

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 **Placing Concrete** by 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

PLACING CONCRETE

THINGS TO KNOW

- Cement's chemical danger is alkali. Alkali "burns" differently than acid. Acid will burn right away, and you notice it immediately.
- By the time you notice a concrete burn it is already serious.
- Alkali will be slower, but that slow burn is your skin and muscles being dissolved. Alkali eats tissue.
- If you get concrete in your eyes, after you rinse them, go immediately to a hospital or urgent care clinic to get evaluated.
- If you get concrete inside your boots and don't do anything, after an hour you may end up in a burn ward. After 3-4 hours you can have deep burns. By the end of the day you'll have a hole in your foot all the way to the bone.
- Concrete burns are chemical burns. After you wash your hands, that "white powder" on your hands at the end of the day is not dried concrete, that is the top layer of your skin dissolving.
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HELPFUL TIPS

- Each worker can keep a small bottle (6 or 8 oz.) of eyewash solution in their pocket to start rinsing their eyes immediately without needing to move. Then a co-worker can give them their pocket bottle to use while someone retrieves the eyewash station or guides the person to it.
- If you get wet concrete on your skin, wash thoroughly with clean water ASAP.
- Never keep working if your clothes get saturated with concrete. The wet clothing will make the concrete burn worse, faster.
- A couple ways to neutralize the cement is vinegar or citrus juice.
- If you get a concrete burn over a large area or completely around a leg or arm, go to the hospital or clinic and get it cleaned properly. Concrete will continue to burn unless totally cleaned and neutralized.

PPE

- Keep an eye wash station within 10 seconds of the pour area. Multiple stations may be needed depending on the size and layout of the pour zone.
 - Two (quart-size) bottles are not an eyewash station. If quart bottles are being used, there must be at least 6 gallons total (24 bottles) to meet the 15 minutes minimum flushing time.
 - If you get concrete in your eyes, do not rub them. Start rinsing with eyewash immediately.
 - If you get concrete on your skin, wash of as soon as possible.
- Another location for an eye wash station is the pumper hopper.
- Anyone standing / walking in wet concrete must wear safety toe rubber boots.
- Tops of the boots must be protected to keep concrete from getting inside. Some examples are:
 - duct tape
 - putting pants leg over the boot tops
 - using snow ski gators to cover the gap
 - use Tyvek leg covers or any other effective method.
- If you get wet concrete inside your boots, STOP WORKING, go to the washing area, take your boots off and wash your feet. Get fresh, dry socks.
- Anyone getting their hands into wet concrete must wear alkali resistant gloves. This is usually the person at the chute, pump hose handler and screeders.
- When using a boom pumper, the hose handler (as well as anyone in the splatter zone) must wear a face shield or goggles.

CONCRETE CUTTING, CORING & GRINDING

- Use saws equipped with built in vacuum and HEPA filter or water system that keeps concrete dust from getting in the air. Or use a hose or water sprayer to keep dust to zero.
- Keep the slurry cleaned up with a wet-vac or other method. Don't let it dry on the pavement.
- Do not let slurry or water used for dust control get into storm drains or flow across pavement.
- If you can't use wet saw method, then wear a respirator.
- If concrete dust is drifting outside the work area, notify your supervisor and Amgen EHSS.

FORMWORK

- Keep protective caps on form stakes and rebar. Put them back on if they fall off.
- Be cautious of form ties, tie-wire, pins, and penetration blanks.
- When handling lumber or plywood, wear puncture resistant gloves to protect from splinters.
- Remove nails from formwork as it is taken apart or bend flat to the board.
- Stay clear of vertical forms during pours in case of blow-outs.
- Watch your hand position when hammering form stakes. Mark the sledge handle from the head back 3-4 inches and DON'T grip the handle in that area.

CONCRETE TRUCKS

- Use flaggers to guide trucks into and out of the construction area when next to public traffic.
- Place plastic sheeting under the pump truck chute to collect spillage and under the engine area for oil leaks.
- Use spotters when truck is backing into position.
- Truck drivers must have hard hat, safety glasses, gloves, and long sleeves when they are outside their truck.

CONCRETE PUMPING / POURING

- Be especially mindful of the pinch points while assembling the chute.
- Check the travel path and work area for overhead hazards (e.g. canopy, overhangs, live wires).
- Check that all hose couplers are secure and have a safety pin or whip check. Tie wire or a nail is not acceptable.
- When finished and breaking down the hose, **verify the pumper pressure** is **ZERO** before disconnecting any hose couplings.
- When using a boom pumper check that the tremie line has a safety chain or cable.
- Worker handling the tremie line must wear a face shield or goggles.

CONCRETE WASTE MANAGEMENT

- Only do wash out at an Amgen approved area.
- Clean tools and mixing equipment only in the approved washout area.
- Washout area must have the rinse water controlled and be at least 50 feet from storm drains.
- Allow slurry in the washout area to dry and then dispose of properly.

HAND MIXING

- Workers mixing dry cement (usually dumping or shoveling from a bag) must wear a respirator until mixture is wet enough that there isn't any cement dust.
- Must also have an eyewash station at the mixing point.
- When using a wheelbarrow, check that your path is clear first.