tritium R&D Mission ROD.

Funded by Stockpile Readiness Campaign.

### **2.c FISH (Four Inch Short Hydride) Beds Development**

Deliverable: Experimentally verify that engineering strains under design conditions are within ASME Code allowable on the prototype FISH bed, and document results by 9/30/2012.

Why It's Important: To totally eliminate the use of hot/cold nitrogen in the Process, the 3 current users, namely 1) current TCAP units, 2) Flow Through Beds (FTBs), and 3) hydride storage beds must be re-designed to perform without the hot/cold nitrogen system. The FISH beds are the proposed replacement storage beds that do not use Hot/Cold nitrogen.

FUNDED by continuing PDRD activity into FY12.

### **2.d Micro-TCAP System Demonstration**

Deliverable: Design and develop Micro-TCAP units to support tritium & deuterium NA-11 and NA-12 cleanup requirements at the LLNL NIF and University of Rochester OMEGA facilities. Construct and test the OMEGA Facility Unit by 9/30/2012

Why It's Important: The National Ignition Facility (NIF) at LLNL and the OMEGA Facility in the Laser Lab for Energetics (LLE) at the University of Rochester use tritium and deuterium in the targets for the fusion energy experiments at each facility. The Micro-TCAP Units will allow both facilities to perform T2/D2/H2 isotope separation at the facilities, avoiding the shipment of T2/D2/H2 mixtures over the road to SRS for separation. The on-site separation capability will also allow LLNL to close couple the target manufacturing process, and meet a more aggressive shot schedule as the experiments escalate.

UNFUNDED. Expected Funding source is NA-11 and NA-12.

GFSI: \$400K Funding from NA-11. Project execution is contingent on timely receipt of funding.



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### Assumptions

None

### Government Furnished Services / Items

1. Tritium Advanced Research Test Facility design and cost element is contingent upon receipt of funding.
2. Project execution for Micro-TCAP System Demonstration is contingent on timely receipt of \$400K funding from NA-11.



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**Contract Output 3.** Support the Tritium Programs missions by safe and efficient execution of projects.

**Up to \$694,750 of the allocated Tritium Programs PBI fee may be earned by Contract Output 3.**

### Essential Fee

\$694,750 available fee for this Contract Output may be earned for the completion of Criterion 1.

### **Completion Criteria**

1. The following project work is to be completed in FY12 and SRSO will allow Tritium Programs to manage the work scope to achieve the lowest cost to NNSA by leveling work scope for design authority, design, and construction resources while expending the desired funds for Fiscal Year 2012. **All specified work will be completed by September 28, 2012 within approved baselines.**

#### 1. Facility Projects

- a. For the Project Y551, Replace HANM UPS, the new UPS will be mechanical complete. Procurement of the UPS will start in FY11 and it is assumed that funding required to meet the milestone is available in FY12 . This achieves replacement of the old existing UPS; thereby reducing HANM deferred maintenance.
- b. For Project Y552, UPS Bypass, will be mechanical complete. This project will reduce production downtime in HANM in the future when other UPS work is needed.
- c. For Project, SS System Piping Modifications, will be design complete. This scope must be accomplished and ready for construction activities to run parallel to an ARMS outage in FY13. Otherwise, two significant loading outages will be required instead of one.
- d. For Project Y587, TEF Tie-in DCS to HANM, the facility will demonstrate operations. Completion of this scope allows the program to achieve the final cost reductions of the TEF Responsive Operations Plan.



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- e. For Project Y608, TEF Diffuser Stacking, design will be completed. Completion of this scope reduces risk to stacking operations in both TEF and HANM.
- f. For TRIM project, Removal of Compressor A (part of HANM Finishing scope), conceptual design will be complete. This scope provides a refined estimate and schedule to complete a portion of the TRIM scope.
- g. For Project Y554, Unloading Line B Modification, will be mechanical complete. Completion of this project allows for unloading of Gas Transfer Systems in the existing stockpile and recovery of tritium for future loading commitments.
- h. Electrical Metering Project – For the Energy Modernization and Investment Program (EMIP), complete the facility metering project to install electrical meters on HANM substation T2, the unclassified data center in 248-H, and the classified data center in 248-H. This PBI assumes additional energy funding is available Oct 1, 2011 to allow for a conceptual design start early in FY12.

### **Assumptions**

Assumptions are included in the individual Completion Criteria.

### **Government Furnished Services / Items**

1. Electrical Metering Project – requires additional energy funding is available Oct 1, 2011 to allow for a conceptual design start early in FY12.





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**Contract Output 4.** Participate in the NNSA Multi-Site Incentives and NNSA Nuclear Security Enterprise Initiatives.

