Emergencies

In case of a fire, accident, spill or any other emergency dial the appropriate site number listed below:

<table>
<thead>
<tr>
<th>Site</th>
<th>Internal Number</th>
<th>External Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVRP</td>
<td>4-3333</td>
<td>845-894-3333</td>
</tr>
<tr>
<td>Poughkeepsie</td>
<td>3-3333</td>
<td>845-433-3333</td>
</tr>
</tbody>
</table>

Issued October 2010

This edition replaces, and makes obsolete all other Contractor Guides that have been published for Hudson Valley Research Park (HVRP) and Poughkeepsie.

Due to extensive revisions in this edition, the "revision bars" have been omitted.
IBM Corporate Environmental Policy

IBM is committed to environmental affairs leadership in all its business activities. The following corporate policy objectives have been extracted from the corporate environmental policy (viewable at http://www.ibm.com/environment).

- Provide a safe and healthful workplace.
- Be an environmentally responsible neighbor.
- Conserve natural resources.
- Produce safe products that protect the environment.
- Use processes that protect the environment.
- Use energy responsibly.
- Assist in improving environmental protection and understanding.
- Assist with worldwide solutions to environmental problems.
- Meet or exceed all applicable government requirements.
- Strive to continually improve environmental management and performance.
- Conduct audits and self-assessments of compliance with this policy.

Every employee and every contractor on IBM premises is expected to follow the company's policies and report environmental, health, or safety concerns to IBM Management. Managers are expected to take prompt action.
IBM Corporate Policy 127
Responsibility for employee well-being and product safety states “...each of us, manager and employee alike, shares a personal responsibility...to provide a safe and healthful workplace for our employees.”

In order to support and implement the requirements of this policy, IBM has developed the Well-Being Management System (WBMS). The scope of the WBMS covers all those who work at the HVRP and Poughkeepsie sites, employees, contractors, and vendors. Everyone is expected to follow the policy and report any concerns to their management immediately.

Voluntary Protection Program (VPP)
The VPP STAR is a voluntary partnership with the U.S. Occupational Safety and Health Administration (OSHA). IBM at the HVRP and Poughkeepsie sites has gained approval into VPP as OSHA’s official recognition of the outstanding efforts of employers and employees, including contractors who have achieved exemplary occupational safety and health performance.
Contractor’s commitment to safety, safe work performance, maintaining safe work areas, safety training, and following safety procedures help contribute to maintaining a safe workplace at the IBM HVRP and Poughkeepsie VPP STAR sites.
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POUGHKEEPSIE SITE MAP
GENERAL INFORMATION

APPLICATION

1. This guide is intended for all contractors, subcontractors, tenants and vendors working at the following IBM locations: Hudson Valley Research Park (HVRP) and Poughkeepsie.

2. This guide does not contain all the OSHA and IBM safety, health, chemical, environmental and security requirements. Although not comprehensive, this guide does address those requirements that are of particular importance or may be overlooked.

3. IBM requires that contractors follow the requirements contained in this guide to ensure the protection of personnel and IBM property. If federal, state, or local requirements are more stringent, the more stringent requirements shall be applied.

   Note: These requirements are in no way intended to supersede the terms and conditions and attachments to any Agreement or Purchase Order between the contractor and IBM.

4. IBM requires that contractors comply with the site's No Solicitation Policy. "For Sale" signs, election posters, banners, etc. are not permissible, whether displayed in one's workspace or in one's vehicle.

5. Safety, health, environmental and security awareness are fundamental aspects of every activity and must never be compromised. Questions about the requirements in this guide or the safety of an operation or activity must be addressed to the contractor supervisor first and then to the IBM
6. The term **Contractor(s)** as used herein refers to the owner and/or employee of any business that is engaged to perform work on the IBM site. Examples of Contractors include, but are not limited to:

   - Business Partners
   - Cleaners
   - Consultants
   - Construction workers (e.g., Electricians, Plumbers, Carpenters, etc.)
   - Engineers/Architects
   - Manufacturers' service representatives
   - Programmers
   - Secretaries
   - Subcontractors
   - Suppliers
   - Technicians
   - Vendors

7. The term **IBM Technical Coordinator** (hereafter abbreviated as TC) means the individual responsible for maintaining technical liaison with the Contractor and for determining for IBM the adequacy, acceptability and fitness of the work supplied by the Contractor. The term "TC" may also be applied to the Contract Administrator, Designated IBM Representative or Project Coordinator.
COMPLIANCE

1. IBM will periodically check to determine if Contractors are following requirements contained in this guide.

2. Safety, health, chemical, environmental and security violations may result in the work being stopped until the violations are corrected. All costs associated with stopping the work because of violations will be charged to the responsible Contractor.

3. Failure to comply with federal, state and local requirements, the terms and conditions of the Contract, or the provisions listed in this guide may result in the removal of a particular Contractor employee, employees or contracting firm from the project or the approved Contractor list.

4. Contractors must:
   - Comply with the General Duty Clause in Section 5(a)(1) of the Occupational Safety and Health Act of 1970 which states: "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm to his employees."
   - Comply with applicable federal, state and local safety, health, chemical, and environmental regulations including, but not limited to, Occupational Safety and Health Administration (OSHA) 29 CFR 1910 - "Occupational Safety and Health Standards". The OSHA homepage
can be accessed at http://www.osha.gov, which contains information on OSHA standards, publications, training requirements, etc.

- Comply with OSHA 29 CFR 1926 - "Occupational Safety and Health Standards for the Construction Industry" when doing construction work.
  - Part 1926 shall take precedence when hazards are covered by both Part 1910 and Part 1926.
  - Part 1910 shall be followed for hazards not covered by Part 1926.

- Comply with national consensus or industry standards including, but not limited to, American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), and National Fire Protection Association (NFPA).

- Comply with applicable IBM standards, specifications, policies and procedures, including the safety, health, chemical, environmental and security requirements contained in this guide.

- Be responsible for any legal liability arising from or in connection with the failure of their employees, agents and subcontractors to act in compliance with all applicable federal, state, local and IBM requirements.

- Initiate, document and maintain programs to protect their employees from hazards through procedures, work practices, regular inspections of the work area, materials, and equipment.
- Instruct employees in the recognition and avoidance of unsafe conditions and in the regulations applicable to their work environment to control or eliminate any hazards or other exposure to illness or injury.
- Provide employees with specific training regarding the Contractor Guide, both initially and annually thereafter, and maintain training record dates.
- Maintain records of their employee training, including the Contractor Guide, and provide documentation of the training when requested by IBM.
- Provide appropriate personal protective equipment (PPE) that complies with applicable OSHA and ANSI standards.
- Provide tools and equipment necessary for safe work performance.
- Use all equipment and tools according to the manufacturer's instructions, labeling, and/or listing.
- Provide all materials and equipment required to perform work, unless the contract documents specify otherwise.
- Be responsible for all their property (e.g., tools, equipment, material, etc.) while it is being used, transported or stored on the IBM site.
- Comply with all emergency alarms. All Contractor personnel must exit the building
immediately upon sounding of emergency alarms.

- Keep equipment in good condition to prevent environmental releases.

5. Contractor management must:
   - Supervise, direct and monitor the work of their employees, agents and subcontractors.
   - Ensure that employees, agents and subcontractors comply with both these safety requirements and those of their contract.
   - Ensure and document that employees have completed required training before they start work.
   - Ensure that all employees have read cover-to-cover and understand the Contractor Guide.
   - Ensure that employee skill levels match the requirements of the work.
   - Ensure that employees keep work areas free of safety, health or environmental hazards.
   - Conduct and document a hazard assessment of tasks to be performed in the work area to determine PPE requirements.
   - Ensure that employees use/wear PPE that is appropriate for the work being done.
   - Keep the TC fully advised of any work or conditions which may adversely affect the safety of personnel or impair IBM property.
   - Obtain the approval of the TC prior to closing or
obstructing any exit or exit path (aisles) from a building or area.

- Ensure all appropriate cautionary devices and/or barricades are in place at or within work areas at all times during work activity.

- Ensure effective traffic control methods and devices (e.g., flaggers, cones) are in place when applicable.

- Notify the TC immediately of any:
  - OSHA recordable or other serious Contractor or subcontractor injury/illness that occurs while at the IBM site.
  - Incidents involving damage to IBM property.
  - Incidents involving injury to IBM personnel, Contractors or all other non-IBM personnel on site.

- Submit a copy of an accident investigation report to the TC including corrective actions to prevent a recurrence. This should be done no later than three working days after the date of an incident.

- Prepare and maintain records and rates of occupational injuries and illnesses {Experience Modification Rate (Worker's Compensation) and OSHA recordable} and make available for submission to IBM upon request.

6. Contractor employees must:

- Obtain approval from the TC before starting any work on the IBM site.
• Follow all IBM emergency instructions.
• Maintain a safe and controlled work area.
• Comply with **CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)** and/or **ELECTRICAL SAFETY** sections of this guide when servicing or maintaining equipment.
• Not activate Emergency Power-off (EPO) buttons except in an emergency.
• Obey all posted signs.
• Obey New York State and IBM traffic regulations and posted speed limits while operating a motor vehicle on IBM property.
• Use/wear PPE that is appropriate for the work being done.
• Report imminent danger or hazardous conditions/acts to their supervisor and/or the TC, for immediate correction.
• Restrict their movement to traveling to and from areas of assigned work, canteen, cafeteria and rest room facilities.
• Not enter restricted areas without authorization and/or escort.
• Barricade work areas that expose non-associated personnel to hazards.
• Use ladders, step stools or access stairways to access items and work areas above their reach. Furniture and equipment must not be used in place of a ladder.
• Review any work activity that could create noise, dust, chemical vapors, spills or flying debris with the TC before starting the work.
• Obtain approval from the TC before using any IBM services or equipment.
• Ensure when working near office, laboratory, manufacturing or computer equipment to avoid:
  ▪ Damaging IBM products.
  ▪ Jarring the equipment.
  ▪ Touching any buttons or switches.
  ▪ Placing tools on or against the equipment.
  ▪ Using power receptacles on equipment, inside equipment or beneath raised floors (unless authorized to do so).
• Not exhibit inappropriate behavior, such as:
  ▪ Horseplay.
  ▪ Pointing compressed air guns, nail/staple guns, drills, etc. at people.
  ▪ Creating excessive noise (e.g., radios).
  ▪ Using abusive, profane, threatening or otherwise offensive language, including without limitation, the use of racially offensive or insensitive speech or sexually explicit speech.
  ▪ Riding pallet jacks or other walk-type material handling equipment not designed for such.
  ▪ Harassment of any kind.
- Displaying or exchanging sexually explicit materials.
- Not bring the following on the site:
  - Alcoholic beverages.
  - Narcotics or controlled substances.
  - Firearms, weapons and/or ammunition.
  - Explosives (unless approved by IBM).

**PERMITS/APPROVALS/ACCEPTANCES**

1. Contractors must obtain all necessary permits, licenses, certifications, approvals, and/or acceptances required by federal, state and local governing agencies before performing any work on the IBM site.

