

AMGEN[®]

WORKER SAFETY HANDBOOK

“Work at the Speed of Safety”

BASIC SAFETY REQUIREMENTS

This Worker Safety Handbook is an overview of basic safety requirements for **HOT WORK / WELDING / ACETYLENE** contractors working on AMGEN sites. It is based on the AMGEN EHS Manual for Contractors.

The AMGEN EHS Manual for Contractors has been delivered to your company. It is your company's responsibility to ensure all the requirements contained in the manual are followed and to comply with all applicable laws and regulations.

This guide helps you, as a contractor's employee, to understand your responsibility and to perform your work at AMGEN following the requirements in the AMGEN EHS Manual for Contractors. This overview covers some of the most basic safety elements and is not intended, nor should it be construed as a summary of all those requirements.

The end goal is to provide a safe workplace and prevent injuries and property damage. All injuries are preventable. Work at the Speed of Safety.

START EVERY DAY SAFELY:

- Identify the hazards...what could go wrong.
- Make sure you have a safety plan and the right controls in place to work safely.
- If you're not sure...Stop and Ask — Do the Right Thing.

PURPOSE

- This booklet is a quick guide for contractors working at Amgen. If you need more information than given in this Handbook, contact your supervisor

EMERGENCY RESPONSE

- In the event of any emergency, contact AMGEN SECURITY at:
() _____ - _____
- Security will call the local emergency number and facilitate the response and escort emergency responders to the location of the emergency.
- When you call, provide as much information as possible including what happened and the location of the incident.
- Emergencies may include life-threatening and non-life-threatening medical emergencies, spills, fire, work-related injury, or illness.

INCIDENT REPORTING

- Report any incident to your supervisor no matter how minor, including near misses.
- An incident is anything that results in or could have resulted in an injury (even first aid) or property damage.

SMOKING

- AMGEN sites are 100% tobacco free, even in vehicles. Smoking or vaping is allowed only in the designated areas provided.

VEHICLE & PEDESTRIAN SAFETY / SPEED LIMIT

- Always yield to pedestrians and non-motorized cyclists.
- Obey all posted speed limit signs. Site wide speed limit is 10 mph (16 kph) if not posted.
- Private vehicles are not permitted on campus without specific permission from Amgen.

CELL PHONES

- Do not walk and text. If you need to look at your phone, stop walking.
- Do not talk on the phone while driving on Amgen property, even hands free. If you need to talk, pull over and stop the vehicle.

HOUSEKEEPING / SITE NEATNESS

- Maintain good housekeeping conditions while working on Amgen property.
- Do not place any waste in Amgen bins without approval from Amgen.
- Don't store any materials where they block doorways, utility panels, eyewash stations or other emergency equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Follow site specific PPE requirements for the area and task being done. Example:
- Minimum PPE in a laboratory may include laboratory coats, shoe covers (booties), hair nets, latex gloves. Freezers may require insulated gloves and jacket.
- Minimum PPE for AMGEN construction sites: Safety Glasses, Hard Hat, Reflective Safety Vest or Brightly Colored Shirt (e.g. orange / lime), Work Boots with safety toe, Long Sleeve Shirts and Cut Resistant Gloves.
- Additional PPE may be required based on the task and tools used.
- Any reduction in PPE requires Amgen EHSS review and approval.

AMGEN EQUIPMENT

- Do not use Amgen owned equipment unless given specific permission in writing.

ENTRANCES AND EXITS

- Do not block any emergency exits or routes.

LOCK OUT / TAG OUT (LOTO)

- A LOTO PERMIT must be obtained prior to ANY work that requires de-energization

STOP WORK AUTHORITY

- If you recognize an unsafe condition, you can stop work and report it to your supervisor.
- If the scope of work changes, stop and report to your supervisor. Re-evaluate the risks and add new safe actions if needed.

GENERAL ELECTRICAL SAFETY

- Portable electric equipment and tools shall be powered through a Ground Fault Circuit Interrupter (GFCI) or a socket with integrated GFCI or RCBO. This applies to temporary lighting as well.
- Check extension cords and verify the ground pin is on the plug and there are no cuts on the outer cover.
- Only electricians are allowed to cut, remove, or otherwise alter wiring on circuits or equipment 50 volts or greater.