Participate in the NNSA Multi-Site Incentives (MSIs) by working with Nuclear Security Enterprise partners to achieve Enterprise-wide goals. Although SRS Tritium Programs' level of participation will vary across the individual Multi-Site Incentives, the distribution of available fee according to Assumption 1 encourages partnership with other Nuclear Security Enterprise (NSE) sites to achieve NNSA's objectives. This is the purpose of Multi-Site Incentives.

**Up to \$1,389,500 of the allocated Tritium Programs PBI fee may be earned by Contract Output 4 as follows.**

### Essential Fee

1. \$1,389,500 available fee of this Contract Output may be earned at the completion of Completion Criterion 1. The fee is distributed per Assumptions 1 and 2.

### **Completion Criteria**

1. Participate in the FY 2012 MSIs cited in the NNSA Milestone Reporting Tool (MRT) by working with Nuclear Security Enterprise (NSE) partners to achieve NSE-wide goals. Successful completion for each individual milestone within the overall MSI is assigned by NNSA Headquarters. Any unspecified % allocation to the Site Office Manager discretion will be provided as Technical Direction to the Contractor subsequent to this PBI approval.

### **Multi-Site Target Assumptions**

1. Letter, NA-10 to Distribution, FY2012 Multi-Site Targets and Success Criteria.
2. Inclusion of specific scope and fee distribution into this PBI will be accomplished through a letter issued by the National Nuclear Security Administration Savannah River Site Office (NNSA-SRSO) Manager to Savannah River Nuclear Solutions, LLC (SRNS).

### **Government Furnished Services / Items**

1. NNSA Headquarters defines the FY 2012 Multi-Site Incentives with associated completion criteria and fee distribution method.



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### **Contract Output 5. Governance (Business Management)**

This Contract Output emphasizes Performance Activities that enable implementation of Governance for SRNS Tritium Programs.

This Contract Output has a two Completion Criteria associated with Governance in the following areas:

- Governance
- Contractor Assurance System

#### Governance:

SRNS will support the NNSA Governance Reform initiative being implemented across the complex. The current expectation is that the activities necessary to implement governance within the Tritium facilities will be completed per the agreed upon implementation schedule.

SRNS will report accomplishments achieved through the governance reform effort (effective CAS, reduced Federal oversight, and requirements reform) including information on cost savings and efficiencies.

#### Contractor Assurance System

SRNS will have a Tritium-wide, comprehensive, and integrated Contractor Assurance System (CAS). As efforts move forward to implement "Governance" within the Tritium Facilities, SRSO acknowledges that the CAS will be evolving to fit the new governance model.

### **Up to \$694,750 of the allocated Tritium Programs PBI fee may be earned by Contract Output 5 as follows.**

#### Essential Fee

1. \$694,750 available fee for the Tritium Programs performance may be earned at the end of the assessment period. Fee will be determined at the end of the assessment period for each Completion Criterion commensurate with performance as measured by the Subjective Adjectival Rating Criteria.

### **Completion Criteria**

Completion criteria include:

1. TP will complete the FY12 scheduled activities as identified in the CAS improvement plan submitted in FY09.



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2. Demonstrate an effective, comprehensive, integrated CAS Program. Elements include the following.
  - a. Integrated assessment schedule (includes internal audit, independent assessments, and management activities)
  - b. Integrated assessment results (includes all formal assessment activities)
  - c. Integrated risk management priorities
3. Demonstrate that an issues management system is implemented, and results are regularly reviewed by senior management. (This includes capturing program and performance deficiencies, regardless of their source, in a system or systems that provides for analysis, resolution, and tracking.)
4. Support the Line Oversight Contractor Assurance System (LOCAS) initiative.
5. Complete all FY12 activities required to support LOCAS affirmation in FY13.
6. Accomplishments achieved through the governance reform effort (effective CAS, reduced Federal oversight, and requirements reform) including information on cost savings and efficiencies, where available, with a target 5% annual efficiency gain and/or cost saving compared to the previous year.

### **Assumptions**

Assumptions are included in the individual Completion Criteria.

### **Government Furnished Services / Items**

None.



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**Contract Output 6.** Maintain the Tritium Facilities in a safe, secure and responsive operating condition. (Operations)

This Contract Output emphasizes Operations programs that provide the physical infrastructure and operational capabilities required to conduct Directed Stockpile and Campaign activities.