2. Some work projects in certain areas, may require IBM-issued permits, approvals, certifications and/or acceptances. Examples include, but are not limited to work projects involving the following:
   - Airlifting
   - Asbestos work
   - Blasting or explosives use
   - Building entry
   - Camera use (including use of the camera/video feature on phones)
   - Chemical use and/or storage
   - Clean room work
   - Computer room work
   - Confined space entry
   - Construction storage/staging areas for materials
and/or equipment on-site
- Construction trailer (e.g., office, storage) placement and use on-site
- Crane or hoist use
- Dewatering
- Discharge into drains
- Disposal of construction debris/waste material
- Diving
- Electrical work on live equipment
- Electric Power Shutdown
- Emergency equipment work
- Environmental
- Excavation work
- Exhaust system work
- Explosive (powder) actuated fastening tool use
- Fire alarm system work
- Fire Prevention
- Gas cylinder use
- Gasoline/Fuel tanks
- Hazardous Energy
- Heater, Temporary (ex. Salamanders)
- Hot Work or Open Flame (cutting, welding, soldering or burning)
- Internal combustion engine use indoors
- Laser or X-ray use (apply at least one week prior)
- Lead disturbance
- Lockout/Tagout application
- Material Handling
- Mobile crane use
- Mobile work platform use
- Noise - working in high noise areas and creating excessive noise
- Openings (floor/wall/roof)
- Personal Protective Equipment (PPE)
- Pneumatic tool use
- Powered industrial vehicle use
- Process Safety Management Permit area work
- Radiation source and equipment use
- Radiographic testing
- Raised floor work
- Recording device use
- Relocation of emergency equipment
- Roof work/access
- Scaffolding use
- Spill cleanup
- Sprinkler system impairment
- Utilities use
- Waste disposal
- Water source shutoff

3. Contractors must contact the TC to obtain IBM-issued permits, approvals, certifications and/or acceptances.

4. The TC will work with the appropriate IBM personnel to obtain the required IBM-issued permits, approvals, certifications, and/or acceptances.
POTENTIALLY HAZARDOUS AREAS

1. Certain areas and operations at IBM sites may have potential hazards associated with them. Contractors must take precaution when working in, on or around such areas. These areas and operations include, but are not limited to:
   - Chemical labs
   - Confined spaces (e.g., tanks, manholes, vaults, pits, etc.)
   - Electrical circuits/equipment
   - High noise level areas
   - High voltage electrical areas
   - Ionizing and non-ionizing radiation labs and areas
   - Laser labs and areas
   - Mechanical equipment rooms
   - Roofs
   - Service cores
   - Storage, dispensing and process areas for chemicals and gases

2. Contractors must review all projects to determine the hazards associated with the work and the area.

3. At the Contractor's request, the TC will provide information regarding potential IBM-generated hazards.

4. Contractors must provide the equipment, procedures and training necessary for their employees to perform the work safely (e.g., PPE requirements, working alone guidelines, etc.).
5. Contractors must honor all warning, danger, and caution signs, signals and devices (e.g., laser signs and lights, radiation signs, protective eye wear signs, etc.) unless authorized to do otherwise by their management or the TC.

   **Note:** The only permissible reason for such authorization is that the warning device has been proven to be defective.

### SPECIFIC WORK SUBJECTS

#### AIR LIFTS

1. Helicopter and all other lifts must be made in conformance with federal, state and local requirements including, but not limited to, OSHA 29 CFR 1910.183, 1926.551 and the Federal Aviation Administration (FAA) regulations and safety standards.

2. Any proposed use of helicopters must be approved by and coordinated with the TC.

3. The location Safety and Health representative must be notified by the TC before commencing any lifting operations.

4. Personnel must be evacuated from areas of possible danger during air lifts.

5. Wire ropes, chains, ropes, slings and other rigging equipment must be inspected before use and as necessary during use to ensure their safety. Defective equipment must be removed from service immediately.
ASBESTOS


2. Contractors must not remove or disturb asbestos, or material suspected of containing asbestos, without the approval of, and coordination with, the TC.

3. Materials that may contain asbestos include, but are not limited to:
   - Adhesives, mastics and glues
   - Ceiling areas
   - Flooring
   - Sprayed on fireproofing
   - Valve packing and gaskets
   - Thermal system insulation (e.g., pipe, duct and boiler insulation)
   - Transite panels (e.g., lab hoods)
   - Roofing materials

4. In the event of damage or disturbance to asbestos or to material(s) suspected of containing asbestos, Contractors must:
   - Stop the work immediately
• Report the problem to the TC
• Isolate the area

5. Contractors must assume all thermal system insulation to be asbestos-containing unless advised otherwise by the TC.

6. Floor tiles may contain asbestos. Contractors must not remove, disturb or damage any floor tiles without approval from the TC.

7. Contractors must not disturb or work above drop ceilings where sprayed-on fireproofing is present without the authorization of the TC.

8. Contractors must assure that only those persons holding valid asbestos handling certificates issued by NYSDOL, appropriate to the work they perform, are allowed to disturb, handle, remove or dispose of asbestos or material containing asbestos.

9. Contractors must ensure that building occupant notifications are removed promptly after the completion of asbestos projects.

10. Only personnel in possession of a valid restricted asbestos handler-allied trades certificate or other asbestos handling certificate issued by NYSDOL, appropriate to the work they perform, are permitted to access the plenum above the suspended ceiling in Building 330D-1 at HVRP.

BLASTING AND EXPLOSIVES

1. Blasting and the use of explosives must be in compliance with federal, state and local requirements including, but not limited to, OSHA 29 CFR 1926,
Subpart U - "Blasting and Use of Explosives".

2. Any proposed use of explosives on IBM sites must be approved by and coordinated with the TC.

3. The TC will notify Emergency Services, Safety and Security two days prior to any blasting operation.

4. Immediately, prior to the first blast, the blaster must obtain approval from the TC, Emergency Services, Safety and Security.

5. The blaster must hold a current New York State license and carry same while on the site.

6. Blasting equipment must be stored in an approved magazine and in an approved location while on the site.

7. All explosives and caps must be removed from the site at the end of each workday.

For information about the use of explosive (powder) actuated fastening tools, refer to the **TOOLS (HAND AND POWER)** section of this guide.

**CHEMICALS**

1. Chemicals include, but are not limited to:
   - acids, bases
   - adhesives, glues, cements, epoxies, resins, caulks
   - caustics
   - cleaners, bleaches, detergents
   - combustible materials
   - compressed and liquefied gas
   - core solder (acid, resin)
- flammable materials
- floor coatings
- fluxes
- gasoline, fuel oils
- greases, oils, lubricants
- insulation material
- paints, dyes, pigments, fillers
- pesticides, herbicides
- refrigerants
- solvents, thinners, retarders

2. Contractors must comply with federal, state, local and IBM requirements regarding hazard communication including, but not limited to, OSHA 29 CFR 1910.1200, 1926.59 and the following:

- Persons working in an area where they may be exposed to chemicals must be informed about the potential hazards.
- Whenever appropriate, the TC will arrange for the Contractor to be informed of any potential hazards to the Contractor's employees because of IBM processes in the immediate area surrounding a work site.
- Any questions regarding additional hazards to which Contractors may be exposed should be discussed with the TC.
- Material Safety Data Sheets (MSDS) for materials used in IBM processes or by other Contractors are available through the TC.
Contractor supervisors are responsible for providing this information to their employees.

- Contractor supervisors are also responsible for providing information on Contractor-supplied chemicals to their employees.
- In cases where Contractors of different trades are working in the same area, information about the potential hazards of materials used by other Contractors is available from the TC.
- Contractors may request additional information (e.g., MSDS) from the TC if they believe that their employees have any potential chemical exposure.

3. Contractors must make every effort possible to use nonhazardous materials. IBM may require the Contractor to submit documentation stating that no other less hazardous chemicals can be used to accomplish the project. IBM reserves the right to prohibit the use of certain materials.

4. Contractors using chemicals at IBM facilities must comply with the following requirements:
   - Only specifically approved chemicals can be used and all restrictions must be followed.
   - Each site maintains a list of generally approved Contractor chemicals with the restrictions noted for use at that site. If the chemical to be used is NOT on the site's Contractor chemical approved list or all of the listed restrictions for that chemical will NOT be adhered to, a specific chemical authorization request and approval is
required for each individual use and area of use.

- Prior to bringing a chemical for use or storage that is not on the approved list, onto any IBM site, the Contractor must present the current MSDS to the TC for review and approval in accordance with the site chemical procedure. The Contractor must have MSDSs readily available and it is recommended that documentation of the chemical approval (including any restrictions) also be readily available for the duration of the work activity. Note that any restrictions for use of the requested chemical must be passed on by the Contractor to all of their personnel using that chemical.

- A chemical may be on the list as "not approved" because it has been reviewed and found unacceptable.

- Contractors may be required to complete an IBM form on the chemicals used on a project (before starting and after finishing the project).

- When transferring chemicals from original containers to smaller or other alternate containers, the Contractor must ensure that the new container is appropriate for and compatible with the chemical, preventing any degradation of the container, leaks, or other hazards. Also, any transfer containers must be labeled with the identification of the contents and principle hazards. During transfer, bonding and/or grounding shall be used where exposure to ignition exists.
5. Contractor chemicals, including gas cylinders, are to be identified by the manufacturer's label or with the chemical name as it appears on the MSDS, and the appropriate hazard warning(s).

6. Contractors must follow the manufacturer's instructions and precautions (e.g., MSDS) and comply with all federal, state and local requirements when using chemicals (including pesticides and herbicides). Contractors are responsible for obtaining all necessary licenses and permits.

7. All work involving chemicals must be conducted in a manner that will minimize exposure to the environment and minimize health risks to personnel.

8. Contractors must follow the emergency medical procedures for the chemicals being used.

9. Contractors must supply and use PPE that is appropriate for the material being used and method of application/use.

10. Contractors working with or transporting chemicals must have received appropriate chemical safety and hygiene training through their employer.

11. Contractors must adhere to any IBM PPE requirements designated for the area in which they will be working in. For more information, refer to the PERSONAL PROTECTIVE EQUIPMENT section of this guide.

12. Before starting work that involves chemicals, Contractors must determine if eyewashes and/or showers are needed. If they are, Contractors must identify the nearest stations or supply a portable one.
13. Contractors who have eye or skin contact with a hazardous material must shout for assistance and immediately use the eyewash and/or shower while another person calls the site emergency number listed in the **EMERGENCIES AND ACCIDENTS** section of this guide.

14. Contractors must maintain adequate ventilation when paints, solvents or volatile chemicals are used. Contractors must provide temporary, supplemental exhaust, as required, to control nuisance odors and protect personnel in the work area and in adjacent areas. Of particular concern with volatile chemicals is when they are used on the roof as they may lead to odors, concerns and subsequent disruptions to IBM work processes. Contractors must ensure that all chemical authorizations, appropriate work area reviews, and requirements (such as isolation of HVAC air intakes) have been completed.

15. Chemicals must be kept in closed containers when not actually being used.

16. Contractor chemicals or wastes must not be stored with IBM's chemicals or wastes without the **approval** of the TC via the chemical authorization request.

17. Flammable and combustible liquids must be handled/stored in approved containers and must not be exposed to excessive heat or ignition sources. Flammable liquids must be removed from the IBM site at the end of the work shift unless previous arrangements have been made with the TC.

18. Flammable liquids or gases must not be used, placed
or stored with combustible materials, such as wood, paper, etc. at any time without approval of the TC.

19. Overnight storage of chemicals, chemical waste or chemically contaminated materials is not allowed on IBM premises without specific approval by the TC.

20. Incompatible chemicals (e.g., oxidizers and flammables) must never be stored together.

21. To prevent spontaneous combustion, wiping cloths contaminated with combustible or flammable materials must be placed in an approved waste can when not in use. Contractors must contact the TC to determine if waste cans are to be provided by the Contractor or furnished by IBM.

22. Contractors are not permitted to handle or relocate any hazardous IBM material and/or chemicals prior to or while performing any contract work. Contractors must notify the TC to have the item(s) relocated.

23. Contractors must not work on, dismantle, or move any chemical pipes, equipment, exhaust hoods and/or duct work, tanks, etc. without approval of the TC.

24. Contractors must ensure and confirm with the TC that chemical pipes, equipment, exhaust hoods and/or duct work, tanks, etc. have been decontaminated, flushed and properly isolated before any work is started. EXCEPTION: Contractors who have been contracted specifically to repair, handle, and/or remove chemicals or contaminated equipment.

25. Chemical piping systems with hazardous chemicals or piping systems that contain a physical hazard (e.g.,
high temperature, high pressure) should have capped ends after a dead ended valve to prevent leakage.

26. Chemicals must be properly transported, stored, handled and contained to prevent spills, leakage or release to the environment.

