

CONSTRUCTION SUBCONTRACT

EXHIBIT "F"

***ENVIRONMENT, SAFETY AND HEALTH
PROVISIONS***

November 16, 2015

SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC

EXHIBIT "F"

ENVIRONMENT, SAFETY AND HEALTH PROVISIONS

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ATTACHMENTS: (Electronic copies of these documents can be downloaded from the Savannah River Site Internet Home Page: http://www.srs.gov/general/busiops/PMMD/SRNS_general_provisions.htm)

ATTACHMENT A	Construction Contractor Designation
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**CONSTRUCTION SUBCONTRACT
EXHIBIT "F"
ENVIRONMENT, SAFETY AND HEALTH PROVISIONS**

ES&HP-1 ENVIRONMENT, SAFETY AND HEALTH PROVISIONS

SUBCONTRACTOR shall have sole responsibility for implementing its safety program. Neither CONTRACTOR nor the GOVERNMENT shall be responsible for supervising the implementation of SUBCONTRACTOR'S safety program, and neither CONTRACTOR nor the GOVERNMENT shall have responsibility for the safety of SUBCONTRACTOR, its employees or its Subtier Suppliers' or Subcontractors' employees. All of SUBCONTRACTOR'S obligations under the General Provision titled "INDEMNITY" shall apply to any liability arising in connection with or incidental to SUBCONTRACTOR'S performance or failure to perform as provided in this Exhibit "F" "Environment, Safety and Health Provisions".

CONTRACTOR requires that a construction superintendent be designated in writing as being responsible for the performance of all aspects of the work described in the Subcontract documents including the environment, safety and health requirements of this Exhibit "F". Attachment "A" "Construction Contractor Designation" is the format for designating that individual.

Throughout performance of the Work, SUBCONTRACTOR shall conduct all operations in such a way as to minimize impact to the natural environment and comply with all laws, regulations, and rules applicable to the site. In the event SUBCONTRACTOR encounters materials reasonably believed to be a toxic or hazardous material, or a toxic or hazardous waste not anticipated by the scope of this Subcontract, SUBCONTRACTOR shall immediately stop work and notify the Subcontract Technical Representative (STR)End User of the condition.

Unsafe Workers

If SUBCONTRACTOR, or any Subtier Subcontractor, independently either suspends or terminates an employee for unsafe acts resulting from performance of work under this Subcontract, SUBCONTRACTOR shall immediately provide electronic notification to the STR/End User with information on that action. (See Exhibit B, Article SP-26, Paragraph C, Security Badging Requirements)

Radiological Control Program (As required by The Subcontract Field Conditions Form found as Attachment "A" to Exhibit "B" – Special Provisions)

- Shall provide for submitting a Radiological Control Program as defined by regulations 10CFR835 and DOE Order 5400.5.
 - SUBCONTRACTOR must advise STR/End User in writing prior to moving any radioactive source to or from the site. SUBCONTRACTOR shall designate a source control custodian. The source custodian shall have documented training for this position. SUBCONTRACTOR shall meet at least one of the following:
 - Maintain a valid State or NRC license for handling and use of by-product materials; or
 - Have CONTRACTOR approved procedures that are in compliance with 10CFR835;
 - Use SRNS's Procedure 5Q1.1-532.

Permits

Written, properly authorized, current permits (work clearance, vessel or confined space, environmental) are required before work begins. The General Provisions GP-9 titled "Permits and Licenses" notwithstanding, CONTRACTOR will, without cost to SUBCONTRACTOR, furnish the permits listed in The Subcontract Field Conditions Form found as Attachment "A" to Exhibit "B"-Special Provisions.

OSHA Form No. 300

SUBCONTRACTOR shall maintain the OSHA Form No. 300 log. The past year's and the current year-to-date records of all recordable occupational injuries and illnesses and the Experience Modification Rate (EMR) from the insurance carrier shall be available for review by CONTRACTOR or the GOVERNMENT upon request.

SUBCONTRACTOR shall comply with, and assist CONTRACTOR in complying with, ES&H requirements of all applicable laws and regulations, and applicable DOE Directives identified in this Exhibit "F".

Subcontractor shall submit to the STR/End User on the first working day of the week, the Subcontractor's Weekly Man-hour Report for the previous week's work found as Attachment "J" in this Exhibit "F".

Additional Environmental, Safety and Health Requirements

In the performance of work under this Subcontract, SUBCONTRACTOR is required to follow the site procedures listed below and hereby incorporated into the Subcontract as Attachments to this Exhibit "F".

Additional Requirements: Exhibit B, Special Provisions and Attachments

ES&HP-2 INTEGRATION OF ENVIRONMENT, SAFETY AND HEALTH INTO WORK PLANNING AND EXECUTION

- A. For the purpose of this Article,
 - (1) Safety encompasses environment, safety and health, including pollution prevention and waste minimization; and
 - (2) Employees include SUBCONTRACTOR and Subtier Subcontractor employees.

