



## Subcontractor Job Safety Analysis (JSA)

This form is to be used to document review of the hazards and the methods used to mitigate those hazards. It is to be completed by the Host/Requestor/Project Manager and submitted to the ESH&A Representative for comment and approval, **prior to work commencement**.

Work Title: \_\_\_\_\_

Scope of Work (what, how long, etc.):  
\_\_\_\_\_

Contract Number: \_\_\_\_\_ Building/Area: \_\_\_\_\_

### **CONTRACTOR INFORMATION**

Contractor: \_\_\_\_\_

Project Manager: \_\_\_\_\_

Phone #: \_\_\_\_\_

Foreman/Safety Rep: \_\_\_\_\_

Phone #: \_\_\_\_\_

### **DESIGNATED COMPETENT PERSON**

Excavation: \_\_\_\_\_  
(29CFR:1926.650)

Scaffolding: \_\_\_\_\_  
(29CFR:1926.451)

Confined Space: \_\_\_\_\_  
(29CFR:1926.21)

Hoisting/Rigging: \_\_\_\_\_  
(29CFR: 1926.550)

Powered Industrial Vehicles: \_\_\_\_\_  
(29 CFR: 1926.600)

### **AMES LABORATORY (ESH&A Use Only)**

Host/Requestor/Project Manager:  
\_\_\_\_\_

Phone: \_\_\_\_\_

ESHA Representative: \_\_\_\_\_

Phone: \_\_\_\_\_

### **Ames Lab Approvals**

*(Use Form 10200.138, Plan Review Guide as necessary-for complex or large projects –graded approach)*

\_\_\_\_ Approved - Exempt from Written Safety Plan and Safety Information Questionnaire - (Justify in Comments Area)

\_\_\_\_ Approved

\_\_\_\_ Not Approved - - Resubmit

\_\_\_\_ Approved As Noted

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ESH&A Representative

Date

**Proceed to next page.**

## Subcontractor Hazard Identification Checklist

Check all of the following that are applicable to/or involved with the work. This checklist will be utilized by ESH&A in review of the work.

### A. Chemical and Biological Concerns

1.  Mercury or mercury compounds (e.g. dimethyl mercury).
2.  Research involving human subjects or animal studies.
3.  Chemicals requiring personnel medical monitoring (see [Federally Regulated Hazards](#)).
4.  Hazardous or toxic chemicals (see [Ames Lab EPA List](#)).
5.  Extremely hazardous substances
6.  Flammable chemicals (flashpoint < 100°F) in quantities greater than 4 liters (1 gallon) in one room.
7.  Perchloric or picric acid, peroxide-formers (see [Peroxide Forming Chemicals](#)).
8.  Pyrophoric or explosive materials (see [Chemical Incompatibilities](#)).
9.  Activities that generate potentially hazardous ambient air concentrations of nanoscale and other particulates, mists, fumes, vapors, or asphyxiates.
10.  Generation of chemical, mixed, or radioactive waste (as defined by the Ames Laboratory Waste Management Program Manual).
11.  Generation of new waste streams, or a > 20% increase in an existing waste stream.
12.  Biological materials including human, plant or animal pathogens (see [Biohazardous Materials](#)).
13.  Suspected and/or confirmed carcinogens (see [Carcinogenic Substances](#)).
14.  Activities that involve the use of engineered nanoscale materials (< 100 nanometers).

### B. Radiation Concerns

1.  Radioactive materials, radiation sources.
2.  Lasers (excludes laser printers and pointers).
3.  Radio frequency (RF) or microwave generators (excluding personal microwave ovens) of greater than 10 watts average output power.
4.  Ultraviolet radiation, which could expose personnel (e.g. arc welding, inductively coupled plasma, UV reactors, xenon lamps, etc.).
5.  Generation of Radioactively contaminated waste as defined by the Ames Laboratory Waste Management Program Manual.
6.  X-ray generating devices.

