Pratt & Whitney CT Operations

ENVIRONMENT, HEALTH & SAFETY GUIDELINES
For Level II CONTRACTORS

Revised October 2012
“Working Together for a Safer Environment.”

FACILITY PHONE NUMBERS

**Pratt & Whitney**

**East Hartford**
- **Emergencies, Medical/Fire/Spill**: 860-565-1111 (5-1111)
- **EH&S**: 860-565-3440 (5-3440)
- **Security**: 860-565-6615 (5-6615)
- **Fire Dept.**: 860-565-5907 (5-5907)

**Middletown**
- **Emergencies, Medical/Fire/Spill**: 860-344-5111 (5111)
- **EH&S**: 860-344-4411 (4411)
- **Security**: 860-344-4074 (4074)
- **Fire Dept.**: 860-344-4074 (4074)
The 2012 edition of the PW Guidelines for Level II Contractors handbook has incorporated several new elements and requirements designed to assist PW in the implementation of best management practices to ensure the safety of our employees as well as the contractors working on behalf of Pratt & Whitney. We hope you will find this issue helpful and provide clear communication of the expectations and guidelines to meet our Contractor Safety Program goals and initiatives.

In particular, you will find all new requirements established from recently promulgated regulatory standards as well as Pratt & Whitney procedural requirements highlighted to emphasize these points. If you have any questions regarding any information contained within this document please contact your contractor coordinator or the Pratt & Whitney Contractor Program Manager.

We appreciate your cooperation and commitment to making Pratt & Whitney a safe place to work.

Sincerely,

Brian J. Blondin

Brian J. Blondin
PW Contractor Program Manager
Connecticut Operations

Updates to the handbook between annual printings will be posted on the intranet at the EHS Guidelines for Contractor Handbook link at www.pw.utc.com/contractorehs. Contractors should visit this page upon their initial clearance to work at a Pratt & Whitney facility, and periodically thereafter.
Guidelines for Level II Contractor Additions:

**Definitions**
Added new definitions relevant to Export Control, Shelter-in place and troubleshooting

**Security and Identification**
Added new contractor daily badging requirement
Added camera/video pass requirement

**Emergency Response**
Added new information regarding emergency evacuation and shelter-in-place from new procedure

**Injury & Illness Reporting**
Added clarification of medical services for contractor employees

**Training**
Added expectations and requirements for OSHA 1910 and 1926 related training

**Cardinal Rules**
Added PIV to section
Added and highlighted Cardinal Rule language

**Barricades**
Added requirements for barricades for Live Electrical Troubleshooting per NFPA 70E 2012

**Foreign Object Damage (FOD)**
Added new section

**Lock-Out / Tag-out**
Added new requirements for multiple trades LOTO events
Added requirements for Line Breaking and Gas line purging

**Personal Protective Equipment (PPE)**
Added new PPE requirements for protective clothing, footwear and life jackets

**Powered Industrial Vehicles (PIVs)**
Clarified existing information, removed redundant requirements
Highlighted cardinal rule language
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Pratt & Whitney’s Environment, Health & Safety Policy

Pratt & Whitney will not be satisfied until its workplace is safe from hazards, its employees are injury-free, its products and services are safe, and its commitment and record in compliance, pollution prevention, and protection of the natural environment are unmatched.

Objectives

• Eliminate all employee injuries and ill health by making the workplace free from hazards and unsafe actions.
• Drive pollutants in manufacturing processes to the lowest achievable levels.
• Conserve natural resources in the design, manufacture, use and disposal of products and delivery of services.
• Comply with safety and environmental protection standards, applicable laws, and company policies and go beyond, when necessary, to achieve our goals.
• Hold operating managers accountable for safety and environmental performance and for providing leadership and required resources.
• Require all employees to support the policy and objectives.
• Continually improve EH&S management and performance.

The purpose and scope of the UTC Standard Practice 10, Contractor EH&S Program, is to regulate the activities of contractors who perform work on-site at UTC’s operating units.
Contractor EHS Requirements

Contractors are responsible for ensuring their employees, subcontractors and agents comply with this EH&S Guide and applicable Federal, State and Local regulations at all times during performance of their work.

- Each contractor will complete a Contractor EH&S Assessment pre-qualification questionnaire. The pre-qualification process will identify contractors, vendors and service providers who have effective Environment, Health and Safety (EH&S) programs with demonstrated leadership and performance in their industry.

- P&W reserves the right to verify that the Contractor and all of the Contractor’s employees meet contractual requirements, including orientation, training, medical testing and substance abuse screening.

- Contractor’s employees meet contractual requirements, including orientation, training, medical testing and substance abuse screening.

- The Contractor EH&S Program at P&W is administered in English. The Program includes this Contractor Handbook, online computer training, and a Contract Coordinator who will provide project management and supervision.

- Contractor employees who will be issued a picture badge or act in a supervisory role in the performance of their duties at PW, must first complete Contractor Online EH&S Training. This training covers the PW requirements in this handbook, and includes a test to verify comprehension. Information on how to take this training is available from EH&S, your Contractor Coordinator or Emergency Services.

- All contractors must communicate in English with the level of proficiency necessary to ensure the safety of their employees and the safety of others.

- Contractor activities and performance will be audited and evaluated through the Contractor EH&S Progressive Improvement Plan to ensure ongoing compliance with P&W policies, procedures and requirements, and to achieve a successful and injury-free workplace.

- Contractor employees may be required to sign a contractor verification card supplied by Plant Protection.
• Each contractor employee must carry the card with them at all times, as it is required in order to enter the facility through the security post.

• A P&W Contractor Coordinator will be assigned for each project. The Contractor Coordinator will be the Contractor’s primary P&W contact on all matters related to the task.

• If there are any questions about this Guidelines for Contractor Handbook or any EH&S concerns related to an operation or activity, contact your supervisor or the P&W Contractor Coordinator.

• The requirements of this Guidelines for Contractor Handbook are in addition to the terms and conditions of any Agreement or Purchase Order between the Contractor and P&W and form a material part thereof.

• Contractors will conduct safety meetings with their employees to cover all applicable sections of this Guidelines for Contractor Handbook before any work is done on PW property.

• Copies of this EH&S Contractor Guidelines for Contractor Handbook are available from Environmental, Health & Safety (EH&S), and Plant Protection and at the P&W Contractor EH&S Website.

Each contractor shall:

• Have ready access to this Guidelines for Contractor Handbook at all times to use as a reference source.

• Report all injuries, spills and near hits immediately to Emergency Services and your Contractor Coordinator.

• Conduct daily inspections of work areas to ensure compliance with the requirements of this guide. Review findings and corrective actions with your Contractor Coordinator.
Definitions

BAER (Business Area Export Representative): P&W employee who has been appointed by his/her manager to obtain import-export compliance training and to act as his/her department’s export-import compliance point of contact.

Cardinal Rule: - A rule that if violated, has the potential to cause a fatal or serious injury. As such, violators of a Cardinal Rule are subject to disciplinary action up to and including permanent suspension from working at P&W.

Contractor Coordinator – The P&W employee who is directly responsible for the activities performed on site by a contractor and the contractor’s employees and subcontractors.

Foreign National: A foreign national is any person, firm, or other entity that is not a U.S. citizen, permanent resident alien, or asylee. A U.S. citizen who works for a foreign company is considered a foreign national. All foreign nationals working in the U.S. are treated as foreign nationals. Foreign nationals employed by Pratt & Whitney are treated as if they are receiving exported information. Exports to foreign nationals are treated as if the export is made to their country of citizenship. Note: An individual who has permanent resident alien status (holds a U.S. "green card") or who is a political asylee or refugee, is not a foreign national, and is treated as a U.S. person, for purposes of the export regulations.

Level I Contractor: Any other person performing work, or providing services who does not meet the definition of a level II or level III contractor service. Examples of level I contractors are credit union employees, office equipment repair personnel, cafeteria personnel, office staff, external auditors, etc.

Level II Contractor: Contractors whose services require them to work in the shop or other potentially hazardous work areas (e.g., process engineering consultants, equipment engineers, original equipment manufacturer service contractors) or delivery personnel who engage in material handling activities. Level II contractors do not perform “trades” type work (e.g., electrical, pipefitting, mechanical).

