

US Site Specific Contractor EHS Requirements

Appendix C to EHMS Doc. 40405.0

Revision Date: 12 August 2011

Owner: Sandy Hackel

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1.0 Introduction / Purpose / SCOPE

This site-specific document does not replace the Contractor EHS Requirements document. The requirements in this document should be followed in addition to those stated in the Contractor EHS Requirements. This document defines site-specific responsibilities and provides site-specific requirements for planning and carrying out Contractor work at Avago Technologies US facilities. At sites where there is not an EHS department, please address questions and concerns to the Facility Manager.

The purpose of these requirements is to minimize or eliminate risk to personnel health & safety and to the environment. This document contains site-specific safety information regarding emergency response procedures for Contractors. This document identifies some, but not all, work practices and procedures that must be followed to minimize impact to personnel health & safety and to the environment while working at Avago Technologies Technologies.

All Contractors and Sub-Contractors performing work at Avago Technologies facilities are expected to comply with these requirements as well as all applicable local, state, and federal environmental, health, and safety regulations and work practices. Failure to abide by these requirements and applicable environmental, health, and safety regulations and work practices, may subject you or

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your firm to corrective action, which may result in disqualification for future consideration of work at Avago Technologies or termination of any contract agreements with Avago Technologies.

When attached to the Contractor / vendor agreement, this document and its appendixes become part of the contract terms. The Contractor must ensure that the requirements put forth in this document are met and that all Contractor personnel and Sub-Contractor personnel are trained in, and comply with all aspects of this document.

2.0 PROCEDURES

Web links to specific program information:

http://wps.avagotech.net/us/ehs/contractor_safety/contract_safety_procure_info.shtml

2.1 EMERGENCY PROCEDURES REPORTING AN EMERGENCY

- ◆ **DIAL 2222** to report an emergency – the emergency number should be posted on all phones
- ◆ If you are calling from a **cell phone**:
 - ◆ **Use local prefix plus - 2222**
- ◆ Give your name, the location of the emergency and the phone extension you are calling from
- ◆ Describe the nature of the emergency as you see it
- ◆ Wait for any questions from the operator
- ◆ Send someone to the nearest aisle or exit to direct the emergency response personnel to the scene

2.2 EVACUATION ROUTES AND EMERGENCY PROCEDURES

- 2.2.1 Fire evacuation routes are posted at each of the exit doors or in various locations around each site. Contractors must become familiar with these routes and, when evacuated outside, **MUST** stay at least 50 feet from the building at designated gathering areas. Do not re-enter the building until an “all-clear” has been declared and you are directed to re-enter by Security personnel.
- 2.2.2 When a medical emergency occurs, the Contractor is responsible for first aid, however our Site medical team will respond to emergency situations. Avago Technologies will not provide care for minor, chronic or self-limiting problems. For emergencies call the emergency number and report the incident. Send a person to the nearest aisle or exit to direct emergency personnel to the location.
- 2.2.3 In the event of a fire immediately dial the emergency number from a safe distance and report the incident. If the fire requires immediate evacuation, leave the

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building through the nearest safe exit and pull the fire alarm. If the fire alarm sounds, all occupants must immediately exit the building.

2.2.4 If a hazardous material or chemical is spilled, immediately evacuate the area and dial the emergency number to report the incident. Do not attempt to clean up the spill unless instructed to do so, do not attempt to re-enter the area until it is determined to be safe.

2.2.5 Contractors should note that Avago Technologies has organized and trained emergency teams that respond to medical, fire, chemical, and natural disaster type incidents. Also be aware that Avago Technologies has site-specific Emergency Action Plans that give more detail on response to specific events (i.e. earthquake, tornado). Contact your Avago Technologies Project Manager for access to this information.

2.3 SMOKING AREAS

Avago Technologies health and safety objective is to reduce, to the lowest level feasible, exposure to all recognized carcinogens. Environmental tobacco smoke (ETS) has been identified as a carcinogen. Therefore, it is the site(s) goal to eliminate the possible health risk or discomfort from environmental tobacco smoke wherever they conduct their operations. This policy applies to all Avago Technologies employees, contractors, vendors, customers and visitors while on the Avago Technologies site.