27. When the work is finished, the Contractor must remove any Contractor-owned chemicals from the site.

**Environmental**

1. Contractors must not spill, discharge, or release any hazardous material or chemical upon or from the IBM property. A release is defined as any unplanned release, leaking, pumping, pouring, emitting, dumping, discharging, emptying, or disposing of a hazardous material or chemical (including wastewater or chemically treated water) from a primary containment.

2. Contractor equipment used on IBM properties must be properly maintained and is subject to inspection by the TC. If equipment is found to be leaking, it must immediately be contained, stopped and repaired (on site or off site at the discretion of the TC). All associated costs including cleanup will be the sole responsibility of the Contractor.

3. Unreported spills, discharges and releases are a violation of both IBM internal requirements and federal, state and local laws. Contractors working on the IBM site must be aware of IBM's spill reporting requirements:
   - If a chemical or unknown liquid is spilled,
discharged, or released on IBM property, the Contractor must immediately call the site emergency number listed in the EMERGENCIES AND ACCIDENTS section of this guide.

- Contractors must remain on the site, at a safe distance, until released by the Emergency Response Incident Commander.

4. When a spill, discharge or release is directly attributable to a Contractor, their subcontractor or supplier, the Contractor must provide any assistance required to identify the cause of the release and to clean up the release. However, Contractors must not begin cleanup until authorized to do so by the Emergency Response Incident Commander.

5. Any chemical spill, discharge, or release on IBM property caused by a Contractor, must be cleaned to IBM's satisfaction. IBM may elect to arrange for cleanup by an Environmental Response/Cleaning Contractor. All associated cleanup costs are the responsibility of the responsible Contractor.

Waste Disposal - {See WASTE DISPOSAL}

Process Safety Management (PSM) and Risk Management Planning (RMP)

2. Any work on bulk chemical or hazardous gas storage and delivery systems, including pipelines must be **approved** by and coordinated with the TC.

**Note:** At the Poughkeepsie site, work on certain chemical and gas storage and delivery systems requires a **permit** from the Safety Department.

At the Hudson Valley Research Park, work on covered hydrogen and nitrogen trifluoride storage and delivery systems requires an IBM PSM card issued by Site Gas Engineering & Operations (D/01EA). Work on covered virgin and waste solvent storage and delivery systems (i.e., B/303) requires a PSM card issued by Environmental Engineering (D/9MXA). Contractor management must provide appropriate documentation to the TC to show compliance with PSM training prior to being issued a card. Cards are valid for one year.

3. Contractor management must ensure compliance with the OSHA PSM requirements including, but not limited to, documenting appropriate employee training, hazard awareness and safe work practices.

4. Contractor employees must comply with OSHA PSM and EPA RMP requirements when performing maintenance or repair, major renovation or specialty work on, or adjacent to, a covered process. In addition, Contractors should be familiar with specific IBM PSM and RMP procedures, particularly emergency procedures.
IBM Chemical Labels

1. The IBM Chemical Labeling program identifies IBM's chemicals and provides information concerning the hazards involved with the chemical. If an IBM label is not present, Contractors must refer to the manufacturer's label. Specific information regarding the chemical hazards can be found in the MSDS. Further questions about the contents and/or hazards of the contents of a container must be referred to the TC.

2. IBM chemical labels have the following features:
   - Each category of chemical has a color associated with it. These colors are used to identify the storage category. Chemicals with different color labels are generally segregated during storage and use.
   - The chemical label color code is:
     BLUE - Poisons
     RED - Flammables and Pyrophorics
     GREEN - Nonflammable Compressed Gases
     YELLOW - Oxidizers and Highly Reactive Chemicals
     WHITE - Corrosives or High Contact Hazard Chemicals (Acids)
     GREY - Corrosives or High Contact Hazard Chemicals (Caustic)
     ORANGE - General Storage
   - IBM chemical labels may also contain hazard information by category and severity of hazard,
and hazard amplification statements (e.g., fire, first aid, storage statements, etc.):

<table>
<thead>
<tr>
<th>Category</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0 = no hazard</td>
</tr>
<tr>
<td>Flammability</td>
<td>1 = slight hazard</td>
</tr>
<tr>
<td>Reactivity</td>
<td>2 = moderate hazard</td>
</tr>
<tr>
<td>Contact</td>
<td>3 = high hazard</td>
</tr>
<tr>
<td></td>
<td>4 = extreme hazard</td>
</tr>
</tbody>
</table>

- The lower part of the label describes the hazard, precautions, first aid, fire, and storage information.

3. IBM chemical labels are generally affixed to process equipment, tanks, etc. to designate contents and hazards not otherwise identified.

4. For chemicals in containers with a manufacturer's label identifying contents and hazards, a colored dot, complying with the label color code above or an IBM label may be used to identify proper chemical storage category.

5. For containers too small for IBM chemical labels, the chemical name and hazard warning(s) must be identified. A colored dot may also be used to identify storage category.

6. Consumer commodities and chemical containers used in laboratories may not have colored labels or dots.

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**CLEAN ROOM AREAS**

1. Clean room areas have restrictions on the generation of dust, dirt, particulate, chemical vapors and adverse temperature or humidity.

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2. Contractors must obtain approval from the TC and comply with established clean room requirements (e.g., special clothing, special work practices, tool/equipment restrictions, etc.) before entering any clean room area.

3. IBM will provide the special clothing that Contractors must wear in clean room areas.

4. Contractors must enter and exit clean room areas only through authorized doorways.

5. No paper, food, beverages or wooden ladders are allowed in clean room areas.

COMPRESSED AIR/GAS
1. Compressed air/gas must not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and PPE.

2. Compressed air/gas must not be used to clean dust from an individual's clothes or body, nor shall the nozzle be pointed at people.

3. Proper pressure control hardware, proper Compressed Gas Association (CGA) fittings and properly rated delivery lines must be used at all times.

COMPRESSED GAS CYLINDERS
1. Contractors must obtain approval from the TC before bringing any compressed gas cylinders onto the IBM site. Contractors must follow all use restrictions associated with that approval.

2. Compressed gas cylinders must be legibly marked (that is, stenciled, stamped or tagged), according to
the current ANSI standards, with the name of the material contained.

3. The Contractor's company name must be identified on any cylinder that is not removed from the site at the end of the work shift.

4. The proper Compressed Gas Association (CGA) fitting must be used. Adapters are not permitted.

5. Gas cylinders that are damaged or contain a buildup of scale or rust must not be brought on site.

6. Hose lines must be properly rated, regularly inspected and tested for leaks.

7. If a leak develops in a cylinder, immediately clear affected people from the area and call the site emergency number listed in the EMERGENCIES AND ACCIDENTS section of this guide.

8. Contractors working with or transporting compressed gases must have appropriate safety training in the use and handling of compressed gases and cylinders through their employer.

9. When transporting cylinders, Contractors must:
   - Install valve protection caps.
   - Secure to a suitable hand truck or cart.
   - Never carry by the bottle valve, regulator or protective cap.
   - Never roll or drag - use an approved cart.
   - Never drop or allow to strike other cylinders or surfaces.
   - Only use the freight elevators.
• Either cradle or have two persons carry the cylinder when transporting to the roof, basement, or between floors (if not on a freight elevator).

10. Ensure that all compressed gas cylinders, whether in use, in transit, or in storage, are fastened securely in an upright position by a chain, suitable strap, or a rigid retaining bar or structure. Individual gas cylinders must be secured in an upright position by a chain, suitable strap, or by a rigid retaining bar. In cases where more than one cylinder is to be stored, the cylinders must be installed in an upright position in a cage or rack constructed to protect the cylinders from falling. The cage or rack must be capable of preventing movement on three sides. The open side must have a removable restraint(s), such as a chain, suitable strap or rigid retaining bar that can be adjusted to prevent cylinders from falling. In all cases the cylinders must be secured to prevent them not only from falling, but also from sliding out from under the restraints.

11. Valve protective caps must always be installed on stored cylinders.

12. Cylinder valves must be closed when not in use and at the end of the day's work. Torch valves must not be relied on for cylinder shut off.

13. Regulators must be approved for the specific compressed gas being used. They must not be interchanged.

14. Compressed gas cylinders must be used in well-ventilated areas or within mechanically ventilated
cabinets.

15. Cylinders must be kept far enough away from welding or cutting operations so that sparks, hot slag or flame will not reach them. When this is impractical, fire resistant shields must be provided.

16. Cylinders must not be placed where they could contact an exposed electrical circuit.

17. All cylinders must be removed from the site daily, unless prior authorization for overnight storage of the gas cylinder has been received from the TC.

18. Acetylene cylinders must not be transported, used or stored with the cylinder lying down because this could result in the release of flammable liquid. If such a release occurs, immediately call the site emergency number listed in the section entitled EMERGENCIES AND ACCIDENTS. Shut off the cylinder, if possible, and tag it as unsafe.

19. Oxygen cylinders must be stored in a well-protected, well-ventilated, dry location. Also, oxygen cylinders must be stored separately from acetylene cylinders at a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire resistance rating of at least a half hour.

20. Do not use acetylene at more than 15 p.s.i. gauge pressure.

21. Oxygen shall never be used to supply breathing air. Only Grade D breathing air shall be allowed for such purposes where air must be supplied to a person via an air supplied respirator.
1. For the purpose of this section, a confined space includes, but is not limited to, a manhole, tank, pit, vault, boiler, or excavation that:
   - Is large enough that an employee can bodily enter and perform work.
   - Has limited or restricted means for entry or exit.
   - Is not designed for continuous employee occupancy.
   In addition, the confined space must be treated as a permit-required confined space if it may contain or does contain one or more of the following:
   - A potential hazardous atmosphere.
   - A material that has the potential to engulf an entrant.
   - An internal shape that could trap or asphyxiate.
   - Any other serious safety or health concerns.
2. Permit-required confined spaces are labeled with a numbered caution or danger sign. EXCEPTION: in high traffic areas, signs may be placed under the cover or inside the space to prevent damage.
3. Hazards may be present in a confined space. Therefore, a permit must be obtained prior to entering any permit-required confined space.
4. Contractors must not enter any permit-required confined space without the approval of the TC and a permit, or as otherwise authorized by IBM.
5. Contractors must comply with all the requirements of
OSHA 29 CFR 1910.146 - "Permit-Required Confined Spaces”.

6. Contractors must have a written confined space program and evidence of confined space training documentation prior to conducting work. The Emergency Services, or Safety (I.H.S) Department(s) will maintain a file of all Contractors' written procedures and training documentation for permit-required confined space entry. Training documentation must indicate the name of the company, the names of the employees, and the dates of training.

7. All Contractors who sign or approve permits must be trained to the entry supervisor level.

8. Contractors must provide their own calibrated atmospheric testing equipment.

9. Permit-required confined space entry requirements are as follows:
   - CONTRACTOR TRAINING: Entry team members must be trained to the appropriate level for the work they are performing (e.g., entrant, attendant or supervisor).
   - HAZARD EVALUATION: Prior to entry, an evaluation of the hazards within the confined space must be made and communicated to the entry team members.
   - SECURING COVERS AND BARRIERS: Confined space covers and doors must be opened and maintained clear of obstructions during an entry. Suitable barricades must be placed around open confined spaces.
• ISOLATION: Process by which a confined space is removed from service and completely protected against the release of energy and materials into the confined space.

• REMOVAL OF CONTENTS: Confined spaces must be clean and free of hazardous materials and/or chemicals and, where necessary, purged by water or other equivalent means. Disposal of materials must be in a manner authorized by the TC.

• CONTROL OF HAZARDOUS ENERGIES: All hazardous energy sources must be isolated and controlled. Examples of energy sources are electrical, mechanical, hydraulic, pneumatic, chemical, and thermal. For more information on the control of hazardous energies, refer to the CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT) section of this guide.

• ATMOSPHERIC TESTING AND MONITORING: Prior to entry, the internal atmosphere in the confined space must be tested (with a calibrated direct-reading instrument) for oxygen, flammable gas and potential toxics. The instrument must have the capability of measuring all hazards that may be found within the confined space, e.g., a four gas meter. It must be determined that there is no hazardous atmosphere within the confined space whenever any employee is inside the space. Monitoring of the confined space must be done on a continuous basis while working inside the space.
• VENTILATION: All permit-required confined spaces should be ventilated by the use of a positive pressure ventilation system arranged to avoid recirculation of contaminated air.