FALL PROTECTION / LADDERS

- Fall protection safety plan is required for any work at heights 6 feet (1.8 meters) or more above a lower level.
- Climbing an access ladder higher than 10 feet (3 meters) requires fall protection whether it has a protective cage or not.
- Working from a ladder at heights more than 10 feet (3 meters) requires fall protection and a working at height permit.
- Scissor lifts, aerial lifts, platforms, and scaffolds are the 1st choice for accessing work at height.
- If you must use a ladder, podium ladders are the 1st preference.
- Check if your site requires a ladder use permit or working at height permit and follow those requirements.

SAFETY UTILITY KNIVES

- Utility knives with self-retracting blades are preferred.
- Wear cut resistant gloves **plus** cut resistant sleeves with adequate cut level protection when using knives without a self-retracting feature. This applies to all cutting tools with exposed blades.
- Always use a sharp blade. They are safer than a dull blade.
- Hand a utility knife to a co-worker with the handle first.
- Consider using a rounded tip blade if the application allows for such.

TASK SPECIFIC SAFETY REQUIREMENTS

HOT WORK / WELDING / ACETYLENE

FIRE PROTECTION SYSTEMS

- Do not disable, shutdown or impair any fire protection systems, sprinklers or alarm pull stations without specific approval from Amgen. This requires a special Red Tag Permit.

HOT WORK / GENERAL REQUIREMENTS

- Hot work is work such as welding, cutting, brazing, grinding, open flame or other work that produces heat or sparks.
- All hot work requires an “*Amgen Hot Work Permit*”. Hot Work Permit must be signed and issued by the Amgen Fire Safety Supervisor before hot work can begin.
- Keep the permit posted at the hot work area in plain view.
- Combustibles and flammables within 35 feet (10 meters) of the hot work must be moved or protected.
- A dedicated, trained fire watch shall be present where hot work is being performed. Plan for bathroom and lunch breaks.
- A dedicated 20-pound (10 kg) (or larger) fire extinguisher appropriate for the hazard shall be located within 20 ft (6 m) from the hot work activity.
- No welding or burning shall be done on any existing vessel, tank or pipeline unless approved.

FIRE WATCH PERSONNEL

- Remain at their post for at least 60 minutes after the hot work is completed
- Stay in the hot work area unless relieved by another fire watch.
- Have a means to make emergency calls such as cell phone, radio, or a telephone in the immediate vicinity

WELDING

- All adjacent areas shall be shielded from arc-flash with proper curtains.
- Welding machines shall be turned off at the end of each shift, or when not in use for extended periods, such as lunch breaks.
- Welding Machines shall be grounded according to the manufacturer’s recommendations.
- Orbital welding and electric heat guns must comply with hot work requirements except the operator may act as their own fire watch.

HIGH HAZARD HOT WORK (Cutting / Welding with Acetylene)

- High Hazard Hot Work requires a review and second signature by the Site EHSS Lead or designee on the Hot Work Permit (in the Additional Required Precautions section).
- Torch Cutting (acetylene), Hot Work in confined spaces, and Plasma Cutting are examples of High Hazard Hot Work.
- All compressed gas cylinder valves shall be closed at the end of each shift, or when not in use for extended periods, such as lunch breaks.
- Fuel gas and oxygen cylinders brought into the work area shall be placed in a safe location and secured in an upright position, with valve protection caps in place.
- Approved flash arrestors and check valves shall be installed on fuel gas and oxygen cylinders immediately downstream of regulator.
- Smoke detectors near your work need to be covered to protect them from smoke damage and prevent accidental alarms.

HEAT GUNS

- Heat guns require a hot work permit unless their maximum possible temperature is below 350 degrees AND there are no flammable materials or combustible liquids within 35 feet.

COMPLETING HOT WORK PERMIT

General Requirements

- Part 2 is kept at the Hot Work area.
- Hot Work Information section is filled in before signatures are applied.
- Names of persons doing hot work and fire watch may be filled in during the Fire Safety Supervisor pre-check.
- **High Hazard Hot Work** tasks require the Site EHSS Lead signature. This will be in the section for “Additional Required Precautions”.
- Do not fill in any Finish Times until that element is completed.

Fire Safety Supervisor (FSS)

- **Verifies** their contact phone number and the emergency response phone number or Site Security are filled in on the back of the Permit.
- **Verifies** Required Precautions are completed. Enter N/A if that line doesn't apply. **All elements must be field verified before** releasing permit.
- **Verifies** with the fire watch and person performing hot work that the Hot Work scope is correct. Writes in names (if not already entered).
- **Signs** the permit and **enters the date & time the permit is valid**.
- **Retains** Part 1 for record and gives Part 2 to the fire watch.
- **Signs the Final Check after** the monitoring period is over. This can be done by any qualified FSS (in consult with initial FSS)

Hot Work Operator

- **Verifies** their name is in the Person Performing Hot Work section
- **Enters** the Hot Work **Date and Start Time**
- **Enters** the **Finish Time after** work is complete.

Fire Watch

- **Verifies** Required Precautions are **completed and correct before** Hot Work Starts,
- **Verifies** than the Hot Work finish time is correct and **Starts** the Post-Work Fire Watch period (1 hour). Don't fill in the Finish Time until the **END** of the **Fire Watch period**. (actual time Fire Watch completed)
- **Marks** the appropriate Fire Monitor box and enter the person's name or method of monitoring if “other”.
- **Enters** the Fire Monitoring Finish time.

WARNING
HOT WORK IN PROGRESS!
Watch for fire!
In case of emergency, call the contacts listed below before attempting to extinguish the fire.

Contact	Number

(Back Side of Permit)

WARNING
HOT WORK IN PROGRESS! Watch for fire!

Instructions
Person performing hot work: Record time started and display permit at hot work area. After hot work is completed, record time and leave permit displayed for fire watch.
Fire watch: Watch area during hot work and after work completion. Prior to leaving area, perform final inspection, sign, leave permit displayed and notify Fire Monitor or Permit Authorizer.
Fire Monitor: Monitor area after post-work fire watch completion. Perform final inspection, sign and return to Permit Authorizer.

Part 2

Required Precautions

The fire pump is in operation and switched to automatic.
 Control valves to water supply for sprinkler system are open.
 Extinguishers are in service/operable.
 Hot work equipment is in good working condition.

Requirements within 25 ft. (10 m) of hot work:

Shield combustible construction using listed (e.g., FM Approved) welding pads, blankets and curtains.
 Remove or shield nonremovable combustibles using listed (e.g., FM Approved) welding pads, blankets and curtains.
 Isolate potential sources of flammable gas, ignitable liquid or combustible dust/lint (e.g., shut down equipment).
 Remove ignitable liquid, combustible dust/lint and combustible residues
 Shut down ventilation and conveying systems.
 Remove combustibles and consider a second fire watch on opposite side of floor, wall, ceiling or roof when openings exist or thermally conductive materials pass through.
 Is work on a combustible building assembly (e.g., Torch-Applied Roofing)? If yes, provide **ADDITIONAL REQUIRED PRECAUTIONS** below.

Hot work on/in closed equipment, ductwork or piping

Isolate equipment from service.
 Remove ignitable liquid and purge flammable gas/vapor.
 Prior to work, and/or during work, monitor for flammable gas/vapor. LEL reading(s): _____
 Remove combustible dust/lint or other combustible materials.
 Is work on/in equipment with nonremovable combustible linings or parts? If yes, provide **ADDITIONAL REQUIRED PRECAUTIONS** below.

Fire watch/fire monitoring the hot work area
Times listed are sufficient for majority. Use Table at back of permit for guidance for combustible concealed cavities, roof work or favorable factors.

Perform a continuous fire watch during hot work.
 Perform a continuous fire watch post-work for
 1 hour or Other ___ hours.
 Perform fire monitoring for
 ___ hours or Other ___ hours.

ADDITIONAL REQUIRED PRECAUTIONS:

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