MISSION SUPPORT and TEST SERVICES, LLC

FIRM-FIXED-PRICE SUBCONTRACT AGREEMENT

EXHIBIT E

1. ENVIRONMENTAL, SAFETY, & HEALTH REQUIREMENTS

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Introduction

The CONTRACTOR is committed to implementing an Integrated Safety Management System (ISMS) that promotes the company's core values and the principles set forth by the U.S. Department of Energy (DOE). The objective of ISMS is to systematically integrate Environmental, Safety, and Health (ES&H) protection into management and work practices at all levels so that workers, the public, and the environment are protected while assigned projects are accomplished. If the location or work activities do not involve the conditions or hazards identified in specific sections of this document, then the requirements in that section are not applicable.

Company Directive CD-0280.005, "Subcontracts," provides additional information regarding the specific processes of Exhibit E.

E-1 GENERAL REQUIREMENTS

1.1 For the purpose of this Exhibit, the term Safety encompasses ES&H protection, including radiological protection, pollution prevention, and waste minimization.

1.2 The SUBCONTRACTOR shall have sole responsibility for implementing its safety program. Although the CONTRACTOR will provide oversight, neither the CONTRACTOR nor DOE National Nuclear Security Administration Nevada Field Office (NNSA/NFO) shall be responsible for the implementation of the SUBCONTRACTOR's safety program.

1.3 When performing work at sites controlled/managed by the CONTRACTOR or NNSA, the SUBCONTRACTOR shall comply with all applicable federal, state, and local laws and regulations, including those protecting workers, air, water, soil, as well as those governing land use, waste disposal, chemical use, and pesticide use. All recognized safety and health standards identified within this Exhibit apply to the SUBCONTRACTOR.

1.4 The SUBCONTRACTOR and SUB-TIER SUBCONTRACTORS shall comply with the following requirements while SUBCONTRACTOR employees and/or SUB-TIER SUBCONTRACTOR employees are physically located on work sites controlled/managed by CONTRACTOR or NNSA:

- Title 10 Code of Federal Regulations (CFR) Part 835, "Occupational Radiation Protection"
- 10 CFR Part 850, "Chronic Beryllium Disease Prevention Program"
- 10 CFR Part 851, "Worker Safety and Health Program"
- 29 CFR Part 1904, "Recording and Reporting Occupational Injuries and Illnesses"

- 29 CFR Part 1910, “Occupational Safety and Health Standards”
- 29 CFR Part 1926, “Safety and Health Regulations for Construction”
- 36 CFR (various), “Parks, Forests, and Public Property”
- 40 CFR (various), “Protection of Environment”
- 49 CFR (various), “Transportation”
- 50 CFR (various), “Wildlife and Fisheries”
- American Conference of Governmental Industrial Hygienists (ACGIH) “2024 TLVs and BEIs Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents” (current edition)
- National Fire Protection Association (NFPA) 70, “National Electric Code (NEC) (2023)”
- NFPA 70E, “Standard for Electrical Safety in the Workplace”
- NNSA Supplemental Directive SD 413.3-7, “Project Management for Non-nuclear, Non-complex Capital Asset Acquisition”

1.5 SUBCONTRACTOR and SUB-TIER SUBCONTRACTORS must be aware of, and comply with, the requirements of these regulations. The SUBCONTRACTOR and SUB-TIER SUBCONTRACTORS must also understand the potential enforcement actions and penalties that may occur for noncompliance with these requirements. Post-award, by proceeding with the work, the SUBCONTRACTOR acknowledges it has read and understands the following requirements and that work on this Subcontract performed by the SUBCONTRACTOR and SUB-TIER SUBCONTRACTORS will comply with the above requirements. This Exhibit E shall align with NNSA Occupational Safety and Health Administration (OSHA)+ model as detailed in NNSA SD 413.3-7.

1.6 The CONTRACTOR reserves the right to perform both announced and unannounced onsite inspections and assessments of the SUBCONTRACTOR’S operations and equipment to verify compliance with the requirements of this Subcontract. The SUBCONTRACTOR shall support and accommodate oversight assessments, audits, and inspections performed by the CONTRACTOR. The CONTRACTOR may invoke Stop Work at any time for violations of applicable laws and regulations.

1.7 The CONTRACTOR shall conduct a post-award review with the SUBCONTRACTOR addressing the execution and implementation of ES&H requirements related to this Subcontract. The post-award review, site visit, and submission of required documents shall be completed before authorization of onsite work.

E-2 SUBCONTRACTOR AND SUB-TIER SUBCONTRACTORS

2.1 The SUBCONTRACTOR shall ensure that SUB-TIER SUBCONTRACTORS performing elements of the Subcontracted Scope of Work at sites controlled/managed by the CONTRACTOR or NNSA adhere to the SUBCONTRACTOR'S Site-Specific Safety Plan (SSSP). The SUBCONTRACTOR is responsible for ensuring that its SUB-TIER SUBCONTRACTORS are included in the SUBCONTRACTOR'S SSSP and that they comply with all of the requirements of this Subcontract.

2.2 If, after award, the SUBCONTRACTOR proposes to use any new SUB-TIER SUBCONTRACTORS not listed in initial contract, the SUBCONTRACTOR shall notify the CONTRACTOR at least 10 business days before the proposed start date of the new SUB-TIER SUBCONTRACTOR. The SUBCONTRACTOR will submit the SUB-TIER SUBCONTRACTOR'S, "Safety and Health History" form and other required documents for ES&H evaluation, and acceptance will be attached to Appendix A of this Exhibit. SUB-TIER SUBCONTRACTORS shall not perform any work prior to the CONTRACTOR'S approval in writing.

E-3 SUBCONTRACTOR COMMITMENTS, EXPECTATIONS, & INTEGRATED SAFETY MANAGEMENT SYSTEM

3.1 The SUBCONTRACTOR safety program must demonstrate the following elements:

3.1.1 Line management is responsible for the protection of employees, the public, and the environment. Line management includes SUBCONTRACTOR employees managing or supervising employees performing work.

3.1.2 Clear and unambiguous lines of authority and responsibility for ensuring ES&H functions are established and maintained at all organizational levels.

3.1.3 Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

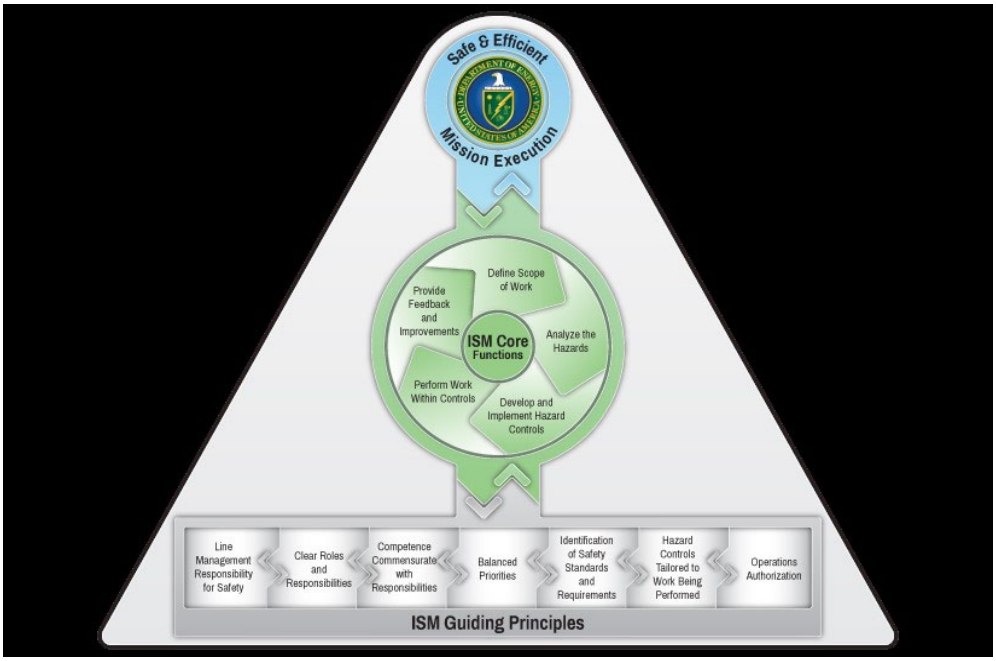
3.1.4 Resources are effectively allocated to address ES&H programmatic and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.

3.1.5 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 accidents and unplanned releases and exposures.

3.1.6 The conditions and requirements to be satisfied prior to operations starting are established and agreed upon by the CONTRACTOR and SUBCONTRACTOR. These agreed upon conditions and requirements are binding requirements upon the SUBCONTRACTOR. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work.

3.2 The SUBCONTRACTOR shall apply the ISMS work cycle shown at the activity level. Depending on the size and complexity of the work activity/task, some elements of the work provide requirements for demonstrating effective safety management during the execution phase of this Contract.

3.2.1 **Error! Reference source not found.** provides requirements for demonstrating effective safety management during the execution phase of this Contract.



Integrated Safety Management System (ISMS)

- **Plan Work:** Contract requirements are translated into work, expectations are set, activities and/or tasks are identified and prioritized, and resources are allocated.
- **Analyze Hazards:** Hazards associated with the work are identified, analyzed, and categorized.
- **Control Hazards:** Applicable standards and requirements are identified, controls to prevent or mitigate hazards are identified, SSSPs are developed, and controls are implemented.
- **Perform Work:** SUBCONTRACTOR'S readiness to perform contract work is confirmed and work is performed safely.
- **Feedback and Improve:** Feedback information on the adequacy of controls is gathered, opportunities for improving the definition of planning of work are identified and implemented, oversight is conducted, and when necessary, controls are modified to ensure a safe work environment.

Table** Error! No text of specified style in document.**.1 ISMS Work Cycle

Work Cycle Phase	SUBCONTRACTOR Requirements	Compliance Strategy
Plan Work		
Review of CONTRACTOR project hazards and controls.	Understand existing conditions and controls that might affect worker safety and health.	SUBCONTRACTOR will review Exhibit E and incorporate site hazards and controls into its SSSP.
Pre-work Site Visit and Review Design Intent	Identify potential job and site hazards and hazard controls specific to the location.	SUBCONTRACTOR will review its potential work hazards and determine any potential location effects on existing CONTRACTOR area hazards. SUBCONTRACTOR will document how the combination of hazards will be controlled in its SSSP.
Pre-work Conference	Resolve emergency-preparedness responsibilities and other safety issues not identified in Request for Quote.	SUBCONTRACTOR will identify an emergency action plan and document it in the SSSP.
Analyze Hazards		
Job Hazard Analysis (JHA) and Risk Assessment Approach	Evaluate job-specific activity/ and site-specific work requirements and hazards.	SUBCONTRACTOR will review work requirements and hazard controls. Activity hazard analysis shall be performed for high-hazard tasks (e.g., confined-space entry, critical lifts, hot work, excavation, penetration, energized electrical work, or respiratory protection). SUBCONTRACTOR will ensure estimates of low probability of occurrence do not dominate early decision-making since human nature and external pressures tend to minimize the use of what would otherwise be sensible controls based on the severity of accident consequences and incorporate hazards and controls into the SSSP. SUBCONTRACTOR will use a Graded Approach.
CONTRACTOR Hazard Information	Request and incorporate hazard identification and hazard control information supplied by CONTRACTOR personnel.	SUBCONTRACTOR will ensure that hazard information from the Scope of Work is incorporated into its SSSP.

Work Cycle Phase	SUBCONTRACTOR Requirements	Compliance Strategy
Job Activity Analysis and Understanding the Technical Basis	Resolve job assignment and personnel fitness issues.	SUBCONTRACTOR will ensure that workers have the appropriate training and skills for assigned activities. The technical basis of an existing hazardous activity must be reconstructed sufficiently to ensure continued safe operations. The effort will be prioritized according to the severity of potential accident consequences.
Pre-work Evaluation of SUB-TIER SUBCONTRACTOR Work Team	Evaluate SUB-TIER SUBCONTRACTOR work group's knowledge of SSSP safety requirements applicable to their work and how the requirements will be implemented.	SUBCONTRACTOR will ensure that SUB-TIER SUBCONTRACTOR workers have the appropriate awareness of the SSSP safety requirements and can demonstrate how they will be implemented for assigned tasks.
Control Hazards		
Safety Program and Define Unacceptable Consequences	Identify company safety management policies, processes, and procedures. Ensure there are clear responsibilities for accepting and suspending work.	SUBCONTRACTOR'S Safety Program will be complete and contain its company-specific safety information. Unacceptable consequences include the following: • Accidents that result in a serious occupational injury • Significant violation of environmental regulations • Unplanned facility outages or interruptions that significantly impact critical mission work If the SUBCONTRACTOR Safety Program does not clearly define them, then controls will be integrated into the SSSP.
SSSP – Identify and Control Hazards	Address all contract-specific safety requirements and protective measures, including combined requirements and combined controls.	The SUBCONTRACTOR will ensure the SSSP incorporates company-specific information from the company safety program as well as contract-specific requirements. The SSSP will document how the combination of facility-specific hazards and activity-specific hazards will be controlled. The SUB-TIER SUBCONTRACTOR'S addenda will be incorporated into the SUBCONTRACTOR'S SSSP. The SSSP will identify methods used by the SUBCONTRACTOR to perform oversight and self-assessment of compliance with the SSSP.