This Contract Output has a single Completion Criteria associated with Operations in the following areas:

- Facility and Site Management/Maintenance
- Operations and Work Planning
- Quality Assurance
- Engineering
- Nuclear Safety and Fire Protection
- Radiation Protection
- Training and Qualification

**Up to \$2,779,000 of the allocated Tritium Programs PBI fee may be earned by Contract Output 6 as follows.**

### Essential Fee

1. \$2,779,000 available fee of the Contract Output may be earned at the end of the assessment period for Completion Criterion 1 associated with Operations. Fee will be determined at the end of the assessment period for each Completion Criterion commensurate with performance as measured by the Subjective Adjectival Rating Criteria.

### **Completion Criteria**

#### 1.A. Facility and Site Management/Maintenance.

SRNS will comprehensively manage the Tritium Facilities and will continuously assess and report on aspects of the health and condition of Tritium Operations facilities to ensure that issues and problems are raised to the appropriate level for resolution through submittal of appropriate metrics.

Completion criteria include:

1. The ten year site plan for the Tritium Facilities, as required by NNSA and RPAM (Real Property Asset Management), will be updated annually to reflect the facility



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- improvements, replacements-in-kind, and general facility maintenance required to support the active programs and missions. This document will comply with the format, content, and schedule provided by NNSA/HQ.
2. Health and condition of the major production facilities, as evidenced by facility assessments and the monthly facility availability metric, will be accurately reported each month and will demonstrate that the facilities are available to meet the mission deliverables.
  3. Real property assets will be maintained in a cost-effective manner that includes management of Deferred Maintenance (reported yearly), facility improvements, and Replacement-In-Kind (RIK) projects to ensure facilities and equipment are available to meet mission deliverables. The Facility Information Management System (FIMS) reporting requirements are timely, accurate, and include the Facility Condition Index (FCI).
  4. Concurrent with the budget cycle and ten year site plan for the Tritium Facilities, provide NNSA/SRSO an analysis of the Tritium Facilities deferred maintenance, replacement plant value and FCI. Include funding needs to stabilize and improve the FCI along with maintenance and project recommendations.
  5. Ensure implementation of a cost-effective, comprehensive, and efficient Maintenance Program that accomplishes the work required to prevent degradation of the condition of the facilities and equipment to ensure that the facilities and equipment are available to support the mission. Metrics (such as locked-in completion, open work activities, corrective maintenance backlog, etc.) shall provide an accurate representation of performance, and will identify areas for improvement.

### B. Operations and Work Planning.

SRNS Tritium Programs' work will be effectively executed in accordance with Conduct of Operations practices and requirements as defined in the S/RIDs and work will be effectively planned and coordinated.

Completion criteria include:

1. Effective Operations and Work Planning implementation, as indicated with Conduct of Operations issues metrics will be accurately reported each month and will demonstrate acceptable trends.
2. Implementation of continuous improvement initiatives of Operations and Work Planning, will be accurately reported each month and will demonstrate that self assessments and facility personnel are identifying errors and other areas for improvement. The Conduct Of Operations metrics will also demonstrate that fact finding and post job reviews are being conducted as appropriate and in a timely manner. In addition, corrective actions identified in the reviews are effective and result in improving trends in operations and work planning activities.



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### C. Quality Assurance.

The Tritium Quality Assurance Program will be managed and implemented in accordance with the requirements of 10 CFR 830, DOE Order 414.ID, NNSA directives (e.g., QC-1, Primary Standards Laboratory memorandum, Development and Production Manual) as defined in S/RIDS and the SRS 1Q Manual.

Completion criteria include:

1. The aggregate of survey and assessment (SRSO, SRNS and external) results provide confidence that quality is assured through an effectively implemented QA program.
2. Provide quality and process improvements, report and trend improvements including corrective action/prevention of recurrence.
3. Effectiveness of product/production is evidenced by quality trending of defects and non-conformance metrics from NCR, TCNCR, UR, and IMR reports, and the associated Cost of Nonconformance.
  - a. A fee deduction may be imposed if reports exceed 3 in any month. At the end of the PBI period, if the total count of annual nonconforming material reports and unsatisfactory reports collectively for the year is less than or equal to 24, SRSO may grant payment of any previously unearned fee. IMR and URs that will be included in the total count are:
    - Monthly UR/IMR received at SRNS TP that are determined to violate design requirements due to SRNS TP processing. These will not be included in the count until they are dispositioned as being a fault of SRNS TP not upon receipt of the notification of an UR/IMR.

Excluded from the total count is any UR or IMR:

- Received that met Design and Administrative requirements and/or that is not the fault of SRNS.
- That is dispositioned and closed by the Design Agency and sent for information only.
- That is identified greater than twenty four months after the shipment date from SRNS TP



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### D. Engineering:

Engineering will be managed and implemented in accordance with the requirements of applicable DOE orders as defined in S/RIDS and SRNS Engineering Procedures as defined per manual E7.

