

SDSTA Safety and Environmental Requirements

1.0 RESPONSIBILITY FOR PROJECT SAFETY AND ENVIRONMENTAL PROTECTION

- 1.1.** The requirements contained herein are specifically related to the Environmental, Safety and Health (ESH) associated with the performance of the consulting work for this contract and focused on protecting the Contractor / Consultant and subcontractor employees and the environment in which they work. These requirements are not intended to infer any responsibility for the work performed to construct or utilize the work product of this contract, nor to replace codes and standards used in the design process.
- 1.2.** The Contractor / Consultant recognizes the importance of performing the work in a safe and responsible manner to prevent damage, injury, or loss to individuals, the environment, and the work itself, including materials and equipment incorporated into the work or stored on-site or off-site. Contractor / Consultant assumes responsibility for implementing and monitoring all Environment, Safety and Health (ESH) precautions and programs related to the performance of the work.
- 1.3.** The Contractor / Consultant and subcontractors shall comply with all legal and SDSTA-specific reporting requirements relating to ESH set forth in the contract documents. The Contractor / Consultant will verbally notify of any injury, loss, damage, or accident arising from the work to SDSTA Project Manager (PM) and to the SDSTA ESH Safety Representative (ESH Safety Rep), to the extent mandated by legal requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the project or the work. All persons injured while working at SURF will be immediately evaluated, and treated as necessary, by a medical professional before returning to work. Contractor / Consultant and its subcontractors will immediately report to the PM all spills of a regulated substance of one gallon or greater, and all other significant impacts to the environment (soil, water, air) in performance of the work. Contractor / Consultant will also immediately notify the PM of any failure to comply with state and federal environmental laws, rules, and regulations.
- 1.4.** The Contractor / Consultant's responsibility for ESH under this specification is not intended in any way to relieve subcontractors and sub-subcontractors of their own contractual and legal obligations and responsibilities.
- 1.5.** The Contractor / Consultant is responsible for screening all subcontractors with respect to safety and to adopt a safety selection process consistent with requirements defined herein. In addition, Contractor / Consultant is responsible for flowing down all ESH requirements of the Contract to its subcontractors, including monitoring and enforcing compliance.

2.0 ESH REQUIREMENTS AND COORDINATION

- 2.1.** Safety and protection of the environment are of the utmost concern on this contract. Safety in this context refers to the health and safety of people and the protection of the environment. Nothing contained herein relieves the Contractor / Consultant from complying with all applicable standards and regulations found in 29 CFR Part 1926 (OSHA construction standard), 40 CFR (Federal environmental regulations, and Part 74 of the Administrative Rules of South Dakota (State environmental regulations), where applicable. Site specific safety requirements are

defined in the SURF ESH Manual located at: <https://www.sanfordlab.org/esh>. Mine Safety and Health Administration (MSHA) compliance may be acceptable, where applicable.

- 2.2.** The Contractor / Consultant will address the safety requirements defined herein and in the SDSTA ESH Manual. Contractor / Consultant costs associated with the implementation of the requirements will be borne by the Contractor / Consultant. Safety deficiencies discovered after the award will be remedied at no cost to SDSTA and may at the Contracting Officer's discretion be deducted from the contract amount.
- 2.3.** The Contractor / Consultant is expected to follow a work planning and controls process that is aligned with the SDSTA. (See SURF website ESH Manual at <https://www.sanfordlab.org/esh>.) The work planning and controls process must be conducted and documented prior to the start of work in the form of a Job Hazards Analysis (JHA). A JHA, developed by the Contractor / Consultant, approved by the PM and ESH Safety Rep. The JHA will be reviewed with the individual(s) expected to perform the work prior to work starting on a specified task. The Contractor / Consultant is expected to review all JHAs. Copies of JHA(s) must be present at the location where work is being performed and accessible to the individuals performing the work and to SDSTA representatives.