Work Cycle Phase	SUBCONTRACTOR Requirements	Compliance Strategy
Pre-Job Meeting (as appropriate)	Participate in the pre-job meeting with the intent of understanding conditions/restrictions identified on the jobsite.	The SUBCONTRACTOR, SUB-TIER SUBCONTRACTORS, and workers are responsible for reviewing the SUBCONTRACTOR'S safety program and SSSP prior to the start of work and as needed.
Hazard Awareness and Identifying and Controlling Energy Sources	Ensure employees, SUB-TIER SUBCONTRACTORS, and suppliers are informed of foreseeable hazards and protective measures associated with work activities, as appropriate, prior to initiating work. Ensure superintendent is qualified and has knowledge of the SSSP and contract requirements.	SUBCONTRACTOR's supervisors are responsible for ensuring that work activities, work hazards, and work controls are clearly linked and flow down to all workers regardless of tier through documented training, safety meetings, toolbox talks, and pre-activity meetings. For all high-risk work, the SUBCONTRACTOR shall submit JHA or Daily Activities Briefing (DAB) forms to CONTRACTOR personnel for daily review and approval as scope changes. For projects that involve high-risk work, the SUBCONTRACTOR shall submit evidence to CONTRACTOR of the review of superintendent qualifications, ensuring they have knowledge of the SSSP and contract requirements for safe execution of activity-level work. If a superintendent is changed during a project, the SUBCONTRACTOR shall resubmit evidence of superintendent qualification for CONTRACTOR review.

Work Cycle Phase	SUBCONTRACTOR Requirements	Compliance Strategy
Hazard Awareness and Identifying and Controlling Energy Sources (continued)		For all high-risk projects, the SUBCONTRACTOR will have a SUBCONTRACTOR Safety Representative or delegate present the following topics at the pre-job meeting: • A detailed list of activities that constitute the scope of the project. For any change in scope, it must be communicated that the change may not be started until approved by the Subcontract Technical Representative (STR). • When to pause or stop work, including pause/stop for scope changes. • The specific sections of the SSSP that apply to the project. • The high-risk activities to be performed during the project. • The JHA form, JHA requirements, and expectations for JHA use. Meetings, toolbox talks, and pre-activity meetings as required; positive verification is required.
		SUB-TIER SUBCONTRACTORS and their workers will be knowledgeable about the SUBCONTRACTOR's SSSP. Workers will attend documented safety meetings, toolbox talks, and pre-activity meetings as required; positive verification is required.
		Workers will become familiar with the hazards and work controls that result in safe working conditions.
Work Authorization	Ensure that safety plans/corrective action plans are reviewed, and work is authorized prior to initiating work or corrective actions.	The SUBCONTRACTOR will obtain and follow all required permits. Permit information will be flowed down to SUB-TIER SUBCONTRACTORS and affected workers during documented toolbox talks, DAB/JHAs, and safety meetings. Corrective actions will be completed as required.

Work Cycle Phase	SUBCONTRACTOR Requirements	Compliance Strategy
Perform Work		
Job Supervision and Positive Verification	Ensure that SUBCONTRACTOR management provides appropriate safety supervision to all workers at all times.	The SUBCONTRACTOR'S supervisors assume responsibility for the safety of the work site and workers. When unanticipated hazards or environmental risks are introduced, work will be paused until revised work planning, hazards, and environmental effects are analyzed and any additional controls are documented and approved, as appropriate. Positive verification requires that each team member affirm to the person in charge that their part of the system is in the state intended for safe operation. This can be done during pre-activity analysis for less complex operations. If the team does not have concurrence, it should be assumed by the person in charge that it is not safe to proceed.
Safety Inspections	Conduct and document daily workplace inspections, with or without CONTRACTOR personnel, to identify and correct hazardous conditions and instances of non-compliance with safety plan/requirements.	Supervisors are responsible for ensuring that daily inspections are documented and immediate action is taken for all identified non-compliance issues.
Emergency Response	Ensure that all personnel at the work site can recognize abnormal or unsafe conditions and know how to respond (e.g., "what-if scenarios").	The SUBCONTRACTOR will train workers to recognize abnormal or unsafe conditions and understand how to respond to the conditions by controlling and reporting the condition. The SUBCONTRACTOR will ensure every worker understands they have the responsibility and authority to suspend an activity if the worker believes it presents an imminent danger.
Corrective Actions	Implement interim controls for unsafe or abnormal conditions, including notification to workers and STR.	The SUBCONTRACTOR will have controls in place to immediately address unsafe or abnormal conditions.

Work Cycle Phase	SUBCONTRACTOR Requirements	Compliance Strategy
Feedback and Improve		
Self-Assessment	Identify opportunities for safety process and work performance improvements.	The SUBCONTRACTOR will review daily inspection reports, lessons learned, and injury/illness reports to identify areas that require improvement.
Performance Reviews	Discuss performance strengths and weaknesses with employees and Lower-Tiered Subcontractors.	Information on strengths and weaknesses will flow down to SUB-TIER SUBCONTRACTORS and workers.
Assessment of Pre-Activity Plans	Review and discuss the quality and effectiveness of in-process and completed Pre-Task Hazard Review/JHAs with employees and SUB-TIER SUBCONTRACTORS.	The SUBCONTRACTOR will review SUB-TIER SUBCONTRACTOR pre-work assessments, DAB/JHAs, etc. to determine if SSSP requirements are communicated to SUB-TIER SUBCONTRACTOR personnel.
CONTRACTOR Feedback	Communicate suggestions for CONTRACTOR improvements to the STR.	The SUBCONTRACTOR will provide updated information and/or suggestions to the CONTRACTOR that will add value to ongoing improvement programs. The SUBCONTRACTOR will provide a means for workers to report unidentified or uncontrolled workplace hazards.

E-4 SUBCONTRACTOR'S ENVIRONMENTAL, SAFETY & HEALTH PROGRAM

4.1 The CONTRACTOR shall conduct a review of the SUBCONTRACTOR'S written work-specific ES&H Program addressing its execution and implementation of ES&H requirements related to contract requirements.

4.2 The SUBCONTRACTOR'S written ES&H Program will become the basis for the development of the SUBCONTRACTOR'S SSSP that must be completed and approved by the CONTRACTOR prior to the start of work.

4.3 The SUBCONTRACTOR'S ES&H Program shall be in writing and specify how ES&H requirements will flow down to employees and SUB-TIER SUBCONTRACTORS.

4.4 The SUBCONTRACTOR'S ES&H Program will include:

- A written company safety and health policy, which includes the Safety Management Program referenced in Section E-2.
- An assignment of program roles and responsibilities for all employees.
- An approved collection of procedures for hazard identification, hazard prevention, and abatement.
- A procedure for workers to report incidents and hazards without reprisal.
- An approved collection of procedures for accident investigation, reporting, and recording.
- A procedure to permit workers to stop work if they believe an activity poses an imminent risk.
- A set of programs for employee training and safety communications.
- A set of company procedures for conducting activities described in this exhibit.

4.5 SUBCONTRACTOR and SUB-TIER SUBCONTRACTOR employees shall have the right and obligation to report unsafe conditions, at-risk behaviors, interrupt or cease work without fear of reprisal, request a potential hazard to be evaluated, or request additional training. No SUBCONTRACTOR employee shall be asked to complete a work activity that the employee reasonably believes is unsafe or that will endanger the environment.

4.6 The ES&H Program shall describe the SUBCONTRACTOR'S method on how to analyze and mitigate recognized hazards relative to each definable work activity. The plan shall also describe how feedback and lessons learned will occur.

E-5 SUBCONTRACTOR'S SITE-SPECIFIC SAFETY & HEALTH PLAN

5.1 The SSSP is the over-arching document defining how work will be performed. This exhibit defines specific requirements that differ from or are in addition to other federal, state, and local regulations that must be adhered to when working on sites governed by 10 CFR Part 851 and OSHA 3886-01R 2012, "Recommended Practices for Safety & Health Programs in Construction," which include:

MANAGEMENT LEADERSHIP	• Top management demonstrates and communicates to workers its commitment to eliminating hazards and to continuously improving workplace safety and health as well as sets program expectations and responsibilities. • Managers at all levels make safety and health a core organizational value, establish safety and health goals and objectives, provide adequate resources and support for the program, and set a good example.
WORKER PARTICIPATION	• Workers and their representatives are involved in all aspects of the program—including setting goals, identifying and reporting hazards, investigating incidents, and tracking progress. • All workers, including contractors and temporary workers, understand their roles and responsibilities under the program and what they need to do to effectively carry them out. • Workers are encouraged and have means to communicate openly with management and to report safety and health concerns or suggest improvements, without fear of retaliation. • Any potential barriers or obstacles to worker participation in the program (for example, language, lack of information, or disincentives) are removed or addressed.
HAZARD IDENTIFICATION AND ASSESSMENT	• Procedures are put in place to continually identify workplace hazards and evaluate risks. • Safety and health hazards from routine, nonroutine, and emergency situations are identified and assessed.

HAZARD IDENTIFICATION AND ASSESSMENT (continued)	• An initial assessment of existing hazards, exposures, and control measures is followed by periodic inspections and reassessments, to identify new hazards. • Any incidents are investigated with the goal of identifying the root causes. • Identified hazards are prioritized for control.
HAZARD PREVENTION AND CONTROL	• Employers and workers have cooperated to identify and select methods for eliminating, preventing, or controlling workplace hazards. • Controls are selected according to a hierarchy that uses engineering solutions first, followed by safe work practices, administrative controls, and finally personal protective equipment (PPE). • A plan is developed that ensures controls are implemented, interim protection is provided, progress is tracked, and the effectiveness of controls is verified.
EDUCATION AND TRAINING	• All workers are trained to understand how the program works and how to carry out the responsibilities assigned to them under the program. • Employers, managers, and supervisors have received training on safety concepts and their responsibility for protecting workers' rights and responding to workers' reports and concerns. • All workers are trained to recognize workplace hazards and to understand the control measures that have been implemented.
PROGRAM EVALUATION AND IMPROVEMENT	• Control measures are periodically evaluated for effectiveness. • Processes are established to monitor program performance, verify program implementation, and identify program shortcomings and opportunities for improvement. • Necessary actions are taken to improve the program and overall safety and health performance.

COMMUNICATION AND COORDINATION FOR EMPLOYERS ON MULTIEMPLOYER WORKSITES	• General contractors, contractors, and staffing agencies commit to providing the same level of safety and health protection to all employees. • General contractors, contractors, subcontractors, and staffing agencies communicate the hazards present at the worksite and the hazards that work of contract workers may create on site. • General contractors establish specifications and qualifications for contractors and staffing agencies. • Prior to beginning work, general contractors, contractors, and staffing agencies coordinate on work planning and scheduling to identify and resolve any conflicts that could impact safety or health.

5.2 The SUBCONTRACTOR shall develop and conduct its services in accordance with the requirements of their written and approved SSSP, which will include the following applicable requirements of 10 CFR Part 851:

- Site access controls and responsibilities
- How the SUBCONTRACTOR will ensure the requirements of Section E-3, Section 1.1 of this Exhibit will be met
    - Includes description of when a formal JHA is required
- General Safety Rules for the Job Site
- Roles and Responsibilities for Management and Safety personnel assigned to the job
- Emergency responses
- Scope of Work
- Activity-Level Work planning
- Equipment and materials
- Supporting documents
- Training requirements

- SSSP Change Process
- Emergency Response and Approvals

5.3 Changes required to be made to the SSSP must be approved in writing by the CONTRACTOR prior to implementation.

5.4 The SUBCONTRACTOR may use Form FRM-3252, “Subcontractor Site-Specific Safety Plan (SSSP),” to develop their SSSP or use an alternate format as long as it contains the minimum required information identified in the FRM-3252, including:

- SSSP Core Information (Company, work location, contract #, SSSP author[s], subcontractor safety representative, and subcontractor work supervisor)
- Scope of Work (including expected outcomes)
- Site Access Controls and Responsibilities
- Activity-Level Work Planning and Hazard Analysis (job activities/work steps, performer, hazards, and controls)
- Equipment and materials to be used
- Supporting documentation (e.g., relevant engineering drawings, owner’s manuals, form[s], permit[s], checklist[s])
- Specific training requirements for specific activities
- SSSP change/revision process and stop work procedure
- Revision Log
- Emergency response
- Attachments and addendums
- Approvals and concurrences (SUBCONTRACTOR job supervisor and line manager must sign, including any sub-tier subcontractor representatives, and CONTRACTOR STR, project manager or technical subject matter expert (SME), safety professional, industrial hygienist, radiological control (if applicable), environmental compliance, and any other approvals as identified by the CONTRACTOR)

5.5 If the SUBCONTRACTOR elects not to work to an SSSP and DAB, then it will follow the requirements in Section E-4 to develop and work to an Activity Level Work Control Document (ALWCD) and JHA.

E-6 ACTIVITY LEVEL WORK PLANNING

6.1 The SUBCONTRACTOR will demonstrate it has performed activity-specific planning for its subcontracted scope of work by either developing an ALWCD or incorporating activity level work planning into their SSSP. The ALWCD(s) or SSSP when used for activity level work planning must provide the following:

- Scope of work under the ALWCD
- Activities/work steps (when necessary)
- Hazards and associated controls (precautions, limitations, prerequisites, warnings, cautions, etc.)
- Special equipment and materials to be used
- Supporting documents necessary for safe work execution (engineering drawings, owner's manuals, permits, checklists, etc.)
- Required training and/or qualifications
- ALWCD or SSSP change/revision process
- Any applicable attachments and/or addendums

6.2 The ALWCD or SSSP will be submitted to the CONTRACTOR for review and acceptance prior to the start of work. The ALWCD must be reviewed and approved by the SUBCONTRACTOR job supervisor, line manager, and by the required CONTRACTOR organizational representatives identified in FRM-2163S, "Subcontractor Work Package (WP) Approval Coversheet," (for ALWCDs) or in FRM-3252 for SSSPs. Any changes to the ALWCD or SSSP must be reviewed and agreed upon by the SUBCONTRACTOR.