Completion Criteria include:

1. Deliver/maintain compliant engineering products in support of facility operations and projects. Acceptable performance in this area will be based on the following:
  - a. engineering products shall be configured in accordance with site and facility procedures
  - b. engineering errors will be identified and tracked via facility protocols. Errors will be evaluated by engineering management to determine if lessons learned exist
2. Deliver/maintain configuration controlled Safety Systems that will perform as described in the safety basis, that will support the Tritium Programs mission including support to the weapons design agencies. Acceptable performance in this area will be based on the following:
  - a. Documents constituting the technical baseline for Tritium Programs shall be maintained current reflecting the field conditions.
  - b. Engineering self-assessments shall be identified that take into account issues and events. Performance shall be documented. These self-assessments will include lines of inquiry that assess performance in accordance with the Safety Basis as applicable.
  - c. System health reports are generated per the requirements of SRNS procedures and per the expectations of TP Engineering Management.
  - d. Principles of Reliability Centered Maintenance (RCM) are investigated and evaluated for use in the facilities. At a minimum, a pilot for evaluation/implementation of PMs or evaluation/reduction of CMs for one system based on RCM principles will be performed. The results of the pilot will be written up in report format with recommendations to TP management regarding further involvement in the program.
3. System engineers shall have sufficient depth of knowledge of their assigned systems to support operations and maintenance while ensuring operation of the systems within the safety basis. Acceptable performance will be based on the following:
  - a. System engineer training will be developed/implemented to meet the training program description on the schedule presented in the Plan of the Week. Training development will be on a forward-fit basis with objective of all newly-assigned System Engineers qualifying via the new training program.



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- b. Shift Technical Engineer training will be developed/implemented to meet the training program description on the schedule presented in the Plan of the Week. New STEs entering STE training as of 10/1/11 will qualify via the new STE training program.
    - c. Engineering Technical Staff personnel take on-going continuing training.
  4. The engineering organization shall support the goals of the TP mission. Acceptable performance will be based on the following:
    - a. Ensure safe and secure operations based on using HPI tools, conduct of engineering principles, and good housekeeping. Errors will be identified and tracked in the error reporting tool with actions taken as required to correct programmatic deficiencies.
    - b. Ensure delivery of quality products on time by meeting schedules, honoring commitments, and identifying/correcting issues and problems.
    - c. Participate in continuous improvement (CI) initiatives to include continuous improvement training participation, leading/participating on CI projects.
- E. Nuclear Safety & Fire Protection: The Tritium Safety Basis and Fire Protection Programs will be managed in accordance with applicable regulations, DOE Directives as defined in SRIDS, and site requirements.

Completion criteria include:

- 1) The SRNS Safety Basis Program(s) achieves and maintains full compliance with regulatory requirements as defined in the S/RID-applicable safety basis requirements.
- 2) Produce and maintain compliant safety basis engineering product deliverables that support operations and projects. These products include DSAs, TSRs, hazard analyses, USQD documents, and supporting analyses.
- 3) The TORC process is managed in a manner which provides an appropriate and adequate level of oversight of the facility safety basis program as defined by the TORC charter.
- 4) Develop and submit the following items per the target completion dates as identified in the TP Plan of the Week:
  - a. Develop and submit FY12 Annual Safety Basis updates for all applicable facilities in accordance with the required delivery schedule
  - b. Implement the TEF DSA upgrade
- 5) The Fire Protection Program shall be implemented and maintained as required by the safety basis documents and by applicable NFPA requirements. Acceptable performance will be based on the following:





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- a. Planned and unplanned impairments and their duration shall be documented and tracked with emphasis on minimization of number and duration of unplanned impairments  
False and nuisance alarms shall be documented and tracked with emphasis on minimization of these types of alarms.
- c. Failure of components which impact the reliability of the fire protection equipment (such as heat detectors, smoke detectors, sprinkler heads, etc) shall be documented and tracked so that the potential for improvements can be identified.

### F. Radiation Protection.

SRS Tritium Programs' Radiation Protection Program will be managed and implemented in accordance with the requirements of 10 CFR 835, applicable S/RIDs, and the SRNS Radiological Protection Program.

Completion criteria include:

1. The aggregate evaluation of assessment results and metrics, including facility contamination events, personnel contaminations and radiation exposure, habitability survey performance, shows the radiological protection program is implemented in accordance with requirements.
2. No significant radiological deficiencies occur which preclude the performance of Tritium operations or accomplishment of missions.