• ENTRY ATTENDANT: At least one trained attendant must be required to remain at the confined space entrance during an entry.

• PERSONAL PROTECTIVE EQUIPMENT (PPE) AND SAFETY EQUIPMENT: Contractors must supply their personnel with all equipment and training required for an entry.

• PRESSURIZED CYLINDERS: Pressurized cylinders must not be brought into confined spaces (except SCBA). All hoses and lines connecting gas cylinders must be shut off at the cylinder and removed from the space when not in use.

10. If any unforeseen hazardous conditions are encountered during entry, the confined space must be evacuated and the TC notified immediately. The permit is automatically terminated at the time of evacuation.

11. Upon completion of the entry, the Contractor must:
   • Notify the TC and/or the permit issuer that the entry is complete so the permit can be closed out.
   • Discuss the entry and any problems encountered in the confined space with the TC.
CONTROL OF HAZARDOUS ENERGY
(LOCKOUT/TAGOUT)

1. Contractors who maintain or service equipment where the unexpected energization, start-up or release of hazardous energy could cause injury must develop and use written lockout/tagout procedures that comply with OSHA 29 CFR 1910.147.

2. The procedure must include the following steps:

   **Removal of Equipment from Service**
   
   1) Preparation for Shutdown (Including Notification of Affected Employees)
   2) Shutdown of Equipment
   3) Isolation of Equipment
   4) Application of Lockout/Tagout Device(s)
   5) Dissipation of Stored Energy
   6) Verification of Isolation

   **Release of Equipment from Lockout/Tagout**
   
   1) Inspection of Equipment/Area
   2) Notification of Employees
   3) Removal of Lockout/Tagout Device(s)
   4) Operation of Energy Isolation Device(s)

3. Contractors must review their lockout/tagout procedures with the TC before starting maintenance or service.

4. The TC will provide awareness to the affected individuals of the Contractor's lockout/tagout procedure.
5. During maintenance or service, all hazardous energy sources capable of being locked out must be locked out and tagged.

   EXCEPTION: hazardous energy sources incapable of being locked out must be tagged out and additional safety measures must be taken to reduce the likelihood of them being energized. Examples of energy sources are electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and pressure within pipes.

6. Contractors are responsible for providing and using their own lockout/tagout devices.

7. Lockout devices consist of locks, chains, blocks, etc., that are used to disable potentially hazardous energies during the maintenance or service of equipment, including piping systems.

8. Lockout devices must be accompanied by a tagout device to indicate the identity of the individual applying the lockout device and to warn against the hazardous conditions, if the equipment were to be energized.

9. A tag with the legend "DANGER - DO NOT OPERATE" and a red lock are the only tags and locks approved for use by IBM employees.

10. Individuals must never disturb, bypass, defeat, tamper with, ignore or attempt to operate any devices or start up any equipment that has a "DANGER - DO NOT OPERATE" tag affixed to it. The "DANGER - DO NOT OPERATE" tag must only be removed by the authorized individual who attached it.
11. The lock key is to be retained by the individual performing the work, and only this individual is authorized to remove the lockout/tagout devices upon completion of the work. Where more than one individual is working on the same piece of equipment, each must place their own lockout/tagout device on the hazardous energy source and retain their own key.

12. Before removing the lockout/tagout devices, the Contractor must contact the TC to ensure that all affected individuals are notified.

CRANES AND HOISTING EQUIPMENT

1. The construction, inspection, operation and maintenance of hoists and cranes must comply with federal, state and local requirements including, but not limited to, the following:
   - OSHA 29 CFR 1910, Subpart N - "Materials Handling and Storage".
   - OSHA 29 CFR 1926, Subpart CC – “Cranes and Derricks in Construction”
   - OSHA 29 CFR 1926, Subpart N - "Cranes, Derricks, Hoists, Elevators and Conveyors".
   - Relevant ANSI and ASME standards.

2. Cranes and hoisting equipment are powered or manually operated devices used to lift, or to lift and transport suspended loads. Special precautions are necessary to control hazards associated with hoisting operations.

3. Hoisting equipment includes, but is not limited to,
hoists, cranes, slings, shackles, grabs, beams, gantries and lifting bars.

4. Any proposed use of cranes and hoisting equipment must be approved by and coordinated with the TC. In Poughkeepsie, the safety department must be notified before mobile cranes, tower cranes and derricks are used.

5. Contractors must not use IBM hoisting equipment nor attach their hoisting equipment to IBM property unless the attachment point is rated to withstand the load and it is specifically authorized by the TC.

6. Hoisting equipment must be designed, built and rated to withstand the applied load plus a safety factor of at least 25% of the calculated load.

7. Daily inspections must be performed on hoisting equipment before it is used.

8. Defective equipment must not be used and must be taken out of service.

9. Operators must be trained in the operation and safe use of hoisting equipment.

10. Load hooks must be swivel-type and self-latching.

11. Hoisting equipment must not be used to lift people unless it is designed and approved for that purpose.

12. The area or building section within the swing radius must be barricaded on all floors to prevent people from entering.

13. Personnel must be kept clear of loads about to be lifted and of suspended loads.

14. Hoisting equipment must be removed from the site or
otherwise secured when it is not being operated.

15. In addition to the general lifting requirements listed above, the following requirements specifically apply to mobile cranes:

- Contractors must provide evidence of an annual inspection conducted by a competent person for each crane.
- A thorough inspection must be performed on the crane after it has been placed/erected, but before lifting of the boom. A written inspection checklist must be completed by the Contractor and remain on the vehicle during operation.
- All operators must be licensed by the State of New York for the type of equipment they are operating (e.g., crane operator, boom truck operator, crane operator restricted to cherry picker type hydraulic cranes, etc.). This must include any vehicle with a reach capability of 40 feet or more, or a lift capacity of 5 tons or greater. The operator of these vehicles must have a current State of New York crane license.
- All certifications and licenses must be provided to the TC at least two days before the work starts.
- Cranes must not be operated in inclement weather (e.g., lightning, high winds, storms, heavy rains, poor visibility, etc.).
- Contractors must supply trained signal people, where necessary.
- At minimum, mobile cranes, including portable
crane derricks, power shovels, or similar equipment may not be operated within 10 feet of overhead electric power lines rated at 50kV or less. For overhead electric lines rated over 50kV, the minimum clearance must be 10 feet plus 0.4 inches for every 1kV over 50kV. The requirements of OSHA 29 CFR 1910.333(c)(3) and/or 1926.416 must be strictly followed when working near overhead electrical power lines.

- All people in the hazard area must wear hard hats meeting ANSI standards for falling object protection and safety shoes while the crane is in operation, during rigging and during picking.

**DIVERS**

1. All dive work must be approved by and coordinated through the TC.

2. Contractors must comply with all applicable requirements of OSHA 29 CFR 1910 Subpart T - "Commercial Diving Operations" and 1926 Subpart Y - "Diving".

3. Contractor divers must comply with the following requirements:
   - Must have a dedicated dive tender for surface supplied air systems for each diver. During SCUBA operations, the diver must be line tended from the surface or accompanied by a second diver in the water with continuous visual contact during the dive.
   - Must have a standby diver available during the dive to assist/rescue primary diver.
• Exposed live electrical parts must be de-energized, locked out and tagged before working on or near them. For more information, refer to the CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAG-OUT) section of this guide.

• Must have up to date certifications and be trained to the appropriate level for commercial diving, in compliance with 29 CFR 1910.410.

• Must adhere to the CONFINED SPACE (PERMIT-REQUIRED) requirements and provide Confined Space Certifications and a Confined Space Program, if the divers will be entering a dewatered or partially dewatered pit without SCUBA or air line system.

• When breathing air is supplied by a compressor, ensure that the compressor has appropriate filters and that any engine exhaust is directed away from compressor intake and any open pit where the work is taking place.

• Diver must have a reserve egress tank when connected to surface supplied air, in the event of power failure (air compressor) or air line break.

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**ELECTRICAL SAFETY**

1. Electrical work must be in compliance with federal, state and local requirements including, but not limited to:

   • OSHA 29 CFR 1910.331 through 1910.335 and/or 1926.416 and 1926.417 for electrical safety-related work practices.
• OSHA 29 CFR 1910, Subpart S and/or 1926, Subpart K for electrical work.
• OSHA 29 CFR 1910.137 and 1910.269 for electrical power generation, transmission and distribution work.

2. Electrical safety-related practices required by OSHA and current industry standards, such as NFPA 70E must be used to prevent electric shock, burns and other injuries resulting from electrical contact and arc/flash/blast exposure when work is performed near or on equipment or wiring. These practices include, but are not limited to, the following:

• Exposed live electrical parts must be de-energized, locked out and tagged before working on or near them. For more information, refer to the CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT) section of this guide.
• Nonmetallic safety glasses must be worn.
• Conductive jewelry must not be worn.
• Circuits must be checked with the proper equipment before work is started to ensure that no voltage is present.
• If the TC agrees that de-energizing exposed live electrical parts introduces additional hazards or is not feasible due to equipment design or operational limitations, specific safety-related work practices for working live must be followed by qualified Contractor personnel:
  ▪ Safety related work practices include the use of precautionary techniques and training,
properly rated PPE, insulating and shielding materials, insulated tools, etc.

- The work practices must be suitable for work conditions and the exposed current/voltage level.
- The work practices must protect against direct body contact or indirect contact by means of tools or materials.
- Suitable barricades and warning signs must be used to make any necessary open wiring inaccessible to unauthorized personnel.
- Energized panels must be covered when not attended.
- Sufficient access and working space must be provided and maintained about all electrical equipment to permit ready and safe operation and maintenance of such equipment.

3. Portable electrical equipment must be:
   - Double insulated or properly grounded.
   - Appropriate for the work environment.
   - Kept in good repair.
   - Compliant with the applicable requirements for attachment/extension cords.

4. Extension cords must:
   - Be properly rated for the connected equipment.
   - Contain polarized caps and plugs and be equipped with an equipment grounding conductor.
• Not be fabricated using electrical boxes or duplex receptacles.
• Not be used if caps and plugs are damaged. Damaged caps and plugs must be replaced with devices that are approved for the purpose by a nationally recognized testing laboratory.
• Not be used if outer jacket has been damaged. Damaged cords must be replaced.
• Not be fastened to surfaces or placed in a manner that could cause damage to the outer jacket or create a tripping hazard. EXCEPTION: tape may be used to temporarily fasten extension cords to surfaces.
• Not be daisy-chained together (i.e., an extension cord plugged into another extension cord).
• Maintain at least 7 feet of overhead clearance when installed over aisles and work areas.

5. Receptacle outlets of 120 volts on all construction projects must have approved ground-fault circuit interrupters for personal protection.

6. Ground-fault circuit interrupt (GFCI) devices are required for construction areas and temporary wiring installations that are used during maintenance, remodeling, or repair of buildings, structures, or equipment or during similar construction-like activities. This includes use of portable electric power tools with or without an extension cord. This also includes areas where, either permanent or portable GFCI's are required by the National Electrical Code such as circuits serving outlets in
damp, wet, outdoor locations and in any other location where individuals using electrical apparatus could become well grounded.

7. Temporary wiring must be de-energized when not in use.

8. Temporary lights must be equipped with guards to prevent accidental contact with the bulb unless the reflector construction is such that the bulb is deeply recessed, and must be protected by a GFCI.

9. Contractor's entry into high voltage areas must be authorized by an IBM engineer or operator qualified in high voltage systems and must be approved by and coordinated with the TC.

10. Temporary lights must not be suspended by their electric cords unless cords and lights are designed for this means of suspension.

11. If conductors and wires need to be temporarily left exposed, they must be de-energized, insulated and positioned so as not to cause physical hazards.

12. Unused openings in boxes must be closed and conductors entering boxes must be protected from abrasion.

13. Listed, labeled or certified equipment must be installed and used in accordance with the instructions included in the listing, labeling or certification.

