



# SANFORD UNDERGROUND RESEARCH FACILITY

**SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY**

## **Facility Access Standard**

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**Revision History**

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## 1.0 Purpose

This standard defines the South Dakota Science and Technology Authority (SDSTA) facility access requirements. The requirements integrate processes to manage and control access to provide a safe and secure place for all personnel at the Sanford Underground Research Facility (SURF).

## 2.0 Scope

These requirements apply to all South Dakota Science and Technology Authority (SDSTA) employees, users, contractors, and visitors at SURF.

This standard may not apply to individuals attending special events at SURF and to guests of the Sanford Lab Homestake Visitor Center.

## 3.0 Definitions

**Brass-In/Brass-Out** – A physical check-in and check-out system that provides an accurate record of all personnel underground.

**Contractor** – A person, partnership, corporation, subsidiary of a corporation, firm, association, or other organization that provides services or materials for SDSTA. Contractors have defined scopes of services, defined locations of work, and defined agreement durations.

**Guide** – An individual who meets the qualifications outlined in the ESH-(12000-S)-79248 Guide and Guide Training Standard designated to provide direct observation of the personnel being guided. Both SDSTA and non-SDSTA personnel can be Guides.

**Leased Areas** – Areas at SURF that are assigned to the U.S. Department of Energy.

**SURF Access Request Form (SARF)** – An internal form that feeds workflows, training, network accounts, security/badge access, access removal, audits, internal and external reporting and the visitor registration database.

**Sponsor** – An individual who undertakes specific responsibilities and serves as a point of contact for individuals or groups who access SURF.

**Trip Action Plan (TAP)** – A documented and pre-planned event that is updated throughout the day to reflect any changes to approve individuals or groups to access facility areas.

**Trained Worker** – Personnel who have been trained in the hazards for specific areas, including a walkthrough for familiarization of emergency requirements.

**User** – A collaborating partner such as a scientist, researcher, or educator conducting a scientific experiment or engineering research requiring SURF access and/or resources.

**Visitor** – A person who has an appointment with a designated Sponsor at SURF and who requires temporary access to site facilities.

**Watch List** – Identifies a list of individuals who are restricted from gaining access to SURF.

## 4.0 Responsibilities

### 4.1. SDSTA Executive Director

- 4.1.1. Ensures accountability of the requirements of this document with direct reports.
- 4.1.2. Authorizes underground occupancy limits.
- 4.1.3. Approves any accommodations to the minimum physical requirements for underground access.
- 4.1.4. Prioritize TAPs associated with group tour approvals not associated with current science, normal operations, and contracts.

### 4.2. Department Directors and Supervisors

- 4.2.1. Ensure accountability of the requirements of this document with direct reports.
- 4.2.2. Ensure employees receive proper site orientation and safety training.

### 4.3. Director of Underground Operations

- 4.3.1. Manages and coordinates the TAP ensuring conveyance and occupancy limits are not exceeded.

### 4.4. Administrative Services Department

- 4.4.1. Distributes permanent and temporary badges to authorized personnel.
- 4.4.2. Completes the check-in process for individuals accessing SURF (those accessing Leased Spaces may be checked-in separately).
- 4.4.3. Performs Visual Compliance screening based on the SARF submission for an individual.
- 4.4.4. Initiates request to deactivate the SARF for an individual.
- 4.4.5. Provides reporting as required.
- 4.4.6. Maintains the ADM-(1000-R)-105245 Watch List.
- 4.4.7. Maintains the daily ADM-(1000-F)-101415 Visitor Log and ADM-(1000-F)-210219 Contractor Log.

### 4.5. Sponsors and Project Managers

- 4.5.1. Submit a SARF for individuals accessing SURF, as appropriate.
- 4.5.2. Maintain accountability for contractors onsite.
- 4.5.3. Ensure contractors or users under their supervision receive proper site orientation and safety training.
- 4.5.4. Arrange for the appropriate number of Guides where required.
- 4.5.5. Communicate arrival of contractors or users to the ESH Department for ESH oversight support.
- 4.5.6. Submit names of contractors and visitors coming onsite to the Administrative Services Department prior to arrival.
- 4.5.7. Notify the ESH Department and Emergency Response Team (ERT) of users or contractors working during non-routine business hours with at least a 24-hour advance notice.
- 4.5.8. Notify the Administrative Services Department when an individual's access is to be terminated.
- 4.5.9. Ensure the EL-(1000-F)-71460 Acknowledgement of Risk and EL-(1000-F)-71462 Release/Agreement Not to Sue and Waiver documents are completed as required.