### G. Training and Qualification.

The Tritium Training and Qualification Program will be managed and implemented in accordance with the requirements of DOE Order 426.2, Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities, as defined in the S/RIDS, and plant policies and procedures.

Completion criteria include:

1. No significant programmatic training deficiencies will occur which affect the performance of Tritium Program activities or accomplishment of mission.
2. Operations Technical Qualification Expiration for all Operations Watchstander employees is tracked, reported, and maintained to demonstrate that fully qualified facility personnel are available to support accomplishment of the mission.

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**Contract Output 7.** Maintain the Tritium Facilities in a safe, secure and responsive operating condition. (ES&H/S&S)

This Contract Output emphasizes Safety and Health and Safeguards and Security programs that provide the physical infrastructure and operational capabilities required to conduct Directed Stockpile and Campaign activities.

This Contract Output has a single Completion Criteria associated with Safety and Health and Safeguards and Security in the following areas:

- Emergency Management
- Health and Safety
- Environmental and Waste Management
- Safeguards and Security
- Cyber Security
- Project Management

**Up to \$2,084,250 of the allocated Tritium Programs PBI fee may be earned by Contract Output 7 as follows.**

Essential Fee

1. \$2,084,250 available fee of the Contract Output may be earned at the end of the assessment period for Completion Criterion 1 associated with Safety and Health and Safeguards and Security. Fee will be determined at the end of the assessment period for each Completion Criterion commensurate with performance as measured by the Subjective Adjectival Rating Criteria.

**Completion Criteria**

A. Emergency Management.

Ensure implementation of a cost-effective, comprehensive, and efficient Emergency Management Program that ensures response to and mitigation of abnormal events by a knowledgeable and fully trained workforce with minimum impact to mission accomplishment. Metrics shall provide an accurate representation of performance, and will identify areas for improvement.

B. Health & Safety.

Ensure implementation of a cost-effective, comprehensive, and efficient Health & Safety Program that ensures response to and mitigation of abnormal events by a knowledgeable and fully trained workforce with minimum impact to mission accomplishment. Metrics



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shall provide an accurate representation of performance, and will identify areas for improvement.

### C. Environmental and Waste Management.

Ensure implementation of a cost-effective, comprehensive, and efficient Environmental Management Program that ensures no significant deficiencies will occur that affect the performance of the SRNS Tritium operations accomplishment of missions. Metrics shall provide an accurate representation of performance, and will identify areas for improvement. Ensure implementation of a cost-effective, comprehensive, and efficient Waste Management Program that ensures minimum waste generation, minimum waste accumulation in the facilities, and compliance with the waste acceptance criteria for disposal. Metrics shall provide an accurate representation of performance, and will identify areas for improvement.

### D. Safeguards and Security

Operate an effective and efficient Safeguards and Security Program that meets DOE, NNSA, and Site requirements/directives and expectations as verified by Contractor self-assessment, SRSO oversight, and external inspections. Maintain effective Tritium Programs performance while completing milestones on schedule and within budget.

Completion Criteria include:

1. Support the NNSA Enterprise through DNS Management Excellence.
  - a. Provide transparency into the security budget formulation and execution activities. Site FS-20 budgets must align with NNSA Field CFO issued costing principles.
  - b. Achieve full compliance, upon final issuance of PPM NAP, with DNS Costing Principles and Budget Reporting (B&R) categorizations in both budgeting and execution. Provide all DNS Planning, Programming, Budgeting and Evaluation (PPBE) deliverables according to DNS schedule and instructions.
  - c. Incorporate traceability across all security planning documentation, (i.e., Tritium Programs Work Authorization and Execution Plan (WAEP), Budget Requests, Site Safeguards and Security Plans, Performance Evaluation Plans, including Performance Based Incentives, etc.) Site Office approved FY12 WAEP must be provided to DNS by October 1st for Fiscal Year 2012.
  - d. Provide 100% alignment of resources, i.e., Full Time Equivalent (FTE) and subcontractors to WAEP.
  - e. Support NA-70 initiatives, both the Security Commodity Team and Physical Security Technology Management Plan (PSTMP), by providing data and expertise as requested.