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**ELEVATED WORK AREAS (SEE ROOFS AND ELEVATED WORK AREAS)**
EMERGENCIES AND ACCIDENTS

Emergencies
In case of fire, accident, spill or any other emergency, Contractors must:

1. Dial the appropriate site number listed below:

<table>
<thead>
<tr>
<th>Site</th>
<th>Internal Number</th>
<th>External Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVRP</td>
<td>4-3333</td>
<td>845-894-3333</td>
</tr>
<tr>
<td>Poughkeepsie</td>
<td>3-3333</td>
<td>845-433-3333</td>
</tr>
</tbody>
</table>

2. Provide the following information:
   - Type of emergency
   - Location of the emergency
   - Caller's name
   - Caller's telephone number

3. Stay on the line to answer questions or get information about what to do until help arrives.

4. Hang up when the emergency response person instructs you to do so.

Accidents and Injuries

1. Contractors are responsible for all injuries to workers on their job site. This responsibility includes the obligation to call Emergency Services on the respective site to obtain assistance, in case of an accident.

2. Contractors must notify the TC immediately of any:
   - OSHA recordable or other serious Contractor or subcontractor injury/illness that occurs while at the IBM site.
- Incidents involving damage to IBM property.
- Incidents involving injury to IBM personnel, Contractors or all other non-IBM personnel on site.

3. Contractors must submit to the TC a copy of the accident investigation report no later than three working days after the date of the incident including corrective actions to prevent a reoccurrence.

4. Prepare and maintain records and rates of occupational injuries and illnesses (Experience Modification Rate (Worker's Compensation) and OSHA recordable) and make available for submission to IBM upon request.

Evacuations

1. Contractors must immediately shut down tools and/or operations and leave through the nearest exit if a fire alarm sounds or if there is a public address (PA) system announcement to evacuate the building they are in.

2. Contractors must go to a safe area at least 250 feet from the building and out of the traffic lanes.

3. Contractors must remain in the safe area until an announcement permits reentry into the building.

4. Contractor supervisors must account for all their employees. This information should be immediately reported to the Emergency Services personnel, especially if all employees are not accounted for.

EMERGENCY EQUIPMENT

1. Contractors must supply all emergency/safety
equipment required for the project they are working on.

2. Any proposed movement, relocation or work on IBM fire alarm systems, sprinkler systems, hose stations, eye wash, deluge showers, fire extinguishers, first-aid equipment, self-contained breathing apparatus (SCBA), fire blankets, stretchers, etc. must be approved by and coordinated with the TC.

3. Any proposed shutdown of the water supply to eye washes or deluge showers in an operating department or area must be approved by and coordinated with the TC.

4. Contractors must not use fire hydrants for a source of water because they are part of a private yard system per New York State Fire Code and are for emergency use only.

ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) – ISO 14001

1. As ISO 14001 registered facilities, the IBM Poughkeepsie and IBM HVRP locations each have in place a site-specific Environmental Management System (EMS). Each has its own EMS Manual and procedures to control potential environmental impacts. The following have been identified as Significant Environmental Aspects at these locations:
   - Air Emissions
   - Chemical Use
   - Employee Transportation (Poughkeepsie only)
   - Energy Consumption
2. Contractors are expected to follow each site’s EMS and be aware of the environmental impact of their activities, to follow applicable procedures as they pertain to their activities on IBM premises, and be properly trained for their jobs. Contractors are expected to support each site’s environmental targets, and be available to participate in EMS audits when on IBM premises.

3. Contractors must be aware of and follow IBM’s Corporate Environmental Policy (see page iv). Contractors must also be aware of the potential environmental impacts associated with their activities and responsibilities.

Additional information on each site’s EMS, the IBM Corporate Environmental Policy, and the contractor’s roles and responsibilities is available from the Technical Contact.

**EXCAVATION, TRENCHES AND GROUND OPENINGS**

1. Excavations include, but are not limited to, any man-made cut, cavity, trench, or depression in the earth's surface formed by earth removal.
2. Excavation equipment and work must comply with federal, state and local requirements including, but not limited to, OSHA 29 CFR 1926, Subparts M, O, and P.

3. All excavation activities must adhere to the Solids Management Protocol (Poughkeepsie site) and/or other applicable site requirements, and be approved by the site Environmental Program Manager or the authorized representative responsible for any such activity.

4. Excavation work must be approved by and coordinated with the TC. An excavation permit may be required for excavation work within or outside of buildings.

5. Excavations below the base of footings of any foundation or retaining wall shall not be permitted without prior approval of IBM Facilities Engineering.

6. Prior to starting any excavation work, contact the TC to obtain permit or approval and have excavation work reviewed by Facilities, Emergency Services, Utility Plant, Gas group, Environmental, and Security. A sub surface scan may be required to determine the existence and location of underground pipes, electrical conductors, gas lines, etc. Contractors must contact the TC to obtain this information.

7. The sides of all excavations in which workers are exposed to danger from moving ground must be protected by a support system, sloping, benching, or equivalent means.
• Excavations less than 5 feet in depth and which a competent person examines and determines there to be no potential for cave-in do not require protective systems.

• Excavations more than 20 feet deep, must be shored, braced, sloped or benched as designed by a registered professional engineer.

8. Individual components of support systems must not be subjected to loads exceeding that of which those components were designed to withstand.

9. Contractors must provide ladders, stairways, ramps, or other safe means of egress in all excavations that are 4 feet deep or more so that a worker does not need to travel more than 25 feet in any direction before being able to exit the excavation.

10. Dirt, debris and other material must be effectively stored and retained at least 2 feet from the edge of excavations that personnel may be required to enter.

11. If it is necessary to place or operate power shovels, derricks, trucks, or other heavy materials at a level above and near an excavation, the side of the excavation must be sheet piled, shored, braced or otherwise protected as necessary to resist the extra pressure due to such superimposed loads.

12. Any liquid entering excavations that requires disposal (dewatering) must be removed in a manner approved by the TC.

13. Adequate barrier physical protection must be provided at all excavations and trenches. In vehicular traffic areas, warning lights must be placed by
excavations and trenches during evening and night hours to provide sufficient warning of danger.

14. Daily inspections of excavations, the adjacent areas, and protective systems must be made by a competent person prior to the start of work and as needed throughout the shift. If evidence of possible cave-ins or other hazardous conditions are apparent, all work in the excavation must cease until the necessary precautions have been taken to safeguard personnel and to correct the situation.

15. Certain excavations may be considered confined spaces. For more information, refer to the **CONFINED SPACE (PERMIT-REQUIRED)** section of this guide.

16. Platforms, walkways, railings and stairs must be built to the proper design and installation in accordance with federal, state and local requirements.

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**EXHAUST SYSTEMS**

1. Any proposed work on exhaust systems must be **approved** by and coordinated with the TC.

2. Exhaust systems work includes, but is not limited to, the following:
   - Shutting off an exhaust system.
   - Entering an exhaust plenum.
   - Blocking, puncturing or removing an exhaust system.
   - Interrupting electrical service to an exhaust system.

3. If exhaust monitor set points are moved from their
approved minimum and/or maximum position, they are to be returned to their proper position upon completion of work, or prior to leaving the work area for the day, whichever comes first. The TC should be informed if the work has altered the approved exhaust flow/static or velocity pressure. This includes work associated with balancing and testing systems, equipment service and maintenance, and all other exhaust system work.

FALL PROTECTION

1. Contractors must comply with federal, state and local regulations for fall protection including, but not limited to OSHA 29 CFR 1926, subpart M - "Fall Protection."

2. Fall protection equipment (personal fall arrest system) must meet the performance requirements of ANSI. {See PERSONAL PROTECTIVE EQUIPMENT - Fall Protection}

3. Personal fall arrest systems, guardrail systems, or safety net systems must be utilized when working within 10 feet of the perimeter of any structure, shaft way or other opening where workers are exposed to a fall which is 6 feet or more. Lifelines must not be secured to sprinkler system, conduit, or utility piping. {See also: OPENINGS IN FLOORS, ROOFS AND WALLS and ROOFS AND ELEVATED WORK AREAS}

FIRE PREVENTION

1. IBM fire equipment must not be used, moved, blocked or otherwise disabled unless approved by
2. Open burning of combustibles (e.g., wood, paper, cardboard) is prohibited per air emission regulations.

3. No combustible material shall be stored outdoors within 10 feet of a building or structure.

4. Contractors must furnish their own fire extinguishers/equipment when required for the type of work being performed and inspect periodically according to regulatory requirements.

5. Smoking:
   - Smoking is strictly prohibited in all IBM buildings and in some areas outside of IBM buildings (e.g., roof tops).
   - Obey smoking restrictions where posted.
   - Smokers must remain in the identified "Designated Smoking Areas".
   - Smokers must not congregate within 15 feet of building entrances or obstruct sidewalks.
   - Dispose of smoking materials in appropriate receptacles, not trash containers.

6. Hot Work or Open Flame Work (e.g., cutting, welding, soldering or burning):
   - Any proposed use of equipment that has an open spark or flame must be approved by and coordinated with the TC.
   - A permit must be obtained from Emergency Services prior to performing any hot work or open flame work.
• A new permit is required each day unless the permit is specifically issued for multiple days.
• A fire watch must be assigned by the Contractor and present when such work is in progress and must be posted for one hour after the work ends, as indicated on the open flame permit.
• Contractors must provide an individual dedicated to monitoring the performance of hot work and open flame work. This individual must be furnished with all equipment necessary to safely monitor the operation, and for the prevention/extinguishment of fire including, but not limited to, portable fire extinguishers and fire blankets. For further information, refer to the EMERGENCY EQUIPMENT section of this guide.
• Contractors must be equipped with the appropriate fire extinguishers and fire blankets. The fire blankets must be spread according to permit documentation on all sides of the hot work or open flame work. Contractor employees responsible for using fire extinguishers must be trained in their proper use by the Contractor.
• Gas cylinders must be kept far enough away from hot work or open flame operations so that sparks, hot slag or flame will not reach them. When such a location is impractical, fire resistant shields must be provided.
• Welding shields or screens must be provided and used at all times. Shields or screens must be of
non-asbestos, fire-proof material.

7. Rooftop Work: In addition to the above Fire Prevention requirements, the following rooftop hot work and open flame requirements must be adhered to:

- Fire watch - A two hour fire watch must be performed starting immediately upon completion of any heat applied roofing hot work and/or open flame work. The fire watch must be the responsibility of the Contractor performing the work and must be verified by the IBM authorized representative.

- The individual performing the fire watch must be dedicated to that responsibility and must have communication access to the site's Security command center. Provisions must be made in the planning of the work for the immediate shutdown of air handling equipment in the event of a fire in order to prevent its spread.

- Contractors shall provide properly working infrared thermometers, or similar devices, to trend the surface temperature of the areas affected by the work. Measurements must be taken and recorded every 15 minutes during the two hour fire watch. Certain infrared devices report average temperatures across the surface being monitored. To identify localized hot spots, the person performing the fire watch must check the surface temperature by touch.

- Contractors must make provisions for periodic inspections of the roof and the ceiling cavity
below the affected roof area for a period of not less than three hours following the close of the fire watch. The interval between inspections must not exceed 30 minutes.

The rooftop hot work and open flame requirements above do not apply for the following, however the fire prevention requirements shall apply.

- For torch applied roofing systems above concrete deck, if there are no combustibles (e.g., wood blocking) and no openings in the roof deck that could allow heat/sparks to enter the building.
- For work performed above the roof surface where flame/heat is not directly in contact with the roof surface.
- If there are no combustibles (e.g., wood blocking) and if there are no openings in the roof deck that could allow heat/sparks to enter the building.