Level III Contractor/ Projects: Contractors and projects that involve trades type work such as general contractors, construction vendors, riggers/millwrights, painters, machine tool services vendors, and other
vendors who use power tools and/or are engaged in activities that involve potentially hazardous chemicals or energy sources.

**Minor Incident** – An incident (violation) that is not severe enough to be defined as a serious incident.

**Protective Services**: Includes PW Fire Department, PW Security Department.

**Review Board** – The Contractor Review Board consist of the Site EH&S Managers, Facility Manager, and Contractor Administrator. The Contractor Review Board will review all contractor incident reports and assign corrective action points. Assigned points will be determined by the board based on the nature and circumstances of the incident or violation.

**Serious Incident** – An incident that results in an OSHA recordable injury, an environmental release that is deemed by the EH&S department to be a danger to human health or the environment, or property damage in excess of $1000.00, including incidents that meet policy 33 & 52 reporting requirements.

**Shelter-In-Place Location**: An area within a building that should be with few doors and windows and away from exterior walls of the building. Area should be large enough for everyone in the designated area and have access to water supply, bathroom facilities and communications.

**Site** – Location of a P&W facility where work is performed.

**Troubleshooting**: Troubleshooting includes voltage checks and should only be conducted by Qualified Persons. Using tools to remove or install parts and/or components is not included. Manual activation of contactors, relays and motor starters is not considered troubleshooting and is prohibited.
Contractor EH&S Performance Progressive Improvement Plan

Point Assessments
Minor Violation: 1 point
Serious Violation: 2-6 points (applied to Cardinal Rule violations)
Category Points: Violations within the same chapter of this handbook (e.g., Lockout Tagout, Confined Space, PPE)
Total Points: Total of all violations, regardless of category.

<table>
<thead>
<tr>
<th>Category Points</th>
<th>Total Points</th>
<th>Division Improvement Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Verbal Warning to Work Crew and Contractor</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Written Warning to Contractor</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>Contractor Meeting with site Review Board</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>Work Crew¹ Suspended from site for 1 week and Contractor Suspended from bidding jobs at the site/division² for 6 weeks</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>Work Crew and Contractor suspended from site for 3 months</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
<td>Contractor suspended from site indefinitely</td>
</tr>
</tbody>
</table>

* - For violations/incidents within the last 24 months.
1 - Alternate work crew may be assigned to continue work
2 - Site or division suspension determined by review board

<table>
<thead>
<tr>
<th>UTC-Wide Consequences*</th>
<th>Improvement Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Divisional Suspension</td>
<td>Written Warning¹ to Contractor Management</td>
</tr>
<tr>
<td>2 Divisional Suspensions</td>
<td>12 Week UTC Bid Suspension</td>
</tr>
<tr>
<td>3 Divisional Suspensions</td>
<td>1 Year UTC Bid Suspension</td>
</tr>
<tr>
<td>4 Divisional Suspensions</td>
<td>Permanent UTC Site and Bid Suspension</td>
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</tbody>
</table>

* - For suspensions within the last 24 months. A suspension at any division initiates the UTC-wide Improvement Action
1 - Including warning that Contractor is at risk of UTC-wide bid suspension

The intent of this plan is to raise the level of awareness concerning poor EH&S performance to succeeding levels of management within a contractor's organization, and thereby enabling management to implement necessary corrective actions to avoid future violations and business interruptions.
PW Security (Identification) Services will clear contractors prior to their first day of work at P&W. Contractors must contact the Security (Identification) Services department or their Contractor Coordinator at each P&W facility to determine what (if any) restrictions apply to individual personnel. Contractors must do this in advance of assigning personnel to work on or within a P&W property or facility. Contractor personnel may be required to provide government-issued documents confirming their eligibility to access security, export controlled, or other sensitive areas of P&W's facilities. P&W reserves the right to deny access to contractor personnel who are unwilling or unable to meet U.S. Government or P&W requirements.

- All persons visiting the site will register at their entry and exit points in accordance with site requirements as specified by the Contractor Coordinator.

- Contractors will display their One-Day Contractor Badge or Picture badge at all times.

- Contractors will exchange their white Contractor Identification Card for a Temporary Yellow Contractor Badge (one-day badge) at the beginning of their work day every day, and return the one-day badge in exchange for their white card at the end of their day.

- Contractors will report the loss of a contractor picture badge immediately to Security Services.

- Unless otherwise authorized by the Contractor Coordinator, contractors are accountable for all employee badges.

- Firearms and weapons are prohibited unless authorized by the Emergency Services/Security Manager.

- Portable radios, tape decks, television sets are prohibited, unless authorized by Contractor Coordinator. Camera and video equipment (including cell phones with digital camera capability) require a PW pass, which must be displayed at all times if issued.

- Contractor employees will be restricted to the area in which they are working.
• Contractors are responsible for the security of all materials, tools and equipment used for the job, whether owned or rented by the contractor.

• The Fair Labor Standards Act prohibits the employment of anyone less than 18 years of age in hazardous occupations.

• All packages, equipment and vehicles are subject to inspection by Emergency Services.

• Contractors admitted to company property must conduct themselves in an orderly and safe manner. Fighting, engaging in horseplay, being under the influence of or possessing alcohol or drugs, gambling, soliciting, stealing, immoral or otherwise undesirable conduct is not permitted.

• Contractor vehicles will be parked only in areas designated by the Contractor Coordinator or by Emergency Services. After unloading tools or equipment, contractor vehicles must be relocated to their designated parking area.

• Authorization must be obtained from the Contractor Coordinator for any access to P&W property before 7 am or after 5 pm (weekdays) or on weekends/holidays.

• Contractors shall never block access to Self-Contained Breathing Apparatus, emergency eye wash stations/showers, or any other emergency equipment.

• Contractors will not use fire hydrants without prior Emergency Services approval.

• **Failure to comply with security procedures is cause for termination of contractor privileges.**

P&W reserves the right to request a copy of the contractor’s hazard control programs, training certificates, injury logs or other EH&S-related program documentation in order to substantiate compliance with various regulatory requirements.
Housekeeping and Sanitation

- Contractors shall maintain a high standard of housekeeping on the job at all times. Daily clean up of work areas is required.

- All equipment and materials shall be stored in an orderly manner.

- Access to emergency equipment, exits, telephones, safety showers, eye washes, fire extinguishers, pull boxes, fire hoses, etc. shall not be blocked.

- No material shall be stored outdoors without the permission of the Contractor Coordinator. **Material shall be marked with the Contractor’s Name.**

- The Contractor Coordinator will notify the contractor immediately when inspections identify unsatisfactory clean-up efforts by contractor employees.

- Restrooms are provided throughout the facility. Your Contractor Coordinator will direct you to the nearest restroom location.

- Never leave file cabinet or desk drawers open more than one drawer at the same time.

- Do not lay electrical cords across aisles or walkways.

- Report slipping or tripping hazards immediately to the area supervisor or Contractor Coordinator.

- Do not store hazardous materials in office areas without approval from EH&S.

- **Report all near hits to the Contractor Coordinator.**
Working in a Manufacturing Unit

- Contractors shall not access, or perform any work on, operating process or manufacturing equipment unless specifically directed by the Contractor Coordinator.

- Contractor employees who perform process and manufacturing operations work shall be trained in the operation and maintenance of the machine they will work with prior to starting work.
EH&S Requirements for Miscellaneous Operations

**Clean Rooms** - The generation of dust and dirt by job activities must be minimized in clean rooms. Appropriate clean room garments must be worn and if this requirement creates a perceived safety hazard, the Contractor must immediately contact the Contractor Coordinator.

**Clean Rooms** shall be entered and exited through approved doorways only. All construction materials, tools, ladders, etc. entering the Clean Room shall be as clean as possible prior to entry.

**Compressed Air** - Cleaning of clothing with compressed air is prohibited. Compressed air that is used for material cleaning must be limited to 29 psig and appropriate personal protective equipment and chip guards shall be used.

**Computer Rooms** - To avoid accidentally engaging switches, breakers, buttons, etc. do not place tools or materials on or against any equipment in computer rooms. All computer equipment near any activity where conductive material might fly or fall (soldering, welding, sawing, etc.), must be completely protected from the falling material.