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2. Security plans, policies and procedures are to be updated to reflect NNSA security policy by FY 2012 or as stated in the NNSA security policy.
  - a. Implement security reform to improve mission effectiveness and drive cost efficiency.
  - b. Implement program improvement tied to NNSA security standards in accordance with SRNS Contract Modification process and mutually agreed upon implementation schedule.
  - c. Continue to update security program to align with forthcoming NNSA Policy (NAP) documents in accordance with agreed upon schedules.
3. Achieve efficiencies based on the current state of the site security footprint. (Security footprint includes documents, buildings, clearances, Closed Areas (CAs), etc.)
  - a. S&S should work with site operations to evaluate and implement a plan to achieve cost efficiencies to include a reduction in the site security footprint to include reducing unnecessary facilities and surplus materials (classified parts, documents, CAs, etc.) in accordance with the Ten Year Site Plan..
  - b. Ensure that PF posts are automated as much as is feasible.
4. Develop site specific condition assessments and lifecycle cost management plans for all FS-20 funded security systems and components. Produce a plan with components that address the following concepts:
  - a. Realize operational efficiencies through modernization or operational/process improvements.
  - b. Evaluate, develop, and implement a systems modernization plan to include economical life cycle management for physical security systems as approved by the Site Office considering the Enterprise-wide perspective.
5. Achieve overall satisfactory or effective performance on Site Office and external surveys or assessments.
  - a. Maintain and sustain an effective S&S program in all applicable functional of the DOE F 470.8.
  - b. Conduct S&S self-assessment in all applicable S&S functional areas and provide periodic performance conclusions to the Site Office.
  - c. All corrective actions are completed on-time, within agreed budget, and effectively address the performance issues.
  - d. Ensure that there are no repeat findings in any S&S functional area.
  - e. Demonstrate that the Contractor Assurance System (CAS) incorporates all applicable functional areas and requirement
6. Use current Site Lessons Learned program to ensure S&S information is shared throughout the SRNS NNSA Facilities.



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7. Ensure S&S security staff are trained in accordance with the site S&S Training Plan.
  - a. Identify and address skill gaps for S&S personnel in the S&S personnel in the S&S Training Plan.

### E. Cyber Security.

Operate effective and efficient Tritium Programs Cyber Security activities that meet DOE, NNSA, and Savannah River Nuclear Solutions (SRNS) requirements/directives and expectations as verified via contractor self-assessments, SRSO oversight, and external inspections.

Completion Criteria include:

1. Implement a Cyber Security Program, based on the NNSA Program Cyber Security Program (PCSP), to protect classified, sensitive-unclassified, and unclassified information to which the site has access or custody.
2. Develop and implement a risk management framework for cyber security, utilizing the NIST SP 800-37, 800-39 DRAFT, and 800-60 as a guideline for the development of the framework.
  - a. Risk management framework will be developed and submitted to headquarters.
  - b. Update the site CSPP with new and updated policies and procedures under the risk management framework.
3. Continue to implement and, where possible, accelerate the implementation of the NNSA PCSP.
4. Implement information system minimum security configurations established by the NNSA.
5. Ensure that significant site risks are adequately evaluated and managed and that sensitive information and systems on the SRS unclassified networks are properly protected.
6. Establish and maintain effective feedback and improvement mechanisms to identify cyber security vulnerabilities, eradicate them from site networks, and prevent recurrence.
7. Establish and maintain a comprehensive self-assessment program for the SRS Cyber Security Program.
8. Actively participate in the NNSA Headquarters' ZBSR for cyber security.
9. Participate in Cyber Tracer (TracerFire) activities, as funded.
10. Establish an effective program to manage risk associated with the implementation of wireless computer technology.



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11. Prepare and provide a quarterly status report to the NNSA OCIO CSPM on the SRS program that includes AOP status, Cyber Security Program implementation, budget execution performance, and other status/performance information as requested.
12. Ensure that POA&Ms and CAPs are appropriately monitored and closed, per schedule.
13. Identify requirements and fully Implement Data Loss Prevention (DLP) tool as funded.
14. Identify requirements and fully implement a continuous monitoring plan by September 2012.

### F. Project Management.

Completion criteria include:

1. Aggregate evaluation of review results indicates projects are routinely implemented in accordance with requirements. No significant deficiencies will occur which affect the performance of the SRNS Tritium operations or accomplishment of missions.
2. Safety will be emphasized for all aspects of the project from design through startup. Ensure effective integration of safety and security into the design and construction of all nuclear line item projects in accordance with DOE-STD-1189. Projects safety indices demonstrate prime and subcontractor performance meet or exceed national safety performance standards and the Departmental/Site Office safety goals as prescribed. Projects will routinely discuss safety in meetings for project personnel and will emphasize lessons learned at SRS construction sites and projects at other DOE sites. During construction phase each project manager or designee will proactively participate and conduct safety walk downs and document on Management Field Observation forms in STAR.
3. Manage projects within established scope, cost, and schedule baselines per SRSO approved Integrated Priority List. Cost and schedule performance are measured through Cost Performance Index (CPI) and Schedule Performance Index (SPI) for large projects and cost and schedule baselines for small projects. CPI and SPI are at or above 0.90
4. Projects use a graded approach compliant with DOE 413.3B principles. Project activities and resources are effectively planned and integrated to ensure the performance baseline is maintained. This includes the use of integrated schedules in the day-to-day management of projects.
5. Monthly project status reports are timely and submitted for each line item project, GPP/GPE/MIEs, and for selected operating expense funded projects. Reports contain indices of overall project performance. Reports include analysis of baseline variances, trends, funds, and contingency management, risk management. Reports contain baseline change control register.