6.3 JHA

6.3.1 A JHA is a documented process by which the steps (procedures) required to accomplish a work activity are outlined, the actual or potential hazards of each step are identified, and measures for the elimination or control of those hazards are developed. Activities are general classes of separately definable construction, maintenance, or operational work (for example, excavating foundations, erecting of structural steel, working at heights exceeding 6 feet, and mixing cement). Activities are not time- or location-specific.

6.3.2 A JHA is required for all high-risk work. If the high-risk work is not clearly defined in the initial submittal of the SSSP, then work will require a separate and discrete ALWCD containing a JHA or a modification/addendum to the SSSP.

6.3.3 High-risk work is defined as work that may result in serious personal injury, illness, or a fatality if performed improperly. The increased risk is based upon characteristics inherent in the work activity, location, materials, or proximity to other hazards. High-risk work activities include, at a minimum, the following activities:

- Critical crane lifts
- Excavation within 5 feet of known hazardous energy utilities (electrical, natural gas, other pressurized systems, etc.) or personnel entry into an excavation > 5 feet in depth
- Energized electrical work
- Work within 10 feet of aerial high voltage power lines (> 50 kilovolts [kV])
- Wall, floor, or ceiling penetrations where a site investigation cannot identify all potential hidden hazards
- Any work where a Confined Space Entry permit is required
- Roof work within 6 feet of an edge not protected by standard guardrails, parapets, or similar physical barriers, or controls approved in the SSSP
- Elevated work without the use of an approved ladder or engineered fall-protection system greater than 6 feet above a lower level or within 15 feet of an unprotected side or edge for all construction trades, excluding roofers. For roofers, the requirement is within 6 feet of an unprotected side or edge.

6.3.4 All high-risk work requires a separate and discrete ALWCD and JHA.

6.3.5 The SUBCONTRACTOR will maintain an approved copy of the ALWCD or SSSP, including any high-risk work and JHAs at the job site during performance of the work that will be available to the CONTRACTOR at all times.

6.3.6 The SSSP and ALWCD shall be communicated to each employee as part of the Site-Specific training and/or SUBCONTRACTOR DAB, signed by each employee including sub-tiers, and implemented by the SUBCONTRACTOR’s management team.

6.3.7 The SUBCONTRACTOR’S SSSP is due 30 days prior to start of fieldwork, and SUBCONTRACTORS must allow 10 business days for each comment and review period to complete the approval process by the CONTRACTOR.

6.3.8 The SUBCONTRACTOR will not mobilize to the field without written authorization from CONTRACTOR’S authorized representative as identified elsewhere in this Subcontract.

E-7 SITE ORIENTATION/PRE- AND POST-JOB BRIEFINGS

7.1 Prior to commencing work, each SUBCONTRACTOR employee or visitor, either initially or as they are introduced to the site, will receive a site orientation briefing conducted by the SUBCONTRACTOR'S supervisor and the SUBCONTRACTOR'S Safety Representative that details the requirements of the SSSP.

7.2 The SUBCONTRACTOR will provide a DAB. The DAB for SUBCONTRACTOR personnel specifically addresses the hazards and mitigating controls for work to be performed that day. FRM-3403, "Subcontractor Daily Activities Briefing," is available for use; however, a SUBCONTRACTOR may use their own format. A Post-job briefing will be conducted at the end of the job for feedback and performance.

7.2.1 The DAB will be performed by THE SUBCONTRACTOR and SUB-TIER SUBCONTRACTORS to identify and communicate the hazards and controls associated with the planned scope of work to be performed during the day. The DAB shall clearly define the planned scope of work and the sequence of activities needed to complete the planned scope of work. The DAB shall identify and discuss the scope/activities that will be performed that day and the associated hazards and controls that will or may be encountered for the scope/activities being planned for that day.

7.2.2 Special attention should be given to potential hazards not specifically covered in the SSSP and other pre-work planning, newly emerging hazards, or hazards resulting from a change in the scope of work. A DAB shall be conducted daily and revisited if conditions or personnel change. Documents such as checklists or permits, or knowledge (such as training) that identifies and plans for the mitigation of hazards associated with an activity, can be referenced. An activity is a specific segment of a particular scope of work that is time-, condition-, worker- and/or location-dependent.

7.2.3 Critical thinking shall be utilized during this part of the analysis. A focus on what could go wrong during the day, such as weather, and changes to the process and personnel, need to be evaluated regularly. The DAB shall be developed with participation by all workers on the activity and to ensure a common understanding of the authorized scope of work and how the tasks will be accomplished. The DAB development process should establish a shared accountability for safety among the work team (e.g., "see something, say something"). SUBCONTRACTORS are required to notify the CONTRACTOR team (STR, Safety, Project Management) in advance of performing high-risk activities. In the event the SUBCONTRACTOR is performing a high-risk work evolution during the day, the STR, Safety, Project Management or alternate CONTRACTOR representatives shall review the JHA daily.

7.3 The SUBCONTRACTOR shall document and maintain records of attendance and topics covered at the site orientation and DABs. This documentation shall be maintained on the job site or in the work package for the duration of the Subcontract. The SUBCONTRACTOR DAB will be maintained at the job site and be available to the CONTRACTOR at all times.

E-8 SAFETY INSPECTIONS

8.1 The SUBCONTRACTOR shall conduct and record daily inspections of the work areas and equipment to monitor compliance with Site Specific Documents *per regulatory requirements.*

8.2 The SUBCONTRACTOR shall report any hazards identified or deficiency not under the control of the SUBCONTRACTOR to the CONTRACTOR.

8.3 The SUBCONTRACTOR shall take steps to ensure the safety of employees, the public, and the environment until the hazards are corrected.

E-9 ONSITE SAFETY REPRESENTATIVE AND RESPONSIBILITIES

9.1 The SUBCONTRACTOR shall have a qualified ES&H Professional accepted by the CONTRACTOR present at the worksite whenever SUBCONTRACTOR personnel are performing work.

9.2 The SUBCONTRACTOR'S Safety Representative will have:

- A degree in Occupational Safety or;
- Hold the designation of a Certified Safety Professional or;
- Hold the designation of an Associate Safety Professional with a minimum of 1-year documented safety experience.
- Occupational Health and Safety Technician or Construction Safety and Health Technician certification in addition to 3 years of experience in the field providing safety duties.
- Documented 5 years full time safety experience (100% safety work). List of projects and description of duties where person was a full-time safety professional.
- Specialized training for specialized activities (i.e., High risk, diving, high voltage).

9.3 If accepted by the CONTRACTOR, the SUBCONTRACTOR'S assigned Safety Representative may have other duties as long as they will not interfere with or prevent the employee from performing the stated activities.

9.4 The SUBCONTRACTOR'S Safety Representative will perform the following minimum activities:

- Submit a "Daily Safety Field Report" to the CONTRACTORS, detailing the days of site activities and outcome of daily inspections as noted in the SSSP to the CONTRACTOR assigned safety representative.

- Notify the CONTRACTOR'S STR to cease work and remove SUBCONTRACTOR'S personnel from the hazardous area if the safety or health of SUBCONTRACTOR'S personnel, other site personnel, or third parties is jeopardized by the SUBCONTRACTOR'S work activities.

- Conduct or participate in daily pre/post job briefings and monthly (minimum) safety meetings for the SUBCONTRACTOR'S employees.

- Provide site-specific training (as described in the SSSP) for new employees and orientations for visitors prior to on-site work.

- Obtain audit compliance with the SUBCONTRACTOR'S SSSP or ALWCD.

- Communicate the CONTRACTOR'S warning systems (including evacuation alarms, accountability rosters, assembly points, etc.).

- Confirm that proper chemical and safety postings are in place, are legible, and are removed when the project is complete.

- Confirm that operations are conducted in a manner to mitigate adverse environmental impacts (e.g., spill containment, erosion control).

- Establish and maintain the on-site hazard communication program (e.g., Safety Data Sheets, training).

- Evaluate the site for hazards not identified in the hazard assessment process(es) and initiate safety measures required to protect personnel, the public, and the environment.

- Revise the SSSP and other applicable documents accordingly.

- Confirm that wastes generated are managed in compliance with applicable State, Federal, or Local laws and Subcontract requirements.

- Maintain a first aid log for occupational injuries that occur on-site.

- Report accidents and injuries to the STR, and conduct accident/incident investigations, as required, including the completion and submission of appropriate forms to the STR.

- Update the Site map including safety information such as locations of fire extinguishers and eye wash stations and ensure that the first-aid kits are kept current as appropriate.

- Inform the CONTRACTOR'S medical services, or local emergency responder organizations if off site services are provided, and verify that phone numbers, addresses, and contacts are current and accurate.

- Interface with CONTRACTOR'S safety and health personnel and the STR to resolve safety issues and conduct periodic inspections and program review.

- Represent the SUBCONTRACTOR in incident investigations and/or critiques as requested by the CONTRACTOR.

E-10 INCIDENT REPORTING REQUIREMENTS

10.1 The SUBCONTRACTOR must immediately notify the CONTRACTOR'S STR verbally, and then in writing, of an event or condition that adversely affects, or may adversely affect the NNSA/NFO or its mission, the CONTRACTOR'S or SUBCONTRACTOR'S personnel, the public, property, or the environment. Such an event or condition includes but is not limited to:

- Employee injury/illness and any accident, incident, near-miss (potential bodily injury/illness or damage to equipment and facilities)

- Potential "Price-Anderson Act" or 10 CFR 851 noncompliance, environmental release

- Any other unplanned event that may be a violation of a regulatory requirement or that may be viewed negatively by the public, CONTRACTOR, or NNSA/NFO

10.2 In situations where any of the conditions mentioned above occur, the scene shall not be disturbed without CONTRACTOR concurrence unless it is to mitigate an imminent hazard or stop a spill in progress. SUBCONTRACTOR and CONTRACTOR personnel may jointly investigate each injury/illness, accident, incident, near miss, or environmental noncompliance.

10.3 The SUBCONTRACTOR shall provide a complete and thorough written accident/incident investigation report of any incident, outlining the causes, corrective actions, and measures taken to prevent recurrence of similar incidents to the CONTRACTOR'S STR within 2 working days of its occurrence.

10.3.1 If the SUBCONTRACTOR's scope of work will not last beyond 2 days, the incident report shall be submitted to STR prior to leaving the worksite. The SUBCONTRACTOR accident/incident investigation reports shall be submitted on the CONTRACTOR'S "FRM-0018, Incident Investigation Statement." The report forms will be provided to the SUBCONTRACTOR during the pre-performance conference or pre-job briefing/orientation.

10.4 The SUBCONTRACTOR will assist the CONTRACTOR in the preparation of all reports (including occurrences and offsite notifications) related to its operations. As part of assisting in the preparation of these reports, the SUBCONTRACTOR will be responsible for, and is required to complete, the proposed corrective actions identified in the reports per the established due dates, unless otherwise agreed upon with the CONTRACTOR.

10.5 Property damage to government equipment, facilities, and motor vehicles shall be immediately reported to the CONTRACTOR'S STR.

10.6 FRM-1253, "Subcontractor Hours": The SUBCONTRACTOR shall submit copies of the FRM-1253 to the CONTRACTOR'S STR on or before the 28th of each month. The report will pertain to actual hours spent performing work for the M&O contractor for the period from the 26th of the preceding month through the 25th of the current month as outlined on the form and will be required throughout the duration of the Subcontract, including periods of no work activity. If the duration of the work does not exceed 1 month, the "Subcontractor Safety & Personnel Report" shall be submitted upon completion of the work, prior to leaving the worksite. The SUBCONTRACTOR will include SUB-TIER SUBCONTRACTORS on the forms. The report forms will be provided to the SUBCONTRACTOR during the pre-performance conference or pre-job briefing/orientation.

10.6.1 Monthly Total Recordable Incident Rate (TRIR) and Days Away, Restricted or Transfer Case Rate (DART): The SUBCONTRACTOR shall submit their overall companies' TRIR and DART Cases for the rolling 12-month performance. The initial information is captured on the Safety and Health History form completed prior to the contract. If the duration of the work on site does not exceed 1 month, this information will not be required. The TRIR and DART information will be submitted to the CONTRACTOR'S STR on or before the 28th of each month. The report will pertain to the company's activities for the previous 12-month rolling year and will be required throughout the duration of the Subcontract, including periods of no work activity. TRIR and DART information can be documented in an e-mail or on the DAB (FRM-3403) in the Additional Topics section under Other.

NOTE: Once the SUBCONTRACTORS submit a copy of the FRM-1253, TRIR, and DART case information to the STR, the STR needs to send copies to the Safety Recordkeeping general e-mail box at SafetyRecordkeeping@nv.doe.gov.

10.7 Injury/Illness Medical Reports: The SUBCONTRACTOR is required to report all job-related injuries and illnesses, regardless of severity, immediately to the CONTRACTOR'S STR.

10.7.1 The SUBCONTRACTOR'S employees must report to the CONTRACTOR'S Occupational Medicine Department after a work-related injury/illness, which requires medical attention, hospitalization, or an absence due to any injury/illness lasting 5 or more consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule) for a return-to-work evaluation focusing on the employee's physical and psychological capacity to perform their work and return to duty.

10.7.2 Copies of the attending physician's report releasing the employee to full or limited duty and appropriate medical treatment forms (medical provider's diagnosis, restrictions, and treatment plan) shall be submitted to the CONTRACTOR'S Occupational Medicine Department during the return-to-work evaluation.

