SANFORD UNDERGROUND RESEARCH FACILITY

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

ESH Training Standard

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Revision History

Rev	Date	Section	Paragraph	Summary of Change	Authorized by
02	5/29/2024	NA	NA	Update Logo	CCR 946
03	2/26/2026	2, 4, 5 & 6	4.7.4, 5.1, 5.2 & 6.1-6.3	Updated document due to change to the document numbering of controlled documents due to the change from DocuShare system to SharePoint system	CCR 1227

1.0 Purpose

This standard ensures all personnel who access Sanford Underground Research Facility (SURF) property are trained to safely execute their work commensurate with the hazards to which they are exposed.

2.0 Scope

This Standard applies to all personnel at SURF. Guide training is addressed in ESH-12000-S-002 Guide and Guide Training Standard.

3.0 Definitions

Competent Person – By way of training/experience, is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation and has the authority to correct them. Personnel at SURF who have been trained on specific equipment, tasks, processes, etc., are a competent person as documented.

Contractor – A person, partnership, corporation, subsidiary of a corporation, firm, association or other organization that contracts to perform construction on SURF property. As used in this standard, this term includes employees, all tiers of subcontractors, and employees of all tiers of subcontractors of contractors. Contractors have defined scopes of services, defined locations of work, and defined durations of agreements.

Department of Transportation (DOT) Training – Training specific to personnel who utilize a commercial motor vehicle license for work at SURF.

Emergency Response Team (ERT) Training – Training specific to ERT members conducted in accordance with CFR 30 MSHA Part 49 Metal/Non-Metal Mine Rescue Standards. Other specific emergency response training is conducted as appropriate (medical, rope rescue, confined space rescue, etc.).

Equipment Training – Training that provides personnel with instruction and means to operate specific equipment or tools safely and effectively.

Functional Role – A set of activities or tasks performed in the usual course of duty related to an occupational responsibility and generally shared by multiple individuals. Any individual may have one or more functional roles that describes all or part of their activities.

General Safety Advanced (GSA) Class – Specialized safety training for specific tasks, equipment, hazards, etc.

General Safety Basic (GSB) Class – SDSTA's safety training that encompasses most aspects of the activities conducted at SURF and the associated hazards. GSB also includes a cultural awareness video

and integrated management system awareness. Personnel who intend to be on-site more than 40 hours within a twelve-month period are required to attend this class.

On the Job Training (OJT) – Training through hands-on teaching and coaching where personnel learn the practical skills and knowledge they need to perform their job under the supervision of a competent person.

Project Manager – A person who undertakes specific responsibilities to organize and support a trip, project or visit and serves as a point of contact for the individuals, groups or agencies.

Refresher Training – A training to ensure that skills learned during initial training are not lost due to lack of use or extended absence from SURF. Refresher training can fulfill a retraining obligation due to incidents or unsafe acts. It also provides an opportunity for personnel to learn about changes or updates to the safety program.

Sponsor – A designated individual responsible for a person/group ensuring that SDSTA and host research organization processes and safety requirements are being fulfilled.

SURF Access Request Form (SARF) – An electronic form used to determine access and training requirements for individuals requesting access to SURF. The SARF identifies areas the individual will be accessing as well as corresponding training requirements.

SURF Safety Orientation – SDSTA's condensed safety training that encompasses surface and/or underground activities conducted at SURF and the associated hazards. Safety Orientation also includes a cultural awareness video and integrated management system awareness. Personnel who intend to be on-site less than 40 hours within a twelve-month period are required to attend this class.

Supervisor – Any individual at SURF who has authority to control (describing, assigning, directing, or is responsible for the completion of) work. A Supervisor is both a role and a function at SURF. Being a supervisor does not require formal authority. Other terms that mean that same thing include Principal Investigator, Lead Researcher, Project Manager, Work Lead, Activity Lead, Activity Lead Designee, Foreman and Manager.

Training – Acquiring of a skill; the process of teaching or learning a skill or job.

Train the Trainer – A method that allows for the training and certification of personnel to become instructors.

Trained Worker – Personnel who have been trained in the hazards for specific areas, including a walk-through for familiarization of emergency requirements. These individuals are able to access a specific work area and perform duties without direct observation from a guide.

User – A collaborating partner such as a scientist, researcher, or educator conducting a scientific experiment or engineering research at SURF underground and/or on the surface.

Visitor – A person who has an appointment with a designated point of contact (Sponsor) at SURF and who requires temporary access to site facilities.

Worker – An individual engaged in an authorized activity or task.

4.0 Responsibilities

4.1.   SDSTA Executive Director

4.1.1.   Ensures accountability with the requirements of this standard with direct reports.

4.2.   Department Directors

4.2.1.   Ensure that direct reports are properly assessed and trained in accordance with this standard.

4.2.2.   Ensure a SARF for incoming personnel is completed within two business days of scheduled arrival to SURF.

4.2.3.   Ensure appropriate training of personnel accessing SURF is completed prior to the commencement of activities.

- Any training documentation must be provided to the ESH Department (Master Rigger, Rope Rescue, Crane Operator, etc.).

4.2.4.   Ensure all training documents have been submitted to the ESH Department.

4.2.5.   Review functional role training requirements and coordinate with the ESH Department to ensure all matrices are accurate and up to date.

4.2.6.   Ensure new equipment is reported to ESH Department for training documents to be developed.

4.2.7.   Ensure new equipment, tools, chemicals, and other devices are reported to ESH Department for training documents to be developed.

4.3.   Project Managers

4.3.1.   Ensure a SARF for incoming personnel is completed within two business days of scheduled arrival to SURF.

4.3.2.   Ensure all required training of personnel accessing SURF is completed/current prior to the commencement of activities.

- Any training documentation must be provided to the ESH Department (Master Rigger, Rope Rescue, Crane Operator, etc.).

4.3.3.   Coordinate training for the proposed individual with the ESH personnel.

4.3.4.   Ensure personnel within their department or work section are provided the approved hazard analyses (JHAs, SOPs, etc.) and are properly trained for each.

4.3.5.   Ensure trained workers complete a walk-through and are familiarized with the work area and emergency requirements.

4.3.6.   Ensure new equipment, tools, chemicals, and other devices are reported to ESH Department for training documents to be developed.

4.4.   Sponsors

4.4.1.   Ensure a SARF for incoming personnel is completed within two business days of scheduled arrival to SURF.

4.4.2.   Ensure all required training of personnel accessing SURF is completed/current prior to the commencement of activities.

- Any training documentation must be provided to the ESH Department (Master Rigger, Rope Rescue, Crane Operator, etc.).

4.4.3. Coordinate training for the proposed individual with the ESH personnel.

4.4.4. Ensure personnel within their department or work section are provided the approved hazard analyses (JHAs, SOPs, etc.) and are properly trained for each.

4.4.5. Ensure trained workers complete a walk-through and are familiarized with the work area and emergency requirements.

4.4.6. Ensure new equipment, tools, chemicals, and other devices are reported to ESH Department for training documents to be developed.

4.5. Supervisors

4.5.1. Ensure a SARF for incoming personnel is completed within two business days of scheduled arrival to SURF.

4.5.2. Ensure that direct reports are properly assessed and trained in accordance with this standard.

4.5.3. Ensure appropriate training of personnel accessing SURF is completed prior to the commencement of activities.

- Any training documentation must be provided to the ESH Department (Master Rigger, Rope Rescue, Crane Operator, etc.).

4.5.4. Ensure personnel within their department or work section are provided approved hazard analyses (JHAs, SOPs, etc.) and are properly trained on each.

4.5.5. Monitor overdue training and ensure that it is completed.

4.5.6. Review functional role training requirements and coordinate with the ESH Department to ensure all matrices are accurate and up to date.

4.5.7. Ensure trained workers complete a walk-through and are familiarized with the work area and emergency requirements.

4.5.8. Ensure new equipment, tools, chemicals, and other devices are reported to ESH Department for training documents to be developed.

4.6. ESH Department

4.6.1. Ensures that training required as determined within this standard is available and current.

4.6.2. Ensures a sufficient number of trainers are qualified to meet all training requirements.

4.6.3. Conducts periodic reviews on training courses.

4.6.4. Updates training records.

4.6.5. Develops new training courses.

4.6.6. Approves certification of training that has been completed by non-SDSTA personnel.

4.6.7. Ensures relevant emergency response training is developed and conducted.

4.6.8. Reviews functional role training requirements and coordinates with other departments to ensure all matrices are accurate and up to date.

4.7. Competent Person(s)

4.7.1. Coordinates with ESH Department to verify current training materials are being utilized.

4.7.2. Conducts training.

4.7.3. Determines competencies of trainees.

4.7.4. Documents ESH-12000-F-001 SDSTA Training Certificate.

4.7.5. Submits training documents to the ESH Department.

5.0 Instructions

5.1. All personnel at SURF have various training needs (visitor, contractors, etc.). A SARF is used to communicate the training needs that are appropriate based on the scope of work and work location. It must be filled out at least two business days before training is required.

- The Department Director, Project Manager, Sponsor, or Supervisor assures the individual's training needs are assessed with his/her intended work location and specific work activities.

- Contractors/users must submit any training documentation required for the work activities that are to be performed onsite.

- A summary for required training is documented in ESH-12000-A-001 Summary of Training and Documentation Requirements.

5.2. SDSTA Training Types

- SURF Safety Orientation Training

- GSB Training

- GSA Training

- Refresher Training

- Equipment/Mobile Equipment Training

- Department of Transportation Training

- Emergency Response Team Training

- Train the Trainer Training

- Guide and Guide Trainer Training (refer to ESH-12000-S-002 Guide Training Standard)

- Other specialized training

5.3. Methods of Training

- Classroom
  - o This could include in-person, hands-on, document review. For example: fall protection and equipment inspection, self-rescuers, mobile equipment, CPR/First Aid, etc.

- OJT
  - o Conducted in a controlled environment under the supervision of a competent person. Examples:
    - ◆ Equipment shall be operated by trained personnel only. As equipment is introduced to site, the ESH Department shall be notified to ensure:
      - ◇ Training materials can be identified, created or updated.
      - ◇ Training can be made available to personnel tasked with operation of equipment.
      - ◇ Training records can be completed/updated.
    - ◆ Workplace familiarization.

◇ Training that is conducted to identify hazards and emergency requirements.

- Virtual
  - o This learning is conducted electronically via:
    - ♦ LMS
    - ♦ Video conferencing
    - ♦ Online training
- Third-Party
  - o Utilizing approved outside sources to conduct specific types of training that SDSTA may not be able to provide. For example:
    - ♦ Master Rigger
    - ♦ Rope Rescue
    - ♦ Qualified Electrical Worker

5.4. Training Matrix

- Lists training (courses, SOPs, JHAs, equipment, etc.) specific to a functional role/position description.
- Provides a system to document completed training.
- Developed in conjunction with the supervisor and approved by their appropriate department director and reviewed for changes.
- Managed via LMS.
- Each department is responsible for review of the functional role training requirements. Departments shall coordinate with the ESH Department to ensure all matrices are accurate.

5.5. Competencies are verified by any of the following:

- Written/verbal tests.
- Demonstration.
- Teach-back.
- Visual assessment.

5.6. Completion of Training

- All SDSTA training must be documented on the SDSTA training certificate or in the LMS.
  - o All external completed training certificates shall be submitted to the ESH Department.
- A due date is assigned to training courses as appropriate.

6.0 Documented Information/Related Document

6.1. ESH-12000-S-002 Guide and Guide Training Standard
6.2. ESH-12000-A-001 Summary of Training and Documentation Requirements
6.3. ESH-12000-F-001 SDSTA Training Certificate