HEATERS, TEMPORARY (EX. SALAMANDERS)

1. Any proposed use of heaters or salamanders must be approved by and coordinated with the TC.
2. An open flame permit must be obtained from the TC prior to using a heater or salamander.
3. Contractors must furnish fire extinguishers which are suitable for the type of work being performed.
4. Heaters and salamanders must comply with the following:
• Be listed by Factory Mutual (FM) or Underwriters Laboratory (UL).
• Be located at least 10 feet from tarpaulins, canvas or similar coverings. The coverings must be securely fastened to prevent ignition or upsetting of the heater due to wind action on the covering or other material.
• Be guarded from pedestrian or vehicular traffic to prevent them from being overturned.
• Be refueled outdoors.

HOT WORK OR OPEN FLAME (SEE FIRE PREVENTION)

HOUSEKEEPING
1. In all Contractor work areas, including construction areas, the Contractor must ensure that all appropriate cautionary devices and/or barricades (e.g., standard railing, cones, signs, tape, ropes, etc.) are in place at all times during the work activity.
2. Stairwell doors and other fire doors must not be blocked open.
3. Care must be taken not to damage finished work.
4. Material(s) must be stacked so that it is stable and does not pose a tripping hazard or block doors and emergency equipment.
5. Material(s) must not be stacked such that it restricts aisle, corridor or passageway width to less than required for emergency egress.
6. Material(s) must not be stored in stairwells.
7. Material storage must not create a potential fall hazard.

8. Material(s) must not be stored outdoors without approval of the TC. When approved, material must be marked with the Contractor's name and the project number.

9. Scrap lumber, metal, trash, garbage and other similar materials generated must be disposed of as directed by IBM environmental personnel. Contractors must dispose of all such materials at regular intervals. Contractors must contact the TC to obtain disposal requirements.

10. Contractors must not remove at any time any items from a trash can or dumpster.

11. To prevent injury, nails protruding from boards must be removed or bent over and all debris must be kept cleared from work areas, passageways and stairs.

12. Walking-working surfaces must be maintained free of slip, trip and fall hazards by removal of protrusions and other obstructions that could create unsafe conditions.

13. Contractors removing tools or equipment must also remove floor anchors or trim anchors flush with surrounding floor surface so as to remove any slip, trip and fall hazards.

14. Broken glass must be swept up immediately and put into containers specifically designated for broken glass.

15. Platform planks must be removed from overhead when the work is finished.
16. Contractors must perform work in a manner that will minimize and control the production and migration of odors, noise, dust, dirt and debris into adjacent equipment or work areas.

17. When the work activity could generate flying or falling material (e.g., soldering, cutting, welding, sawing, etc.) all equipment near the activity must be completely protected because the material could cause serious damage to equipment.

18. When tarpaulins are required for security barriers or for the deflection of hot slag, dust, paint drippings, etc., they must be flame resistant, asbestos free and in good condition.

19. Contractors must remove their property, equipment, chemicals, material and debris from the IBM site at the end of the work shift unless previous arrangements have been made with the TC.

20. Contractors performing work must leave the work area broom clean at the end of each work shift and when the work is finished.

21. When the work is finished, the Contractor must remove any Contractor-owned materials from the site.

INFECTION CONTROL

1. Contractors must assure that they are in compliance with all aspects of federal, state and local requirements including but not limited to OSHA 29CFR 1910.1030, Occupational Exposure to Bloodborne Pathogens. This rule applies to those persons with expected exposures to bloodborne pathogens (BBP)
and/or other potentially infectious material (OPIM).

2. Contractors will follow accepted work practices and use PPE as appropriate for job tasks.

3. Contractors will not handle any equipment, containers or bags labeled and/or color coded as biohazardous unless specifically authorized to do so.

4. Contractors will report all first aid incidents involving the presence of blood or OPIM to their supervisor and the IBM TC before the end of the workshift during which the incident occurred. Decontamination of the area will be performed by trained personnel. Contractors must ensure timely evaluation and management of all first aid providers who rendered assistance in order to determine whether or not an "exposure incident" occurred as defined by the standard.

5. Contractors will notify IBM TC and IBM I.H.S/Medical of any contract employee identified as either having or suspected to have active TB. Arrangements are made by IBM, with assistance from the contract company, for the Public Health Department (PHD) representative to tour the IBM work area. Arrangements for testing and follow-up of contract employees, determined to be at risk, are made by the contract company and the PHD.

INTERNAL COMBUSTION ENGINES

1. Any proposed use of gasoline, liquid propane (LP) gas, or any other internal combustion engines inside buildings or on roofs must be approved by and coordinated with the TC.
2. Contractors must not operate internal combustion engines near building air intakes where fumes could be carried into heating, ventilation and air conditioning (HVAC) systems.

3. If LP gas engines are to be used inside the building, they must be equipped with oxycatalyst exhaust purifiers.

4. Contractors must notify the TC before bringing any gasoline or fuel tanks onto the work site.

5. Fuel must be stored in approved containers. Storage on a roof is limited to one gallon.

LADDERS

1. The design and use of ladders must comply with all federal, state and local requirements including, but not limited to, the applicable portions of OSHA 29 CFR 1910.25 through 1910.27 and/or 1926.1053.

2. Ladders should be constructed of wood or fiberglass material. Aluminum or steel ladders must not be used where the employees or the ladder could come in contact to exposed energized parts, unless they have nonconductive side rails.

3. Ladders must not have:
   • Cracks.
   • Loose, missing or broken steps.
   • Broken, frayed or worn ropes.
   • Missing or damaged safety feet.
   • Inoperable extension devices.

4. Defective ladders must not be used and must be taken
out of service.
5. Ladders must not be placed in front of doors or door openings unless the door is blocked open, locked or guarded by a responsible person.
6. Ladders used in hallways or traffic areas must be protected by at least 2 barricades or cones.
7. Ladders must be secured to keep them from shifting, slipping, being knocked over or blown over by the wind.
8. Straight and extension ladders used to access roofs or platforms must extend at least 3 feet above the point of support.
9. Extension ladders must not be separated because this eliminates the safety feet from one section and can cause damage to the pulleys and catches on the extension section.
10. A step ladder must not be used as a straight ladder.
11. The top and the last step before the top of an ordinary step ladder must not be used as a step.
12. Personnel must always face the ladder and hold onto the ladder when ascending or descending. When material must be handled, it must be raised or lowered in a safe manner to prevent dropping.
13. Ladders must be taken down, stowed and secured at the end of each work day.
14. Wooden ladders must not be used in clean room areas.

LASERS
Lasers are capable of producing injuries to the eye and
under some circumstances the skin, if improperly used or inadequately controlled. Laser equipment must be operated using accepted industry practices for the safe use of lasers including, but not limited to, those promulgated by ANSI. In addition, laser products and their use must comply with all applicable federal and state regulations.

The following general requirements apply to contractor use of laser products at the IBM facilities covered by this guide.

1. All laser products must be certified with the Food and Drug Administration Center for Devices and Radiological Health.

2. Lasers must not be used or stored overnight at an IBM facility without the approval of, and coordination with, the TC.

3. The following information must be submitted to the TC before using lasers or laser products:
   
   - A copy of a valid certificate of competence issued by the NYSDOL for each employee operating a mobile laser. The category of certification must be appropriate for the intensity of the laser used. (Refer to Industrial Code Rule 50 for information on NYSDOL certification requirements.)
   
   - A copy of the Contractor's procedures for safe operation of laser equipment.
   
   - The hazard class, wavelength and output characteristics of each laser.

4. During operation of laser equipment, all entrances and approaches to the work area must be closed-off
LEAD

Construction and renovation activities involving the disturbance of lead-containing materials or settled lead dust may be hazardous if appropriate work practices are not followed. Examples of materials that may contain lead include, but are not limited to:

- Paint and primer coatings
- Noise and vibration dampers
- Radiation-shielding materials
- Sheet metal (i.e., terne metal)

Contractors are responsible for evaluating and controlling their employees' occupational exposure to lead. Contractors must not remove, handle or otherwise disturb lead, or material suspected of containing lead, without the approval of, and coordination with, the TC.

Prior to work on painted surfaces, Contractors must notify the IBM TC to request sampling and analysis of paint and/or primer coatings for determination of their lead content (total lead and leachable lead (TCLP)). When feasible, lead-based paint and primer coatings must be removed manually with the aid of IBM approved wetting agents and solvents prior to work on substrate materials.
Aggressive removal techniques may only be used when manual removal methods are ineffective. In such instances, the specific work practices and engineering controls to be employed must be submitted to and approved by the TC prior to the start of work. Examples of aggressive removal techniques include, but are not limited to:

- Abrasive blasting
- Burning
- Grinding
- Heat-gun application
- Mechanical chipping, scraping, or sanding
- Power washing

All lead-contaminated waste materials, including used PPE such as gloves and overalls, must be collected separately from other waste materials for proper disposal. Lead bricks and sheeting used for noise reduction, vibration dampening, radiation shielding, and roof flashing may only be removed or handled with prior authorization from the TC.

Contractors must not use lead-containing mortar, paint, or primer on construction or renovation projects. Use of lead-containing solders on water pipes is prohibited. All work involving the handling of lead-containing materials must be conducted in accordance with all applicable federal, state and local regulatory requirements including the OSHA standards for lead, 29 CFR 1910.1025 and 29 CFR 1926.62.

For information on obtaining a list of approved chemicals,
refer to the section of this guide entitled CHEMICALS-ENVIRONMENTAL. For information regarding waste disposal requirements, refer to the WASTE DISPOSAL section of this guide.

LOCKOUT/TAGOUT (SEE CONTROL OF HAZARDOUS ENERGY)

MATERIAL HANDLING

1. The movement of materials, tools and equipment must be approved by and coordinated with the TC.

2. The movement of materials out of IBM buildings and/or off IBM property by Contractor personnel must be supervised by Contractor supervisory personnel.

3. Contractors may be requested by IBM Security representatives to produce appropriate authorization when transporting materials on or off the site.

4. Contractors using IBM docks to load or unload materials with a powered industrial vehicle must comply with the following:
   • Chock the rear wheels on both sides of the vehicle to prevent movement.
   • Vehicles must not be left unattended at the dock.
   • Trailers disconnected from tractors must be supported with 2 trailer jacks at the trailer nose.

For more information, refer to the POWERED INDUSTRIAL VEHICLES section of this guide.

5. All vehicles must have their engines turned off while loading and unloading materials.
6. Care must be taken when moving materials to ensure that people are not injured and that walls, ceilings and doors are not damaged. Damage will be back-charged to the Contractor. Any damage to ceilings, walls, doors, elevators etc. should be immediately reported to 845-894-8000 at the HVRP and 845-433-1000 at Poughkeepsie.

7. There are many aisles within IBM facilities that must be shared by pedestrians and powered vehicles. Contractors traveling in aisles must stay to the right, stay alert, be courteous and yield the right-of-way to power vehicles.

8. To maintain emergency egress requirements, carts, tools, materials and equipment must not be left unattended in aisles.

9. Contractors must use the following preventive measures when moving materials:
   • Piping, conduit, ladders, etc. must not be transported in a manner that could potentially strike individuals.
   • Piping, conduit, ladders, etc. more than 10 feet long must be carried by at least two persons, each supporting one end of the material to be transported.
   • Caution signs or signal people may be required at corridor intersections to alert personnel.
   • Floor tile load rating must not be exceeded.

10. Elevator load rating must never be exceeded on any elevator, and loads must be centered in elevator cars that have been identified with markings.
MOBILE LIFTS AND WORK PLATFORMS

1. Mobile work platforms and their use must comply with federal, state and local requirements including, but not limited to, OSHA 29 CFR 1926.453, 1926.556, ANSI and ASME.

2. Any proposed use of mobile work platforms, (also known as, aerial lifts, elevating aerial platforms, elevating work platforms, rolling mobile scaffolds, vertical lifts, etc.) must be approved by and coordinated with the TC.

3. Mobile work platforms must comply with the following:
   - The platform must have emergency stop devices located at both the upper and lower control stations that will deactivate all powered functions.
   - A self-propelled platform must be equipped with passive brakes which must hold the unit on any slope it is capable of climbing.
   - The platform must have a method to prevent free descent in case of hydraulic, pneumatic, electrical or electromechanical failure.
   - A power-elevated platform must have a clearly identified means for emergency lowering that is readily accessible from ground level.
   - Hydraulic or pneumatic actuated outriggers or stabilizers must not retract in case of a system failure.
   - The platform must have a 39 to 45 inch high top
railing, an intermediate railing, a toe board, a chain or self-closing gate at the platform entrance, and a safe means for access to and from the work platform.