10.7.3 The SUBCONTRACTOR is required to submit the same required information for its SUB-TIER SUBCONTRACTORS. The SUBCONTRACTOR must comply with all work restrictions made by CONTRACTOR'S Occupational Medicine Department.

10.8 The SUBCONTRACTOR shall maintain reports and documentation required by federal, state, and local regulations and those required by its SSSP. These reports and documentation shall be submitted to the CONTRACTOR upon request or at completion of the work.

E-11 OCCUPATIONAL MEDICINE REQUIREMENTS

11.1 The SUBCONTRACTOR and SUBCONTRACTOR'S SUB-TIER SUBCONTRACTORS must follow the CONTRACTOR'S medical program for their employees engaged in work activities at the CONTRACTOR-managed sites when:

- On site for more than 30 days in a 12-month period.
- They are required to be enrolled in a medical surveillance/qualification program or exposure monitoring program.
- Subcontractors need to establish Occupational medical services by using:
  - Management and Operating (M&O) Contractor's Occupational Medical Clinic or;
  - Private physicians or medical groups who are capable of fulfilling the requirements and intent of Occupational Medicine requirements.

11.2 Exposure monitoring that is not enrollment in a program is monitoring performed to characterize the exposure resulting from a new activity or to validate an industrial hygienist's judgment that exposures are likely to be minimal does not constitute enrollment in an exposure monitoring program.

11.3 Exposure monitoring that is enrollment in a program is when routinely monitoring the airborne beryllium levels experienced by machinists that periodically that contain beryllium in areas where concentrations of beryllium are at or above the action level is an example of enrollment in an exposure monitoring program.

11.4 Medical surveillance requirements apply to work involving exposure to asbestos, beryllium, biological hazards, chromium (VI), formaldehyde, hazardous materials, hazardous waste, hazardous noise, lasers, lead, mercury, OSHA toxic substances, and polychlorinated biphenyls (PCBs).

11.5 Medical surveillance requirements also apply to work involving respirator wear, silica, crane operation, radiological work, and driving vehicles requiring commercial driver's license (CDL)/commercial motor vehicle licenses.

11.6 Medical qualification requirements apply to safety sensitive activities such as tower climbing, explosive handling, confined space entry, respirator use, hazardous waste remediation, or other activities identified by the CONTRACTOR.

11.7 When medical surveillance/qualification is required for the work to be performed, the SUBCONTRACTOR shall identify the applicable exposures or tasks for personnel conducting these work activities and ensure that the required monitoring has been verified with the CONTRACTOR'S Occupational Medical Department using the information in the note below.

NOTE: The Occupational Medical Department can be contacted via e-mail at occmedscheduling@nv.doe.gov and on phone NLV: (702) 295-1473 or NNSS: (702) 295-6224 for scheduling.

11.8 The SUBCONTRACTOR must notify the CONTRACTOR of any SUB-TIER or SUBCONTRACTOR employee's absence of 5 consecutive workdays due to injury or illness.

11.9 Prior to returning to work on site, the SUBCONTRACTOR shall have the employee receive clearance from Nevada National Security Site (NNSS) Occupation Medicine.

E-12 EMPLOYEE TRAINING/ORIENTATIONS

12.1 The SUBCONTRACTOR shall verify that employees are properly trained and qualified in accordance with regulatory and CONTRACTOR requirements to safely perform assigned tasks.

12.2 The SUBCONTRACTOR shall conduct training and maintain records of other specific training identified in the SUBCONTRACTOR'S SSSP. Training records will be retained on site for the duration of the contract and made available to the CONTRACTOR upon request.

12.3 The CONTRACTOR will provide the necessary training/orientations for site access as they pertain to the work to be performed by the SUBCONTRACTOR. The training/orientations identified will be completed prior to start of work. The SUBCONTRACTOR shall allow for the hours needed to complete the training and orientations identified here and in the badging process defined in Exhibit F. Required training and orientations will be identified on the training checklist in Appendix B.

12.3.1 Training:

Hazard-Specific Training:

12.3.1.1 General Employee Radiological Training (GERT) (WBT 1E00W585) (0.5 Hr.)

12.3.1.2 Radiological Worker Training (RWI (1E000580) or RWII (1E000582) (Instructor Led) (RWI or RWII training is only required for radiological work)

12.3.1.3 CONTRACTOR'S Lockout/Tagout/Tagging Authority Process (1E00W448) (LOTO/Tagging Authority Process Training is only required if the subcontracted work will require LOTO activities)

12.3.1.4 CONTRACTOR'S Excavation Penetration Process (Briefing 1E00W752) (Excavation Penetration Process training is only required if the subcontracted work will require excavation and penetration activities)

Facility-Specific Training:

12.3.1.5 Underground Training (1E000669) (for Underground facilities only)

Orientations:

Facility Specific Orientations:

NOTE: Facility-specific orientations are only required if the subcontracted work will be performed in one of the locations or facilities. If the subcontracted work will not be performed in or at one of the facilities or locations identified, then the training is not required.

12.3.1.6 NNSS Site Access Safety Orientation (1E00W102) (0.5 Hr.)

12.3.1.7 RSL Facility Safety Briefing [Remote Sensing Laboratory]

12.3.1.8 DAF Emergency Management Training (1DAFW004) [Device Assembly Facility]

12.3.1.9 JASPER General Employee Training (1JASW001) [Joint Actinide Shock Physics Experimental Research]

12.3.1.10 U1a General Employee Training (1SCE0001)

12.3.1.11 DAF General Employee Training (1DAFW126)

Emergency Protocol Orientations:

12.3.1.12 Protective actions (WBT 1REMPAW1)

12.3.1.13 Work Location Emergency Response Plan, Including Evacuation Alarms and Accountability (1REM050000)

Security Protocol Orientations:

12.3.1.14 Initial Security Briefing. [DOE Order] DOE O 470.4B, "Safeguards and Security Program" (1S000110) as well as DOE O 470.4B Chg. 3 (Ltd.Chg.)

E-13 EMERGENCY PREPAREDNESS REQUIREMENTS

13.1 The SUBCONTRACTOR must comply with NNSS Emergency Response Procedures.

13.2 As a minimum, the SUBCONTRACTOR initial indoctrination will include the following information:

- General Site Orientation/Emergency Reporting
- Shelter-in-place
- Evacuation of personnel
- Notifications
- Emergency signals
- Evacuation routes
- Assembly areas
- Personnel accountability

13.3 Indoctrination of the SUBCONTRACTOR'S employees must be performed by the SUBCONTRACTOR and formally documented. This documentation must be available for review by CONTRACTOR representatives.

E-14 RADIOLOGICAL REQUIREMENTS

14.1 The SUBCONTRACTOR shall abide by the requirements of the current version of the NNSS Radiation Protection Program (NNSS RPP) as implemented with the NNSS Radiological Control Manual (NNSS RCM).

14.1.1 The NNSS RPP can be downloaded from the following web address: https://www.osti.gov/servlets/purl/1435448

14.1.2 The NNSS RCM can be downloaded from the following: https://www.osti.gov/servlets/purl/1895616

14.2 The SUBCONTRACTOR shall abide by the CONTRACTOR'S radiological postings.

14.3 The SUBCONTRACTOR shall make arrangements with the CONTRACTOR'S Radiological Control Division to develop adequate controls, prescribe protective measures, and generate required Radiological Work Permit (RWP) necessary to demonstrate compliance with the NNSS RPP.

14.4 The SUBCONTRACTOR shall comply with all RWPs approved by the CONTRACTOR controlling the work performed by the SUBCONTRACTOR.

14.5 The SUBCONTRACTOR shall provide a list of all equipment and materials expected to be utilized in areas controlled for radiological purposes and shall additionally disclose all

heavy equipment to be brought on NNSA/NFO-managed property to the CONTRACTOR'S STR (to be provided to the Radiological Control Division), prior to arrival on NNSA/NFO property.

14.6 All SUBCONTRACTOR-owned/rented equipment and vehicles brought onto NNSA/NFO property are subject to radiological survey at any time during the contract period.

14.6.1 All SUBCONTRACTOR-owned/rented heavy equipment utilized for soil disturbing or building demolition activities are required to undergo baseline and re-entry radiological surveys upon arrival at NNSA/NFO property or prior to use at the work site, as directed by the CONTRACTOR'S Radiological Control Division.

14.6.2 All SUBCONTRACTOR-owned/rented equipment and vehicles are required to undergo radiological evaluation prior to removal from the work site and/or NNSA/NFO property.

14.6.3 All SUBCONTRACTOR-owned/rented equipment and vehicles brought onto NNSA/NFO property that cannot meet established radiological release requirements shall not be removed from NNSA/NFO property.

14.7 If the worksite requires dosimeters, the SUBCONTRACTOR can contact the CONTRACTOR. The CONTRACTOR can obtain as many as required, by the CONTRACTOR'S Radiological Control Division.

14.8 Upon completion of work, the SUBCONTRACTOR returns the dosimeters to the CONTRACTOR.

14.9 When required, the SUBCONTRACTOR shall ensure radiobioassay samples from their employees are submitted to the CONTRACTOR'S Radiological Control Division and/or RWP.

14.10 If the SUBCONTRACTOR is expecting to bring radioactive material/radioactive sources (including those contained within equipment) or radiation-generating devices (RGDs) onto NNSA/NFO property:

14.10.1 The SUBCONTRACTOR shall maintain radioactive material/radioactive sources per the CONTRACTOR'S direction.

14.10.2 The SUBCONTRACTOR shall provide a planned schedule of moves or advise the CONTRACTOR'S STR (to be provided to the Radiological Control Division), in writing, prior to moving any radioactive source to, around, or away from CONTRACTOR-managed property. Prior approval to move such radioactive sources onto or from CONTRACTOR-managed property must be received from the CONTRACTOR'S Radiological Control Division.

14.10.2.1 The SUBCONTRACTOR shall notify the CONTRACTOR'S Radiological Control Division immediately after they bring radioactive material/radioactive sources onto

CONTRACTOR-managed property so a pre-use radiological survey can be performed by the CONTRACTOR.

14.10.2.2 The SUBCONTRACTOR shall notify the CONTRACTOR'S Radiological Control Division prior to removing radioactive material/radioactive sources from CONTRACTOR-managed property so a post-use radiological survey can be performed by the CONTRACTOR.

14.10.3 The SUBCONTRACTOR shall provide to the CONTRACTOR'S STR (to be provided to the Radiological Control Division) prior to arriving onsite, a copy of the current applicable radioactive material license (Nuclear Regulatory Commission or applicable state reciprocity) or other approval to the CONTRACTOR'S STR (to be provided to the Radiological Control Division) that gives the SUBCONTRACTOR authority to possess and operate the radioactive source/radioactive material or RGD (copy of current License for Industrial Radiography per 10 CFR 34, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations,") along with procedures for operating the device.

14.10.3.1 The SUBCONTRACTOR shall have adequate controls, protective measures, and work control documents/procedures/permits as required under their approved radioactive material license (Nuclear Regulatory Commission or applicable state reciprocity) or other approval for all operations associated with SUBCONTRACTOR-owned radioactive material/radioactive sources or RGDs.

14.10.4 The SUBCONTRACTOR shall provide current leak test results, training records for RGD Operations, and source certificate/nominal activity sheets to the CONTRACTOR'S STR (to be provided to the Radiological Control Division) prior to the radioactive source arriving on NNSA/NFO-managed property.

14.10.5 The SUBCONTRACTOR shall provide special form certificates, Department of Transportation shipping papers, and radioactive source container certifications, to the CONTRACTOR'S STR (to be provided to the Radiological Control Division) upon entry to NNSA/NFO-managed property.

14.10.6 The SUBCONTRACTOR shall provide or make arrangements for transportation of radioactive source/radioactive materials in compliance with Department of Transportation regulations.

14.10.7 The SUBCONTRACTOR shall have a worker radiation safety plan as specified in 10 CFR 39, "Licenses and Radiation Safety Requirements for Well Logging," including Operating and Emergency procedures and Incident Reporting procedures.

E-15 ENVIRONMENTAL REQUIREMENTS

15.1 Waste Management

15.1.1 The SUBCONTRACTOR shall manage all wastes generated at sites controlled by NNSA/NFO or CONTRACTOR in compliance with federal, state, and local regulations.

15.1.2 The SUBCONTRACTOR shall submit a plan detailing the methods for managing waste generated during work activities. The Waste Management Plan is due 10 days after the award due date. The CONTRACTOR will need 10 business days to review each comment and complete the approval process prior to the start of on-site activities.

15.1.3 The plan shall address the following:

- Waste Management Objectives
- Recycling, Salvage and Reuse
- Waste Management Procedures
- Waste Management Handling and Disposal

15.1.4 The SUBCONTRACTOR shall coordinate with the CONTRACTOR to maximize the recycling of waste that is generated during the work.

15.1.5 Unless identified elsewhere in this Subcontract, disposal arrangements and disposal costs of wastes and excess materials are the responsibility of the SUBCONTRACTOR and in accordance with the following protocol:

15.1.5.1 Construction and general office wastes are considered municipal solid waste and must be disposed of in an approved solid waste landfill offsite.