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**Contract Output 8.** Maintain the Tritium Facilities in a safe, secure, and responsive operating condition. (Business Management)

This Contract Output emphasizes Business programs that provide the physical infrastructure and operational capabilities required to conduct Directed Stockpile and Campaign activities.

This Contract Output has a single Completion Criterion associated with Business in the following areas:

- Fiscal Management
- Program Management
- Information Technology/Process Control
- Modernization
- eSourcing

**Up to \$2,084,250 of the allocated Tritium Programs PBI fee may be earned by Contract Output 8 as follows.**

Essential Fee

1. \$2,084,250 available fee for the Tritium Programs performance may be earned at the end of the assessment period associated with Business Management. Fee will be determined at the end of the assessment period for each Completion Criterion commensurate with performance as measured by the Subjective Adjectival Rating Criteria.

### **Business Management**

A. Fiscal Management.

Budget and financial deliverables per the Planning, Programming, Budget, and Evaluation (PPBE) process will be provided in accordance with established due dates.

Completion criteria include:

1. The SRNS Tritium Program (TP) will maintain an effective and timely information response process. Information requests, budget exercises, work insertion requests, etc., will be fully supported at both the TP and SRNS corporate level. The fiscal management efforts and work product will be evaluated on such factors as responsiveness, quality and timeliness, proactive resolution of emergent issues and concerns, and communication with SRSO and SRNS.
2. SRNS TP will keep SRSO apprised of and invited to participate in joint contractor-Federal discussions, meetings, and briefings germane to accounting changes that affect NNSA costs or have potential service impacts.



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This includes, but is not limited to, changes to indirect rates, cost collection methodologies for pension and Work Force Restructuring costs, etc. SRNS must ensure that unilateral actions are not taken to the disadvantage of NNSA's interests without attempting to influence the decision and providing SRSO sufficient opportunity to intercede at the Federal level.

3. SRNS will maintain an effective and efficient funds controls system including the following:
  - a. No legal or administrative violations occur with regards to the management of appropriations for which controls have been established by DOE/HQ, or for which funds of other federal agencies or governmental entities have been entrusted to DOE for performance of supporting scopes of work. (Tritium only)
  - b. Uncosted balances are maintained consistent with sound financial management. Due consideration will be given to multi year expense projects, multi-year program and productivity strategies and timing of funding and scope direction.
  - c. Reprogramming actions and supplemental financial plans will be timely, accurate, comprehensible, and minimized via advance planning and forecasting processes. Any identified need for a reprogramming action will be identified early in the fiscal year, have SRSO program approval, and clearly identify all funding sources. Due consideration will be given for late year reprogramming request driven from customer requested schedule changes and mutually agreed upon program and business opportunities.
  - d. Indirect costs and rates will be tracked and managed to identify and mitigate potential perturbations to planned direct work.
4. SRNS will have a controlled integrated baseline for all Tritium programs, projects and functions. The baseline will appropriately:
  - a. Include the NNSA Uniform Program Cost Reporting Structure format elements.
  - b. Be compatible with and in a Work Breakdown Structure (WBS) format ready for incorporation into the NNSA Cost Management Initiative database.
  - c. Have tools in place to (1) manage mission changes in scope, cost and schedule, (2) compare Actual Cost to Budgeted Cost (3) accurately forecast estimated cost to complete and estimated total costs at completion, and (4) document deviations from the performance measurement baseline and notify the Contacting Officer of such changes on a timely basis.
  - d. Prohibit retroactive changes to records pertaining to work performed that will change previously reported costs, except for correction of errors and routine accounting adjustments.
  - e. Prohibit retroactive changes that result in funding fluctuations or revisions to the EAC.
5. Offline quarterly and year-end reporting will be provided per reporting requirements.
6. Impact analyses and ad hoc exercises will be responded to in a timely manner and be coordinated with SRNS.





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7. Budget formulation requirements will be provided per requirements and coordinated with all appropriate organizations.
8. Financial reporting will demonstrate effective and transparent accounting practices.
9. The integrated baseline will be in place and ready for validation by the NNSA CFO by September 30, 2012. (Implementation is predicated on receiving requirements in appropriate timeframe).