 - If the Contractor / Consultant does not have a company established Safety Plan, they must adopt the SURF ESH Manual program in its entirety.
- 2.4.** The Contractor / Consultant will conduct a daily crew work planning meeting (tailgate/toolbox talk), including, when necessary, subcontractor employees, prior to the beginning of each shift. This talk will include the plan of work for the day, a review of hazards and potential regulatory issues, inspection/removal of loose puncture hazards as part of a general daily cleanup requirement of the work area, and the review of applicable JHAs. These documented talks will be submitted to the PM or uploaded to a designated electronic database at the end of each day, or by the end of the work week.
- 2.5.** The Contractor / Consultant is responsible for assuring that all Contractor / Consultant employee safety training is completed in compliance with SDSTA guidelines, standards, and associated regulations. The following training is required for all Contractor / Consultant personnel before they start work:

 - Sanford Underground Research Facility (SURF) Surface and/or Underground Orientation Training, if onsite for less than 40 hours in a 12-month period
 - Cultural Awareness video
 - Any specific equipment training (e.g.: crane operator)
 - Site specific training for environmental compliance (e.g.: spill prevention, Hazmat, storm water, etc.)
- 2.6.** For Contractor / Consultant personnel working on-site more than 40 hours in a 12-month period, the following training is required:

 - General Safety Basic Training (Surface and/or Underground)
- 2.7.** The Contractor / Consultant must have an individual trained and qualified as a SURF Guide for each area that the Contractor / Consultant will be working [\[or have an assigned SURF Guide for the duration of the task – \(REMOVE IF NA\)\]](#). [\[The Guide must be onsite with the workers at all](#)

times. – (REMOVE IF NA)].] Refer to ESH-(1000-S)-73189 Facility Access Standard or the SURF Training Department for Contractor Guide training.

- 2.8.** The Contractor / Consultant shall provide all common Personal Protective Equipment (PPE) required for the work (hard hats, safety toe boots, safety glasses with side shields, hi-visibility clothing and required fall protection equipment including suspension trauma straps, and full body harness (ANSI A10.14 approved). All Contractor / Consultant personnel shall follow the ESH-(7000-S)-71493 PPE Standard and supporting documents.
- Unique PPE required for aerial lift equipment:
 - o Anyone working from an aerial lift must wear a personal fall restraint system or SRL following manufacturer's recommendations.
 - o Fall protection must be attached to the manufacturer's designated anchor point.
 - Unique PPE required for any underground work [will be provided by SDSTA for the duration of the project and– (REMOVE IF NA)].] at a minimum includes:
 - o W65 Self Rescuers (must be maintained according to MSHA requirements) (always required when working underground)
 - o Gas Tester(s) (M40M or equivalent)
 - o Cap lamps
- 2.9.** Smoking, use of tobacco products, including vapor, alcohol, controlled substances, or weapons are not allowed within the boundaries of SURF. All property owned and operated by the SDSTA is designated as tobacco and vapor-free. This applies to all areas of the surface and the underground. The Contractor / Consultant shall manage and maintain a drug and alcohol policy that aligns with that of SDSTA written policy and procedures. The ESH department review of this document may be required.
- 2.10.** If SDSTA perceives the Contractor / Consultant has created or is exposed to an imminent danger, unacceptable risk, or a non-compliance situation, SDSTA will stop work until safe conditions are re-established. Such work stoppages will be at the expense of the Contractor / Consultant and will not add time to the completion date of the contract. All personnel have the right and responsibility to authorize a stop work onsite whenever encountering an unsafe condition or act. Refer to the ESH-(2000-S)-202124 Stop Work Standard.
- 2.11.** In the event of an incident, Contractor / Consultant will notify the PM and/or ESH Safety Rep immediately and never later than the end of shift on the day of incident. Contractor / Consultant shall complete the ESH-(3000-F)-173324 First Report of Incident and Investigation form and submit to the PM or ESH Safety Rep. Contractor / Consultant shall conduct an incident investigation in accordance with the SDSTA Standard. The investigation will include preparing a written report summarizing the results of the investigation, corrective actions taken to prevent a reoccurrence, and any lessons learned. SDSTA may at its discretion participate in and facilitate the incident investigation. Time and expense incurred by Contractor / Consultant performing an incident investigation will be at the Contractor / Consultant's expense.
- 2.12.** When working in the headframes, the Contractor / Consultant will maintain six-foot distance away from an open shaft hole when the cage gate is open or have 100% tied-off (Fall Arrest) protection.