15.1.5.2 The SUBCONTRACTOR may, with approval from the CONTRACTOR, utilize CONTRACTOR maintained solid waste receptacles to dispose of non-hazardous construction and general office waste, but must abide by the following list of PROHIBITED ITEMS. The SUBCONTRACTOR must make special arrangements with the CONTRACTOR for the disposition of PROHIBITED ITEMS listed below. The CONTRACTOR is not obligated to allow the SUBCONTRACTOR to dispose of the below-listed items on site unless expressly provided elsewhere in the Contract:

- Radioactive Waste
- Hazardous Waste
- Free Liquids
- Medical Waste
- PCB waste

- Tires
- Hydrocarbon Waste
- Non-empty Aerosol Cans
- Refrigerant-Containing Items
- Universal Waste, including batteries, e.g., lithium ion, nickel cadmium batteries
- PFAS [Per and Polyfluoroalkyl Substances]

1. The SUBCONTRACTOR shall immediately notify the STR when these waste types are generated or may be generated.

15.2 Waste Water

15.2.1 Waste water discharge must meet the requirements of federal, state, and local regulations, as well as applicable discharge permits issued by regulatory authorities. Before discharging any waste water to a drain or to the ground (except domestic waste water to an existing sewer system), the SUBCONTRACTOR shall obtain permission from the CONTRACTOR.

15.2.2 The SUBCONTRACTOR shall maintain non-sewered toilets while in service and in accordance with State and Local regulations.

15.2.3 Waste water projects require advance approval by the state of (PROJECT LOCATION). The SUBCONTRACTOR will provide drawings that have been signed and stamped by a Professional Engineer licensed within (PROJECT LOCATION State) to the CONTRACTOR.

15.2.4 The SUBCONTRACTOR shall utilize Best Management Practices to control storm water runoff and sedimentation for the protection of NNSS property and existing infrastructure.

NOTE: The SUBCONTRACTOR shall <u>not</u> obtain a Stormwater Pollution Prevention Plan (SWPPP) unless directed to do so by the CONTRACTOR.

15.2.5 The CONTRACTOR shall determine if the SUBCONTRACTOR is required to obtain a SWPPP.

15.2.5.1 Storm water discharge must meet the requirements of federal, state, and local regulations. Activities occurring at the North Las Vegas Facility that could potentially

impact storm water must meet the “No Exposure Certification.” Activities occurring at RSL-Nellis must meet the Nellis Air Force Base SWPPP.

15.3 Air Quality

15.3.1 The SUBCONTRACTOR must minimize the degradation of air quality by complying with federal, state, and local air quality regulations.

15.3.2 The SUBCONTRACTOR shall minimize/suppress the release of fugitive dust emissions during construction or related activities. Use of water spray must be managed by the SUBCONTRACTOR in a manner which takes into consideration water conservation, as well as effective/adequate dust suppression.

15.3.3 The SUBCONTRACTOR shall provide a list of the equipment that will be brought onto NNSS facilities as part of this subcontract, along with anticipated equipment duration onsite, purpose, and existing equipment air permits, to the CONTRACTOR:

15.3.3.1 Fuel-burning equipment, such as: generators, fuel-fired compressors, pumps, boilers, and water heaters

15.3.3.1.1 Excluded equipment includes: self-propelled mobile sources (e.g., vehicles, forklifts, scrapers, trenching equipment)

15.3.3.2 Above ground fuel storage tanks

15.3.3.3 Construction related equipment such as, mechanized aggregate-processing equipment, asphalt plant, batch plant

15.3.3.3.1 If an aggregate processing plant, batch plant or asphalt plant will be brought onsite, then the SUBCONTRACTOR may be required to perform an air dispersion modeling analysis using a methodology that is that is accepted by Clark County Division of Environmental Quality or Nevada Division of Environmental Protection, prior to the equipment arriving onsite, regardless of duration on the NNSS facilities in Nevada.

15.3.3.3.2 SUBCONTRACTOR shall provide completed air dispersion modeling analysis report to the CONTRACTOR.

15.3.3.4 Other process or non-fuel storage equipment that may produce emissions (e.g., paint booths, cementing silos, fume hoods)

15.3.4 The CONTRACTOR shall determine when equipment is required to be added to an NNSS facility air permit, then the SUBCONTRACTOR shall pay for the permit application fee, provide documentation and photos necessary for permitting, perform ongoing operations recordkeeping, and provide operating records to the CONTRACTOR.

15.3.5 The CONTRACTOR may perform oversight to ensure that emissions from construction and fuel-burning equipment are kept to a minimum within regulated opacity limits.

15.3.6 The SUBCONTRACTOR shall comply with California Code of Regulations (CCR) Title 17. Division 3. Chapter 1. Subchapter 10, Article 4. Sub article 5.1, “Management of High Global Warming Potential Refrigerants for Stationary Sources,” when performing leak repairs and servicing the CONTRACTOR’S refrigeration systems.

15.3.7 The SUBCONTRACTOR shall comply with the California Record keeping requirements of CCR 95389 and provide applicable records to the CONTRACTOR.

15.3.8 The SUBCONTRACTOR shall present documentation to the CONTRACTOR that technicians who install, alter, remodel, maintain and repair heating, ventilation, air conditioning, and refrigeration (HVACR) systems are licensed to perform the work by the Maryland Board of Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) Contractors.

15.3.9 The SUBCONTRACTOR shall present documentation to the CONTRACTOR that technicians who service, maintain, or repair refrigeration equipment have the proper certification according to 40 CFR 82.161.

15.3.10 The SUBCONTRACTOR shall provide to the CONTRACTOR documentation when a refrigerant is added or removed from refrigeration equipment, and when repairs are made to refrigeration equipment containing 50 pounds or greater of Class I or Class II ozone depleting substances.

15.3.11 The SUBCONTRACTOR shall provide copies of service records to the CONTRACTOR for all work done to heating, ventilation, air conditioning (HVAC) units, chillers, commercial or industrial type process refrigeration equipment, or other refrigerant-containing equipment.

15.4 Industrial Chemical Use and Control

15.4.1 The SUBCONTRACTOR must notify the CONTRACTOR immediately of all spills of chemicals (including fuel, lubricants, and hydraulic fluid) and wastes (including waste water) to the environment, regardless of quantity spilled.

15.4.2 The SUBCONTRACTOR shall use Pesticides, Herbicides, Insecticides, etc., that have an active Environmental Protection Agency (EPA) Registration.

15.4.3 The SUBCONTRACTOR shall request approval from the CONTRACTOR before using Restricted Pesticides.

15.4.4 The SUBCONTRACTOR shall provide a Certified applicator to apply the pesticides and submit certification to the CONTRACTOR.

15.4.5 The SUBCONTRACTOR shall maintain required records of the applicator or SUBCONTRACTOR licensing and certification, storage area inspections, use, and facility notifications of application dates and provide this information to the CONTRACTOR.

15.4.6 The SUBCONTRACTOR shall provide the CONTRACTOR the steps that will be taken to prevent releases of chemical products while on site.

15.4.7 The SUBCONTRACTOR shall not apply or release any chemical substance including fuel to the air, ground, or any drain unless that is the intended and approved use of the chemical substance.

15.4.8 The SUBCONTRACTOR shall maintain an inventory of spill mitigation equipment appropriate to the type and volume of stored material at the site of material storage.

15.4.9 The SUBCONTRACTOR will bear the cost of any clean-up caused by actions/inactions or mishaps.

15.5 Drinking Water Quality

15.5.1 The SUBCONTRACTOR shall follow the State and Local regulations regarding construction, maintenance, or repair of a drinking water system.

15.5.2 Prior to inspection and entering the Potable Water Tank and/or Fire Water Tank, the SUBCONTRACTOR shall comply with all cleanliness processes per the latest edition of American Water Works Association (AWWA) Standard C652, “Disinfection of Water Storage Facilities.”

15.5.3 The SUBCONTRACTOR shall not connect to a water supply until obtaining approval from the CONTRACTOR.

15.5.4 Approval will require the submission of backflow preventer certifications as well as ANSI/National Sanitation Foundation annual inspection records.

15.5.5 For any temporary connection to a water supply system, regardless of the length of time, the SUBCONTRACTOR shall attach a backflow preventer at the point of connection. If the connection is to a non-potable water system, a backflow preventer may not be required, but only if prior approval is provided by the CONTRACTOR.

15.5.6 The SUBCONTRACTOR shall comply with Nevada Administrative Code (NAC) 445A.67215, “Cross-connections and backflow: Service connection to fire sprinkler system,” which requires that an appropriate backflow prevention device be installed at each service connection between the public water system and a fire sprinkler system. The device must be tested upon installation and by a certified backflow tester.

15.5.7 Water projects require advance approval by the state of (PROJECT LOCATION) The SUBCONTRACTOR will provide drawings that have been signed and stamped by a Professional Engineer licensed within (PROJECT LOCATION State) to the CONTRACTOR.

15.6 Groundwater Protection

15.6.1 The SUBCONTRACTOR shall protect groundwater resources by minimizing use of groundwater for operations and preventing contaminants and other unauthorized substances from entering borehole/wells.

15.6.2 New potable water well construction requires the use of ANSI/NSF 61, “Drinking Water System Components – Health Effects,” products and Materials.

15.7 Pollution Prevention/Waste Minimization

15.7.1 The SUBCONTRACTOR shall practice pollution prevention and waste minimization techniques, including proper storage of chemicals, recycling, controlling air emissions, use of less hazardous substitutes in place of hazardous chemical, water conservation, and energy conservation.

15.8 Biological Resource Protection

15.8.1 SUBCONTRACTOR operations shall be evaluated prior to the start by the CONTRACTOR for the potential to not impact sensitive and protected/regulated species. The CONTRACTOR will inform SUBCONTRACTOR personnel prior to the start of operations of the presence of sensitive and protected/regulated species in the vicinity of operation and required mitigation.

15.8.2 The SUBCONTRACTOR shall immediately notify the STR of any impacts to sensitive and protected/regulated species.

15.8.3 The SUBCONTRACTOR shall immediately report to the STR any sightings in or affected by the project activities of bird nests and bird electrocutions.

15.8.4 The SUBCONTRACTOR shall work with the CONTRACTOR during the planning stage and prior to any surface disturbance, e.g., access roads (permanent and temporary), staging areas, to ensure protection of sensitive and protected/regulated species.

15.8.5 The SUBCONTRACTOR shall follow the NNSS’ in-place Avian Protection Plan, which includes specifications on avian friendly poles and reporting of nests and bird electrocutions. Power poles shall support the most current Avian Power Line Interaction Committee standards. These standards state there shall be a maintained avian-safe horizontal separation of 60 inches and vertical separation of 40 inches between energized conductors and ground hardware on all poles.

15.8.6 The SUBCONTRACTOR shall request approval from the CONTRACTOR prior to any alterations made to existing drainages. CONTRACTOR biologists or their designee will approve, survey, and monitor drainage alterations prior to and during construction.

15.8.7 The SUBCONTRACTOR shall remain within the areas surveyed and approved for surface disturbance and shall request authorization from the STR if additional surface disturbance is necessary.

15.9 Cultural Resource Protection

15.9.1 The SUBCONTRACTOR operations shall ensure that cultural resources are not impacted. The CONTRACTOR will inform SUBCONTRACTOR personnel prior to the start of operations of the presence of protected cultural resources in the vicinity of the operation.

15.9.2 The SUBCONTRACTOR shall immediately notify the STR of any impacts or discoveries of cultural resources.

15.9.3 The SUBCONTRACTOR shall remain within the areas surveyed and approved for surface disturbance and shall request authorization from the STR if additional surface disturbance is necessary.

E-16 AVIATION REQUIREMENTS

16.1 The SUBCONTRACTOR shall be compliant with NNSS Flight Safety and Standardization procedures as provided by the Flight Safety Administrator (702-295-1235). The SUBCONTRACTOR shall follow:

- 14 CFR 91.111, “Operating Near Other Aircraft”
- 14 CFR Part 107, “Small Unmanned Aircraft Systems”
- Federal Aviation Administration (FAA) Aeronautical Information Manual
- DOE O 440.2C, “Aviation Management and Safety” as well as DOE O 440.2C Chg. 3 (LtdChg)
- National Wildfire Coordinating Group (NWCG), “NWCG Aviation Mishap Response Guide and Checklist”

E-17 EXPLOSIVES AND MUNITIONS STORAGE/USE/DISPOSAL

17.1 If the SUBCONTRACTOR intends to use explosives or munitions to perform any part of the Subcontracted scope of work, the SUBCONTRACTOR must obtain advance written approval from the CONTRACTOR.

17.2 If performing work utilizing explosives or munitions, the SUBCONTRACTOR shall comply, at a minimum, with applicable contents of the current version of DOE-STD-1212-2019, “Explosives Safety.” The SUBCONTRACTOR shall also comply with appropriate federal, state, and local directives.

17.3 The SUBCONTRACTOR shall submit a process hazard analysis, required by DOE-STD-1212-2019 to the CONTRACTOR for acceptance before starting any operation.

17.4 Compliance with the additional explosive requirements contained in Program Description PD-P200.002, “Nevada National Security Site (NNSS) Underground Facility Safety and Health Program Description,” Section 22.0, “Blasting and Use of Explosives,” is required.

17.5 The SUBCONTRACTOR will dispose or remove all unused explosives in opened containers or damaged explosives and blasting agents. At the end of the operation, all explosive material or munitions will be removed from the NNSS or other CONTRACTOR-managed facilities by the SUBCONTRACTOR, unless otherwise directed in writing by the STR.

E-18 DIVING OPERATIONS

18.1 The SUBCONTRACTOR shall follow requirements identified in 29 CFR 1910, Subpart T, “Commercial Diving Operations.”

18.2 The SUBCONTRACTOR shall designate a qualified supervisor on-site when dive operations are being conducted. Training documentation and procedures will be maintained on site for inspection upon request of the CONTRACTOR.

18.3 The SUBCONTRACTOR shall be responsible for performing underwater rescue if needed and ensuring the rescued individual is completely free of the water hazard where the CONTRACTOR’S Fire and Rescue (F&R) will assume Incident Command.

NOTE: NNSS F&R does not perform underwater rescues.