### B. Program Management.

SRNS will manage programs consistent with the NNSA Program Management Policy (BOP-006.001) and the Defense Programs Program Management Manual. A Program is a group of ongoing activities and related projects conducted with a defined set of resources (financial, human, etc.) managed in a coordinated way to achieve mission objectives and obtain benefits not available from managing them individually.

Program Management within Tritium Programs applies primarily to RTBF, DSW, Engineering and Readiness Campaigns, FIRP, S&S, etc.

Program Management philosophy views programs as falling across a spectrum ranging from operational or level-of-effort programs, such as surveillance of the nuclear weapons stockpile at one end, to major capital acquisition projects at the other end. The diversity of programs within the NNSA demands the "tailored" application of the program management principles to accommodate the requirements of each program.

Completion criteria include:

Plan, execute, and manage to established scope, cost, schedule, and risk baselines for all program elements including:

1. Each individual program will be planned, executed, managed, and will maintain acceptable cost and schedule performance as established by Work Authorization Directives, Prioritized Project Lists, PCD Requirements, Baseline Dismantlement Schedule, program implementation plans, program execution plan, and all other program requirements.
2. Aggregate evaluation of review results indicates programs are routinely implemented in accordance with requirements. No significant deficiencies will occur which affect the performance of the SRNS Tritium operations or accomplishment of missions.
3. SRNS' scope associated with NNSA Milestone Reporting Tool (MRT) Level 1 and 2 milestones will be completed on schedule. This excludes milestones associated with the Multi-Site PBI that are addressed in Contract Output 4.
4. Information requests, budget exercises, work insertion requests, etc., will be supported. Develop and submit business cases as requested.
5. Submit Performance reports as required by individual Programs' Execution Plans.



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6. Quarterly program status reviews are conducted that contain overall indices of performance, analysis of baseline variances, trends, funds and reserve management, and risk management. A review of HQ deliverables and issues will also be discussed.

### C. Information Technology/Process Control.

Ensure implementation of a cost-effective, comprehensive, and efficient Information Technology/Process Control Management Program that ensures no significant deficiencies will occur that affect the performance of the SRNS Tritium operations accomplishment of missions. Metrics shall provide an accurate representation of performance, and will identify areas for improvement. SRNS must demonstrate that all classified networks are available to support NNSA missions by meeting the following criteria:

1. Maintain the Tritium Programs Classified Network (TFnet) Availability at greater than 98%.
2. Maintain Tritium's Programs Enterprise Secure Network (ESN) Availability at greater than 98%.
3. Complete a minimum of 4 Intrusion Detection System (IDS) Reviews per month.
4. Maintain Tritium Programs Data Server Availability at greater than 98.7%.

### D. Modernization

Completion criteria include:

1. Enterprise Initiatives
  - a. Record of Decision
    - i. Facilitate communication and implement actions needed by the Nuclear Security Enterprise to support the Record of Decision.(Tritium R&D)
  - b. Transformation Activities
    - i. Support key modernization and strategic planning initiatives.
  - c. Stockpile Services Modernization Plan (SSMP)
    - i. Work with NNSA-SRSO, NNSA-HQ, and the NSE to support the key Congressional inputs required in SSMP document updates and it's strategies within funding limits.
2. Facility Modernization
  - a. Demonstrate support for implementation of the Tritium Programs transformation strategies and goal per NNSA direction within funding limits.
  - b. Support key facility modernization and strategic planning initiatives, such as the Tritium Programs Strategic Plan, Human Capital Management Plan, and Business Transformation Plan within funding limits.



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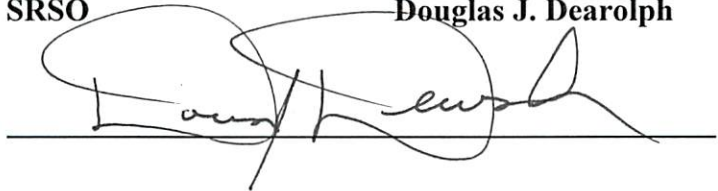
### E. eSourcing:

Completion criteria include:

1. Implement e-Sourcing for NNSA procurements where applicable. Participate and support SCMC activities and EM like initiatives as appropriate.
2. Utilize the eSourcing tools available at the NNSA Supply Chain Management Center and achieve ten eSourcing events.
3. Continue to work with SCMC to modify supplier agreements allowing SRNS to purchase using SCMC e-catalogs and other supplier agreements.



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Approvals:		
SRNS NNSA Programs	Dennis J. Donati	Date
		<u>9/20/11</u>
NNSA SRSO	Douglas J. Dearolph	Date
		<u>9/20/11</u>