- The platform deck must have a slip resistant surface.
- The platform load capacity must be clearly indicated.
- Must not be moved in the elevated position if the ground/floor surface has hole or irregularities which could cause the platform to become unstable or tip over.

4. Contractors must comply with the following when using mobile work platforms:
   - Only trained and authorized personnel are permitted to operate the platform.
   - No more than two persons are allowed on the platform.
   - The platform entrance chain or self-closing gate must be closed before the platform is raised, lowered, moved or used.
   - Employees must always stand firmly on the floor of the platform and never sit, stand or climb on the rails, boards, or use planks, ladders or other devices on the platform.
   - Employees must wear fall protection when working from platforms that have articulating arms (e.g., bucket trucks and aerial lifts).
   - Safety cones must be placed around the platform
to alert personnel of potential hazards.

- Prior to use each day, the platform must be inspected for defects and properly operating controls.
- The platform deck must be kept clear of tripping hazards and slippery substances.

### MOTOR VEHICLES

1. Contractors must obey New York State Department of Transportation (DOT) and IBM traffic regulations and posted speed limits while operating a motor vehicle on IBM property.

2. Contractors must yield the right-of-way to pedestrians and emergency response vehicles.

3. PARKING PROGRAM - Contractors are authorized to park in any designated open parking areas. Parking is not allowed in firelanes, handicap, restricted, on hash marks, along roadways, sidewalks, dock areas or any special permit parking areas. Vehicles in violation of the HVRP parking/traffic regulations, particularly those that are obstructing Emergency Vehicle/Fire Lanes or interfere with business operations, will be towed to a local garage at the owner's expense.

4. Contractors must not park vehicles overnight unless approved by the TC.

5. Contractors must use driving lanes and not cross through parking areas.

6. Contractor vehicles and equipment must not block exits, walkways, roadways, loading areas, fire
7. Contractors must not perform maintenance or repairs to vehicles, equipment, engines, transmissions or other fluid-containing systems on the IBM site unless specifically authorized to do so by the TC.

8. Contractors must turn vehicle engines off when parked to reduce the probability that engine exhaust will be drawn into building ventilation systems, or into confined spaces.

9. Contractors are responsible for any loss or damage of their personal property. If damage occurs to a car, a Contractor must report it to the TC and site Security.

NOISE
1. Contractors working in posted high noise level areas (e.g., motor generator rooms, fan rooms, boiler rooms, etc.) must wear hearing protection and comply with OSHA 29 CFR 1910.95.

2. Contractors must wear hearing protection when their operations could create exposures that exceed OSHA standards.

3. Contractors must not create noise levels, in adjacent occupied areas, that exceed IBM's permissible standards.

4. Contractors must make every effort to minimize noise levels when transporting materials and equipment through occupied areas.

OFFICE SAFETY
1. Contractors working in office areas must ensure that:
   - Exit paths are kept clear and without obstruction.
• Floors are kept free of slip, trip or fall hazards.
• Equipment is listed by a nationally recognized testing laboratory and equipped with a polarized or grounded attachment plug.
• Unsafe or defective equipment is removed from service until it is repaired or replaced.
• Extension cords are used only to supply temporary power to portable equipment during construction or maintenance, and protected by a GFCI.
• Temporary power taps are of a type which is approved by the location.
• No heat-producing appliances are used (e.g., coffee makers, tea warmers, toasters, popcorn poppers, space heaters, etc.), unless approved by the TC.
• Material storage is arranged to assure stability and to minimize the possibility of items falling.
• Proper work practices and equipment (e.g., step stool) are used to access and retrieve materials.

2. Contractors are encouraged to apply office ergonomics by:
   - Using proper lifting techniques.
   - Properly adjusting chairs and workstations.
   - Using appropriate work station accessories (e.g., wrist rests, copy holders, foot rests, etc.).

OPENINGS IN FLOORS, ROOFS AND WALLS
1. Openings made in floors, roofs and walls must be
approved by and be coordinated with the TC.

2. All floor and roof openings must comply with federal, state and local requirements including, but not limited to, OSHA 29 CFR 1910, Subpart D - "Walking-Working Surfaces" and/or OSHA 29 CFR 1926, Subpart M - "Fall Protection".

3. All floor and roof openings must be guarded so that no one can fall in or through the opening.

4. All floor and roof openings must be guarded by one of the following:
   - A standard railing and toe board on all exposed sides.
   - A cover of standard strength and construction. While the cover is not in place, the floor hole must be constantly attended by someone or must be protected by a removable standard railing.

5. Every open-sided floor 6 feet or more above the adjacent floor or ground level must be guarded by a standard railing on all open sides, except where there is an entrance to a ramp, stairway, or fixed ladder. The railing must be provided with a standard toe board whenever persons can pass beneath the open sides or there is machinery and/or equipment that can be damaged by material falling from above. Where standard railing cannot be provided, a personal fall arrest system in compliance with OSHA 1926, Subpart M - "Fall Protection" must be provided.

6. Wall openings which pose a hazard because of their location must be guarded in the same manner as floor or roof openings.
7. Raised floor tiles and their support stanchions must not be removed or altered unless approved by the TC.

8. When raised floor tiles are removed, barricades, cones or other alerting techniques must be utilized to prevent individuals from falling into the opening. Whenever raised floor tiles are removed and the drop is 4 feet or more, the holes, or openings must be guarded by standard railing, or if this cannot be provided, a personal fall arrest system must be employed.

9. Penetrations through floors, walls, ceilings and roofs for conduit, piping, ductwork, etc. must be restored/sealed using appropriate construction materials and methods that maintain the designed fire rating. The Contractor that made the penetrations is responsible for the restorations which meet the standards.

10. Contractors performing roof repairs or flashing new penetrations must be authorized by the manufacturer of the existing roof system. A copy of that authorization letter must be submitted to the TC.

OVERHEAD WORK

1. Contractors must not work above hung ceilings over occupied offices or areas.

2. Contractors performing overhead repairs or minor construction activity from ladders or other lifting aids must use barricades, cones, caution tape or other alerting techniques to warn people of the potential hazard.

3. Contractors performing major overhead construction
must barricade the area and erect construction signs to keep out unauthorized personnel.

4. Contractors must wear hard hats when they work in areas or perform operations where there is a potential for head injury.

5. Contractors must not perform work over a test cell that has equipment in the cell.

PAINT (SEE CHEMICALS)

PEDESTRIAN SAFETY

1. Personnel must always be alert for potential slippery conditions in parking lots, walkways, aisles, stairs, etc. especially during inclement weather. Use caution when walking on snow-covered or wet surfaces. Wear outer shoes that are appropriate for the weather conditions. Wipe your feet on the floor mats at building entrances during inclement weather. This helps prevent wet and slippery conditions on the stairs. Use handrail when going up or down stairs. Running is not permitted inside or outside buildings or in the parking lots.

2. Report the specific location of any potentially hazardous conditions on sidewalks, parking lots, stairways, etc. to the TC.

3. Many aisles within the IBM facilities are shared by pedestrians and powered vehicles. Pedestrians and powered vehicle operators must travel in a safe manner, remain alert and use caution at intersections, corners, doorways and in the aisles. Pedestrians must stay to the right when walking in aisles and be alert
for powered vehicles.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

1. Contractors must comply with the requirements of OSHA and ANSI standards which apply to employee training, performance of hazard assessments, selection, use, care and disposal of PPE.

2. Contractors must use/wear PPE (e.g., eye, face, head and extremity protection; protective clothing; respiratory protection; protective shields and barriers; etc.) that is appropriate for the hazards associated with the work being performed.

3. Contractors are responsible for assessing the hazards and determining the necessary PPE. When there is doubt about the safety measures to be observed, Contractor employees must consult with their Contractor supervisor.

4. Contractor management is responsible for providing and ensuring that PPE is available, properly used and properly maintained. Time lost while obtaining the necessary PPE will be at the Contractor's expense.

5. Contractors must consult the MSDS for additional PPE requirements (e.g., gloves, respirators, etc.) when using hazardous materials.

6. Contractors must be trained in the use, care and limitations of all required PPE.

7. Contractors must observe all IBM PPE requirements pertaining to the IBM equipment and areas involved in the scope of work.

8. PPE must be kept in good condition and replaced
immediately if damaged.

**Eye and Face Protection**

1. Contractors must comply with the requirements of OSHA 29 CFR 1910.133 and/or 1926.102 regarding eye and face protection.
2. Contractors must wear eye and face protection which meets the performance requirements of ANSI and is labeled as such.
3. Contractors must wear eye and face protection when machines or operations present potential eye or face injury.
4. Contractors involved in welding operations must use filter lenses or plates of the proper shade number.
5. Contractors exposed to laser beams must wear suitable laser safety goggles which will protect for the specific wavelength of the laser and be optical density (O.D.) adequate for the energy involved.

**Fall Protection**

1. Contractors must comply with federal, state and local requirements for fall protection including, but not limited to, OSHA 29 CFR 1926, Subpart M - "Fall Protection."
2. Fall protection equipment, Personal Fall Arrest System, must meet the performance requirements of ANSI.
3. A Personal Fall Arrest System is used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. The use of a body belt
for fall arrest is prohibited.

4. Lifelines and lanyards must be secured to an anchor point with strength of 5,000 pounds per employee attached. **Note:** DO NOT secure lifelines and lanyards to any sprinkler system, conduit or utility piping.

   For more information, refer to the **FALL PROTECTION** section of this guide.

**Foot Protection**

Contractors must wear protective footwear that meets the performance requirements of ANSI when the potential for foot injury exists.

**Head Protection**

1. Contractors must wear head protective equipment (helmets) in areas where there is a possible danger of head injuries from impact, flying or falling objects, or electrical shock and burns.

2. Helmets for protection against impact and penetration of falling and flying objects and electric shock must meet the performance requirements of ANSI.

**Hearing Protection**

Contractors must wear appropriate hearing protection to reduce noise exposure levels as required by OSHA 29 CFR 1910.95 and/or 1926.52.

**Respiratory Protection**


2. Respiratory protection should not be the primary means of protecting employees. Contractors must
consider alternatives such as substituting less hazardous materials and the use of temporary ventilation, before requiring respiratory protection.

3. Contractors must inform the TC if their work requires the use of respiratory protection. The TC will consult with Industrial Hygiene and Safety to determine whether other personnel in the area could be exposed to hazardous materials.

POWERED INDUSTRIAL VEHICLES

1. Any proposed use of powered industrial vehicles (e.g., fork trucks, platform lifts, motorized hand trucks, burden carriers, etc.) must be approved by and coordinated with the TC.

2. Powered industrial vehicles and their use must comply with federal, state and local requirements including, but not limited to, OSHA 29 CFR 1910.178 - "Powered Industrial Trucks" and 1926.602 - "Material Handling Equipment".

3. Powered industrial vehicles must be maintained in good working order with no modifications, missing guards, leaking fluids, etc.

4. Powered industrial vehicle operators must be trained and qualified to operate the vehicle in accordance with OSHA 29 CFR 1926.602 and 1910.178.

5. Contractors must supply information on the operator's training, the powered industrial vehicle's inspection and preventive maintenance records to the TC.

6. Powered industrial vehicles and any associated attachments or rigging equipment must be inspected
before their initial use each day by a trained operator. Defective equipment must be taken out of service.

7. Contractors must not use IBM power vehicles unless appropriate contractual provisions exist between IBM and the contractor.

8. Operators of powered industrial vehicles must carry their training certification (e.g., operator's license) with them while operating the vehicle. 
   For information on Liquefied Petroleum Gas Powered Vehicles, refer to the **INTERNAL COMBUSTION ENGINES** section of this guide.

9. Powered industrial vehicles designed for lifting loads using freight elevators must not exceed the elevator capacity and the load must be centered within the elevator car.