E-19 HAZARD COMMUNICATION

19.1 When any amount of chemicals will be used for the work, the SUBCONTRACTOR shall develop a written Hazard Communication Program Plan per 29 CFR 1910.1200, “Hazard Communication.” These procedures shall describe the method that will be used to communicate the hazards associated with chemical handling, usage, storage, and disposal. The plan shall be submitted to and accepted by STR prior to commencement of work. The Plan shall be submitted as part of the SSSP.

E-20 RESPIRATORY PROTECTION

20.1 The SUBCONTRACTOR shall comply with the OSHA Respiratory Protection Standard in 29 CFR 1910.134.

NOTE: The CONTRACTOR does not recognize filtering face piece respirators (dust mask) as a respiratory protective device. A copy of the SUBCONTRACTOR'S respiratory protection program shall be submitted as part of the SSSP for acceptance by the CONTRACTOR.

20.2 The name of the competent person trained and designated by the SUBCONTRACTOR to be responsible for storing, maintaining, inspecting, and cleaning Respiratory equipment shall be provided to the CONTRACTOR.

E-21 EMPLOYEE EXPOSURE MONITORING PROGRAM (FOR ALL CHEMICALS OF CONCERN)

21.1 The SUBCONTRACTOR shall develop a Written Employee Exposure Monitoring Procedure for all chemicals with potential for exposure above the action level, which is normally 50 percent of the occupational exposure limit. All logs and records of air sampling and an exposure assessment shall be maintained and made available to the CONTRACTOR upon request. A competent person, who is determined acceptable by the CONTRACTOR, shall conduct air monitoring/sampling and exposure assessment. The procedure shall be submitted as part of the SSSP.

21.2 The SUBCONTRACTOR's procedure will include provisions for maintaining personnel exposures below the ACGIH threshold limit values and the OSHA permissible exposure limits.

21.3 The SUBCONTRACTOR shall comply with the M&O Uninterruptible Power Supply (UPS) Lifecycle Program for all new battery/UPS system installation.

E-22 ASBESTOS ABATEMENT PLAN

22.1 The SUBCONTRACTOR shall submit an Asbestos Abatement Plan for STR approval prior to start of work, which meets all the criteria of OSHA 29 CFR 1926.1101, "Asbestos." The Asbestos Abatement Plan shall identify the procedures that will be used to remove and dispose of all asbestos-containing materials that may be encountered during work performed under this Subcontract. These items include, but are not limited to, piping insulation, floor tiles, ceiling tiles, and boilers.

22.2 Supervision of the asbestos abatement work shall be performed by a federal, state, or local accredited/licensed competent person (as defined by OSHA 29 CFR 1926.1101) employed by the SUBCONTRACTOR and who will be at the worksites at all times.

22.3 Installation of asbestos containing material (ACM) in newly constructed facilities is prohibited. For all new facilities, certify that no ACM was used for building construction.

E-23 SILICA

23.1 A SUBCONTRACTOR with employees potentially exposed to respirable crystalline silica (RCS) above 25 micrograms per cubic meter of air (25 ug/m^3) as an 8-hour time-weighted average under any foreseeable conditions shall comply with the 29 CFR 1910.1053, “Respirable Crystalline Silica,” and/or 29 CFR 1926.1153, “Respirable Crystalline Silica.”

23.2 The SUBCONTRACTOR shall submit a Written Silica Exposure Control Plan (if applicable) to the CONTRACTOR for review and approval as part of the SSSP.

NOTE: The CONTRACTOR’s RCS Occupational Exposure Limit is 25 ug/m^3 as opposed to OSHA PEL of 50 ug/m^3.

E-24 TOXIC METALS (LEAD, CADMIUM, MERCURY)

24.1 A SUBCONTRACTOR with employees working in toxic metals contaminated areas shall submit a Written Toxic Metals Exposure Control Plan in accordance to the appropriate section of 29 CFR 1910 to the STR for review and approval as part of the SSSP.

24.2 All SUBCONTRACTOR employees working under the accepted Written Toxic Metals Exposure Control Plan shall have been trained in accordance with the plan. Training records shall be submitted to the STR prior to the start of work.

E-25 CHRONIC BERYLLIUM DISEASE PREVENTION

25.1 A SUBCONTRACTOR with employees working in Beryllium Legacy Areas or beryllium contaminated areas shall follow the CONTRACTOR’S 10 CFR Part 850, “Chronic Beryllium Disease Program.”

E-26 INFECTIOUS DISEASES & BLOODBORNE PATHOGENS

26.1 SUBCONTRACTOR employees who may be exposed to infectious diseases and/or bloodborne pathogens shall be properly trained regarding their responsibilities, required control measures, and personal safety. Appropriate PPE shall be used when exposure hazards exist. Each SUBCONTRACTOR employee whose job duties puts them at risk of exposure (e.g., medic, nurse, first aid person) shall be offered vaccinations and documentation of the vaccination or declination shall be maintained and made available to the CONTRACTOR.

26.2 The SUBCONTRACTOR shall provide all its employees with a general overview on the hazards associated with COVID-19 and/or bloodborne pathogens, possible means of exposure, and proper control methods.

26.3 Provisions shall be made for proper disposal of hazardous medical wastes and a sign posted in the treatment area warning of biohazards. A “sharps” container acceptable to the CONTRACTOR shall be maintained in the first aid area for the secure disposal of used needles and similar medical waste.

E-27 LASERS

27.1 The SUBCONTRACTOR planning to bring a Class 3B or Class 4 laser onsite shall submit FRM-0209, “Laser Registration (Class 3B and 4),” and Laser Safe Operation Procedure to M&O Laser Safety Officer (LSO) for approval prior to operation of each Class 3B and 4 lasers.

27.2 The SUBCONTRACTOR LSO must ensure that all Class 3B and 4 lasers are in-compliance with Food and Drug Administration 21 CFR Chapter 1, subchapter J, “Radiological Health,” or compliance with 21 CFR 1040.10, “Laser Products,” and 21 CFR 1040.11, “Specific Purpose Laser Products,” to include product safety design, protective housing, safety interlock, an emission indicator, and aperture warning label.

27.3 The SUBCONTRACTOR LSO must ensure that ANSI Standard Z136.1 “Safe Use of Lasers” engineering and administrative controls requirements for Class 3B and 4 lasers are fully implemented.

E-28 HEARING CONSERVATION PROGRAM

28.1 If noise due to activity is expected to equal or exceed the exposure levels identified by ACGIH (Section 1.4.9) the SUBCONTRACTOR shall have a written Hearing Conservation Procedure. The procedure shall include noise surveys, engineering controls, the procurement and use of low noise-producing equipment when possible, posting of warning signs for areas found to require hearing protection, and training on hearing protection devices used at the work location. The procedure shall be submitted as part of the SSSP.

28.2 Unless otherwise specified or provided by the CONTRACTOR, the SUBCONTRACTOR shall provide equipment for sampling and monitoring noise levels. This equipment shall be calibrated before and after use and all measurements documented and made available to the CONTRACTOR.

E-29 CONFINED SPACES

29.1 If SUBCONTRACTOR employees will be required to enter a permit-required confined space (manhole, tank, pit, vault, vessel, etc.), the SUBCONTRACTOR shall have a written permit-required Confined Space Entry Procedure acceptable to the CONTRACTOR. The procedure including the SUBCONTRACTOR Confined Space Permit shall be submitted as part of the SSSP.

29.2 The SUBCONTRACTOR'S permit-required Confined Space Procedure shall follow the requirements of 29 CFR 1910.146, "Permit-required confined spaces," and accepted by the CONTRACTOR.

29.3 The SUBCONTRACTOR shall confirm with the CONTRACTOR acceptable rescue procedures and associated personnel.

29.4 At all CONTRACTOR sites the SUBCONTRACTOR shall consider all elevator pits as permit-required confined spaces until otherwise determined to be non-permit required confined spaces and accepted as such by the CONTRACTOR'S Confined Space Program Coordinator.

E-30 INCLEMENT WEATHER

30.1 The SUBCONTRACTOR shall describe protective actions to be taken when a lightning threat is within 10 miles of the work activity.

30.1.1 Actions may include work stoppage and sheltering, if deemed necessary. The CONTRACTOR'S STR can furnish sources for further information on-site.

30.1.2 While the CONTRACTOR'S STR provides warnings to the SUBCONTRACTOR, the SUBCONTRACTOR is responsible for ensuring the site is safe and shutting down operations until the warning has been lifted. Some of the warnings include:

- Flash flood warnings
- High winds warnings

NOTE: Personnel are not to perform lifts or elevated work when wind speeds exceed 20 miles per hour (mph).

30.1.3 The Local Emergency Director for the area is responsible for emergency response/aid procedures for severe weather.

30.2 The NNSS can make hazardous weather notifications through the Operations Command Center and can be made available through the STR.

E-31 HEAT AND COLD STRESS PREVENTION

31.1 The SUBCONTRACTOR shall have operating and emergency procedures for heat and/or cold stress and ensure that all field employees, especially front-line supervisors are trained on the warning signs/symptoms of early heat or cold related disorders and instructed on the clothing and work methods best suited to avoid heat and/or cold stress. Stay/work times shall be developed to reduce the possibility of heat or cold related disorders, if necessary. Such times shall be communicated to the workers.

31.2 The SUBCONTRACTOR shall provide an immediately accessible, adequate, and potable water supply during all periods of the day.

E-32 PERSONAL PROTECTIVE EQUIPMENT

32.1 The SUBCONTRACTOR shall ensure employees use PPE specified by OSHA, Center for Disease Control, and the SSSP. All required PPE (hardhats, safety glasses with side-shields, safety-toed boots or shoes, harnesses, lanyards, gloves, etc.) shall be provided by the SUBCONTRACTOR.

32.2 Head Protection

32.2.1 Hardhats manufactured to the recognized ANSI Z89.1, “Industrial Head Protection,” standard shall be worn with the brim forward unless specifically allowed by the hard hat manufacturer.

32.3 Eye & Face Protection

32.3.1 The SUBCONTRACTOR shall require employees to wear eye protection equipped with hard-side shields (safety glasses) manufactured to ANSI Z87.1-2020, “Current Standard for Safety Glasses.” This applies to prescription eyewear as well.

32.3.2 The SUBCONTRACTOR shall monitor the eye protection worn by its employees and take immediate corrective actions when non-compliance is noted.

32.3.3 Employees performing operations creating airborne particles or splash hazards, shall wear face shields and safety glasses or mono goggles.

32.3.4 The CONTRACTOR does not allow tinted or shaded safety glasses indoors, underground, or at night except amber tinted, photo-gray or otherwise prescribed to avoid vision restrictions.

32.4 Hand & Arm Protection

32.4.1 Appropriate gloves shall be worn when the work being performed presents potential for hand and finger injuries (type of glove must be specified on JHA or Work Package).

32.4.2 The SUBCONTRACTOR shall require all employees to wear a suitable shirt, with no less than 4-inch sleeves, as the minimum work clothing to be worn.

32.5 Leg & Foot

32.5.1 SUBCONTRACTOR employees shall wear safety toed shoes or boots manufactured to the ASTM F2413-18, “Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear,” standard when required by the work being performed.

32.5.2 The SUBCONTRACTOR shall require all employees to wear long pants at the worksite.

32.6 Other

32.6.1 The SUBCONTRACTOR shall provide its employees with life jackets when working over or near open water and shall require their use. SUBCONTRACTOR-supplied life rings, rope, and a rescue vessel acceptable to the CONTRACTOR shall be in place when a drowning threat exists.

32.6.2 Qualified Electrical Workers performing lockout activities shall wear electrical protective gloves and other required arc-flash protection meeting the requirements of NFPA 70E while verifying absence of energy or when exposed to electrical energy.

32.6.3 Welders shall wear hardhat/welding hood combinations manufactured to the recognized ANSI 87.1-2020 standard and safety glasses while welding.

32.6.4 SUBCONTRACTOR employees who handle chemicals or harmful substances shall be trained and shall wear appropriate PPE per the chemical manufacturer’s recommendations.

32.6.5 The SUBCONTRACTOR shall provide and require the use of hearing protection whenever a hearing hazard exists.

E-33 HAZARDOUS MATERIALS (HAZWOPER)

33.1 The SUBCONTRACTOR performing Hazardous Waste Operations and Emergency Response (HAZWOPER) work shall be responsible for conducting personal and biological exposure monitoring per OSHA, 29 CFR 1910.120, “Hazardous Waste Operations and Emergency Response,” and 29 CFR 1926.65, “Hazardous Waste Operations and Emergency Response” standards and for verifying that employees are not exposed above the action level. If exposures are at/above the action level, provisions of the OSHA standards (exposure and biological monitoring, posting, hygiene facilities, etc.) must be met.

33.2 A general supervisor who has the responsibility and authority to direct all hazardous waste operations shall be designated by the SUBCONTRACTOR. The general supervisor's credentials shall be reviewed and accepted by the CONTRACTOR prior to the start of work.

E-34 HOUSEKEEPING, FIRE PREVENTION AND PROTECTION

34.1 If work activities will present the possibility of a fire, the SUBCONTRACTOR shall develop and submit to STR for review and approval, a Fire Protection and Prevention Plan specific to the work under this Subcontract prior to starting any work. The plan shall be submitted as part of the SSSP.

34.2 The SUBCONTRACTOR shall provide an adequate number of fire extinguishers of the correct size and type for its work activities. Extinguishers shall be maintained per manufacturers' recommendations, inspected monthly, and tested annually.

34.3 If the SUBCONTRACTOR requires that large quantities of flammables or combustibles will be brought to the worksite, then the CONTRACTOR requires that they will be involved in the coordination.

34.4 The SUBCONTRACTOR shall develop a specific written Flammable and Combustible Material Storage Procedure, establishing the requirements for the handling, storage, and use of flammable and combustible liquids.

34.5 The SUBCONTRACTOR shall ensure flammable and/or combustible liquids are stored properly, dispensed in safety cans manufactured to a recognized standard acceptable to the CONTRACTOR, and areas designated for these activities are maintained in an orderly fashion. All storage areas containing hazardous materials shall be posted with appropriate signs and access shall be controlled.

34.6 The SUBCONTRACTOR shall instruct its employees that smoking or other open flame producing articles can only be done in designed areas.

34.7 The SUBCONTRACTOR shall not allow use of open flame equipment on the jobsite outside of designated areas covered by a Hot Work Permit.

E-35 TOOLS AND EQUIPMENT

35.1 The SUBCONTRACTOR shall provide all tools and ensure they are used by employees properly trained in their use in accordance with the manufacturers' recommendations, have required guards in place, and are maintained in good working order. All tools and equipment shall be inspected by qualified personnel and certifications are required for calibrated equipment.

35.2 The SUBCONTRACTOR shall ensure that work is performed only in areas where illumination is equal or better than the "OSHA Lighting Standards for General Industries." SUBCONTRACTOR Artificial lighting equipment shall be manufactured to a recognized standard acceptable to the CONTRACTOR.

E-36 DEMOLITION

36.1 The SUBCONTRACTOR shall submit to the STR for review and approval a demolition plan included with its SSSP in accordance with 29 CFR 1926 Subparts T and U.

36.2 Prior to starting demolition operations, the SUBCONTRACTOR will designate a competent person to perform an engineering survey of the structure to determine the condition of the framing, floors, and walls, and the possibility of an unplanned collapse of any portion of the structure. Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in documentation that such a survey has been performed in accordance with 29 CFR 1926.850, “Preparatory Operations.”

E-37 WELDING, CUTTING, BRAZING, AND GRINDING

37.1 The SUBCONTRACTOR shall have a written “Cutting, Welding, Grinding and Brazing Procedure,” which contains the applicable parts of ANSI Z49.1-2021, “Safety In Welding,” and addresses fire concerns including fire watches, welding fumes, preservative coatings, respiratory protection, eye/head/body protection, etc.

37.1.1 The procedure shall also provide for the maintenance and inspection of welding, grinding, brazing, or cutting equipment. To avoid worker exposure to welding fumes, samples shall be collected to demonstrate compliance and the results provided to the STR.

37.2 The SUBCONTRACTOR shall provide a site-specific hot work plan as part of the SSSP, detailing the steps to protect their employees against the hazards of welding, cutting, brazing, and other heat or spark producing hazards at the work site.

37.3 The SUBCONTRACTOR shall ensure employees performing welding, cutting, grinding, or other spark-producing activities wear fire-retardant clothing or other applicable body protection (leather gloves, sleeves, aprons, etc.)

37.4 The SUBCONTRACTOR shall ensure that employees are trained in, and comply with, the requirements for proper fire prevention and equipment use when welding, cutting, grinding, or brazing.

37.4.1 Fire Watch requirements:

- Knowledge of type of fire extinguisher and operation
- Inspection of hot work area and fire extinguisher
- Recognition of potential fire hazards

- Means of summoning assistance
- Observation & wait time (NNSS requires a 60-minute fire watch following work activity completion)

37.5 The SSSP must include a copy of the SUBCONTRACTORS Hot Work Permit.

37.6 All Hot Work shall be approved by the NNSS Fire Marshal or one of his designees.

E-38 FALL PREVENTION/PROTECTION

38.1 10 CFR 851 requires the SUBCONTRACTOR to adopt a 100% fall protection policy that makes provision for secondary fall protection (full-body harness) for all employees who are working or traveling more than 4 feet General Industry and 6 feet for Construction.

38.2 The SUBCONTRACTOR's SSSP shall describe how the SUBCONTRACTOR will manage their Fall Protection Procedure on site.

38.3 When personnel are required to work on unprotected roofs or near unprotected edges (work platforms, skylights, etc.) at heights greater than 4 feet General Industry and 6 feet for Construction, the SUBCONTRACTOR shall identify the hazards and develop methods to achieve 100% fall protection.

38.3.1 For work conducted on roofs, the SUBCONTRACTOR shall submit a Roof Access/Elevated Work Plan (drafted by fall protection competent person) or an engineered Fall Protection Plan (drafted by fall protection qualified person) to the CONTRACTOR for acceptance prior to start of such work.

E-39 FLOOR AND WALL OPENINGS

39.1 The SUBCONTRACTOR shall review the fall hazards involved in its scope of work and implement appropriate controls per 29 CFR 1910.23, "Ladders," where required.

E-40 SCAFFOLDING

40.1 When scaffolds will be used to perform work, the SUBCONTRACTOR shall have a written Scaffolding Procedure and use scaffold material acceptable to the CONTRACTOR. The procedure shall be submitted as part of the SSSP and meet requirements per 29 CFR 1926.451, "General Requirements."

40.2 Use of any engineered scaffold will require the SUBCONTRACTOR to provide to the CONTRACTOR the records with appropriate professional engineer certifications prior to using the scaffold.

40.3 When scaffolds will be secured to a facility, a CONTRACTOR's Excavation-Penetration Permit will be required.

40.4 The SUBCONTRACTOR shall provide scaffold user training to all employees. Training records will be maintained on site and made available to the CONTRACTOR upon request. A list of SUBCONTRACTOR scaffold competent person(s) shall be maintained on site, on company letterhead, and approved by an officer of the SUBCONTRACTOR.

E-41 BARRICADES AND TRAFFIC CONTROL PLANS

41.1 The SUBCONTRACTOR shall provide and use appropriate barrier devices to identify the nature of the job hazard involved (i.e., yellow, and black for “CAUTION” or red and black for “DANGER”). Barrier devices, including barrier tape, shall not be used as a substitute for a barricade as they do not offer adequate protection from falls. Barrier devices shall be used only in those applications where temporary identification of a hazard is needed; but not as a primary means of protecting employees from exposure.

41.2 If applicable to the worksite, the SUBCONTRACTOR shall develop a Traffic Control Plan for the worksite, including placement of traffic control devices, and a schedule if the plan will be changed as the work progresses. The plan(s) will be in accordance with the current edition of the “Manual on Uniform Traffic Control Devices” and submitted to the CONTRACTOR for acceptance prior to the start of work.

E-42 EXCAVATIONS, TRENCHING, AND SURFACE PENETRATIONS

42.1 The SUBCONTRACTOR shall not commence any excavation, trenching, or surface penetration work, until they have obtained permission from the STR and complied with the conditions required by the permitting authority. The permitting authority for this Subcontract is the CONTRACTOR, who will issue FRM-0084, “Excavation - Trenching Permit,” to the SUBCONTRACTOR. The CONTRACTOR’s Permit shall be used, and the CONTRACTOR will provide the initial location information. Permits shall be kept at the jobsite and made available to the CONTRACTOR.

42.2 The SUBCONTRACTOR shall provide at the jobsite a competent person, who will classify all soils and perform daily inspections of all excavations/trenches. The competent person shall verify that all excavation/trenching equipment meets appropriate regulatory standards. These inspections shall be documented, kept on file, and made available to the CONTRACTOR.

42.3 A list of SUBCONTRACTOR excavation competent person(s) shall be maintained onsite, on company letterhead, and approved by an officer of the SUBCONTRACTOR.

42.4 The SUBCONTRACTOR shall have an engineered drawing for reference showing the location of all underground services and/or utilities. Such drawings will be provided by the CONTRACTOR.

42.5 The CONTRACTOR will perform detection activity (goldaking, metro-teching, etc.) to identify and mark the location of underground services and/or utilities.

42.6 When a wall, ceiling, partition, roof, or floor must be penetrated by drilling, inserting nails or screws beyond wallboard depth, or other like activities, a Penetration Permit shall be issued by the CONTRACTOR. This permit is in addition to any other lockout/tagout (LOTO) permits or forms issued by the CONTRACTOR. The SUBCONTRACTOR is responsible for assisting the CONTRACTOR in identifying the work areas and activities subject to the issuance of the permit.

E-43 UNDERGROUND CONSTRUCTION (TUNNELING)

43.1 Any SUBCONTRACTOR performing underground design, construction, and/or tunneling work shall be responsible for complying with the requirements of the CONTRACTOR'S PD-P200.002. This document references the codes and standards applicable to modification and new construction of underground facilities on the NNSS.

43.2 All utilities, systems, and equipment modified during the course of the design and construction shall be brought into compliance with the requirements of PD-P200.002.

43.3 A general supervisor who has the responsibility and authority to direct all tunneling operations shall be designated by the SUBCONTRACTOR. This person's credentials shall be reviewed and approved by the STR prior to the start of work.

43.4 Tunnel opening and shift inspections shall be performed by the CONTRACTOR or performed by SUBCONTRACTOR employees approved by the CONTRACTOR.

43.5 All PPE required by SUBCONTRACTOR employees, including self-rescuers, self-contained self-rescuers, mining belts and cap lamps, shall be provided by the SUBCONTRACTOR.

43.6 The complete mining plan shall specify minimum ventilation requirements, diesel equipment usage, rock bolting and ground support practices, posting of unsupported areas, and such other information as specified in the scope of work. The mining plan shall be included in the SSSP, which is approved by the CONTRACTOR before the start of work.

43.7 Equipment used underground shall have appropriate fire protection equipment and meet diesel particulate emissions requirements, and must be approved for use by the STR.

43.8 Vehicles containing explosives shall meet the requirements of 30 CFR 57.6202, "Vehicles."

43.9 Explosive material shall not be transported on a locomotive. When material is hauled by trolley locomotive, covered, electrically insulated cars shall be used in accordance with 30 CFR 57.6203, "Locomotives."

43.10 Blasting and the use of explosives shall comply with applicable portions of 29 CFR 1926 Subpart S, "Underground Construction, Caissons, Cofferdams and Compressed Air," and Subpart U, "Blasting and the Use of Explosives."

43.11 The CONTRACTOR shall provide Mine Rescue support.

43.12 Check-in/Check-out procedures shall follow the NNSS tunnel specific requirements.

E-44 LOCKOUT/TAGOUT PROCEDURES

44.1 A SUBCONTRACTOR performing LOTO activities in or on any CONTRACTOR managed facility shall formally submit their LOTO program for review and approval. The appropriate CONTRACTOR Tagging Authority, CONTRACTOR Safety Professional, and STR will confirm that the LOTO program meets the requirements of 29 CFR 1910.147, "The Control of Hazardous Energy (Lockout/Tagout)," 29 CFR 1926.417, "Lockout and Tagging of Circuits," and NFPA 70E. The Program shall be submitted as part of the SUBCONTRACTOR'S ES&H Program. LOTO program acceptance shall be obtained before performing work requiring LOTO. Use of the SUBCONTRACTOR's program shall be augmented on the CONTRACTOR's LOTO and TA program.

44.2 The CONTRACTOR TA has overall control of the LOTO. The SUBCONTRACTOR shall follow their (29 CFR 1910.147, 29 CFR 1926.417, and NFPA 70E compliant/ CONTRACTOR accepted) LOTO procedure within the LOTO boundaries established by the CONTRACTOR. The CONTRACTOR'S LOTO procedure is always used, except when a SUBCONTRACTOR has exclusive control of a system or area. When the SUBCONTRACTOR has exclusive control, the boundary of the exclusive control area shall be clearly specified. CONTRACTOR TAs are not involved in LOTO inside this boundary.

E-45 ELECTRICAL SAFETY PROGRAM/PROCEDURES

45.1 When the SUBCONTRACTOR'S employees will be working on or near exposed energized electrical conductors or circuit parts or installing new electrical circuits, the SUBCONTRACTOR shall have a written Electrical Safety Program as part of their ES&H Program that includes the applicable sections of 29 CFR 1910, 29 CFR 1926, and NFPA 70E. The program shall specify the required training, controls, procedures, hazard evaluation and analysis processes, and pre-job briefings. The program shall include the proper use of Limited/Restricted/Prohibited approach boundaries and Arc Flash Boundaries. The program shall also address the use of energized electrical work permits, risk assessment, flash hazard analyses, and the use of arc flash PPE. The program and training records of personnel permitted to work on exposed energized electrical equipment shall be made available to the CONTRACTOR for acceptance.

45.2 The SUBCONTRACTOR shall have a General Electrical Safety Procedure and shall train all employees regarding general electrical safety and inspection methods for electrical equipment used by employees. Training records (qualification/journeyman's card) shall be maintained at the worksite and made available to the CONTRACTOR, upon request. The procedure shall be submitted as part of the SSSP.

45.3 Shock and arc flash PPE requirements shall be specified in the SSSP and comply with the most recent version of NFPA 70E. Compliance with the CONTRACTOR'S PPE requirements meets this standard.

45.4 The CONTRACTOR'S Electrical Authority Having Jurisdiction (AHJ) shall have final authority for electrical code interpretations involving electrical installations.

45.5 Use of temporary surface laid cables (at voltages greater than 120 volts) must be approved by the CONTRACTOR'S AHJ.

E-46 PORTABLE LADDERS

46.1 The SUBCONTRACTOR's SSSP shall specify the type of ladder used, training/inspection protocol, and safety requirements that meet applicable 29 CFR 1910 and 1926 requirements.

46.2 The SUBCONTRACTOR will use ladders for egress and/or to conduct low level work of short duration and will not use ladders in lieu of scaffolds as a primary means of conducting work of longer duration.

E-47 MATERIAL HANDLING EQUIPMENT (LIFT TRUCK, CHAIN FALLS OTHERS REQUIRED?)