**Electrostatic Discharge Sensitive (ESDS)** areas - Always wear static discharge equipment (except electricians) and test the static discharge equipment for effectiveness. Do not touch any ESDS equipment or hardware.

**Electric Utility Use** - Contractors must coordinate with their Contractor Coordinator for access to appropriate electric utility sources. Accessing power from test stands or production equipment is prohibited.

**Internal Combustion Engines** – Operation of diesel and gasoline powered vehicles is prohibited inside buildings unless prior approval and arrangements for ventilation have been made with the Contractor Coordinator, Emergency Services and the EH&S department.

**Lasers** – Prior approval must be obtained from the site EH&S department before any laser equipment is used on site.

**Noise** - Contractor personnel shall wear appropriate hearing protection in accordance with facility rules and posted signs.
Radiographic Equipment - Prior approval must be obtained from the site EH&S department before any radiation-emitting equipment (X-ray units, radioactive sources, etc.) is used on site. Approved radiation sources shall not be left unattended or on P&W property overnight.

Temporary Heating Devices - Temporary propane or resistance heating devices used on site must be approved by a nationally recognized testing agency (e.g., UL, Factory Mutual). The Contractor Coordinator must approve heater use and location in advance. A hot work permit must be issued on the day of use (see Hot Work Permit section of these guidelines).
Emergency Response and Notification

Fires

In the event of a fire, locate and pull the nearest fire pull box or call the emergency number specific to the site you are working. This will communicate the fire emergency directly to the dispatcher.

Do not attempt to extinguish a fire yourself, unless you are trained and qualified to operate a fire extinguisher.

Evacuation

Evacuations are indicated by an audible signal followed by a specific announcement over the public address system. It is essential that all evacuation instructions be adhered to.

Exit quickly and in an orderly manner.

Your Contractor Coordinator will review evacuation routes and assembly areas with you.

Proceed to the nearest safe exit or shelter in place location in an orderly manner. DO NOT rush, push, stop, or attempt to retrieve personal items that are not in your immediate area.

When exiting a building, go to the nearest assembly area and standby for further instructions. Follow the sweeper's instructions.

DO NOT attempt to re-enter the evacuated area until you are directed to do so by a uniformed P&W Protective Services representative or sweepers who have been directed by P&W Incident Command

Evacuation Guidelines

Spills and Releases - Listen to the PA announcement. Directions will be either for evacuation or shelter in place. If the release is in the facility one or more buildings could be evacuated to the exterior. Once this has been established, employees should move to their exterior assembly areas. If the release is outside the facility, you will be told to remain in the building or move to your shelter in place location. Remain indoors until the Incident Command has determined that it is safe to leave the building.
Bomb Threats - Listen to the PA announcement or for direct instructions from Protective Services. Directions will either be for evacuation or shelter in place.

Suspicious Packages/Powders - Listen to the PA announcement or for direct instructions from the Protective Services. Directions will either be for evacuation or shelter in place.

Suspicious/Dangerous Person - **Self Evacuate**, if safe to do so. Leave the building and seek cover. If you cannot safely evacuate, **Hide Out**. Hide in areas out of view of the dangerous person. Lock or block entry to your hiding space. Lay on the floor under desks or similar spaces. **Take Action** as a last resort and only when your life is in imminent danger. Attempt to incapacitate the dangerous person. Act with physical aggression, do not try and talk to them.

Active Shooter - **Self Evacuate**, if safe to do so. Leave the building and seek cover. If you cannot safely evacuate, **Hide Out**. Hide in areas out of view of the active shooter. Lock or block entry to your hiding space. Lay on the floor under desks or similar spaces. **Take Action** as a last resort and only when your life is in imminent danger. Attempt to incapacitate the active shooter. Act with physical aggression, do not try and talk to them.

Explosion - Listen to the PA announcement. Directions will either be for evacuation or shelter in place. If the explosion is internal to the facility one or more buildings could be evacuated. Once this has been established, employees will move to their exterior assembly areas. If the explosion is outside of the facility, you will be told to remain in the building or move to your shelter in place location. Remain indoors until Incident Command has determined that it is safe to leave the building.

CBRNE (Chemical, Biological, Radiological, Nuclear and Enhanced Conventional Weapons) Listen to the PA announcement. Directions will either be for evacuation or shelter in place. If the event is internal to the facility one or more buildings could be evacuated. Once this has been established, employees will move to their exterior assembly areas. If the event is outside of the facility, you will be told to remain in the building or move to your shelter in place location. You will remain indoors until Incident Command has determined that it is safe to leave the building.

Tornado - Listen to the PA announcement for directions. Prior to the storm hitting you will be asked to move to your shelter in place location. After the event, listen for instructions. If your building has been damaged, you are to proceed to your outside assembly area and await further
instructions. Be aware of your surroundings and avoid hazards such as live electrical, debris and similar hazards

**Hurricane** - Listen to the PA announcements if on site or local news on TV or radio for instructions on coming into work. Prior to the storm hitting you will be asked to move to your shelter in place location. After the event, listen for instructions. If your building has been damaged, you are to proceed to your outside assembly area and await instructions. Be aware of your surroundings and avoid hazards such as live electrical, debris and similar hazards

**Earthquake** - Do not evacuate the building during the earthquake. If possible, move to your shelter in place. Do not go up or down stairs. If you cannot move to your shelter in place, move away from windows, tall objects that can fall over and similar hazards. Get under a desk or table and hang onto it, or move into a hallway or get against an inside wall. If you are outside of a building, get into the open, away from power lines, light poles or anything else that could fall on you. Once the event is over, determine if there is any damage to the building you are in. Look for broken windows, cracks in the walls, fallen ceiling panels, electrical power outage and similar items. Call (860-56) 5-1111. If an evacuation is necessary, it will be announced over the PA.

**Injuries**

In the event of an injury or illness, dial the site-specific emergency phone number from any internal P&W phone.

Provide the dispatcher with the following information:

- Nature of emergency (injury, spill, fire)
- Location (department name/number, building letter, column number)
- Your name and the name of the company for which you work.

Health Services is responsible for keeping track of all injuries and illnesses whether incurred by our employees or those contracted to P&W.

**Only properly trained P&W emergency response personnel are qualified to clean up injury sites involving body fluids.**
Spills

Chemicals may not be disposed of by dumping on the ground or into sanitary or storm drains.

A spill is defined as an accidental release of any product, including water, outside of its normal container except during use.

There is no minimum to the quantity that defines a spill.

All spills, including those that occur outside a building, shall be reported immediately by dialing the emergency response number applicable to the site where you are working and providing the dispatcher with the following information:

- Nature of emergency (injury, spill, fire)
- Location (department name/number, building letter, column number)
- Your name and the name of the company for which you work.
- Identity of material spilled/released
- Quantity of material spilled/released
- Time of the spill

Contractors shall be responsible for all spills that result from their work at any P&W facility. However, the contractor cannot start cleaning up the spill until Emergency Services has authorized them to do so, unless failure to do so immediately poses an imminent risk to human health or the environment.

If P&W determines that a spill clean-up is beyond the contractor's ability, or the contractor has failed to clean up the spill adequately, P&W shall use its own personnel or hire spill clean-up specialist.

In all cases, the contractor shall be responsible for all costs. These costs may include removal of contaminated materials as well as restoration of the area.
Injury and Illness
Recordkeeping and Reporting

Contractors shall immediately notify their Contractor Coordinator or P&W Supervisor of any injury, illness and any loss of or damage to P&W property, including incidents related to their subcontractors.

Contractors shall collaborate with the Contractor Coordinator or P&W Supervisor in the incident investigation and root cause corrective action implementation.

An investigative report assessing the root cause and corrective action shall be submitted within 24-hours of the incident's occurrence to the Contractor Coordinator.

Any unsafe conditions and activities shall be reported to the Contractor Coordinator or P&W Supervisor and corrected immediately.

In the event a contractor requires medical attention for a work-related or potentially work-related injury or illness, or periodic medical evaluations, the contractor must use the clinic selected by his or her company. The Pratt & Whitney onsite medical clinics provide clinical evaluation and treatment to contractors in the following situations only:

- FAA mandated testing (e.g. drug and alcohol testing)
- In emergency medical situations when not transported directly offsite by the fire department/plant protection
- Hydrofluoric Acid (HF) exposure
The Contractor Coordinator accompanied by the contractor must formally investigate all incidents, injuries and spills, including near misses, in order to prevent reoccurrence. For all incidents:

- Secure the area with barricades/caution tape to preserve the scene.
- Perform a walk-through of the incident site; this may occur with Site EH&S personnel as well as the Contractor Coordinator.
- Interview witnesses, where applicable.
- Take pictures and/or create a diagram of the incident site.
- Submit a written incident investigation report to the Contractor Coordinator, within 24 hours of the incident occurrence.
- The report shall describe the incident and identify root cause and corrective actions, along with a timetable for implementing the corrective actions.
- With the assistance of the Contractor Coordinator, an internal divisional incident report will be completed for all incidents that result in a recordable injury, environmental release deemed hazardous by the Environmental Health and Safety department, or significant property damage.
Training

- Contractors shall instruct each of their employees and sub-contractors in the recognition and avoidance of unsafe conditions and of the regulations applicable to his/her work environment to control or eliminate any hazards or exposure to illness or injury.

All contractors and their subcontractors performing jobs on a P&W premises shall ensure that all of their employees assigned to perform work have been properly trained to the OSHA regulations applicable to the hazards associated with the work they will perform prior to permitting the employee(s) to begin work.

- Training may include, but is not limited to, on-the-job (OJT) training, tool box sessions, internal or external formal training, etc. The training must meet the minimum criteria set forth by the state, federal, national, provincial, and local requirements regarding the specific subject matter.

- Contractors are required to work to the most stringent applicable sections of OSHA 1910 and 1926 at a minimum. The rules and requirements covered in this Guidelines for Contractor Handbook are not all inclusive and there may be additional requirements specific to a project or task. Copies of OSHA standards can be obtained from OSHA’s web site http://www.osha.gov.

- Contractor(s) and subcontractor(s) shall maintain, on the P&W premises, a summary of training information depicting the training/certification/licensure as required for all employees assigned to perform work on the project. Form is available on the internet at http://links.pw.utc.com\contractorehs via the Pratt & Whitney link.

- Actual documentation of training is subject to review upon request by P&W. Examples of actual training documentation include class rosters, toolbox notes and attendance, certificates, official letter of completion, etc.
Hazard Control Programs

The remaining pages of this guide contain specific environmental, health and safety requirements for Contractors working at Pratt & Whitney Connecticut facilities. Contractors are responsible for being aware of and following these requirements whenever they work at Pratt & Whitney facilities.
Cardinal Rules

P&W has established 6 cardinal rules. These are rules that if violated, have the potential to cause a fatal or serious injury.

Contractor employees who are observed violating a Cardinal Rule (Confined Space, GFCI, Elevated Work, Lockout Tagout, Machine Guarding and PIV) are subject to having their contractor clearance suspended. The length of suspension will be determined by the Contractor Review Board in consideration of facts from the incident investigation. The employee will be required to surrender his/her contractor clearance card and if applicable, his/her picture badge. The employee will also be required to retake the online Contractor EHS Training and provide proof of completion to have their card/badge returned when the suspension expires. In some cases a violation of a Cardinal Rule may result in permanent suspension from working at P&W.

The P&W Cardinal Rules are:

Confined Space

Confined Spaces shall be identified and written procedures established and followed for entry.

Contractors who will enter Confined Spaces must obtain a copy of the space’s risk assessment from the EHS department that defines the hazards associated with the space. It shall be attached to their confined space entry permit posted near the entry.

GFCI use on ALL Hand and Portable Power Tools

Contractor employees shall use Ground Fault Circuit Interrupters (GFCIs) on all portable tools and portable electrical devices used in service/maintenance or installation activities.

Contractor employees shall use Ground Fault Circuit Interrupters (GFCIs) on all portable tools and portable electrical devices used in all manufacturing/assembly/overhaul & repair activities where construction activities are performed, or where there is the potential for exposure to damp/wet areas or the potential for damage to cords/plugs/receptacles.
Elevated Work

Contractor employees shall use fall protection when exposed to a fall hazard (working at an elevated level of 6 feet or more).

Lockout Tagout

Prior to performing work on machines or equipment, contractor employees shall identify all hazardous energy forms, bring them to a Zero Energy State and secure them. Zero Energy State is defined as the elimination and/or control of hazardous energy such that it no longer represents a hazard to personnel.

This shall include but is not limited to mandatory use of lockout / tagout procedures when working on any electrical, mechanical, hydraulic, pneumatic, compressed gas, chemical or thermal processes.

Machine Guarding

Contractor employees shall not tamper with or disable machine / equipment guarding while operating under normal conditions.

PIV

Operators must be properly qualified / authorized and abide by all traffic rules. Be aware of surroundings and always yield to pedestrians.
Aerial Lifts

Aerial lifts (boom, scissors, snorkel types, etc.) and other vehicle mounted elevated work platforms shall be used in accordance with applicable regulatory and industry recognized standards, and shall meet P&W Powered Industrial Vehicle (PIV) requirements.

All employees operating aerial lifts shall be properly trained for the lift they use.

Employees working in aerial lifts shall wear hard hats or bump caps, and shall be tied off in a restraint mode with a harness and lanyard. Restraint mode is achieved when the lanyard prevents the employee from stepping up onto the mid-rail.

Employees shall work from the floor of the lift only. Climbing on handrails, mid-rails or brace members is prohibited unless a permit to do so has been issued verifying an adequate anchor independent of the lift is used to tie off in a fall arrest mode.

Areas below overhead work will be clearly marked with safety stanchions, caution tape and signs to protect associates at grade level.

Contractor personnel are not permitted to use PW overhead cranes, hoists or powered lift apparatus unless prior approval has been received from the Contractor Coordinator.
Asbestos-Containing Materials

- Some building materials throughout the facility may contain Asbestos-Containing Materials (ACM). Furthermore, the building material may not be labeled as containing asbestos.

- Assume that all thermal insulation (piping, elbows, joint insulation, etc.) floor and ceiling tile, window caulking, siding, and roofing materials, do contain asbestos, unless labeled as non-ACM. This list does not include every product/material that may contain asbestos. It is intended as a general guide to show which types of materials may contain asbestos.

- Some buildings may have thermal insulation sprayed on ceiling structural components (e.g. decking, I & H beams, etc.).

  The Contractor Coordinator, designated site asbestos coordinator or the site facilities department must be contacted before ceiling tiles are moved below areas that have not previously been confirmed to be free of sprayed on asbestos. Should the upper ceiling be insulated with sprayed on asbestos, only personnel trained and qualified to work with asbestos will be permitted to remove ceiling tiles and work above them, and only after authorization by the site facilities department or site asbestos coordinator. If the asbestos cannot be avoided to perform the work, it must be abated before the work is performed.

There is sprayed on thermal system insulation on the ceiling structural components in Office Building B.

The site Asbestos Coordinator must obtain all asbestos dumpsters.

No new products containing asbestos or its synonyms (crysotile, amosite, crocidolite, anthophyllite, actinolite) may be used in any facility. Some foreign country suppliers identify the names of the types of asbestos their product contains without using the word asbestos.

- Tasks involving work on existing building material must be reviewed for ACM by the Contractor Coordinator and Site EH&S personnel prior to commencing the task. Construction and demolition activities
will require prior approval by means of the site Facilities/EH&S department review procedure.

- In the event that ACM or suspect ACM material is encountered during construction or demolition, the contractor shall stop work immediately and call the Contractor Coordinator or the site emergency response number.

- Contractor personnel will not attempt to clean up any such debris, or perform any repair to the suspect ACM material unless they are trained and qualified to perform asbestos abatement, and are approved by UTC for asbestos abatement projects.

- All contractor employees will vacate the immediate area while UTC personnel assess the material and the area of concern.
Barricades

Barricades for Hazardous Work Area

- Danger Tape - Work in progress that is continuously attended and supervised with a hazard that has a potential for moderate to severe injury (e.g., mounting hoist rails, hot work).

- Caution Tape or Cones - Work in progress that is continuously attended and supervised with a hazard that has a potential for minor injury only (e.g., mounting a bulletin board, plumbing repairs on a water fountain).