- B. In performing work under this Subcontract, SUBCONTRACTOR and any Subtier Subcontractor(s), shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. SUBCONTRACTOR shall exercise a degree of care commensurate with the work and the associated hazards. SUBCONTRACTOR shall ensure that management of environment, safety and health (ES&H) functions and activities becomes an integral, but visible part of SUBCONTRACTOR'S work planning and execution processes. SUBCONTRACTOR shall, in the performance of work, ensure that:
 - (1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those SUBCONTRACTOR and Subtier Subcontractor employees managing or supervising employees performing work.
 - (2) Clear and unambiguous lines of authority and responsibility for ensuring ES&H are established and maintained at all organizational levels.
 - (3) Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.
 - (4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.
 - (5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.
 - (6) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.
 - (7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by CONTRACTOR and SUBCONTRACTOR. These agreed-upon conditions and requirements of the Subcontract are binding upon SUBCONTRACTOR. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work.

- C. SUBCONTRACTOR and any Subtier Subcontractor(s) shall manage and perform work in accordance with the degree specified in Paragraphs I through O of this Provision. Documentation in the Subcontract shall describe how SUBCONTRACTOR will:
 - (1) Define the Work to be performed;
 - (2) Identify and analyze hazards associated with the work;
 - (3) Develop and implement hazard controls;
 - (4) Perform work within controls; and
 - (5) Provide feedback on adequacy of controls and continue to improve safety management.

- D. The Subcontract shall describe how SUBCONTRACTOR will establish, document, and implement safety performance objectives, performance measures, and commitments in response to Subcontract requirements while maintaining the integrity of the Worker Protection Plan (WPP). The Subcontract shall also describe how SUBCONTRACTOR will measure WPP effectiveness.

- E. SUBCONTRACTOR shall submit to the Procurement Representative documentation of its WPP for review and acceptance. The Procurement Representative will establish dates for submittal, discussions, and revisions to the WPP. The Procurement Representative will provide guidance on preparation, content, review, and acceptance of the WPP. On an annual basis, SUBCONTRACTOR shall review and update, for CONTRACTOR acceptance, its safety performance objectives, performance measures, and commitments consistent with, and in response to, Subcontract requirements, and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as maintain the integrity of the entire WPP. Accordingly, the Subcontract shall be integrated with SUBCONTRACTOR'S business processes, as applicable to the Scope of Work contained in this Subcontract, for work planning, budgeting, authorization, execution, and change control.
- F. SUBCONTRACTOR and any Subtier Subcontractor(s), shall comply with, and assist CONTRACTOR in complying with, ES&H requirements of all applicable laws and regulations, and applicable directives identified in the General Provisions of this Subcontract on Laws and Regulations. SUBCONTRACTOR shall cooperate with Federal and non-Federal agencies having jurisdiction over ES&H matters under this Subcontract.
- G. SUBCONTRACTOR shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements including those specified in the Subcontract. If SUBCONTRACTOR fails to provide resolution or, if at any time, SUBCONTRACTOR'S acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the Procurement Representative may issue an Order stopping work in whole or in part. Any stop work Order issued by the Procurement Representative under this Provision (or issued by SUBCONTRACTOR to a Subtier Subcontractor) shall be without prejudice to any other legal or contractual rights of CONTRACTOR. In the event that the Procurement Representative issues a stop work Order, an Order authorizing the resumption of the work may be issued at the discretion of Procurement Representative. SUBCONTRACTOR shall not be entitled to an extension of time or damages by reason of, or in connection with, any work stoppage ordered in accordance with this Provision.
- H CONTRACTOR shall hold SUBCONTRACTOR responsible for compliance with the ES&H requirements applicable to this Subcontract, including performance of work by any Subtier Subcontractor(s).
- I. Compliance with ES&H Requirements
SUBCONTRACTOR and any Subtier Subcontractor(s) shall take all reasonable precautions in the performance of the work under this Subcontract to protect the environment, safety and health of employees and members of the public, and shall comply with OSHA and all other applicable federal, state and local regulatory requirements, including new DOE Regulation 10 CFR 851, "Worker Safety and Health Program" which will apply to any work performed on the Savannah River Site effective February 9, 2007. SUBCONTRACTOR and any Subtier Subcontractor shall comply with site-specific ES&H requirements when specified in the Subcontract. The CONTRACTOR'S Procurement Representative shall notify SUBCONTRACTOR in writing of any noncompliance with this Provision. After receipt of such notice, SUBCONTRACTOR shall immediately take corrective action. In the event that SUBCONTRACTOR fails to take corrective action and comply with said regulations and requirements, the CONTRACTOR'S Procurement Representative may, without prejudice to any other legal or contractual rights of CONTRACTOR, issue an Order stopping work in whole or in part. An Order authorizing the resumption of work may be issued at the discretion of the Procurement Representative. SUBCONTRACTOR shall not be entitled to an extension of time or damages by reason of, or in connection with, any work stoppage ordered in accordance with this Provision.
- J. Corporate Worker Protection Plan (WPP)
SUBCONTRACTOR shall possess and maintain a corporate WPP which implements the OSHA requirements applicable to the normal course of SUBCONTRACTOR'S business. Prior to the start of work under this Subcontract, SUBCONTRACTOR shall provide to the CONTRACTOR'S Procurement Representative a copy of the WPP and sample Task Specific Plans (TSP) (based on a minimum of three tasks in the scope of work) for review and acceptance by the appropriate CONTRACTOR organization(s). NOTE: SUBCONTRACTOR is responsible for conducting hazard analysis and documenting additional TSP's. Work under this Subcontract shall not commence until the WPP and TSPs have been accepted by CONTRACTOR. SUBCONTRACTOR shall provide a copy of the accepted WPP and TSP to any Subtier Subcontractor(s), and shall ensure Subcontractor employee's performing work at the site have access to the WPP document accepted by SRNS, and other standards, controls and procedures including DOE worker protection publications applicable to the workplace. SUBCONTRACTOR'S employees and the employees of any Subtier Subcontractor(s), shall comply with the WPP and TSPs in the performance of the work under this Subcontract. The WPP shall meet the following minimum requirements:
- (1) Shall include management policies that provide for clear goals, responsibilities, authority, and accountability for meeting loss control objectives;