### C. Electrical Concerns

1.  Work with exposed electrical wiring or parts with voltages greater than 50 volts.
2.  Work with stored energy systems (e.g. capacitor banks > 10 joules; station battery systems > 50 volts).
3.  Voltage systems of greater than 600 volts.
4.  Current systems of greater than 25 amps.

### D. Environmental Concerns

1.  Potential to release hazardous, radioactive materials or oil products (include oil filled equipment/containers with a capacity  $\geq$ 55 gallons) to the sanitary or storm sewers, soil.
2.  Potential for release of chemical, physical, radiological agents (Nanoscale and other particulates, fumes, mists, or vapors) to the air via hood or other exhaust system.
3.  Transportation of hazardous or radioactive materials, including laboratory-to-laboratory and on-site or off-site.

### E. Physical and Mechanical Concerns

1.  Fabrication of major (large mass or volume) equipment, structural supports.
2.  Work that is done in the proximity of floor openings or on elevated work platforms or scaffolds.
3.  Activities that require use of safety eyewear, respirators and/or other forms of personal protective equipment (PPE).
4.  Torch work, exposed source hot-work, or exposed heat sources (e.g. welding, soldering, arc welding, furnaces, etc.).
6.  Rotating parts or pinch points.
7.  Fluids or gases and pressure delivery systems, other than installed building utilities (> +/- 5 psig).
8.  Pressure vessels, vacuum vessels, and glass systems (> +/-5 psig).
9.  Use of hoists, cranes or rigging.
10.  Cryogenic systems (including thermal and/or oxygen deficiency hazards).
11.  Mechanical stored energy systems (e.g. flywheels, mechanical springs, etc.).
12.  Electromagnetic systems.

### F. Workplace Concerns

1.  Confined space (as defined by Ames Laboratory ESH&A Program Manual, Section 5.18).
2.  Activities that limit means of egress.
3.  Temperature or humidity extremes.
4.  Work which produces acute noise that interferes with normal conversation.
5.  Activities that involve tasks of prolonged repetitive motion.
6.  Activities that involve lifting/moving of 50 pounds, lifting from awkward positions, or pushing/pulling of heavy objects.
7.  Activities involving additional sub-contractors

### G. Other Concerns

Other: \_\_\_\_\_

Other: \_\_\_\_\_

Other: \_\_\_\_\_

**Hazard Management Statements must be completed for each hazard identified in the checklist (See next page for an example).**

## **SAMPLE MANAGEMENT STATEMENTS**

### **Tuck-pointing Job**

#### **A3 “Chemicals requiring personnel medical monitoring (see Federally Regulated Hazards)”.**

Mortar will be used for tuck pointing and a sealant used after the tuck pointing.

- Hazard Communication Training is Required
- Material Safety Data Sheets (MSDSs) will be provided to Ames Laboratory for approval.
- Chemicals will be handled in accordance with the manufactures instructions.
- Chemical gloves will be used when handling sealant.

#### **D3 “Transportation of hazardous or radioactive materials”**

- Although not considered hazardous, all waste generated will be removed from the site and disposed of by contractor.

#### **E3 “Work that requires the use of Personal Protective Equipment”**

Cutting of lumber for braces

- safety glasses will be used
- hearing protection will be required when using saws
- hard hats will be used when work is performed under scaffolding

#### **E2 “Work that is done in the proximity of floor openings or on elevated work platforms or scaffolding”**

Frame scaffolds will be used.

- Scaffolding must be initially and daily during project.
- A competent person must be on-site at all times scaffolding is being used.
- The erectors and dismantlers of scaffolding must be trained on how to do so properly.

#### **E9 “Use of hoists, cranes, or rigging.**

A truck crane will be used to stage equipment and materials on roof.

- A competent person must be on-site when loads are being lifted.
- Pedestrian foot traffic in the area of the lift must be prohibited. Use barricades and caution tape to divert pedestrians. Also post someone to prevent foot traffic beyond barricades and tape.