- 2.13.** The Contractor / Consultant acknowledges that periodic evacuation drills and exercises are required by SDSTA to validate the adequacy and effectiveness of the ESH-(6000-S)-185207 Emergency Management Standard. Contractor / Consultant also recognizes that such drills and exercises enhance its employees' understanding of Emergency Management Standard. Contractor / Consultant agrees to participate in quarterly evacuation drills, which may or may not be scheduled in advance, during the term of this contract. It is understood that Contractor / Consultant will not be entitled to any additional compensation for participating in these evacuation drills or exercises.
- 2.14.** The Contractor / Consultant agrees to assess whether Contractor / Consultant's employees have the physical, mental, and emotional capacity to perform assigned tasks competently and in a manner that does not unreasonably threaten safety, health, or property, including participation in emergency procedures applicable to Contractor / Consultant's work location. The ESH-(2000-S)-15209 Fatigue Management Standard regulates the impacts of fatigue for safety, health, and productivity onsite. Refer to the SURF website ESH Manual at <https://www.sanfordlab.org/esh> for further information.
- 2.15.** The Contractor / Consultant shall follow use of ladders and shall meet the requirements of OSHA 1926.1053 (Subpart X) and OSHA 1910.23 (Subpart D). Prior to using a ladder, the following shall be considered:
- Alternative methods, such as platform/podium ladder, scaffolding, scissor lift, or aerial lift.
 - Fall protection is required when working from a standard ladder at a height greater than four feet.
 - Fall protection is required when working from the platform of a three-sided podium ladder at a height greater than six feet.
 - Additional fall protection is not required when working from a four-sided podium ladder.

Refer to the SURF website ESH Manual at <https://www.sanfordlab.org/esh> for further information on the ESH-(7000-S)-73415 Fall Protection and Prevention Standard.

- 2.16.** The Contractor / Consultant shall manage all waste, both solid and hazardous, as well as all obsolete, expired, or unused materials procured by the Contractor / Consultant are the responsibility of the Contractor / Consultant, including the cost of disposal. The Contractor / Consultant shall manage and dispose of all wastes generated in compliance with all applicable state and federal laws and regulations. The Contractor / Consultant shall minimize, to the extent practical, the generation and accumulation of waste during the lifespan of the project. Waste shall not be allowed to accumulate to the point of becoming a threat to the environment (air, land, water) and must not be stored on the ground for longer than a single work shift. Where large amounts of waste are anticipated, a roll off bin should be used. If a roll off bin is not used, then wastes must be removed from the work site on a regular basis.
- 2.17.** All clean-up and disposal costs associated with spills or leaking equipment of environmentally regulated substances by the Contractor / Consultant in the performance of their work are the responsibility of the Contractor / Consultant. Spills and leaks must be cleaned up immediately, and leaks must be repaired to prevent further environmental contamination.

- 2.18.** If the Contractor / Consultant will be disturbing one or more acres, it is the responsibility of the Contractor / Consultant to obtain a South Dakota Stormwater Construction Permit and to comply with that permit, including the installation and maintenance of stormwater pollution controls. Stormwater flowing off the work site must be clean, with no visible sheen or solids and any existing stormwater pollution controls that are altered during Contractor / Consultant activities must be returned to full operating condition as soon as possible.

- 2.19.** Work that results in the storage of petroleum products (55 gallons or greater in a single container) or the installation of oil-filled operational equipment with a volume of 55 gallons or greater must be reported to the Environmental Department and secondary containment must be installed.

- 2.20.** Visible air emissions occurring from roads, stockpiles, conveyors, etc. used during Contractor / Consultant work must be controlled by the Contractor / Consultant.

- 2.21.** All chemicals to be used at SURF must be pre-approved by SDSTA and Safety Data Sheets (SDS) must be maintained by the Contractor / Consultant and be readily available to workers on site.

- 2.22.** Flammables (defined in 30 CFR Part §57.4460 Storage of flammable liquids underground) are not allowed underground. Flammables used on the surface are to be stored in engineered flammable cabinets or in containers with a minimum one-hour fire resistance.

- 2.23.** Combustibles in the underground work areas shall be managed as per 30 CFR Part 57.4104 - 57.4531, as applicable.

- 2.24.** Tier 4 engines are required at SURF for underground use. Lower Tier 3 equipment may be allowed underground but only with SDSTA permission. All underground diesel equipment must be approved by SDSTA prior to usage.

- 2.25.** SDSTA reserves the right to restrict or deny access of any Contractor / Consultant employee to the work location.

- 2.26.** The Contractor / Consultant shall report the hours worked on site by Contractor / Consultant's employees on a monthly basis to the PM named in the contract. Hours shall be emailed to the PM no later than the 3rd day of the month for hours worked the previous month.

Refer to the SURF website, ESH Manual at <https://www.sanfordlab.org/esh>, for further information on all standards.

Revision History

Rev	Date	Section	Paragraph	Summary of Change	Authorized by
01	11/3/2023	NA	NA	Initial Release	CCR 861