- (2) Shall include the implementation of applicable local, state, federal, environment, safety and health requirements that are relevant to the scope of work, including applicable elements in 10 CFR 851, "Worker Safety and Health Program";
- (3) Shall provide employee guidance on internal engineering controls, precautions, and requirements on personal protective equipment (PPE) to minimize, control and/or prevent employee exposure to include equipment/property loss;
- (4) Shall include management policies for incorporating and implementing the use of American Conference of Governmental Industrial Hygienist (ACGIH) threshold limit values (TLVs). The ACGIH guidelines shall be used when the TLV(s) exposure limits are more restrictive than OSHA permissible exposure limits (PELs).
- (5) Shall include Task Specific Plans that include hazard identification and control measures that provide for safe work practices and employee training, i.e., 1) Define Scope of Work, 2) Identify and Analyze Hazards, 3) Develop and Implement Controls, 4) Perform Work within Controls, 5) Provide Feedback, and Continuous Improvement.
- (6) Shall include Focused Observation Checklists, as applicable. SUBCONTRACTOR shall (i) thoroughly assess the work scope, (ii) identify the associated hazards, and (iii) apply elements of corresponding Checklists within the Worker Protection Plan (WPP) or utilize applicable Checklists as attachments to the WPP. Subcontract scope performed by SUBCONTRACTOR and its Subtier Subcontractors will typically be covered by the WPP and appropriate Checklists. Such Checklists are available on the Savannah River Site Internet Home Page (www.srs.gov/general/busiops/PMMD/general_provisions.htm) for review and down loading.
- (7) Shall include a process that provides authority to Subcontractor and Subtier Subcontractor employees to call for a "time out/stop work" when unsafe conditions are observed and/or employee actions are likely to cause injury to themselves, other personnel, or cause damage to SRS property.

SUBCONTRACTOR shall provide mechanisms to involve workers in the development of WPP goals, objectives, and performance measures and in the identification and control of workplace hazards. Whenever a significant change or addition is made to the WPP, it shall be re-submitted to SRNS for review and acceptance. Examples of significant changes include any requirement deletions, additional scope added, total re-write or major revision. Additionally, SUBCONTRACTOR must submit annually to SRNS either an updated WPP for acceptance or a letter stating that no changes are necessary in the current accepted WPP.

K. Assigned Competent Person

The SUBCONTRACTOR will designate (in writing – after award) an Assigned Competent Person (ACP), and alternates, who will be responsible for SRS perimeter barricade escort and safety orientation for non-badged Subcontractor personnel seeking temporary badges in support of the Subcontractor's work scope. The STR shall be notified two (2) working days in advance of personnel seeking entry. The ACP shall be a responsible employee, cognizant of the Subcontract scope and the Subcontractor's Worker Protection Plan, including any focused observation safety checklists. The ACP will meet the entering personnel at the SRNS Badging Office, Building 703-46A. The ACP and entering personnel shall review the scope of work to be performed and upon arrival at the work site issue and review, complete and date any applicable focused observation safety checklist(s).

L. Safety and Health Representative

SUBCONTRACTOR shall designate a safety and health professional or representative as specified in the Subcontract. The designation must include the person's qualifications and duties and be documented in the Subcontractor's Worker Protection Plan (see ES&HP-3C).

M. Material Safety Data Sheets

SUBCONTRACTOR shall provide the STR copies of Material Safety Data Sheets for all chemicals brought to SRS prior to the initial use of such chemicals. In addition, SUBCONTRACTOR shall provide the STR with a current inventory on a monthly basis for chemicals stored on-site for thirty (30) or more days per EPCRA/CERCLA. All chemicals stored on-site shall follow NFPA storage guidelines.