- Blocked main aisles require prior approval from the contractor coordinator and must have detour signs posted to re-route personnel to alternate emergency exits.

- If the barrier will interfere with a main aisle or completely block the only means of egress of a department aisle, the 4-foot minimum distance from the edge is waived. If this creates a greater hazard to personnel working inside the barrier however, alternate barricading methods may be used if authorized by the Contractor Coordinator and the EH&S department.

Barricades for live electrical troubleshooting:

- Barricades shall be used whenever qualified authorized individuals are working on exposed live parts, the barricade distance will be no closer than ten feet from the live part(s).

- Barricades shall be used with safety signs where it is necessary to prevent or limit Unqualified or other employee access to work areas containing live parts. Unauthorized crossing of boundaries shall not be permitted.
Chemical Handling & Storage/ Hazard Communication

- Contractors shall have a written hazard communication program and shall inform their employees of the location and availability of their program.
- Contractors shall train their employees on the physical, chemical and biological agents in the workplace.
- Material Safety Data Sheets (MSDS) shall be available at the work site for materials supplied and used by the contractor.
- The Contractor Coordinator will communicate hazards inherent to the work location and provide the contractors with access to MSDSs for materials at this site.
- All chemicals used by contractor personnel (including fuels, paints, coatings, coolants, cleaners, flooring materials, etc.) must have prior approval via the site EH&S approval process.
- Chemicals will be properly labeled and segregated to prevent potential hazardous mixing.
- Factory Mutual approved metal safety cans with self-closing lids and flame arrests shall be used for handling flammable liquids.
- All containers must be properly labeled as to their contents and potential chronic health and target organ effects.
- Flammable and combustible liquids shall not be used or stored in any close proximity to open flames and ignition sources.
- All unused, flammable and combustible liquids must be stored in a flammable-storage closet or removed from the premises on a daily basis.
- Flammable and combustible liquids and other hazardous materials shall be kept in closed containers when not in use.
- Upon completion of the project, all unused materials will be taken off site.
• Storage and transfer of flammable liquids will be grounded and bonded where necessary.

• Emergency safety showers and eyewash units are provided in various areas of the facility. P&W personnel will identify their locations for you. In the case that there is not an immediate eyewash station available, your own portable eyewash station may be required.

• All affected contractor employees shall wear appropriate personnel protective equipment per their Hazard Communication Program and the MSDS of the product in use.

Excavations- Confined Space

• In certain cases trenches and excavations may be considered a Permit Required Confined Space based on known or potential hazardous conditions such as a hazardous atmosphere. When this occurs, compliance with the confined space program is also required.

• Workers must be confined space trained and only enter the space under a confined space permit.

• The contractor’s competent person shall assess the excavation to determine potential hazards which may qualify the trench/excavation as a confined space.
Confined Spaces

Cardinal Rule

- **Cardinal Rule**: Confined Spaces shall be identified and written procedures established and followed for entry

- Contractors who will enter Confined Spaces must obtain a copy of the space’s risk assessment from the EHS department that defines the hazards associated with the space. It shall be attached to their confined space entry permit posted near the entry.

- Contractors must use own permit.

- Contractors shall follow their own Confined Space Entry procedure when entry into a P&W designated permit-required confined space is necessary. Contractors shall provide their procedure to the Contractor Coordinator for review and approval prior to entering a permit required confined space.

- Contractor shall review the completed entry permit with their Contractor Coordinator or EH&S personnel prior to entry. **P&W division will retain a copy of permit.**

- “Permit Required Confined Spaces” are identified and marked by a sign near the entrance stating:

  "DANGER"
  Permit Required
  Confined Space
  Do Not Enter

- Before entering a “Permit Required Confined Space,” proper training in Confined Space Entry and Lock Out/Tag Out is required.

- Contractors will supply all necessary equipment and support personnel required to enter a “Permit Required Confined Space.”

- Your Contractor Coordinator will coordinate obtaining all “Permit Required Confined Space” entry permits with Emergency Services and will provide information regarding permit space hazards and entry operations.
Non-permit required confined space entries require use of a buddy system and continuous air monitoring. Exceptions to this requirement must be in writing from the site EH&S manager.

**P&W EH&S personnel reserve the right to deny entry.**
Electrical Safety

- **Contractors must provide ground-fault circuit interrupters (GFCI's) at all times when using electric power cords in order to protect employees from ground-fault hazards.**

- The requirements of NFPA 70E 2012 shall be followed for all live electrical work. This covers requirements for PPE, flash clothing, insulated tools, live work permits and establishing a blast radius for all work to be performed. [Barricades](#)

- Exposed live electrical parts will be de-energized and locked out before working on or near them whenever practical.

- If determined by the Contractor Coordinator that de-energizing exposed live electrical parts introduces additional hazards, or is not feasible due to equipment design or operational limitations, specific safety related energized work practices will be developed by qualified contractor personnel and the Contractor Coordinator. Work practices will protect against direct body contact or indirect contact by means of tools or materials and be suitable for work conditions and the exposed voltage level. **Live work permit will be needed.**

- Extension cords will be listed or approved as assemblies by a nationally recognized testing agency.

- Extension cords will not be used in a manner that could cause damage to the outer jacket or cause tripping hazards.

- When crossing over aisles with extension cords appropriate overhead clearance must be maintained.

- Never route extension cords through door or window openings.

- Portable electric equipment and extension cords will be approved for the work environment and kept in good condition.

- Outlets (120 volts) on construction sites that are not a part of the permanent wiring of the building or structures will have approved ground fault circuit interrupters (GFCI).

- Contractor Coordinator will designate an exclusion zone around exposed, energized sources.
• Energized panels will be closed after normal working hours and whenever they are unattended. Temporary wiring will be de-energized when not in use.

• Suspended temporary lighting will be festoon listed.

• Only qualified electrical contractor employees may enter substations and/or transformer vaults and only after being specifically authorized by the Contractor Coordinator. All others must be accompanied at all times by P&W qualified personnel.

• **East Hartford Only** – Electrical work in substations must be performed by at least a Journeyman Electrician. A substation qualified Pratt & Whitney individual must accompany all others, including non-electrical workers. Job briefing shall be conducted and documented prior to any substation entry.

Working on or near live electrical parts other than troubleshooting requires a Live Work Permit, which must be obtained through your contractor coordinator.

• Use of electrical tape for temporary repair of frayed cords is prohibited.

• Extension cords shall not be fastened with staples, hung from nails or suspended by wire.
Elevated Work

Cardinal Rule

- For any employee working six feet or more above an exposed work surface, contractors shall provide primary fall protection whenever possible and secondary fall protection only when primary fall protection is not practical.

- For work that requires disconnection from an anchorage point, a full body harness with two shock absorbing lanyards and locking snaphooks shall be used. Contractors must attach the second lanyard to a suitable anchorage point prior to disconnection from the original anchorage point.

- The anchorage point must be at waist level or higher; and capable of supporting at least 5,000 lbs. per employee attached.

Primary Fall Protection System:

- Primary fall protection systems (e.g. guard rails) provide protection for walking and working surfaces in elevated areas with open sides, including exposed floor openings.

- Primary fall protection systems include, but are not limited to, fixed guardrails, as well as scaffolds, aerial lifts and other approved personnel lifting devices.

Secondary Fall Protection Systems:

- A secondary fall protection system consists of an approved full body harness and two shock-absorbing lanyards.

- A secondary fall protection system shall be worn when primary fall protection is not practical or feasible.

- Use of a secondary fall protection system shall include the prior establishment of a rescue plan for the immediate rescue of an employee in the event they experience a fall while using the system.

Life Line Systems:

- Vertical lifeline systems shall be made from materials (including the line itself) designed specifically for fall protection.
• Vertical lifeline systems must be capable of supporting at least 5,000 lbs. for one person only.

• Lifelines may be mounted either vertically or horizontally and are generally intended to provide mobility to personnel working in elevated areas.

• Horizontal lifelines must withstand at least 5,000 lbs. impact and pulled tight enough to prevent deflection.

• Horizontal lifelines shall be positioned to provide points of attachment at waist level or higher.

• Vertical lifelines used for vertical mobility will be equipped with sliding rope grabs or may consist of self-retracting reel type lanyard/lifeline attached directly to a safety harness. Retractable lifelines shall be attached to supports capable of 5,000 lbs. impact loading.

• Sliding rope grabs, approved for the size rope used, are the only method for securing a safety lanyard to a vertical lifeline. Lanyards shall not be attached to lifelines by means of knots and loops.

• All fall protection devices used in elevated work shall be inspected by a competent person prior to initial use (and annually thereafter) and by the user prior to each use.

• Defective equipment shall be tagged "Do Not Use" and immediately removed from service.

• All contractor employees who will be required to perform elevated work shall be fully trained in elevated work practices and the care and use of safety equipment.

• Safety nets shall be used only with prior approval of the Contractor Coordinator.
Fire Protection and Prevention

- Do not block emergency exits unless authorized by Contractor Coordinator.

- Access to fire fighting equipment, fire control and emergency vehicles shall be maintained at all times.

- Contractor shall familiarize employees with the method used at the facility for reporting a fire, the location of fire alarms and the requirements for the conduct of employees in the event of an alarm.

- Flammable liquids shall be kept in closed containers when not in use and shall not be allowed, under any circumstances, within 50 feet of an open flame or ignition source.

- In the event of an alarm, contractor shall evacuate the area. Contractors are also required to evacuate during drills.

- **Smoking is not permitted anywhere on P&W facility property,**
Foreign Object Damage (Debris)

Foreign Object Damage (FOD) – Any damage attributed to a foreign object that can be expressed in physical or economic (monetary) terms which may or may not degrade a product’s required safety and/or performance characteristics.

Many of our products are sensitive to debris that can be produced during contractor work activities in manufacturing areas. The following requirements must be implemented for all work performed in manufacturing areas to protect our products from FOD:

- All items brought into the work area should be accounted for, this includes personal items (watch, jewelry, cell phone, food, etc).

- Tools - All hand and power tools should be accounted for during work. At the end of the day or operation, ensure that all tools, bits, fixtures are accounted for and returned to proper storage locations.

- Tool breakage - should a tool break or be determined to be missing (or any personal items), contact the Contractor Coordinator to ensure that the tool and all parts can be located.

- Parts/Materials:
  - All product or otherwise critical surfaces near work areas must be properly protected against debris or contact.
  - Debris that is produced during work needs to be cleaned at logical intervals to preclude migration to sensitive areas.
  - Control of parts - nuts, bolts, straps, tie-wraps, should be contained to prevent spillage and should be monitored to prevent migration.
  - Consumables - rags, sanding materials, nails, etc should be used and discarded during cleaning intervals with debris, including end of shift.
• Every effort should be taken to prevent contractor work items from migrating or mingling with shop tools, parts and compartments. Should this occur, work should cease and control and/or separation of contractor/shop materials should take place.

- Do not move any shop parts or equipment

- Do not place any items on surfaces used for P&W processes

- Do not remove any items from areas posted as quarantine

• When performing elevated work including scaffolds, cranes, hoists, aerial lifts and overhead work: Increased diligence regarding the above will be required. No tools, parts or materials should be taken overhead that are not needed or accountable since their descent will make relocation of those parts even more difficult.

• Every effort should be made to prevent any and all debris or parts to fall from overhead/aerial work areas.

• At the completion of work, all items are cleaned and accounted for. All work areas are cleaned of debris and consumables that were produced during work.
Ladders

- A stairway or ladder shall be provided for access where there is a break in elevation of 19 inches or more and no ramp, runway, sloped embankment or personnel lift is provided.

- Portable metal or conductive ladders shall not be used near energized lines or equipment.

- Fabricated ladders are prohibited.

- Conductive or metal ladders shall be prominently marked as conductive and all necessary precautions shall be taken when used in specialized work.

- No ladders other than Type 1 or Type 1A shall be used. Fiberglass ladders are mandatory for electrical tasks or when working in close proximity to electrical services where accidental electrical contact is a foreseeable event.

- Ladders will be secured to keep them from shifting, slipping, being knocked or blown over. Ladders will never be tied to facility services piping, conduits, or ventilation ducting. Ladders will be lowered and securely stored at the end of each workday.

- Ladders will not be placed in front of doors or door openings unless the door is either monitored by an attendant or blocked open to prevent contact with the ladder. If all traffic around the ladder work area cannot be re-routed, the ladder must be secured to prevent accidental knock down. The Contractor Coordinator will arrange closure of aisles, walkways and selection of alternative traffic routes. Appropriate warning signs, tape and cones will be deployed around ladder work to define exclusion zones.

- Stepladders will not be used as straight ladders. The top or first step below the top of ordinary stepladders will not be used as a step or a stool.

- Ladders will only be used for the purposes for which they are designed.
• Extension ladders will not be separated.

• The following requirements shall apply to the use of all ladders:

• Ladders used for access to an upper landing surface shall have side rails that extend at least three feet above the landing surface.

• Ladders shall be maintained free of oil, grease and other slipping hazards.

• Non-self-supporting ladders shall be tied off or otherwise secured to prevent accidental displacement.

• Non-self-supporting ladders shall be used at an angle where the horizontal distance from the top support to the foot of the ladder is approximately one quarter of the working length of the ladder.

• When ascending or descending a ladder, the user shall face the ladder and shall use at least one hand to grasp the ladder; user shall not carry any object or lad that could cause him/her to lose balance and fall.

• Ladders will be visually inspected by a competent person and approved for use before being put into service. Each user shall inspect ladders visually before using.

• Ladders with structural defects shall be tagged “Do Not Use,” immediately taken out of service, and removed from the site by the end of the day.

• Wooden ladders shall not be painted.

• Any employee working on a ladder at a height greater than 20 feet shall use appropriate fall protection equipment.
Lockout/Tagout of Hazardous Energy Sources

Cardinal Rule

Before working on machines or equipment Contractors shall isolate all forms of hazardous energy, secure them with locks and tags, then verify Zero Energy State.

- Contractors shall restrict access to work areas by unauthorized employees where energy sources have been de-energized.
- All affected employees shall be notified. Where applicable, the area shall be secured and signs posted to alert employees that a de-energizing activity is in progress.
- Contractors shall obtain specific site lockout instructions from the Contractor Coordinator.
- Standardized lockout devices and "Danger" tags shall be used to prevent the operation of switches, valves, pieces of equipment, etc., where personal injury may occur or equipment may be damaged.
- For work that involves multiple trades and or contractors:

  During multiple trade lockout tagout events, a Primary Authorized employee must be designated to oversee the event, and each employee who will perform work that exposes them to the controlled energy must verify or witness zero energy state for each hazardous energy source he or she will be exposed to.

  A lead authorized employee shall be designated for each party that is part of the group.

  Each lead shall verify that a zero energy state has been achieved for each hazardous energy source that must be locked out that is associated with his or her party’s work.

  If any party does not have an employee that is qualified to perform the verification (e.g. an employee qualified to assess electrical hazards), then the lead employee and each member of his/her party must witness the verification performed by a designated qualified employee of one of the other parties or qualified P&W employee.
The primary and all lead persons must sign a document attesting to the completion of these verification steps before work may begin. Contractor Coordinators should coordinate these requirements at a pre-job hazard review.

- Each contractor and subcontractor employee performing operations where equipment or systems require de-energizing shall place his/her own lock and tag on each energy source requiring de-energizing; each employee shall sign and date the tag. The tag shall include the employee’s name, the name of the contractor they work for, the date the lock is installed and the reason for lockout is required.

- Only standard "Danger - Do Not Operate" (black, red and white) tags will be used.

- If equipment for de-energizing is in a confined space, the confined space will be cleared of all employees prior to testing the energy source for deactivation.

- Stored energy systems and equipment, such as electrical capacitors, mechanical springs, steam lines, and hydraulic systems, shall be put in a "zero energy" state.

- Contractor employees shall remove only their own locks and tags when they complete their work.

- Used danger tags will be destroyed; tags will not be reused unless designed for reuse.

- Extended lock out requirements shall be coordinated with the Contractor Coordinator.

- Line breaking permits required if breaking into a live / pipe containing a hazard.

- Gas line purging permit required for all work done to lines containing flammable gasses.
Motor Vehicle Safety

- Contractor employees shall park their personal vehicles only in those areas designated by P&W Emergency Services or the Contractor Coordinator. P&W assumes no responsibility for vehicles, or articles in vehicles, parked on P&W property.

- Vehicles and equipment shall not block exits, walkways, loading areas, fire hydrants or emergency equipment.

- Operators of vehicles with high overhead clearance must pre-plan travel routes on site to ensure overhead utilities, obstructions and or personnel will not be at risk of impact.

- Contractor diesel and gas powered vehicles are prohibited inside buildings unless prior approval and arrangements for ventilation have been made with the Contractor Coordinator, Emergency Service and the EH&S department.

- Contractors will not perform extensive maintenance or repairs of vehicles while on UTC property.

- Drivers shall obey all traffic regulations and signs, and carry a current driver's license for any vehicles they operate.

- Drivers shall not use mobile phones while operating vehicles on company property.

- All vehicles are subject to inspection when entering or leaving the location.

- Vehicle's engines shall be turned off when parked.

- Mobile sources (i.e. delivery vehicles, construction equipment, security vehicles, and even personal vehicles) cannot idle for more than 3 consecutive minutes when not in motion.

  - Idling is only allowed during the following:
    - Vehicle is motionless due to traffic conditions
    - Mechanical difficulties
    - Operation of defrosting equipment, heating or cooling equipment
• Operate auxiliary equipment that is located in or on the vehicle (e.g. crane operation, lift gate operation)
• When the outside temperature is below 20°F
• The vehicle is undergoing maintenance
  To warm the engine up to manufacturer’s recommended operating temperature

• Passengers are not allowed to ride in beds of pick-up trucks.
• Drivers shall be mindful of pedestrian traffic at all times.
• Equipment, including rentals, brought to this facility, used inside or outside, will be identified with the name of the contractor utilizing the equipment.
• All accidents will be reported immediately to the site emergency number.
• Vehicles brought on site carrying equipment must be inspected daily.
• All cargo and equipment on vehicles shall be properly loaded and secured. Vehicles shall not be overloaded.
Overhead Work

- Loads shall not be suspended over any persons or over occupied building areas.

- Contractors shall secure area with safety stanchions or caution tape and post warning signs to alert pedestrians and area occupants of overhead work. The distance the barricade is set up away from the work area must take into consideration the length of materials in use and the potential for materials to be projected horizontally or to rebound from the ground surface or surrounding structures if they fall from overhead. The set-up distance should allow for these types of hazards to be contained within the barricaded area.

- When work is limited to a visual inspection without tools, Caution Tape or safety cones at a minimum of two feet from the work (no potential for falling objects) may be used.
Personal Protective Equipment

- Contractors shall furnish and require the use of personal protective devices and equipment (PPE) by their employees and by their subcontractor employees.

- PPE shall not be modified or used in any manner other than which it was designed.

- Long pants and shirts with sleeves are required

- Employees shall wear US Coast Guard approved life jackets or vests when the danger of drowning exists (when working over or near water).

Minimum PPE Requirements:

- Employees shall wear safety glasses with side shields that meet the specifications of ANSI Z87.

- Safety glasses with side shields shall be worn under welding hoods and face shields.

- Safety glasses with side shields shall be worn under chemical goggles unless the goggles are manufactured with high impact lenses.

- Safety glasses with side shields shall be worn throughout the manufacturing facility and in outdoor work areas, except in the office and cafeteria areas, unless performing work activities.

- Tinted safety glasses are not permitted indoors, unless needed for the job hazards.

Hearing Protection:

- Hearing protection is required in designated and posted high noise areas and when performing high noise producing activities.

Respiratory Protection

- Contractors shall have a Respiratory Protection Program that includes proper training of employees if employees are at risk of exposure to airborne contaminants.
• Contractors shall provide their employees with respiratory protection to protect them from exposure to harmful dust, mist, fumes, gases or vapors when engineering and administrative controls are not adequate.

• Site EH&S representatives will advise the contractor of specific location requirements for respiratory protection.

**Gloves:**

• Contractors shall ensure that their employees wear gloves to protect their hands from chemical agents, heat, cold, etc.

• Gloves should not be worn around moving machine parts such as belts, pulleys and gears.

**Protective Footwear**

ANSI Z-41 rated safety shoes or work boots are required for construction and maintenance activities.

Due to the various hazards in shop areas and the different types of shop floor material, footwear worn in shop areas must:

  • be closed toe
  • be closed heeled
  • have a substantial sole (e.g. no moccasins)
  • have a maximum heel height of 2.5 inches, including the sole
  • have a minimum heel floor contact dimension of 1.5 inch by 1.5 inch

**Hard Hats**

• ANSI Z-89 rated hard hats are required on all construction sites and shall be worn as designed, unless a waiver signed by EHS and the Contractor Coordinator is posted at the work location.
Powered Industrial Vehicles (PIVs)

Cardinal Rule

- Operators must be properly qualified / authorized and abide by all traffic rules. Be aware of surroundings and always yield to pedestrians.

- Contractors must provide their own PIVs that are in proper working order and comply with safety standards. Contractors are not permitted to use PW vehicles without authorization from the designated manager for that facility. (Extension of requirement in Tools section)

- Powered industrial vehicles include, but are not limited to, fork trucks, electric buggies, aerial lifts, earth-moving equipment, cranes and hoisting equipment.

PIV Registration Requirements:

- PW Contractor Coordinator must register resident and non-resident contractor PIVs in the PW PIV registration database.

- Initial inspection must be completed by the PW Contractor Coordinator and entered into the registration database.

- All contractor PIVs shall be identified with the Company Name and PIV Number on four sides of the PIV. The letters shall be a minimum of two inches high. The PIV number will be issued through the PIV Registration Database by the Contractor Coordinator.

PIV Operators:

- Resident contractors who will operate a powered industrial vehicle (PIV) must complete an Operator Permit Application – PW F4786) with their supervisor and forward medical clearance, proof of training and appropriate OJT forms for each type of PIV listed on the PW F4786 form to Site EHS or processing. A permit will be issued to the contractor.

- Contractors must obtain medical clearance from their own company designated physician.
PIV operators must receive a vision test initially and once every 3 years. They must see (with corrective lenses if necessary) 20/40 or better at a distance with one or both eyes, have depth perception of 4 or better on Titmus II vision tester, and peripheral vision of 70 degrees or better.

If a contractor employee is terminated the Site PIV program owner must be notified to deactivate the employee in the PIV permit database.

Operators of PIVs shall be trained in their safe operation, and shall carry proof of training with them in some form (a permit, wallet card, copy of a training record, etc.) and provide such proof upon request.

PIV operators must abide local rules (e.g., speed limits, restricted areas).

PIV operators are not allowed to talk on a cell phone or wear headphones while operating any PIV to avoid distracted driving. However, noise protection devices such as earmuffs or earplugs are permitted.

PIV operators shall wear their seat belt at all times during operation when their PIV is provided with one by the manufacturer.

**PIV Inspections:**

Contractors must maintain a copy of an annual inspection performed by a qualified person on each vehicle brought on site. A copy of this inspection must be on the vehicle at all times. Inspections must have been performed within the last 12 months.

Contractors are responsible for daily inspections of PIVs and a record of this must be kept in the vehicle at all times. (Sample available from EH&S-site).

- PIVs shall be checked by the operator at the beginning of each shift to ensure that all parts, equipment and accessories that affect safe operation are in proper operating condition and free from defects.

- The Contractor EH&S Inspection Program will verify compliance with this requirement. All defects shall be corrected before the vehicle is placed in service.
- Any vehicle found deficient must be removed from the site and will not be allowed back until the items have been repaired and a new inspection and maintenance report has been presented.
- This requirement applies to all contractor vehicles whether owned, rented, or leased.

**PIV Operational requirements:**

- PIV speed will be limited to 6-mph/10-kph (approximately twice walking speed) in manufacturing areas, high pedestrian areas, and areas with other potential significant risks.
- All resident contractor PIVs being used on a permanent basis including electric buggies/carts operating inside the facility capable of traveling faster that 6-mph/10-kph must be equipped with a physical speed limiter device (mechanical/electronic governor, keytroller) by July 1, 2014.
- Contractor equipment brought in for temporary use only is exempt from speed limiting control devices but the PIV shall have administrative controls in place to control speed (speedometer) and operations must comply with the 6 MPH speed limit.
- All buggies, flatbeds, fork trucks, stackers and golf carts must have a yellow flashing (non-strobe) light that indicates that it is in operation.
- All fork trucks, electric buggies, carts and earth moving equipment must have an audible alarm when operating in reverse. Audible alarms must be of sufficient sound level to be heard over ambient noise.
- Only vehicles required for the job are permitted inside the buildings.
- LPG tanks shall be stored outdoors at a location specified by the Contractor Coordinator. All LPG tanks on PIV’s must be replaced outside.
- Diesel and gas powered vehicles are prohibited inside buildings unless prior approval and arrangements for ventilation have been made with the Contractor Coordinator, Emergency Services and the EH&S department.
• Areas within the facility where vehicles will be operated shall be assessed for hazardous conditions, and only vehicles designed for use under any identified hazardous conditions may be used in that area.

• All fork trucks that have a sit down, non-elevating operator position are required to have a restraint system (such as a seatbelt) installed and available for use.

• All fork trucks shall have protective overhead guards to prevent objects from falling onto the operator.

• Parked forklifts shall have forks resting at ground level and parking brake set.

• Vehicles shall not be left running while unattended.

• In the event of an indoor facility emergency notification, vehicles shall be pulled over to the side of the aisle and motors switched off.

• Actively leaking vehicles or equipment are prohibited from exiting the facility.

• The contractor shall repair or contain any leaking vehicle or equipment before exiting the facility. Emergency response personnel shall be notified by dialing the emergency phone number for the facility.

• Riding construction equipment as a passenger is prohibited.

• Towing or otherwise pulling loads with the forks on a forklift is prohibited.

• PIV use shall be restricted or minimized during shift changes to minimize PW employee exposure to PIV traffic.

• PIVs (propane, diesel) shall not be allowed to idle for 3 minutes or more.

• PIVs must be equipped with non-marking tires (East Hartford must have ground strap) for inside operation.
• Modifications to PIVs are prohibited unless approved by the manufacturer of the PIV. Documentation must be kept with the PIV.

• Makeshift fork extensions and use of C-clamps are prohibited.

• PIVs are not allowed in parking lots or roadways without prior written permission from EH&S in East Hartford.
Roof Work/Access

- Access to roof work requires prior authorization from the Contractor Coordinator.

- Employees working within 15 feet of any unprotected edge, 6 feet or higher, must comply with fall protection requirements determined with the Contractor Coordinator prior to commencing the task. Unprotected edges include unguarded skylights and hatches.

- Contractor employees working alone on the roof must get prior approval from their Contractor Coordinator.

- Employees are not permitted on the roof in severe weather unless authorized by a Contractor Coordinator.

- Personnel accessing roofs with an unprotected edge to perform work must proceed directly to their work area. While in transit, they shall focus their immediate attention on staying as far away from unprotected edges as possible and continue moving toward the designated work area without stopping until they arrive. Once they reach the work area, they must comply with one of the following fall protection methods:
  
a. If the work area is greater than 15 feet from an unprotected edge, personnel must tie off in a fall restraint mode that will prevent them from reaching an unprotected edge. If a suitable anchor point is not feasible, a warning line (Appendix B) shall be erected around the area that is at least 15 feet from any unprotected edge, and all work must be done within the warning line. Management must approve the use of a warning line system on the hazard assessment document.

b. If the area is closer than 15 feet from an unprotected edge, personnel must use secondary fall protection. When secondary fall protection is being considered, preference should first be given to fall restraint with a restraint lanyard, followed by fall positioning with a retractable lanyard, and lastly fall arrest with a shock-absorbing lanyard.
Personnel accessing roofs to perform inspections or assessments of workplace conditions are exempt from using fall protection as long all the following criteria is met:

- Inspection is being performed before or after work has taken place.
- The employee making the inspection or assessment is aware of roof conditions, and is competent in recognizing and abating fall hazards.
- Inspector activities are limited to visual inspection, basic measurements and note taking.
- Any discussion, meeting, conversation or phone call while inspecting shall take place at least 15 feet from an unprotected edge.
- While in transit, the inspector shall stay as far from unprotected edges as possible. Employees approaching an unprotected edge shall travel in a perpendicular direction only.
Tools

- Hand tools shall be kept in good condition, i.e., sharp, clean, oiled, dressed and not abused.
- Tools and other materials shall not be left on stepladders, scaffolds, roofs or other places where they may be dislodged and fall.
- Non-sparking tools are required in areas where flammable solvents are handled and where sparks could create an explosion.
- Faulty or damaged tools and hoses shall be tagged "Do Not Use" and removed from service immediately.
- Cords and hoses shall be protected from damage and shall be routed through the job area in a manner that prevents tripping hazards and cord or hose damage.
- Contractors are not permitted to use UTC tools and equipment without authorization from the manager of site Facilities and Services.
Waste Management

- All waste generated on location shall be disposed of as approved by the Contractor Coordinator and site EH&S.
- Wastes (includes rinse from washing of equipment, PPE, tools, etc) are not to be poured into sinks, drains, toilets, or storm sewers, or onto the ground.
- Solid or liquid wastes that are hazardous or regulated in any way are not to be disposed of in refuse dumpsters.
- All spent (used) or unused chemicals must be disposed of in accordance with all applicable solid waste and hazardous waste regulations.
- Regulated materials generated will be placed in pre-labeled, DOT-approved containers provided by UTC through the Waste Operations departments.
- PW EH&S personnel will manage the removal and disposal of regulated materials or chemicals unless specifically arranged otherwise.
- Sinks in restrooms and drains will not be used for disposal of any materials.
- Deliberate and/or unauthorized discharges and releases to the environment are prohibited.
- Waste materials that no longer have use such as paints, spray paint cans (including empty ones), used varnish, thinners, other types of solvents, oil, antifreeze, kerosene or rags contaminated with any of these materials are controlled waste. Contact your Contractor Coordinator for more information on their disposal.
EXPORT COMPLIANCE

All Pratt & Whitney employees, contractors, and third parties within the U.S. are subject to U.S. export laws and regulations.

It is essential that all contractor personnel understand and comply with all elements specified by the PW International Trade Compliance group.

**Watchlist Screening:**

Watchlist Screening refers to the process of determining whether parties to a potential transaction with P&W are listed on various “watchlists” established by the U.S. Government.

**MK denial reviews:**

All contractor personnel will be subject to review by PW using MK Denial for inclusion on the Denied Persons list. This will be performed initially and on an annual basis.

- Prior to granting access to P&W facilities, network, data, software, or commodities
- Prior to being enrolled in P&W-provided training

**Access Controls:**

The U.S. Government prohibits foreign nationals from having access to certain "technical data" or controlled commodities without a specific export license. "Access" means any contact with technical data via visual, oral, or other means. This includes receipt or review of documentation, briefings, plant tours, etc. Electronic transmission of technical data to a foreign national via facsimile or electronic mail is subject to export restrictions.

Contractor employees shall obtain proper authorization from their contractor coordinator and or PW supervisor prior to accessing badge controlled areas.

Contractor Employees shall not tailgate another employee to gain access to a badge controlled area that they have not previously been authorized to enter.
Export Controlled Areas

Export controlled areas are marked with the following sign.

![Export Controlled Areas Sign]

Photographic equipment:

- Camera and video equipment (including cell phones with digital camera capability) require a PW pass, which must be displayed at all times if issued.

- Photographs/video shall not be taken of any data, equipment or process unless authorized in advance.

- All publications/presentations or documents that contain photographs shall be reviewed by a BAER prior to distribution.

Technology control

If a Foreign National Contractor requires access to technology or a controlled technology area, the sponsor must coordinate in advance with the appropriate Business Unit Export Manager and ITC to obtain an approved Technology Control Plan. Please note that creation and approval of this plan can take several weeks. Please note that one component of obtaining an approved plan is to have an approved Non-disclosure agreement between the FN Contractor and PW.

Visitor Registration

All visitors to Pratt & Whitney’s facilities must be registered in the Visitor Registration System. This includes U.S. persons, permanent resident aliens (ie “green card” holders), and non-U.S. persons.