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**RADIATION SOURCES AND EQUIPMENT**

1. Radiation sources and equipment includes any source or equipment that produces ionizing or non-ionizing radiation such as X-ray equipment, radioactive materials, radio frequency (RF) sources, ultraviolet (UV) sources, infrared (IR) sources, magnetic field sources or lasers.

2. Contractors must notify the TC at least one week before any planned use of a radiation source or radiation equipment.

3. Radiation sources and equipment must not be used without the **approval** of the TC.

4. Contractors must follow all federal, state and local requirements.
5. Contractors must obtain any licenses or permits necessary to operate the radiation source or equipment. A copy of the license and the Contractor's safe operating procedures must be presented to the TC at least one week before work starts.

6. Contractors must provide radiation safety monitoring equipment as required by law. This monitoring equipment must have been calibrated within the last year.

7. Contractors are responsible for erecting and maintaining the required warning signs and isolation barriers.

8. Radiation sources must not be left unattended during use.

For more information, refer to the LASERS and RADIOGRAPHIC TESTING sections of this guide.

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RADIOGRAPHIC TESTING

1. Contractors must notify the TC at least one week before any planned radiographic testing.

2. The TC must notify the IBM Radiation Safety Officer (RSO) at least one week prior to scheduling any radiographic testing. No radiographic testing must occur without the agreement of the TC and RSO.

3. The RSO will require that contractors using X-ray machines or radioactive material for testing purposes meet the following criteria:

   - A current license issued by the State of New
York or the Nuclear Regulatory Commission must be demonstrated.

- All requirements of New York State Industrial Code Rule 38 must be met.
- Ionizing radiation sources used for testing must be approved by the RSO.
- Contractors must provide copies of their operational and source emergency procedures, source decay curves and isodose line charts.
- Appropriate calibrated radiation monitoring equipment such as a Geiger counter/ion chamber must be available during testing.
- Contractors are responsible for erecting appropriate warning signs and isolation barriers at a distance from the source where the exposure rate will not exceed two milliroentgens per hour.
- No radiation sources may remain unattended or overnight on IBM property.

For more information, refer to the LASERS and RADIATION SOURCES AND EQUIPMENT sections of this guide.

ROOFS AND ELEVATED WORK AREAS
1. Access to the roof of any building or other elevated work areas must be approved by and coordinated with the TC.
2. Contractors must follow the site procedure(s) and/or work practices for roof access.
3. Unless specifically required by the scope of work, Contractors must not access a roof or elevated work

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area that is severely damaged or covered with ice and/or snow.

4. Unless specifically required by the scope of work, Contractors must not access or remain on a roof or elevated work area during periods of inclement weather (e.g., fog, snow, sleet, hail, heavy wind, heavy rain, electrical storms, etc.).

5. When the scope of work requires Contractors to work on a sloped roof or within 10 feet of an unprotected roof edge, platform or other elevated work area, they must use fall protection equipment. Contractors must comply with all federal, state and local regulations including OSHA 29 CFR 1910 and 1926, including 1926.501/502. For more information, refer to the FALL PROTECTION section of this guide.

6. Contractors must protect the roof surface from damage by personnel, equipment or material storage during work by methods such as plywood.

7. Contractors must hoist material and equipment to and from roofs and elevated work areas in conformance with federal, state and local regulations. For more information, refer to the CRANES AND HOISTING EQUIPMENT section of this guide.

For information regarding rooftop hot work and open flame requirements, refer to the FIRE PREVENTION section of this guide.

**SCAFFOLDING**

1. Any proposed use of scaffolding must be approved by and coordinated with the TC.

2. The use and construction of scaffolding must comply
with good industry practice and federal, state and local requirements, including but not limited to, OSHA 29 CFR 1910.28, 1926.451 and 1926, subpart M - "Fall Protection".

3. The erection and dismantling of scaffolds must be performed under the supervision and direction of a qualified person.

4. Scaffolds and their parts (e.g., footings or anchorage) must be sound, rigid and capable of supporting at least 4 times their maximum intended loads without settling or displacement.

5. Unstable objects such as barrels, boxes, loose bricks, or concrete blocks must not be used to support scaffolds or planks.

6. Wheeled scaffolds must be equipped with lockable wheels which are locked whenever employees are on the scaffold.

7. A safe means must be available for access to and from the work platform.

8. Guardrails, guardrail screens, toe boards and outriggers must be used when required.

9. Platforms must be secured to prevent slippage.

SECURITY

1. IBM security authorizes entry into IBM buildings by issuing an identification badge to each Contractor employee. Contractor's entry into IBM buildings must be approved by and coordinated with the TC.

2. Contractor supervisors must notify the TC of work plans, including work location, crew size and
expected start time.

3. Contractors must sign in and obtain an identification badge.

4. Contractors must prominently display their identification badges at all times.

5. Contractors must remove, destroy and dispose of fabric stick-on badges (one-day badges) when leaving IBM facilities at the completion of the work shift.

6. Contractors who are authorized access to the IBM site must ensure controlled access security by:
   • Only admitting persons with valid identification badges into IBM buildings.
   • Directing persons without badges to Security to gain access.
   • Not lending a badge to another person.
   • Entering and exiting through designated doors only.
   • Not defeating locks, latches or locking/latching hardware.
   • Leaving doors in a closed and locked condition.
   • Not propping doors open unless they are monitored to ensure that only authorized people enter the area.
   • Monitoring or properly securing openings made in walls, roofs or floors that could provide unauthorized access.

7. SEARCH POLICY - IBM reserves the right to
conduct random searches of any personal or other property carried onto or off of IBM premises including vehicles, handbags, lunch boxes, backpacks, briefcases, etc. Anyone refusing to participate in the search process will be brought to the attention of the employer.

8. IBM and US Trade Regulations - IBM and US trade regulations require prior notification of all visits by persons from Restricted or Controlled trade countries. IBM Export Control must be notified for approval. Questions concerning foreign visitors or restricted trade country status should be directed to IBM Site Export Control and to the Procurement interface.

9. Contractors must report any concerns dealing with Security and Safety to the TC and IBM Security Department.

SPRINKLERS AND FIRE ALARM SYSTEMS
{SEE EMERGENCY EQUIPMENT}

TOOLS (HAND AND POWER)

1. Tools must be inspected, handled and used in compliance with OSHA 29 CFR 1926, Subpart I - "Tools - Hand and Power".

2. Contractors are responsible for providing all tools required to perform the work.

3. Hand and power tools must be kept in safe operating condition and must be used only for their intended purpose.

4. Damaged and defective tools must not be used and must be removed from service.
5. Nonsparking tools are required in areas where flammable solvents are handled or where sparks could create an explosion.

6. All tools must be used with the correct shield, guard or attachment recommended by the manufacturer.

7. Guards must be inspected before each use and must not be removed or tampered with.

8. Tools and other materials must not be left on step-ladders, scaffolds, roofs or other places where they may be dislodged and fall.

9. Appropriate PPE must be worn/used when using tools.

**Portable Electric Equipment**

1. Portable electric equipment must be inspected, handled and used in compliance with OSHA 29 CFR 1910.334 and/or 1926.302.

2. Portable electric equipment must be double-insulated or electrically grounded by a grounding conductor within the cord and plug and must be protected by a GFCI.

**Pneumatic (Air Powered) Tools**

1. Any proposed use of pneumatic tools must be approved by and coordinated with the TC.

2. Pneumatic tools must be inspected, handled and used in compliance with OSHA 29 CFR 1926.302 - "Power-Operated Hand Tools".

3. Compressed air must be turned off when the tool is not in use.

4. The manufacturer's safe operating pressure for all
fittings and hoses must not be exceeded.

5. Pneumatic tools must be secured to the hose in a positive manner to prevent accidental disconnection.

6. All hoses exceeding one-half inch inside diameter must have a safety device at the source of supply to reduce air pressure in case of hose failure or tool disconnection.

7. Safety clips or retainers must be securely installed and maintained on pneumatic impact tools to prevent attachments from being accidentally expelled.

**Explosive (Powder) Actuated Fastening Tools**

1. Explosive actuated tools must be inspected, handled and used in compliance with OSHA 29 CFR 1926.302 and ANSI, Safety Requirements for Explosive Actuated Fastening Tools.

2. Any proposed use of explosive actuated tools must be **approved** by and coordinated with the TC. Prior to the use of said tool, the contractor must obtain a permit.

3. Explosive actuated tools must be operated only by employees who are licensed for, and trained in the operation of the particular tool being used.

4. The type and size of fastener to be used must be compatible with the type and size of material which the fasteners are to be driven into.

5. Explosive actuated tools must not be used in explosive or flammable atmospheres.

6. Explosive actuated tools must not be loaded until just prior to the intended firing time.
7. Loaded explosive actuated tools must never be left unattended.
8. Explosive actuated tools must never be pointed at anyone.
9. Spent and misfired cartridges must be disposed of in accordance with manufacturer instructions.

**TRAFFIC SAFETY**

1. Traffic control for work performed on or near roadways, highways or parking lots must comply with, but not be limited to, the Federal Highway Administration's "Manual on Uniform Traffic Control Devices".

2. Contractors must provide and use traffic management and traffic controls (e.g., signs, barricades, cones, flaggers, hazard lights, high visibility warning garments) to protect individuals and property from vehicular traffic hazards.

3. Contractors such as flaggers, that are exposed to vehicular traffic hazards while performing work, must wear high visibility warning garments (e.g., reflectorized colored vest) and use appropriate warning devices (e.g., flags, signs) to warn traffic of the work zone.

**UTILITIES**

1. Contractors must notify the TC if an appropriate source of utilities is not available in the work area.

2. Utilities may not be run through a doorway, which is normally locked to maintain security, unless the doorway is continuously monitored to control
unauthorized access.

3. An alternative would be for Contractors to supply an appropriate and safe, temporary utility source in accordance with federal, state, local, and National Electric Code (NEC) requirements.

WASTE DISPOSAL

General (all wastes)

1. Contractors must make every effort to reduce the amount of waste that is generated, to reuse materials with the concurrence of the TC, and to segregate waste materials for recycling with respect to the site's guidelines.

2. All waste materials must be properly transported, stored, handled and contained to prevent spills, leakage, discharge or release to the environment. Waste containers must be properly labeled to identify contents.

3. Contractors must not discharge or dispose of any waste into an IBM storm sewer, industrial or sanitary waste drain system, sink, restroom, trench, trash can, dumpster, ditch, stream or body of water, etc. without the specific approval of the IBM Environmental Engineering Department or the TC.

4. Contractors must dispose of all waste materials according to the directions of the TC and any documentation they provide (such as Contractor chemical authorizations).

Solid Waste

1. Solid waste includes, but is not limited to the following materials, when not contaminated with
chemical wastes:
- Bottles/cans
- Cardboard
- Construction debris
- Metals
- Pallets
- Paper
- Scrap furniture
- Wire

**Chemical Waste**

1. Chemical waste includes, but is not limited to:
   - Acids / Bases
   - Asbestos or asbestos-containing materials (e.g., transite and roof cements)
   - Batteries
   - Caulk
   - Caustics
   - Cement, glue or sealant
   - Chemicals
   - Cleaning products
   - Contaminated pipes, exhaust hoods, ducts and tanks
   - Floor tile
   - Insecticide
   - Laboratory equipment
- Fluorescent light ballasts and lamps
- Oils and fuels
- Paint and coatings
- Refrigerants
- Smoke detectors
- Solvents
- Empty containers containing residues of the above materials

2. Contractors must inform the TC of any chemical waste generated as a result of the performance of their work. Waste includes empty containers depleted at the work site. The TC will consult with the necessary personnel to determine if the contractor or IBM should be responsible for disposing of the waste. If it is determined that the Contractor is responsible, they must dispose of the waste in accordance with all federal, state, local and IBM requirements.

3. If it is determined that IBM is responsible, the Contractor must package and label the waste and arrange for transportation according to requirements from the site chemical waste storage operations personnel (B/309 Fishkill, B/028 Poughkeepsie).