N. Environmental Compliance

SUBCONTRACTOR and any Subtier Subcontractor(s) shall comply with all applicable environmental protection laws, Executive Orders, ordinances, regulations, directives, and codes. Upon request SUBCONTRACTOR shall submit an Environmental Compliance Plan (ECP) outlining the methods proposed to address the environmental requirements specified in the scope of work. The ECP shall specify the person responsible for ensuring the requirements are met.

O. Site Reporting Requirements

SUBCONTRACTOR shall immediately notify the STR or SRNS Procurement Representative of any event/condition that may require reporting to DOE. Further, the SUBCONTRACTOR shall cooperate with any SRNS or DOE critique, analysis, or investigation and complete necessary reports for such events/conditions. Events/conditions that require reporting to DOE are defined in DOE Manual 231.1-2 (DOE M 231.1-2) and can include (but are not limited to):

- (1) Operational emergencies,
- (2) Occupational injury or illness (including exposures to hazardous substances in excess of allowable limits) and near misses,
- (3) Any on-the-job injury where an employee is taken offsite for something other than observation. The notification requirement applies to any person who goes offsite for prompt medical treatment of any type. The mode of transportation (ambulance, personal vehicle, etc.) is not pertinent – any offsite transfers must be reported immediately,
- (4) Any violation of Lockout/Tagout controls where there are no credible barriers left between the worker, and the energy source regardless of whether or not there was an injury
- (5) Fires/explosions.
- (6) Hazardous energy control failures,
- (7) Operations shutdown directed by management for safety response,
- (8) Environmental release of radioactive materials, hazardous substances, regulated pollutants, oil spills, etc.,
- (9) Violation of Federal Motor Carrier Safety Regulations or Hazardous Material Regulations,
- (10) Loss, damage, theft, or destruction to government property (including damage to ecological resources like wetlands, critical habitats, historical/archeological sites, etc.),
- (11) Spread of radioactive contamination or loss of control of radioactive materials,
- (12) Personnel radioactive contaminations or exposures, and
- (13) Violations of procedures.

Immediate notification is required of such events to ensure SRNS meets its commitment for 30 minute notification to appropriate DOE authorities. SUBCONTRACTOR shall preserve conditions surrounding or associated with the event for continued investigation unless such actions interfere with establishing a safe condition. In addition, SUBCONTRACTOR and their employees shall not conceal nor destroy any information concerning noncompliance or potential noncompliance with the environment, safety and health requirements of this Subcontract.

ES&HP-3 SAFETY PERFORMANCE

A. Safety Incentive/Liquidated Damages Safety Provision

“As an incentive to reward excellent Subcontractor safety performance at the Savannah River Site, SRNS has allocated a sum equal to (number) % of the initial awarded Subcontract value to be included in the final payment for exemplary Subcontractor Safety Performance under the Subcontract.

The incentive shall be **void** and the prescribed liquidated damages applied for any work related incident resulting in:

- Fatality
- Inpatient hospitalization of one (1) or more employees for purposes other than observation.

The incentive shall be **reduced** (pursuant to the – Safety Citation Article) for the following type situations:

- Failure to immediately and accurately report, as defined in General Provisions/ Special Terms and Conditions article entitled “Site Reporting Requirements”, an injury or accident will result in additional liquidated damages of \$1000 per incident.
- Unauthorized changing of the scene of the injury/accident will result in additional liquidated damages of \$1000 per incident.
- Any incident involving Subcontractor and/or subtier owned/leased heavy equipment or motorized vehicles resulting in personal injury or property damage in excess of \$500, and caused by personnel under the control of Subcontractor and/or subtier, will result in additional assessed liquidated damages of \$1000 per incident.
- Multiple Safety Citations issued within a Subcontract period of performance *inclusive of options if exercised – (liquidated damages will be assessed at \$1000* per citation beginning with the fourth citation at the discretion of SRNS)

Incentive payment will be made at the end of the Subcontract performance as part of final payment; however, the assessed liquidated damages shall be due as they are identified and cited. Both payment and damages shall be incorporated by Change Notice to the Subcontract.

B. Safety Citation

A Safety Citation may be issued to a Subcontractor by the Subcontract Technical Representative (STR) for safety violation(s) such as, but not limited to:

- *Failure to abate any unsafe conditions immediately*
- *Failure to address serious/imminent danger safety concerns upon identification of the concern*
- *Failure to immediately report injury/incidents*
- *Failure to properly perform OSHA record keeping*

NOTE: If the Safety Citation was issued because of a Subtier's failure to comply, the Safety Citation will be issued to the prime Subcontractor but will apply to the Subtier Subcontractor for the purpose of the Time Out.

At the discretion of SRNS, the Subcontractor's application for payments will be placed on hold if the Subcontractor has any Safety Citation(s) which have not been resolved to the satisfaction of SRNS.