- Smoking is not permitted inside any Avago Technologies owned or leased building
- Smoking is only permitted within outdoor locations that are clearly identified as a "Designated Smoking Area"
- Smoking in personal vehicles will be permitted and considered as a "Designated Smoking Area"
- Smoking in company vehicles is not permitted
- Smoking next to or simply near a "Designated Smoking Area" is not permitted
- Smoking in front of building entrances, common paths of travel, building ventilation intakes, or near hazardous/combustible materials is not permitted
- Smokers are reminded to keep the outside smoking areas clean and use the ashtrays provided

Those employees and guests who smoke should do so in a manner consistent with all aspects of the site smoking policy. We recognize every individual's right to exercise their free agency, but to do so with respect of others in mind. Please be aware of these smoking restrictions throughout the entire site(s) and help us provide a pleasant, healthy environment for all.

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2.4 AREA SPECIFIC CLEANROOM PROTOCOL

Each fabrication area has specific cleanroom protocol that must be followed to minimize contamination. See your Avago Technologies Project Manager for specific training requirements.

2.5 NEW EQUIPMENT PURCHASE / LEASE / USE ON SITE

All capital equipment purchased for installation at Avago Technologies sites must go through the New Equipment Purchase process requiring EHS or Facility Manager approval. The Contract / Project manager or other Avago Technologies requisitioner is responsible for following this process. When a Contractor brings equipment onto an Avago Technologies site that poses facility or environmental and/or safety concerns, the equipment must be reviewed using the criteria set forth in the site's New Equipment Purchase process. This can be coordinated through the Avago Technologies Project manager.

2.6 HAZARD COMMUNICATION

OSHA's Hazard Communication Standard requires information exchange on multi-employer sites. Avago Technologies must provide appropriate Hazard Communication information to contract companies that have employees working on site to ensure contract employees' "right to know" and contract companies working on Avago Technologies sites must provide appropriate Hazard Communication information to Avago Technologies to ensure Avago Technologies employees' "right to know".

2.6.1 Avago Technologies' Hazard Communication Information

- * Material Safety Data Sheets: MSDSs for all chemicals Avago Technologies uses and stores on site are available 24 hours/day, 7 days a week to contract employees.
 - * MSDSs can be obtained electronically from local web sites
 - * MSDSs can be obtained in hard copy from the Facility Manager or US EHS
- * Written Hazard Communication Program: Avago Technologies' written Hazard Communication program can be accessed through the project manager (contact US EHS)
- * Labeling: Avago Technologies' information on labeling can be accessed through the project manager (contact US EHS)
- * Contractor must work with Avago Technologies Project Management and Facility Manager or EHS staff to identify and share hazard communication information applicable to the Contractor activity and to pre-plan appropriate controls and employee communication plans

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2.6.2 Avago Technologies Requirements for Contractor Hazard Communication Information

Contract companies must disclose information regarding contractor hazardous substances used and/or stored on Avago Technologies property to Avago Technologies and Avago Technologies employees through the following means:

Initial Submission of Hazard Communication Information

- 1) Contractor identifies all contractor chemicals to be used or stored by the contractor on Avago Technologies property
- 2) Contractor obtains updated and legible MSDSs for all chemicals
- 3) Contractor completes a "Contractor Chemical Use Form" for each chemical and submits it, along with a copy of an up-to-date, legible MSDS for each chemical, to the project manager
- 4) Project manager submits form(s) and MSDS(s) to Avago Technologies Facility Manager or EHS
- 5) Avago Technologies Facility Manager or EHS reviews the individual chemicals and approves/denies permission to bring the chemicals on Avago Technologies property. Avago Technologies Facility Manager or EHS informs the project manager if the chemicals are approved or denied.
- 6) If denied, the chemical must not be brought onto Avago Technologies property
- 7) If approved, Avago Technologies Facility Manager or EHS will return a copy of completed "Contractor Chemical Use Form(s)" and MSDS(s) to the project manager
- 8) The contractor lists all chemicals on an organized chemical inventory (alphabetical listing by name of product/chemical). The chemical inventory shall include the name of the product/chemical (as it appears on the MSDS and label) and the manufacturer of chemical.
- 9) The contractor will assure the chemical inventory and MSDSs are available to Avago Technologies employees. A convenient location is where the site's MSDSs are located.
 - 9.1 If the information is unacceptable, Facility Manager or EHS will inform the project manager what is unacceptable and the contractor will be required to correct any discrepancies/issues in a timely manner.