**4.5.10.** Submit a TAP when required.

**4.6.** Environment, Safety, and Health (ESH) Department

**4.6.1.** Grants appropriate access to the facility and provides directions for check-in.

**4.6.2.** Screens individuals against the Watch List.

**4.6.3.** Monitors the facility access points and reports deficiencies (e.g., perimeter fencing, access signage, etc.).

**4.6.4.** Observes and reports activities/situations that could present a threat.

**4.6.5.** Maintains the access control system database, updates access requirements for proximity locks and manages keys for facility access.

**4.6.6.** Oversees installation, maintenance, and repair of access points.

**4.6.7.** Provides personal protective equipment (PPE), brass, and shuttle service when needed.

**4.6.8.** Maintains completed Acknowledgement of Risk and Release/Agreement Not to Sue and Waiver documents.

**4.7.** Infrastructure Technician

**4.7.1.** Ensures the occupancy limits for the cage are not exceeded.

**4.7.2.** Monitors the brass tag boards.

**4.7.3.** Denies underground access when appropriate.

**4.8.** Personnel Accessing SURF

**4.8.1.** Required to check in at the Yates or Ross guard house.

**4.8.2.** Ensure accountability of the requirements of this document.

**4.8.3.** Report any access control point deficiencies, suspicious activity, or unauthorized personnel to ESH Department.

**4.8.4.** Ensure visitors, contractors, and users meet the physical requirements for access.

**4.8.5.** Submit a TAP when required.

## **5.0 Instructions**

**5.1.** Facility Access Requirements

- SURF promotes a safe and healthy environment for all personnel, therefore, prohibits weapons, tobacco, vapor products, alcohol, and illegal substances onsite. Refer to SDSTA-(Manual)-187303 SDSTA Policy and Policy-Procedure Manual for further detail.
- Requirements for access are determined based upon the purpose for entry to the facility per ESH-(1000-A)- 207792 Requirements for SURF Access.
  - The SARF for an individual should be completed at least two business days before arrival. Refer to ADM-(1000-WI)-206802 Steps to Complete and Approve a SURF Access Request Form (SARF).
    - ◆ A SARF is completed for Employees, Contractors and Users who require unescorted access to facilities on the surface or underground, an SDSTA network account and/or will require safety training conducted by an Environment, Safety, and Health (ESH) representative.
    - ◆ In addition, a SARF is completed for all foreign national individuals that visit SURF.
- Individuals accessing SURF must have authorization prior to entering the facility and must process through an entry control point (guard house) where authorization is verified against a daily logs. Personnel must check-in at the Administration Front Desk and be issued a temporary visitor card.

- Personnel accessing SURF who require training must be trained in accordance with ESH-(12000-S)-73354 ESH Training Standard. This training determines the level of access approved. In order to access a worksite, personnel must be qualified as a trained worker or accompanied by a qualified trained worker.
- Personnel accessing SURF will be issued an access badge after training is complete.
  - SURF utilizes an electronic site access control system that provides personnel entry into approved areas via access badge.
  - Every SDSTA employee, visitor, user and contractor, assigned an access badge, is required to possess an access badge at all times while on SURF property. Because access badges are also the means by which person(s) enter and leave the premises, access badge holders must not loan their access badge to anyone including using their badge to allow unauthorized person(s) to enter premises.
- The sponsor will assume responsibility of the person(s) once the above steps have been completed.
- When necessary, contractors may work onsite during non-routine business hours with sponsor or project manager approval and following notification to SDSTA ESH Department and ERT.
  - The sponsor or project manager will review the SDSTA incident reporting protocols, safety requirements and verify emergency information are readily available for personnel.
- In addition to SURF facility access requirements, personnel accessing Leased Areas at SURF shall follow the requirements specified by the Lessee.

## 5.2. Underground Access Requirements

- Persons with health concerns/conditions should consult with a physician prior to accessing the underground.
- Minimum Physical Requirements for Underground Access:
  - Persons accessing the underground must be at least 18 years of age and able to perform the following:
    - ◆ Don and wear the required PPE.
    - ◆ Don and use a self-rescuer.
    - ◆ Walk in both warm/hot and humid conditions.
    - ◆ Walk across uneven or slippery surfaces for distances in excess of one mile.
    - ◆ Tolerate standing in very close proximity to others while riding in the personnel cage.
    - ◆ Tolerate changes in elevation.
    - ◆ Recognize and respond to emergency signals and signs (visual, auditory, and olfactory).
    - ◆ Travel to egress points, unassisted, and under their own power.
    - ◆ Ascend and descend three flights of stairs.

\*Any accommodations to the minimum physical requirements for underground access will necessitate SDSTA Executive Director approval.

- SURF Acknowledgment of Risk and Release/Agreement Not to Sue, and Waiver documents shall be completed and signed.
- A TAP must be submitted. The purpose of the TAP is to:
  - Provide accountability for personnel underground.
  - Manage established occupancy limits.
  - Identifies Guides for each group.
  - Provide authorization for the trip to designated areas within the facility.
- All personnel going underground for any purpose must brass in/out. Persons authorized for access without personalized brass tags will be assigned a numbered visitor brass tag. This provides accountability for all personnel underground.
  - If there is evidence that an individual failed to brass-out, the following actions must be initiated:
    - ◆ Verify via the Guide, Sponsor, or others that the individual who failed to brass-out is no longer underground.
    - ◆ If verification is not obtained, contact the Duty Officer to report an unaccounted person.
    - ◆ The Duty Officer will initiate a search for the individual, and SDSTA's Emergency Response Team will be activated.
    - ◆ The ESH-(3000-F)-173324 First Report must be completed per the ESH-(3000-S)-73314 Incident Management Standard.
- All personnel accessing the underground must be accompanied by a Guide or be an authorized Guide. Guide status and requirements must be followed and are outlined in the ESH-(12000-S)-79248 Guide and Guide Training Standard.
- Underground occupancy limits must be followed as described in the ESH-(6000-S)-185207 Emergency Management Standard.

### 5.3. Termination of Access

- When access to SURF is no longer required, the sponsor shall notify the Administrative Services Department and shall ensure all SDSTA property is returned. SDSTA property may include:
  - Badges
  - Keys
  - PPE
  - Workwear
  - Equipment and tools

### 5.4. Access Restrictions

- Due to the critical nature of the work being performed in SURF hoistrooms, advanced approval from SDSTA hoist personnel prior to entry is required.
- At certain times, access to the underground may be partially or fully restricted, and any restrictions will be communicated to affected personnel.



- Some areas throughout the underground require prior approval via a permit process. To request authorization for restricted access locations, see the UO-(3000-WI)-187300 SDSTA Underground Level Access Work Instruction.
- Access will be restricted for individuals identified on the Watch List.

## **6.0 Documented Information/Related Documents**

- 6.1.** ESH-(12000-S)-73354 ESH Training Standard
- 6.2.** ESH-(12000-S)-79248 Guide and Guide Training Standard
- 6.3.** ESH-(1000-A)- 207792 Requirements for SURF Access
- 6.4.** ESH-(3000-S)-73314 Incident Management Standard
- 6.5.** ESH-(3000-F)-173324 First Report
- 6.6.** ESH-(2000-F)-202122 Toolbox Talk
- 6.7.** ADM-(1000-F)-210219 Contractor Log
- 6.8.** ADM-(1000-F)-101415 Visitor Log
- 6.9.** ADM-(1000-R)-105245 Watch List
- 6.10.** ADM-(1000-WI)-206802 Steps to Complete and Approve a SURF Access Request Form (SARF)
- 6.11.** UO-(3000-WI)-187300 SDSTA Underground Level Access Work Instruction
- 6.12.** SDSTA-(Manual)-187303 SDSTA Policy and Policy-Procedure Manual