A graded approach implemented at the discretion of SRNS will be used to monitor performance and determine corrective actions. The graded approach of using safety citations in no way prevents SRNS from exercising all termination rights as identified in our General Provisions.

- **First Safety Citation -**
 - The Subcontractor shall be required to attend a Mandatory Incident Review with SRNS to evaluate the Safety Citation.
 - The Subcontractor shall (at their own expense and at no additional cost to SRNS) conduct a Time Out.
 - The Subcontractor will be assessed a reduction of 10% from the available financial incentive
- **Second Safety Citation**
 - The Subcontractor shall be required to attend a Mandatory Incident Review with SRNS to evaluate the Safety Citation
 - The Subcontractor shall (at their own expense and at no additional cost to SRNS) conduct a minimum of a one-half (1/2) shift Safety Time Out.
 - The Subcontractor will be assessed a reduction of 50% from the remaining financial incentive.
- **Third Safety Citation –**
 - The Subcontractor shall be required to attend a Mandatory Incident Review with SRNS to evaluate the Safety Citation
 - The Subcontractor shall (at their own expense and at no additional cost to SRNS) conduct a minimum of a one-half (1/2) shift Safety Time Out.
 - The Subcontractor will be assessed a reduction of the remaining financial incentive.”
- **Fourth Safety Citation –**
 - The Subcontractor shall be required to attend a Mandatory Incident Review with SRNS to evaluate the Safety Citation
 - The Subcontractor shall (at their own expense and at no additional cost to SRNS) conduct a minimum of a one-half (1/2) shift Safety Time Out.
 - Liquidated damages will be assessed at **\$1000**, and will be due upon issuance of the Change Notice.
- **Fifth Safety Citation –**
 - The Subcontractor shall attend a meeting with SRNS SCM, ESH and STR representatives to discuss further corrective actions up to and including termination of the Subcontract.

1 st Safety Citation	2 nd Safety Citation	3 rd Safety Citation	4 th Safety Citation	5 th Safety Citation
Conduct a “Time Out” as defined in Safety Citation Article and deduct 10% of available financial incentive dollars (\$)	Conduct a one –half (1/2) shift Safety Time Out as defined in Safety Citation and deduct 50% of the remaining financial incentive dollars (\$)	Conduct a one –half (1/2) shift – Safety Time Out as defined in Safety Citation and deduct the remaining financial incentive dollars (\$)	Conduct one –half (1/2) of a shift – Safety Time Out as defined in Safety Citation Liquidated Damages will be accessed at \$1,000.	Corrective actions to be determined based on other citations and may include termination of Subcontract

If a Safety Citation or multiple citations are issued against a Subcontractor under a multiple year Subcontract, the Subcontractor will be re-evaluated 12 months from the issuance date of the first citation. The evaluation will include, but is not limited to, the review of overall safety performance since the citation issuance. If the review concludes that the Subcontractor has improved performance i.e.: had a continuous quarter without a citation; the Safety Citation sequence can be reset for the next 12 month period at the discretion of the Procurement Representative to avoid liquidated damages. Once the Safety Incentive is lost; it cannot be regained.

C. Safety Representative

Safety Professional (SP) - Required for SUBCONTRACTS with high risk factors and large scope and noted on the OSR 1-126 Subcontract Field Conditions Form. SUBCONTRACTOR shall provide a full time dedicated Safety Professional on site and shall work closely with CONTRACTOR management personnel to coordinate SUBCONTRACTOR’S comprehensive Safety Management System. Implementation, administration, and oversight of SUBCONTRACTOR’S Worker Protection Plan and CONTRACTOR’S site safety rules shall be this person’s sole responsibility. “Zero Incidents” shall be the goal of SUBCONTRACTOR. The dedicated Safety Professional shall meet the following minimum acceptance criteria or pre-approved equivalent.

1. Certification by the American Board of Industrial Hygienists/Board of Certified Safety Professionals Joint Committee or equivalent nationally recognized organization, or an associate degree (or higher) in Safety and Health recognized by the American Society of Safety Engineers or other nationally recognized agency.
2. **OR** at least three (3) years of full time work/management experience in the field of safety with safety related responsibilities.

Duties may include, but are not limited to:

- Manage SUBCONTRACTOR’S comprehensive Safety Management System/Worker Protection Plan
- Interface with site safety personnel and the Subcontract Technical Representative (STR/End User) to resolve safety issues
- Ensure safety Requirements and goals have been identified to workers
- Hold safety and pre-job meetings as required
- Ensure that the Safety Professional attend SRNS Behavior Based Safety Training.
- Conduct Behavior Based Safety Observations of working employees where required, on the OSR 1-126 form. The results of the observations shall be documented on Attachment D, “Safe Worker Observation Data Sheet” and submitted to the STR/End User.
- Attend all injury/illness/incident fact finding meetings

SUBCONTRACTOR shall submit the Safety Professional’s qualifications to SRS for acceptance prior to the start of work.