Routine Maintenance of Hazard Communication Information

The contractor must maintain/update the chemical inventory and MSDSs whenever changes are made.

Additional Hazard Communication Information

1. The contractor is required to ensure all chemical containers are properly labeled in compliance with all regulations. The contractor must provide information on labeling practices to Avago Technologies upon request.

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2. The contractor must provide Avago Technologies its written Hazard Communication Program upon request.

The contractor's effort and success in properly maintaining this Hazard Communication information and complying with these expectations will be factored into the contract review.

2.7 ASBESTOS CONTAINING BUILDING MATERIAL INFORMATION

A list of all asbestos containing building materials located at the Avago Technologies site can be obtained from your Avago Technologies Project Manager. Activities that disturb asbestos-containing materials must follow strict EPA requirements.

2.8 DECONTAMINATION PROCEDURES

Contractors must contact the Avago Technologies Project Manager and determine the correct procedure to follow for any situation involving the need to decontaminate tools, equipment or building materials.

2.9 CONSTRUCTION MATERIAL DISPOSAL PROCEDURES

Prior to the Contractor performing any services, the contractor must identify the waste and determine waste volumes that will be generated. The Contractor, Avago Technologies Project Manager and EHS or Facility Representative will consult with each other prior to storing any waste materials on Avago Technologies premises.

Typically, the Contractor is responsible for promptly removing all excess and/or waste materials of trade from the site, including proper disposal of waste materials. Under specific circumstances, Avago Technologies may manage excess and/or waste materials of trade generated by the Contractor (e.g. if the project generates waste materials that Avago Technologies owns). Prior to any project generating excess and/or waste materials of trade, the Contractor, Avago Technologies Project Manager and Facility or EHS Representative will determine who is responsible for excess and/or waste material storage and disposal. Contact your Avago Technologies Project manager for specific instructions.

The Contractor and Contractor personnel are required to sort, separate, and recycle recyclable materials while performing work on the Avago Technologies site. The Contractor and the Contractor personnel will adhere to the following:

- **No hazardous wastes will be placed into any trash receptacle or compactor on Avago Technologies sites**
- **All chemical containers must be empty before placing them in any trash receptacle (Empty is defined as having no liquids, pastes, or large amounts of residue)**

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remaining in the container. If not empty, chemical container may be required to be disposed of as hazardous waste.)

- The Contractor must remove chemical containers brought on site by the Contractor

2.10 CONFINED SPACE INVENTORY & HAZARD EVALUATION INFORMATION

There are designated permit required and non-permit required confined spaces on this site. Specific Confined Space Inventories and hazard evaluations are available. Hazard evaluations DO NOT take into account the type of work a contractor may perform, potentially changing the hazards of the confined space. A complete hazard evaluation MUST be conducted by the contractor prior to entry. Contractors may request the inventory and associated hazard evaluation from the Avago Technologies Project Manager.

2.11 FIRE SYSTEM WORK PROCEDURES

Work on fire protection systems that requires the system to be impaired must follow site-specific procedures for fire system impairment. The Avago Technologies Project Manager must be made aware of any situation where fire system work will take place.

Contractor personnel shall never operate any switch or valve used to control building services, processes or equipment unless authorized by the Avago Technologies Project Manager.

2.12 HOT WORK PERMIT PROCEDURES

A Hot Work Permit is required for any temporary operation involving open flame, heat, or spark production. This includes, but is not limited to brazing, cutting, grinding, soldering, pipes thawing, welding, and torch-applied roofing.

- 1) Submit a Hot Work Permit to the Avago Technologies Project Manager for all operations involving open flame.
- 2) Follow safe practices for the use and handling of cutting and welding equipment.
- 3) Comply with the requirements of this program and OSHA regulations, 1910.252 Subpart Q.
- 4) Institute the proper precautions when neither the work nor the combustible materials can be removed.

2.13 CRANE / HELICOPTER LIFT PERMIT PROCEDURES

Both helicopter and crane lift load shift or drops can potentially have serious consequences.