47.1 The CONTRACTOR maintains a 50-pound limit for individual manual lifting and carrying.

47.2 The SUBCONTRACTOR shall ensure that chain-falls, inertia reels, etc., have an annual documented inspection (including initial load tests). Rigging equipment shall undergo a visual inspection prior to each use by a Competent Rigging Inspector. Lift capacities shall be clearly indicated on lifting devices.

47.3 The following requirements set by 29 CFR 1910.178, "Powered Industrial Trucks," will be followed:

47.3.1 The CONTRACTOR requires that only manufacturer designed attachments are used on powered industrial trucks. If those attachments constitute a crane, only certified crane operators can operate the equipment.

47.3.2 The CONTRACTOR requires SUBCONTRACTOR operators to have a current operator qualification card and maintain daily inspection logs for all equipment.

E-48 CRANES AND RIGGING

48.1 The SUBCONTRACTOR shall provide the resources necessary for inspection, certification, and maintenance of rigging and lifting equipment as well as monitor all lifts to ensure that regulatory lifting practices are followed by the M&O Contractor Lifting SME.

48.2 The SUBCONTRACTOR shall submit its 29 CFR 1926.1400, Subpart CC, "Cranes and Derricks in Construction" compliant program as part of the ES&H program.

48.3 The SUBCONTRACTOR shall designate a qualified supervisor to determine the methods and develop plans for rigging operations to ensure safe lifts.

48.4 The SUBCONTRACTOR shall ensure all crane operations maintain minimum safe distances from all high voltage lines, as determined by the CONTRACTOR. Twenty feet is required for voltages up to 350 kV. At voltages greater than 350 kV, the distance shall increase as required.

48.5 Cranes (Mobile)

48.5.1 The SUBCONTRACTOR shall provide the resources necessary for inspection, certification, and maintenance of rigging and lifting equipment and shall monitor all lifts to ensure that acceptable lifting practices are followed.

48.6 Lift Plan requirements

48.6.1 Lift plans are required to be submitted to the CONTRACTOR for concurrence. The SUBCONTRACTOR shall submit a detailed rigging plan with all applicable supporting calculations to the CONTRACTOR for review and acceptance prior to the lift. A Formal Lift Plan will be required for the following activities:

- Excess of 5 tons
- Lift classified as critical (exceeding 75% of crane capacity chart)
- Any two-crane lift or any lift over operating or occupied facilities, process pipe racks or near power lines)
- High value or long lead time item

48.6.2 The SUBCONTRACTOR shall designate a qualified supervisor to determine the methods and develop plans for rigging operations to ensure safe lifts.

48.6.3 The SUBCONTRACTOR is required to meet DOE Standard DOE-STD-1090-2020, “Hoisting and Rigging” for lift classification and lift plan requirements.

E-49 SUSPENDED PERSONNEL PLATFORMS

49.1 The SUBCONTRACTOR shall notify the STR prior to using any suspended personnel platform and develop a Lift Procedure to be reviewed and accepted by the STR prior to their use. The procedure shall include, but not be limited to, employee training, pre-lift meetings, trial lifts, and platform inspection. The plan shall meet all the requirements of American Society of Mechanical Engineers Standard ASME B30.2, “Overhead and Gantry Cranes,” and the requirements of 29 CFR 1926.1431, “Hoisting Personnel.”

49.2 Personnel platforms (baskets) provided by the SUBCONTRACTOR shall be designed by a qualified engineer and manufactured by competent personnel. They shall have permanent markings indicating maximum weight. A copy of the original (initial) proof test and inspection shall be provided to the CONTRACTOR for review.

E-50 EQUIPMENT OPERATIONS

50.1 Machines manufactured and used for elevated personnel platform work (John L. Grove – [JLG] Industries, Hi-lift, etc.) shall be operated and maintained in accordance with 29 CFR 1926.600, “Equipment,” 29 CFR 1926.1417, “Operation,” and manufacturers’ recommendations. Equipment shall be operated only by trained and qualified individuals. Training records shall be available to the CONTRACTOR on site.

50.2 NNSS wind restrictions for articulated lifting devices is 20 mph sustained or manufacturers specifications. (Lineman bucket trucks 35 mph).

50.3 NNSS does not allow the use of mobile telephones or entertainment devices while operating heavy equipment.

50.4 When a lightning threat is within 10 miles of a work activity, the SUBCONTRACTOR must stop work and shelter. Do not perform lifts or elevated work when wind speeds exceed 20 mph, per NNSS requirements.

E-51 PRESSURE SYSTEMS AND COMPRESSED GAS CYLINDERS

51.1 The SUBCONTRACTOR if planning to bring a pressure system (vessels and/or pressure sources) including cryogenics, pneumatic, hydraulic, and vacuum on site shall submit a pressure system work scope, drawings/data sheet, system specifications, pressure relief device calibration certificate, etc. to the Pressure Safety Program Manager or SME for approval. The Pressure Safety Inspector will inspect the pressure system and issue FRM-0080, “Pressure Safety Inspection Report” prior to operation of the pressure system.

51.2 The SUBCONTRACTOR shall have a Gas Cylinder Use and Storage Procedure that allows for proper use and storage of compressed gas cylinders. The procedure shall include segregation by type, proper signage, protective isolation of fuel gases from oxygen, provisions to keep cylinder caps in place when provided by the supplier, positive upright securing of bottles, and maintenance of safe distances from ignition sources. The site storage procedure shall be submitted as part of the SSSP and meet 29 CFR 1910.95, “Occupational Noise Exposure” requirements.

E-52 VEHICLE OPERATIONS

52.1 The SUBCONTRACTOR shall ensure all vehicles operated on CONTRACTOR-managed facilities are registered/licensed, maintained in a roadworthy condition, and operated in a safe manner.

52.2 The SUBCONTRACTOR shall ensure all persons operating vehicles on CONTRACTOR-managed facilities are healthy and unimpaired, have appropriate and required operators' licenses including CDLs when required, and observe established road regulations and/or jobsite regulations, including applicable speed limits.

52.3 The SUBCONTRACTOR shall enforce the wearing of seat belts any time a company-provided vehicle is in motion. Cell phones are only allowed to be used by the driver in hands-free mode while vehicles are in motion, and SUBCONTRACTOR employees shall not engage in reading or sending text messages while driving any vehicle (e.g., Privately Owned Vehicles, Government Owned Vehicles, or SUBCONTRACTOR vehicles).

Appendix A
Sub-Tier Subcontractor Safety and Health History Forms

SAFETY AND HEALTH HISTORY

1. General Contractor Name:	2. NAIC/SIC Code:
3. Number of Sub Tier Contractors expected on-site?	
4. Workers Compensation Insurance Carrier letter providing your firm's Interstate EMR for the three (3) most recent years. Attach Insurance verification letter and if applicable explanation for EMR greater than 1.0 (Experience Modification Rate (EMR) is an insurance calculated rate based on your company's historical cost of injuries and future risk chances. A company's EMR is then compared to the average losses of other employers in your state in the same industry.) At	

Year:	EMR:	Insurance Carrier:
Year:	EMR:	Insurance Carrier:
Year:	EMR:	Insurance Carrier:

5. OSHA 300 Log to fill in number of injuries and illnesses for previous three years:

Year	Number of fatalities	Lost workday cases	Restricted workday cases	Cases with medical attention only	Hours Worked
2022					
2021					
2020					

6. Number of OSHA Inspections

Year	Number	Number of Citations	Citation Type:				
			Demin	Serious	Willful	Repeat	Other
2022							
2021							
2020							
2019							
2018							

7. Explanation for EMR greater than 1.0

Submittals:

1. Company Safety Program/applicable procedures
2. Resume of Company Safety Manager
3. Resume of proposed Site Safety Representative
4. Insurance EMR verification

EXAMPLE

General Contractor form
Rev 3 (03/2014)
S:\NLV\Technical Communications Servers\ACVH Exhibits\Exhibit E\7-18-2024\SME Updates\01 Health History Form - EXAMPLE.docx

Page **1** of **2**

Figure A-1. Subcontract Safety and Health History Form

Appendix A (continued)
Sub-Tier Subcontractor Safety and Health History Forms

SUB-TIER SAFETY AND HEALTH HISTORY

1. Sub-Tier Company Name:	**2. NAIC/SIC Code:**
3. Name of General Contractor:	

4. Workers Compensation Insurance Carrier letter providing your firm's Interstate EMR for the three (3) most recent years. Attach Insurance verification letter and if applicable explanation for EMR greater than 1.0

(Experience Modification Rate (EMR) is an insurance calculated rate based on your company's historical cost of injuries and future risk chances. A company's EMR is then compared to the average losses of other employers in your state in the same industry.)

Year:	EMR:	
Year:	EMR:	
Year:	EMR:	

5. Use your OSHA 300 Log to fill in number of injuries and illnesses for previous three (3) years:

Year	Number of Fatalities	Lost Workday Cases	Restricted Workday Cases	Cases with Medical Attention Only	Hours Worked
2022					
2021					
2020					

6. OSHA Inspections

Year	Number	Number of Citations	Citation Type:				
			Demin	Serious	Willful	Repeat	Other
2022							
2021							
2020							
2019							
2018							

7. Do you have written safety program?	Yes		No	
8. Have you submitted the safety program to the General Contractor for their approval?	Yes		No	

9. Explanation for EMR greater than 1.0

EXAMPLE

Sub-Tier Contractor form
Rev 1 (03/2014)
S:\NLV\Technical Communications Servers\ACVH Exhibits\Exhibit E\7-18-2024\SME Updates\02 Sub Tier Health History Form - EXAMPLE.docx

Page **1** of **1**

Figure A-2. Sub-Tier Subcontract Safety and Health History Form

Appendix B
Exhibit E Training Checklist

Employee Training and Orientation Determination Section:			
Applicability Y/N	**Hazard-Specific Training:**	**Applicability Y/N**	**Facility Specific Orientations:**
Y	General Employee Radiological Training (GERT) (WBT 1E00W585) (0.5 Hr.)	Y	NNSS Site Access Safety Orientation (1E00W102) (0.5 Hr.)
N	Radiological Worker Training (RWI (1E000580) or RWII (1E000582) (Instructor Led)	**N**	RSL Facility Safety Briefing
N	CONTRACTOR's Lockout/Tagout/Tagging Authority Process (1E00W448)	**N**	DAF Emergency Management Training (1DAFW004)
N	CONTRACTORS Excavation Penetration Process (Briefing 1E00W752)	**N**	JASPER General Employee Training (1JASW001)
N	Underground Training (1E000669)	**N**	U1a General Employee Training (1SCE0001)
		N	DAF General Employee Training (1DAFW126)
		Y	Protective actions (WBT 1REMPAW1)
		Y	Work Location Emergency Response Plan, Including Evacuation Alarms and Accountability (1REM050000)
		Y	Initial Security Briefing. DOE O 470.4B, Safeguards and Security Program (1S000110)

Appendix C
Daily Activities Briefing (DAB) Form

Company Form FRM-3403	SUBCONTRACTOR DAILY ACTIVITIES BRIEFING FORM	7/20/23 Rev. 0 Page 1 of 2

Core Information

Subcontractor:		**Project:**			
Job Supervisor:		**Safety Professional:**		**Date:**	
Work authorized by STR and/or on the WAP/POD?	☐ Yes	☐ No			

Scope of Work

List the scope of work being performed today

Activities, Hazards, & Controls

List the hazards and controls that are related to the work activities to be performed:

Activity(ies)	Hazard(s)	Control(s)

Additional Topics

Topics Covered
☐ Roles and responsibilities for each performer
☐ Prerequisites, cautions, limitations, hold points
☐ Work site conditions
☐ Permits
☐ Materials, tools, equipment, PPE
☐ Training
☐ Other:

Verification

Job Supervisor Name	Job Supervisor Signature	Date	Time

EXAMPLE

Figure C-1. Daily Activities Briefing (DAB) Form Page 1 Example

Appendix C (continued)
Daily Activities Briefing (DAB) Form

Company Form FRM-3403	SUBCONTRACTOR DAILY ACTIVITIES BRIEFING FORM	7/20/23 Rev. 0 Page **2** of **2**

Workers/Visitors

Worker/Visitor Name	Worker/Visitor Signature	Date (MM/DD/YY)

EXAMPLE

Figure C-2. Daily Activities Briefing (DAB) Form Page 2 Example

Appendix D
FRM-3252, Subcontractor Site-Specific Safety Plan (SSSP)

Company Form FRM-3252A	SUBCONTRACTOR SITE-SPECIFIC SAFETY PLAN (SSSP)	1/11/24 Rev. 0 Page 1 of 3

Company Name:		**Contract #:**	
Work Location:		**Rev #:**	
SSSP Author(s)			
Subcontractor Safety Representative(s):	NAME	PHONE	
Subcontractor Work Supervisor:	NAME	PHONE	

This document provides the scope, activities, hazards, controls, equipment, supporting document(s), references, and other required information to demonstrate that activity-level work planning has been performed, and the minimum requirements of an activity-level work control document (ALWCD) are met.

Section 1: Scope of Work

Enter a detailed scope of work and expected outcomes (end state).

Section 2: Site Access Controls and Responsibilities

Describe how site access is controlled and the roles and responsibilities of those on the jobsite. Provide contact information (phone and email) for key roles and positions including Site Superintendent/Job Supervisor and Safety Officer at a minimum.

Section 3: Activity-Level Work Planning & Hazard Analysis

#	Job/Activity (Work Steps)	Performer	Hazard(s)	Control(s)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

EXAMPLE

Figure D-1. Subcontractor Site-Specific Safety Plan (SSSP) Example