Industrial Hygiene Technician (IHT) -

IH Technician - an individual with 12 months related experience under the direction of a CIH, IHP who may not be located on site during the performance of work. Duties include, but not limited to:

- Determine appropriate sampling equipment and sampling methods
- Technical competency in utilizing various industrial hygiene equipment
- Maintain industrial hygiene equipment
- Develop equipment management files and conduct training on equipment
- Notify supervisors and personnel of monitoring results

Based on guidance received from industrial hygienist perform industrial hygiene surveys, sampling, studies, and investigations

SRNS Behavior Based Safety

Ensure that the Safety Representative attend SRNS Behavior Based Safety Training.

D. “Behavior Based” Type of Safety Process

SUBCONTRACTOR will be responsible for the development and implementation of a comprehensive “Behavior Based” Type of Safety Process which is to include any Subtier Subcontractors, which perform site work on this Subcontract.

The “Behavior Based” Type of Safety Process is in addition to the required features cited in other contract provisions regarding Safety and Health, and is to be included in the Worker Protection Plan.

SUBCONTRACTOR, at its option, may elect to utilize a template of CONTRACTOR’S “Behavior Based” Type of Safety Process. The salient features of this process are as follows:

- Observation Team
- Observation Team Leader
- One (1) observer for every ten (10) hourly paid employees. These observers are members of the Observers Team.
- Ensure that the Safety Professional or the Safety Representative attend SRNS Behavior Based Safety Training.
- Observer(s) schedule at least one (1) field observation daily giving feedback to employees about what they observe (safe, as well as, at risk behavior) and identify any barriers which are present that inhibits the employees’ safety.
- Observations are recorded on Safe Worker Observation Data Sheets are collected weekly.
- Observation Reports are issued as a tool to improve safety performance.
- The Observation Team meets weekly to analyze data and to make recommendations to improve safety.
- Recommendations are reviewed by SUBCONTRACT management.
- Recommendations and actions are then communicated to employees via toolbox safety meetings, bulletins, or newsletter articles.

ES&HP-4 EQUIPMENT SAFETY

SUBCONTRACTOR shall ensure that major equipment used in the performance of work under this Subcontract is inspected, operated and maintained by competent personnel. As confirmation, SUBCONTRACTOR shall complete Attachment F, Major Equipment Declaration (MED), and provide one (1) copy to the Subcontract Technical Representative (STR), prior to placing any such equipment in service on the Savannah River Site. Provide a copy of the MED form to the SRNS Purchasing Representative. Additionally, prior to performing any activity involving the

loading, unloading, and transporting of self-propelled medium or heavy duty construction equipment on the Savannah River Site (i.e., mobilization/demobilization), SUBCONTRACTOR shall read and complete the "Self-propelled Equipment Loading, Unloading & Transport Safety Review Checklist", copy available on the SRS Internet Home Page at (http://www.srs.gov/general/busiops/PMMD/general_provisions.htm), and provide a copy to the STR.

HAULING AND DUMPING OPERATIONS

SUBCONTRACTOR shall ensure that all dumping operations including dump truck vehicle configurations for specific loads meets the requirements set forth in Attachment I, SRS Haulage and Dumping Vehicles, General Safety Requirements.

CRANE OPERATOR CERTIFICATION

All construction crane operators designated to perform crane operations at the Savannah River Site shall be certified by the National Commission for the Certification of Crane Operators (CCO). All construction crane operators will be required to provide evidence of meeting CCO certification requirements including:

- (1) Possession of either a current medical certificate as defined by the ASME B30.5 mobile crane standard, or a Department of Transportation (Dot) Medical Examiner's certification; and,
- (2) Original copy of a CCO certification card including applicable classifications of crane operations.

More information concerning the CCO certification Program can be found at <http://www.nccco.org>, or telephone (703) 560-2391.

PROXIMITY TESTERS

Proximity testers for electrical circuits are designed to test for presence of voltage, under certain conditions, and on specific operating systems. There are a number of these testers commercially available in the marketplace. Each tester is made to individual specifications and has its own limitations. Some of those limitations are significant. Using the tester outside the specified applications voids all responsibility of the manufacturer and places it on the user. Each individual model of these types of testers has their limitations, along with their specified use ranges listed on the packaging, or in the user manual/instructions. It is very easy to forget those limitations during day-to-day work activities.

There is only one "Approved" tester for testing for the absence of voltage, 600 volts and below. The TEGAM Model 110A is that tester. No other tester is approved for that function at SRS for Construction-Managed Subcontractors. NO proximity testers are approved for the purpose of testing for absence of voltage at 600 volts and below.

ES&HP-5 FIRST AID FACILITIES

SUBCONTRACTORS must arrange for and identify their offsite medical provider. *(A listing of some available local Offsite Occupational Medical Providers is available on SRNS website http://www.srs.gov/general/busiops/PMMD/SRNS_general_provisions.htm.)* The CONTRACTOR or the GOVERNMENT has first-aid facilities at the Jobsite and as an option those facilities will be made available for first-aid treatment of employees of the SUBCONTRACTOR. The use of the CONTRACTOR first-aid facilities is intended for occupational injuries and illnesses only. These facilities are also available for life threatening injuries or illness while engaged in the performance of the Work under this Subcontract.

If first-aid facilities and/or services are made available to SUBCONTRACTOR'S employees then, in consideration for the use of such facilities and the receipt of such services, SUBCONTRACTOR hereby agrees:

- (a) To release, defend, indemnify and hold harmless CONTRACTOR the GOVERNMENT and their authorized representatives, successors, or assigns, and all of their officers and employees from and against any and all claims, demands, liabilities, including attorney's fees, arising from the receipt of such services or the use of such facilities by SUBCONTRACTOR'S employees, except for claims and demands arising out of the sole active negligence of CONTRACTOR, the GOVERNMENT or any of their representatives.
- (b) Upon receipt of any notice from CONTRACTOR or the GOVERNMENT of any such claim, demand or liability being pursued against CONTRACTOR or the GOVERNMENT, to not only undertake the defense

of such claim, demand, or liability, but also upon entry of judgment, to make any and all payments necessary thereunder, and

- (c) That in the event any of SUBCONTRACTOR'S employees require off-site medical services, including transportation thereto, SUBCONTRACTOR shall promptly pay for such services directly to the providers thereof.

ES&HP-6 ENVIRONMENTAL REQUIREMENTS

A. WASTE DISPOSAL

SUBCONTRACTOR shall comply with all Federal, State, Local and Site, laws and regulations, in regards to waste generation, storage, transportation, and disposal.

SUBCONTRACTOR shall manage its work activities in a manner that minimizes the generation of waste.

SUBCONTRACTOR shall be cognizant and responsible for all wastes generated. SUBCONTRACTOR shall be responsible to identify materials as being a waste (i.e., materials that are to be discarded, abandoned or rejected). After SUBCONTRACTOR reviews each waste stream (type), CONTRACTOR and SUBCONTRACTOR shall jointly determine an appropriate waste accumulation area, preferably at or near the point of generation and at a location where spills/releases could not easily migrate to the environment.

Waste shall only be disposed of in locations specified by CONTRACTOR. No waste shall be removed from the Savannah River Site without the express written consent of CONTRACTOR, or as provided in the scope of work.

B. SANITARY SEWAGE

In the event there is disposal of sanitary sewage, SUBCONTRACTOR shall use and execute Attachment "G" "Sanitary Sewage Disposal Record" to document proper disposal.

C. INERT WASTE

SUBCONTRACTOR shall be responsible for the accumulation, minimization, segregation, transportation of inert waste as required and on-site disposal of inert waste generated, unless directed otherwise by CONTRACTOR.

Generation of hazardous waste will require characterization by a qualified Generator Certification Officer (GCO).

CONTRACTOR will provide SUBCONTRACTOR with the required documentation, which must accompany the delivery of hazardous waste to appropriate off-site treatment, storage or disposal facilities. CONTRACTOR will require a two working day notice of SUBCONTRACTOR'S intent to ship waste off site. All waste must be radiologically screened prior to shipment and meet the facility's waste acceptance criteria.

Hazardous Waste Satellite Accumulation Areas shall be located at or near the point of waste generation. Satellite Accumulation Areas or the waste accumulation container shall be locked if they are not located in direct sight of the responsible attendant.

Hazardous Waste Satellite Accumulation Areas shall be identified as follows:

- install a visible boundary to define the accumulation area (e.g., chain, tape, ribbon)
- install a minimum of one (1) 12" x 18" sign with a yellow background and 1" black letters, which is legible from 25 feet away, containing the following information:
 - "Hazardous Waste Satellite Area"
 - Construction location
 - Responsible attendant and contact number
 - Contractor Environmental Engineer and contact number

- install a minimum of (1) "No Smoking" sign (for ignitable wastes)
- install an "Authorized Use Only" sign (for unlocked satellite areas or waste accumulation containers) with 1" black letters and a white background. Sign to be approximately 12" x 18".
- Identify the hazardous waste accumulation containers with a minimum of one (1) label per container legible from ten (10) feet. Approximate label standards are 18" x 24" with a yellow background and 2" black letters. Depending on container size, smaller labels/letters are permissible.
- The assigned Responsible Attendant for the area shall have the appropriate Resource Conservation and Recovery Act (RCRA) training.

Spent fluorescent light bulbs are to be managed as "Universal Waste" per 40 CFR 273 or transferred to the N-Area Hazardous Waste Staging Area (Building 717-12N) in Central Shops at the end of the work shift for consolidation and recycling.

Handling, storage and disposal of fluorescent light ballast, small capacitors and other equipment containing PCBs shall be in compliance with the Toxic Substance Control Act Regulatory requirements. Non-radioactive material containing PCBs shall be transferred to the N Area PCB Storage Facility (Building 741-1N) in Central Shops within 30 days of the date marked on the drum. SUBCONTRACTORS should note that each ballast must be individually radiologically surveyed (smeared) and cleared by Radiological Controls prior to shipping. Contact the STR for specific guidance.

If mixed waste is encountered, contact the STR for coordination and disposal with Operations.

D. SPILL RESPONSE AND REPORTING

SUBCONTRACTOR shall be responsible for developing and maintaining spill prevention control and countermeasures for chemicals and petroleum products used and stored on the work site. The following Best Management Practices shall be used.

1. Establish secondary containment, diversionary structures, or equipment to prevent the products from contaminating the environment should a spill or leaks occur.
2. Locate storage facilities away from low-lying areas such as ditches, streams, and storm sewers.
3. Maintain nearby spill control equipment, i.e. spill kit.
4. Effectively containerize and label all products.

SUBCONTRACTOR shall provide immediate notification to the STR of any spilling, leaking, pumping, pouring, discharging, emitting or dumping of materials into or on any land, water, or air. SUBCONTRACTOR shall also report any other incident relative to material/waste handling, storage, transportation, or disposal and shall take immediate and appropriate steps to protect human health and the environment.

SUBCONTRACTOR shall not release any wastewater (for example: water from washing out concrete trucks) on the Savannah River Site without written approval from CONTRACTOR.

SUBCONTRACTOR shall be liable for all costs associated with or resulting from such releases, including without limitation, clean-up costs.

E. AIR QUALITY

The Savannah River Site is a major source facility with a Title V Operating Air Permit. Any internal combustion engine (ICE) brought onto SRS by a contractor/vendor must be appropriately permitted by the SCDHEC Bureau Air Quality Control (BAQC) with either a construction permit or have a written exemption approval from the BAQC. ICEs include, but are not limited to, engines fueled by gasoline, diesel, natural gas, and liquefied propane gas. These engines are commonly utilized to power pumps, air compressors, generators, light sets, welders, etc. The contractor/vendor should contact the BAQC at (803) 898-4123 or (803) 896-8940 for guidance or assistance with the South Carolina air permitting process. The contractor/vendor will ensure any ICE is operated in accordance with permit or exemption approval and will maintain all required records and documentation. The contractor/vendor will

provide copies of the required records and documentation including permits or exemption approvals, to SRS to ensure they are maintained at the site for the required time duration.

Refrigerant Recovery - The Clean Air Act Amendments of 1990 prohibit the venting of certain chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) to the atmosphere from refrigeration cooling and air conditioning units. All refrigerants shall be recovered.

F. ASBESTOS

All demolition/renovation work at the Savannah River Site involving asbestos must be permitted with CONTRACTOR'S Asbestos Coordinator prior to starting work. SUBCONTRACTOR shall submit the following information, if applicable to the Subcontract:

1. A copy of SCDHEC CONTRACTORS ABATEMENT company license.
2. A copy of certificates (from SCDHEC) of personnel performing abatement activities (SUPERVISOR OR WORKER).
3. A copy of MEDICAL RECORDS (last physical date) on personnel performing abatement activities.
4. A copy of RESPIRATOR FIT TEST (last date of respirator fit test).
5. A copy of SCDHEC letter of authorization to perform abatement activity at SRS.
6. A copy of JOB PLAN/SCOPE OF WORK on abatement activity.
7. A copy of SUBCONTRACTORS BUILDING INSPECTOR ACCREDITATION CERTIFICATE and inspection report.
8. A copy of SUBCONTRACTORS PROJECT DESIGNER ACCREDITATION CERTIFICATE and designer report.

Asbestos shall be disposed of in containers provided at the N Area Central Shops Insulation Facility, 717-10N, unless otherwise specified in the Subcontract. The plastic bags used for asbestos disposal shall be clear.

All demolition work performed at the Savannah River Site, on any building or facility, whether or not it contains asbestos, shall be reported to SCDHEC on a Notification of Demolition and Renovation form.

The use of polychlorinated biphenyls (PCBs) or asbestos is prohibited unless specified or approved in writing by CONTRACTOR.

G. EROSION AND SEDIMENT CONTROL

SUBCONTRACTOR involved in activities, which disturb surface soils, shall submit a Sediment and Erosion Control plan to CONTRACTOR for review and approval. The plan is intended to provide guidance according to the South Carolina Stormwater and Sediment Reduction Regulation (SC 72-300). Land disturbances less than 1/2 acre requires CONTRACTOR review and State approval.

H. REGULATORY REPORTING

SUBCONTRACTOR shall be required to prepare and submit data to CONTRACTOR for input to any required regulatory reports, including but not limited to, the SCDHEC Quarterly Hazardous Waste Report, Environmental Protection Agency (EPA) Annual Tier II Chemical Inventory Report and the EPA Annual Toxic Release Inventory Report. CONTRACTOR will provide forms for SUBCONTRACTOR'S use. (Attachment "H" – "SRS Chemical Usage Report")