Therefore all contractors must conform to the following requirements:

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- 1) Closely review and control the helicopter flight path (or crane location and crane swing), load pick and put locations to minimize the area that will be impacted.
 - 2) Generate a map indicating helicopter path (or crane location and crane swing), load pick and put locations, approximate load weights and dimensions. Attach map information to the crane permit and submit to Avago Technologies Project Manager and Facility Manager or EHS.
 - 3) Always allow a safety factor of additional horizontal clearance (at least 25' in all directions) beyond: the pick and put sites of the load(s), the crane location, and the projected path of the load. Helicopter lifts may require partial or full evacuation of an affected building. Consult Avago Technologies Project Manager and Facility Manager or EHS to review your clearance plan.
 - 4) Work with Avago Technologies Project Manager and Facility Manager or EHS to determine a "Lift" Zone [that may involve multiple floors within a building based on density and size of load(s)] that should be barricaded.
 - 5) Coordinate early pre-notification of potential "lift" zone occupants of impending local evacuation. *
 - 6) If there is a limited building evacuation, Monitors must be posted on each floor in the area immediately outside of the barricaded "Lift" zones to keep personnel out during the actual lifts.
 - 7) All doors or similar portals that lead directly into "Lift" zones must be barricaded and posted.
 - 8) All nonessential personnel must remain outside of the lift zones while lifts are in progress.
 - 9) All essential personnel in lift zones must wear hardhats.
 - 10) P.A. announcements* and sweeps of the area is advised just prior to the lift.
 - 11) Out of consideration, remember to notify the "evacuated" personnel immediately after the lift has been completed to minimize work interruption. *
 - 12) Immediately after the lifts have been concluded, remove all related postings and barricades.
- *These steps can be omitted if the prospective Lift zones are: not normally occupied or if the lift is conducted during off hours (e.g. plant shutdowns).

2.14 POWDER ACTUATED TOOLS

- 1) Prior to the start of any project, all Project Managers must determine if the use of powder-actuated fasteners is anticipated. If the answer is yes, remind Contractor of their obligations (including pass downs to their subs and subs of subs) regarding their use.
- 2) Confirm that all operators of such devices have had documented certification on their operation.
- 3) All devices must be inspected daily for normal operation and all malfunctioning guns are to be red tagged until they are repaired.
- 4) All fasteners are only to be loaded immediately prior to the beginning of a project and are not to be left unattended unless they are rendered in a safe state (i.e. no charge or projectile in the gun).
- 5) Fastener usage should generally be restricted to floor anchoring of hardware or anchoring to cinder block walls (of good integrity). Otherwise, there should be a review of the project by Avago Technologies Project Manager and Facility Manager or EHS prior to start-up.
- 6) Pre-notification of personnel in the adjacent areas is recommended if the project is to take place in a quiet occupied area (so that they won't be unduly alarmed by the sharp reports). An alternative is to schedule the project in noise sensitive areas during an off shift.

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2.15 WORKING ALONE

Working alone is defined as when an employee can neither be seen nor heard by another individual. Employees should not work alone in any potentially hazardous area where a person could receive a harmful exposure to a hazardous environment (i.e. storage, transportation, dispensing, and use of hazardous chemicals in open containers or systems, servicing or changing hazardous gas cylinders, live electrical work where the nature of the work presents a serious electrical shock hazard, elevated work platforms, to name some examples). Please discuss any potentially hazardous work situations with your Avago Technologies Project Manager and establish safe work procedures for these cases.

2.16 SECURITY

- Contractors should only access these sites for business purposes
- Contractors with full time presence on site are required to get a Contractor Photo I.D. and a Contractor Access Card for entrance to any portion of these sites. It is the responsibility of the Avago Technologies Project Manager to make these arrangements with Security and sign the authorization card.
- Contractors, Vendors and Visitors at these sites for a short-term project can be issued a photo ID and access card if the Avago Technologies Project Manager determines there is a business need. The access card and ID must be returned to security at the end of each work shift. Otherwise they can be put on the access list to check out access cards and Contractor Badges from Security.
- Contractors, Vendors and Visitors must obtain and wear proper identification badges in order to go unescorted on Avago Technologies property.

3.0 REFERENCES

- 3.1 Code of Federal Regulation, 29 CFR 1910, General Industry Safety Orders
- 3.2 Code of Federal Regulation, 29 CFR 1926, Construction Safety Orders
- 3.3 Applicable State or Country Specific Codes and Regulations