Introduction
The purpose of this subject area is to ensure that underage workers (minors under the age of 18, but not younger than 15 years of age) performing BNL-sponsored work are not exposed to hazardous situations without the appropriate controls.

This subject area provides the requirements BNL staff and non-BNL staff must follow to ensure the safety of minors, and the forms that must be completed and approved before minors do any work.

Contents

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<th>Section</th>
<th>Overview of Content (see section for full process)</th>
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| 1. Preparing for Underage Workers (Minors) | • Notify ESH Coordinator and FS Representative when minors will work on projects.  
• Identify minor’s work and potential hazards; implement hazard controls.  
• Ensure minor completes training before working.  
• Document planned work.  
• Review and approve in writing exposure to minors to potentially hazardous conditions.  
• Closely supervise the activities of minors. |

Definitions

Exhibits
None
Forms

Planned Work Involving Minors Form

Training Requirements and Reporting Obligations

This subject area does not contain training requirements. Specific training is required dependent on the work involved for both the student and mentor.

This subject area does not contain reporting obligations.

External/Internal Requirements

<table>
<thead>
<tr>
<th>Requirement Number</th>
<th>Requirement Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 CFR 1910</td>
<td>Labor/Occupational Safety and Health Standards</td>
</tr>
<tr>
<td>BSA Contract No. DE-SC0012704 - Clause I.131 DEAR 970.5223-1)</td>
<td>Integration Of Environment, Safety, And Health Into Work Planning And Execution (dec 2000)</td>
</tr>
</tbody>
</table>

References

Biosafety in Research  Subject Area

Chemical Safety  Subject Area

Confined Spaces  Subject Area

Cryogenics Safety  Subject Area

Electrical Safety  Subject Area

Forklift Safety  Subject Area

Laser Safety  Subject Area

Lifting Safety  Subject Area

Oxygen Deficiency Hazards (ODH), System Classification and Controls  Subject Area

Pressure Safety  Subject Area

Radiological Dose Limits  Subject Area

Static Magnetic Fields  Subject Area

Training and Qualifications  Web Site

Work Planning and Control for Experiments and Operations  Subject Area

Standards of Performance
All staff and guests shall comply with applicable Laboratory policies, standards, and procedures, unless a formal variance is obtained.

All staff and users shall identify, evaluate, and control hazards in order to ensure that work is conducted safely and in a manner that protects the environment and the public.

All staff and users shall ensure that they are trained and qualified to carry out their assigned responsibilities, and shall inform their supervisor if they are assigned to perform work for which they are not properly trained or qualified.

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[SBMS Home Page] [Subject Areas] [Instructions] [Changes]

PROCEDURE: PREPARING FOR UNDERAGE WORKERS (MINORS)

Management System: Worker Safety and Health

Subject Area: Underage Workers (Minors)

1. Preparing for Underage Workers (Minors)

| Effective Date: Aug 29, 2014 | Subject Matter Expert: John Peters | Management System Executive: Ed Nowak |

Applicability

This information applies to BNL staff who will be responsible for an underage worker (minor) during his/her work term at BNL. First Paragraph of Applicability

Required Procedure

Step 1

The Supervisor/Sponsor notifies (with sufficient time to comply with the procedures in this subject area) their ES&H Coordinator and Facility Support (FS) Representative (where the potential for radiological exposure exists), when minors are to be engaged in Department/Division projects.

The Guest Administrator must provide a list of all minors and their corresponding Supervisors/Sponsors to the ES&H Coordinator, FS Representative, and to the Office of Educational Programs upon request.

Step 2

The Supervisor/Sponsor identifies the work the minor will be performing and all potential hazards associated with the work. Controls must be implemented to ensure hazards are minimized or eliminated. For radiological hazards adhere to the following:

- **25-mrem per year exposure-control level**: Minors must not be allowed to work in Controlled or Radiological Areas without the written permission from the Department Chair/Division Manager and other identified approval signatories as defined on the Authorization for Minors to Work in Controlled or Radiological Areas Form in the Radiological Dose Limits Subject Area.

- **Above 25-mrem per year exposure level**: Minors must not be allowed to work in Controlled or Radiological Areas that potentially expose them to greater than 25 mrem per year without the approvals identified in the previous statement along with approval of the Radiological Control Division Manager on the Authorization for Guests, Visitors, or Minors to Exceed 25 mrem Form in the Radiological Dose Limits Subject Area.
* Under no circumstances will a minor be allowed to exceed a limiting value of 100 mrem per year.

<table>
<thead>
<tr>
<th>Step 3</th>
<th>The Supervisor/Sponsor identifies all required training and ensures it is completed before the start of work. See the Training and Qualifications Web Site.</th>
</tr>
</thead>
</table>
| Step 4 | The Supervisor/Sponsor documents planned work involving the minor by completing and submitting Planned Work Involving Minors Form or an equivalent to the Department Chair/Division Manager for approval. The ES&H Coordinator and FS Representative must all be copied. This document must include the following items as a minimum:  
  - Name, birth date, affiliation, and Life/Guest Number of the Minor;  
  - Start date/end date of planned work;  
  - Description of work, including any potential hazards and controls, or statement that there will be no exposure to hazardous situations;  
  - Location(s) of work;  
  - Name and signature of Supervisor/Sponsor;  
  - Ensurance of completion of required site- and facility-specific training before work;  
  - Parental/Guardian consent;  
  - References associated with work planning control documents in compliance with the Work Planning and Control for Experiments and Operations Subject Area;  
  - For work in Radiological and/or Controlled Areas, an approval line for the Department Chair/Division Manager, FS Representative, and ALARA Committee Chair (or the Radiological Control Division's ALARA Coordinator). |
### Step 5
The Department Chair/Division Manager reviews and approves in writing exposure to minors to potentially hazardous conditions. Examples of hazardous conditions include the following:

- Work in confined spaces: see Confined Spaces Subject Area;
- Work with Class IIIB or IV lasers: see the Laser Safety Subject Area;
- Work with materials that are capable of detonation or explosive decomposition;
- Work with carcinogens, highly toxic chemicals, or reproductive toxins: see the Chemical Safety Subject Area;
- Work with biohazard etiologic agents: see the Biosafety in Research Subject Area;
- Work in oxygen-deficient hazard areas, Class 1 or higher: see the Oxygen Deficiency Hazards (ODH), System Classification and Controls Subject Area;
- Work with static magnetic fields: see the Static Magnetic Fields Subject Area;
- Work using cranes (see the Lifting Safety Subject Area) or forklifts (see the Forklift Safety Subject Area);
- Work with pressurized systems (nontoxic gases greater than or equal to 100 psi) or related (see the Pressure Safety Subject Area);
- Work with electrical hazards (50 V or greater): see the Electrical Safety Subject Area;
- Work within Radiological or Controlled Areas (this work requires additional approvals; see step 2);
- Work with nonflammable and flammable cryogenic liquids: see Cryogenics Safety Subject Area;
- Work unsupervised near motorized equipment, such as drilling or excavating machinery.

### Step 6
Supervisors/Sponsors must closely supervise the activities of minors. If potential hazards exist, a statement defining level of supervision must be included in the documentation submitted by the Supervisor/Sponsor for approval.

### Guidelines
Supervisors/Sponsors should meet with the ESH Coordinator, Facility Support Representative, and Training Coordinator in advance to ensure all requirements are addressed before the minor’s arrival at BNL. The minor should be added to appropriate Work Planning Control documents for the duration of his/her work via memo to the appropriate Experiment Review Coordinator, and/or Work Control Managers/Coordinators.

### References
- Biosafety in Research Subject Area
- Chemical Safety Subject Area
- Confined Spaces Subject Area
Cryogenics Safety  Subject Area

Electrical Safety  Subject Area

Forklift Safety  Subject Area

Laser Safety  Subject Area

Lifting Safety  Subject Area

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https://sbms.bnl.gov/sbmsearch/subjarea/110/110_pro1.cfm
**DEFINITIONS**

**Definition: Underage Workers (Minors)**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>underage worker (minor)</td>
<td>Any person under the age of 18, but not younger than 15 years of age. &lt;br&gt;<strong>Note:</strong> No one under the age of 15 will be permitted to perform work on-site without approval by Level I Managers.</td>
</tr>
<tr>
<td>work</td>
<td>Activities that involve the design, operation, maintenance, modification, construction, demolition, or decommissioning of facilities, systems, or experiments by BNL or non-BNL staff.</td>
</tr>
</tbody>
</table>

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### 1. Minor’s Demographic Data

<table>
<thead>
<tr>
<th>Full Name (Last, First, MI):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>Sex:</td>
</tr>
</tbody>
</table>

| Life/Guest Number: |  |

**Home Institution:**

| Home Address (Line 1): |  |
| Home Address (Line 2): | City/State: | Zip Code: |

### 2. Work/Training(s)

**A) Description of Work (Include any potential hazards and controls and if any work will be performed in Radiological and/or Controlled Areas):** *

*If no hazards present make a statement to that effect.

**B) Associated Work Planning Documents:**

**C) Location(s) of Work:**

**D) Start/End Dates of Work:**

| Start Date: | End Date: |

**E) Safety Training Required:**

**F) Job/Project Deadline:**

| Start Date: | End Date: |

**G) Include a statement that Supervisor/Sponsor will ensure all training will be identified and completed before starting any work.**

### 3. Supervisor Information

| Name: |  |
| Signature: |  |
| Department/Division: |  |

| Phone: | E-mail: |
4. Department/Division Approvals

<table>
<thead>
<tr>
<th>Department Chair/Division Manager</th>
<th>ES&amp;H Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Name:</td>
</tr>
<tr>
<td>Signature:</td>
<td>Signature:</td>
</tr>
<tr>
<td>Department/Division:</td>
<td></td>
</tr>
</tbody>
</table>

5. For work in Radiological and/or Controlled Areas

<table>
<thead>
<tr>
<th>Authorization</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS Representative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALARA Committee Chair</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>RCD Manager**</td>
<td></td>
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<td></td>
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</tbody>
</table>

** Only if over 25 mrem ACL

6. Minor’s Emergency Contact Information

<table>
<thead>
<tr>
<th>Contact Person</th>
<th>Relation</th>
<th>Phone</th>
<th>(Please indicate with an X)</th>
<th>Home</th>
<th>Work</th>
<th>Mobile</th>
</tr>
</thead>
</table>

7. Parental Consent

I understand that:

- , a minor working at Brookhaven National Laboratory, may work in areas where hazardous materials are present or where hazardous activities may take place.
- The Supervisor/Sponsor will ensure the work is reviewed and that all procedures are complied with to ensure hazards are controlled or eliminated.
- The above named minor will be informed of the hazardous materials and activities associated with their project as outlined in Section 2, and will be trained appropriately prior to starting work.
- Proper supervision and appropriate safety precautions will be implemented at all times.

Parent/Guardian Name:

Signature:

Phone:

Date: