



Safety Core Values Handbook





Welcome to APAC, a CRH Americas Materials (CRH), South Division company.

The company you are working for, at every level, expects that all work performed on our behalf, whether by employee or contractor, is conducted with safety as the very first consideration. From this belief, we have developed our core values that will help us drive world-class safety performance.

The APAC/CRH Americas Materials 3 Safety Core Values are:

Zero Fatalities

Fatalities are unacceptable. Our solemn commitment to our employees and contractors is to prevent any and all fatalities. These are the basic mechanics of safety that shall never be compromised. We must have 100% compliance, 100% of the time. We accomplish this through:

1. Risk Assessment: understanding and systematically reducing workplace hazards.
2. Safe Equipment Operation, Safe Transportation and Seat Belt Usage
3. Lock Out / Tag Out
4. Equipment and Machinery Guarding
5. Confined Space
6. Safe Work at Heights / Fall Protection
7. Lifting/Rigging Operations
8. Overhead and Underground Hazards
9. Personal Protective Equipment (PPE)
10. Safety of Pressurized Systems
11. Blasting Safety
12. Work Zone Safety
13. Employee Engagement
14. Contractor Safety Management

Zero Incidents

We expect our employees and contractors to work every day without an incident. This includes focusing on the prevention of



injuries, fleet and equipment accidents, or any incident that can cause property or environmental damage regardless of severity. These are areas where focus and diligence is needed in order to prevent incidents from occurring.

1. Risk Assessment prior to performing work.
2. Daily briefings or T-5s shall be conducted prior to the beginning of the day and prior to performing certain tasks respectively. *T-5 means taking 5 minutes to discuss safety with your supervisor and/or co-workers.*
3. Safe lifting techniques (body posture, two man lift, etc.)
4. 3 Points of Contact for climbing onto and off of objects and equipment.
5. Appropriate management of third party contractors while on APAC/CRH premises
6. Proper tool usage, etc.



Employee Driven Safety Culture

To achieve a sustainable zero-incident workplace our employees must truly “own” the safety program and hold each other accountable for safety – 100% of the time, with strong management support. To continue to move our safety culture toward World Class performance, there shall be company-wide employee participation and ownership combined with management support regarding these specialized areas of focus:

1. Training/Coaching/Behavior Reinforcement (follow-up)
2. Employee Involvement/Engagement (employee led teams)
3. 5-S (workplace organization & housekeeping)
4. Team Based Problem Solving
5. Near Miss Reporting
6. Regular Safety Observations and Audits
7. Management Support and Leadership



“Compliance is the foundation from which to build an effective safety process. Although the CRH safety philosophy is “beyond compliance” we must ensure that we comply with all applicable rules, regulations and policies, first and foremost at all times. Therefore, 100% compliance, 100% of the time, must be mandatory.”

Zero Fatalities

Below you will find information on our CRH Life Saving Rules which is our plan to prevent fatalities. These rules are overviewed in this booklet and were prepared to help our employees and contractors recognize the serious risks in our business and equip them to take whatever precautions or preventive measures are necessary to either eliminate these risks if possible, or reduce these risks if elimination is not feasible.

Fatalities are unacceptable. To prevent such occurrences, we anticipate your understanding, active engagement and full compliance with the below expectations.

1. Risk Assessment

Risk identification, analysis and reduction must be conducted before every task is performed.

Risk identification, analysis and reduction provide our employees with a level of protection that goes “beyond compliance”. There are many different ways to conduct risk assessments and some of these methods are outlined below. These programs are the backbone of our safety processes.

Take 5 Minutes for Safety Program (T-5) :

Our Take 5 Minutes for Safety program is a communication process for crews or groups of employees. Required at the beginning of the shift and recommended anytime the work requirements change, the T-5 is a process for discussing risks and performing risk assessments as well as communicating with and among employees



the established methods and best practices for reducing identified risks.

Weekly Safety Topics:

Weekly safety topics are a primary means of communicating the results of risk assessments performed as a result of prior incidents, accidents, near misses and regular evaluations of risks conducted by the safety leaders, staff and others. Weekly safety topics are best performed at the beginning of the first shift of the week and must include a focused discussion of the topic. We should include all facility, project or crew personnel and any relevant contractors in our weekly safety discussions, as applicable.

Safety Leadership Teams (SLT):

Safety Leadership Teams are groups consisting of a cross section of employees who meet on a periodic basis to identify and analyze risks, and develop solutions to these risks. Each CRH company is required to participate in the Safety Leadership process. Information developed by SLT groups shall be communicated to other employees in the form of safety shares or meeting presentations by team members in front of peers, managers and other who can benefit from these learning events.

Non-Routine Tasks:

Prior to performing non-routine tasks, a focused discussion of applicable risks and precautions must be conducted with all relevant employees and/or contractors, as applicable. This can often be accomplished as part of a T-5 process. While T-5's must be conducted at the start of each shift, they should also be conducted at any time during the shift when non-routine tasks are performed, or when work conditions change. The affected individual(s) shall take appropriate time to think the task through to completion and determine if it is safe to perform the task (i.e. risks mitigated, appropriate PPE available, etc.).

Job Safety Analysis (JSA):

Non-routine tasks involving significant risks, multiple steps and/or complex requirements should be pre-planned. Such pre-planning should include development of a Job Safety Analysis (JSA). Many



JSA's have been developed and are available in various safety manuals and systems at our facilities.

For tasks where JSAs have been created, these documents should be reviewed prior to beginning the task. Where JSA's have not been developed, managers should involve supervisors and safety leaders in the planning process to assist in developing them.

2. Mobile Plant (Equipment) Safety

This includes safe equipment operation, safe transportation, vehicle and pedestrian segregation and seat belt usage, etc.

Safe vehicle and equipment operation and accident prevention is vitally important to our operations. All precautions necessary to ensure safe operations of equipment shall be taken at all times. For example:

- Seat belts must be worn by everyone in all company vehicles and while operating any piece of mobile equipment that has a roll over protection system (ROPS).
- All loads must be secure and within vehicle or equipment weight limits. Contracted haulers and drivers shall comply with all applicable weight regulations and inspect all loads prior leaving or entering CRH's projects or facilities. No driver shall leave or enter CRH's projects or facilities with an overweight, unsecured or unsafe load.
- All operators of equipment must be qualified by their supervisor to operate such equipment safely.
- All drivers must be trained and regularly assessed and must carry out documented daily pre-use company vehicle inspections for both on-site and off-site use.
- Equipment shall always be operated within the limits established by the manufacturer, Federal and State Laws, County and City



Ordinances, recognizing personal individual skill limit, and not exceeding, or making exceptions to these limits.

- Operators shall use extreme caution at all times to remain aware of the presence of any personnel on foot in the area of their equipment, and to operate the equipment so as not to pose a hazard to those employees.
- When operating equipment such as backhoes, loaders, motor graders, paving equipment or other similar equipment, the operator should take an additional precaution upon approaching any individual within 10 feet who is engaged in work not directly involved with the work that operator is performing. The operator must engage the horn or otherwise attract the attention of the individual to gain eye contact before s/he proceeds any closer than 10 feet to that person. If eye contact is not gained, the operator should cease travel until s/he has made contact.
- All equipment shall be inspected at least daily, and continually monitored for proper operation of safety devices, normal wear, and items that are subject to sudden failure, (tires, rigging, cables, etc.).
- Operators shall be responsible for insuring that safety devices, brakes, mirrors, back-up alarms, fire extinguishers, windshield wipers, lights, etc. are maintained. If deficiencies are found, these items should be written on the inspection document and verbally reported (via phone, radio or in-person) to the shop. A decision will be made by a competent person whether the identified deficiencies result in red-tagging or downing the equipment until repairs can be made.

3. Lock Out / Tag Out / Try Out

Every employee or contractor performing servicing or maintenance of fixed or mobile equipment must de-energize, effectively lock out and then try to start the equipment.



To manufacture our products and serve our customers, we operate a wide range of mechanical, electrical, fuel powered and/or hydraulic equipment. Employees and contractors risk serious or fatal injury when they enter equipment danger zones without fully and properly de-energizing the equipment. This is a serious source of risk that will not be tolerated.

By following proper lockout / tag out procedures, we can eliminate ALL sources of stored energy and therefore repair, maintain or adjust our equipment in a 100% safe environment. Accordingly, it is absolutely critical to ensure that the proper lockout / tag out is performed at every company workplace or jobsite, by every relevant employee or contractor, for every potential equipment hazard. Verification of LOTO effectiveness is required by attempting to start the machine

Component and Energy Specific Procedures

The different components of equipment at our locations are all unique; from conveyors to dryer drums, from burners to mixers, from baghouses to augers, from hot oil systems to feeder bins, from central mix to dry batch concrete plants, and different types of mobile equipment. Therefore, we have identified the different hazards that are present with this equipment in order to ensure that employees and contractors know how to abate these issues. Component and energy specific procedures are available at all CRH facilities for a systematic isolation and de-energizing for each piece of energized equipment. These procedures detail the specific hazards (including all energy types), the proper sequence and placement of isolation equipment for application and removal of lockout equipment and testing procedures to assure isolation of all related energy sources.

These procedures identify the steps necessary to effectively Lock Out / Tag Out a piece of equipment, as well as indicate any special hazards that must be taken into consideration and should be consulted by employees and contractors before undertaking the maintenance activity.



Close Proximity Maintenance (Troubleshooting/Adjustments)

Lockout / Tagout (LOTO) procedures are the default procedures to be used in any maintenance situation.

Whenever LOTO procedures can be followed, they must be followed. However, CRH as well as OSHA recognizes the need to test or position machinery/equipment/components. In those situations in which lockout or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machinery/equipment/component, CRH has established **Close Proximity Maintenance (“CPM”)** procedures to provide protection for employees and contractors when it is necessary for a component to be energized and personnel to be near the operating equipment to conduct the necessary troubleshooting.

Some examples where CPM may be necessary:

- When tracking a conveyor belt, the belt may have to be in operation for adjustments to be made.
- When a mechanic is troubleshooting mobile equipment with the operator’s help, the machine must sometimes be running in order to locate the source of the problem.
- If a machine has an electrical short, the machine must be energized so that the location of the short can be found.

To ensure the utmost safety for employees and contractors authorized to perform CPM procedures, we must follow and strictly enforce the following procedures:

1. All CPM tasks must be approved by the supervisor on duty and all personnel must be authorized,
2. This CPM exception is limited to a **maximum** of four authorized personnel (including the operator) for one CPM task at a time.
3. For a two (2) person operation to conduct a CPM task, the operator must have visual contact at all times with the authorized person performing the CPM task. If constant visual contact cannot be achieved, Lock Out / Tag Out is required.



4. Emergency stops for designated equipment must be tested before engaging in CPM.
5. For a three (3) or four (4) person operation, during the entire time in which anyone is in close proximity to energized equipment, a dedicated operator must be stationed on that equipment's control panel. If the operator does not have visual contact with the authorized person performing the CPM task, another individual must act as a safety observer and have the ability to immediately communicate with the operator or activate an emergency stop if shut down of the equipment becomes necessary.

Electrical Energy

To ensure safety when dealing with electrical energy, employees and contractors must have received training in the current NFPA 70E standards prior to performing work on or near energized electrical components. Appropriate arc rated PPE must also be worn.

4. Equipment and Machinery Guarding

Any moving part , or component of, a piece of equipment, machinery, or plant that exposes a person to a “pinch point” or “caught between” or point of operation hazard shall be adequately guarded as to eliminate or minimize the risk.

No machinery may be operated without all appropriate guards in place. No machinery may be put into operation after maintenance without authorization and following the replacement of all relevant guards.

5. Confined Space

Every employee or contractor entering confined spaces must be trained and follow established protocols.



"Confined space" means a space that:

- (1) Is large enough and so configured that an individual can bodily enter and perform assigned work; and
- (2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
- (3) Is not designed for continuous occupancy.

Criteria for a permit-required confined space:

"Permit-required confined space (permit space)" means a confined space that has one or more of the following characteristics:

- (1) Contains or has a potential to contain a hazardous atmosphere;
- (2) Contains a material that has the potential for engulfing an entrant;
- (3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- (4) Contains any other recognized serious safety or health hazard.

Confined spaces requiring permits are marked with signs at the entryway. All entries must be authorized by the supervisor on site and a permit must be completed for those confined spaces meeting the specified criteria. In those cases, procedures can include completing the confined space entry permit, calibrating the gas monitoring device and ensuring the space is adequately ventilated prior to entry. All alarms from the gas-monitoring device shall be adhered to and monitoring data noted on the confined space entry permit.

Perform proper lock out / tag out procedures prior to entering confined spaces. Proper PPE must be worn with respect to the task being performed inside the space. (i.e. Inspection, changing of bags and cages, grinding, welding, etc.). Anyone involved in this procedure (entrant, attendee, supervisor, rescue personnel) must be trained in confined space entry and lock out/tag out procedures.



Baghouse, manhole, tanks, material bin entries, etc. introduce additional hazards that may require additional safety requirements. *Prior to wearing a respirator, an individual must have appropriate training in the fitting, use and care of the respirator and must be medically evaluated and cleared for respirator use.*

6. Safe Work at Heights / Fall Protection

Every employee or contractor working at elevations must be protected to a level of 100%.

CRH requires that all work performed at elevations be performed by means that achieves a level one-hundred percent (100%) fall protection. 100% fall protection means performing an elevated work task so that the risk of a fall is reduced to zero.

Fall protection can consist of appropriate guardrail systems, working from a properly secured ladder, working from an aerial lift, the use of personal fall arrest systems, etc.

All employees and contractors on project sites are required to use Personal Fall Protection when walking/working at heights of six (6) feet or more above the ground or next lower level or around holes that are not protected by a standard guardrail (handrail) or safety net system. At plant and shop sites fall protection is required at four (4) feet. This includes but is not limited to working on top of a structure such as a silo, conveyor, baghouse, cold feed bin, or tank where protection such as guardrails are not adequate.

Personal fall arrest systems for both construction sites and general industry sites (plants, shops, etc.) may be utilized in conformance with 29 CFR 1926.502 (d). A personal fall arrest system is a system used to stop an individual in a fall from a working level. It consists of an anchorage, connectors, a body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.



A ladders last approach must always be applied. Where ladders are used, they must have a visible capacity rating and be used properly

All work performed at elevations must be supervised by a competent person and all personnel must be appropriately trained for the exposure.

7. Lifting/Rigging Operations

Any employee or contractor involved with any CRH operation, who uses a lifting device (crane, boom truck, overhead hoist, floor hoist, etc.) must be properly trained and qualified in the operation of each specific lifting device that he/she may operate.

Operation of such equipment includes, but is not limited to the lifting capacities of the respective lifting device and the associated rigging of the material to be lifted. Anyone that is required to attach any given load to a lifting device shall be properly trained in safe rigging, slinging and signaling procedures.

Always ensure that the safe working load is indicated on the lifting device and the load being lifted is within the load capacity of the lifting equipment. Be sure to use the correct load chart for the lifting equipment's current configuration and setup, the load weight and lift path. Rated load capacities, recommended operating speeds, special hazard warnings, or instruction, must be followed at all times.

Chains cannot be used for lifting unless they are appropriately sized, rated and inspected. Only grade 80 or 100 chains should be used for overhead lifting applications unless otherwise recommended by the manufacturer. In addition, lifting chains are required to have a documented monthly inspection.

Lifting safety also applies to those lifting activities conducted with loader and excavator buckets. Appropriate rigging equipment and practices must be used.



8. Overhead and Underground Hazards

All overhead and underground hazards must be properly located, identified and marked prior to the commencement of work in that area. A risk analysis shall be conducted to evaluate, minimize and/or eliminate the risk associated with all above and underground hazards.

Compliance with programs such as “Call Before You Dig”, utilizing color-coded schemes for the locating and marking of underground utilities is required before digging. Take whatever precautions are necessary to avoid striking underground utilities such as digging by hand, where appropriate.

Provide a spotter and/or appropriate warning devices or signage for overhead power lines in areas where they pose a risk to our employees and others associated with our operations. Take whatever precautions are necessary to avoid contact or arcing from electrical cables to include complying with all requirements for maintaining minimum distances from such cables or overhead lines.

9. Personal Protective Equipment

Personal Protection Equipment (PPE) – Proper PPE must be worn by all CRH employees and contractors where so required by either OSHA, MSHA, local regulations or by company policy. Examples include, but are not limited to:

- Head Protection – Hardhat
- Eye Protection – Safety glasses, goggles, face shield, etc.
- Hearing Protection – Earplugs, earmuffs, etc.
- Foot Protection – appropriate work shoes and steel toed foot wear
- Hand Protection – proper gloves



- Visibility – reflective clothing – vests, pants, reflective tape and/or other reflective type devices
- Full Body and Face Protection from thermal burns while unloading/loading liquid asphalt and/or thermal burns from electrical arc flash – The appropriate hardhat, face shield, ear plugs, proper gloves, long sleeves and/or protective coat, must be worn when there is a potential for any employee to be exposed to the above referenced thermal burn risk(s).

Please check with local management for the specific PPE requirements at the company location or project site where you will be working.

10. Safety of Pressurized Systems

All vessels containing substances under pressure, such as compressed air, cement, hydrated lime, fly ash, etc., are required to have an approved safety relief valve in proper working condition.

Periodic inspection of these safety devices is required to ensure the proper working condition of the relief valve, and each CRH company is required to include these devices as part of their regular inspection program.

Where applicable, employees and contractors must be trained on safe operating practices and company procedures shall be in place to prevent the overfilling of a pressurized vessel.

11. Blasting

Each CRH Company whose operations require blasting will have a Drilling and Blasting Program in place that must be followed by both employees and contractors.



Independent contractors generally perform this specialized work for CRH. All contractors, subcontractors and their employees must be trained in accordance with all applicable legal requirements for the scope of their work prior to actually performing the work. **(APAC does NOT do Blasting Operations)**

12. Work Zone Safety

For those employees and contractors performing work in CRH's road construction work zones, all personnel must be properly trained for their specific roles.

Understanding and fulfilling your responsibilities in regards to safe backing, backer spotter, internal traffic control plans, repositioning vehicles and equipment, flagging, relevant traffic control standards and strategies for preventing work zone intrusions among others, is critical to your safety and that of all workers and the motoring public.

13. Employee Engagement

Engagement by employees and contractors in the various aspects of CRH's safety program is absolutely necessary to achieve zero fatalities and zero incidents. This is a requirement of your work with CRH

14. Contractor Safety Management

CRH works closely with all contractor partners to help ensure safety for all parties while on site. This includes entering into appropriate legal agreements, ensuring the contractor has provided the required insurance and all necessary pre-checks to begin work.



Contractors must follow all applicable regulations, safety policies or contractor safety rules and any site specific safety information. Contractors must be adequately trained, including the necessary relevant experience or qualification, prior to coming on site or performing any work for CRH. If contractors are in any way unsure of their responsibilities while on our site, they should ask their CRH representative.

Haulers / Truckers

Contracted haulers and drivers who are backing toward ground personnel or equipment should establish and maintain eye contact with the spotter who is directing you. **IF, AT ANY TIME, YOU LOSE SIGHT OF ANY PERSON AROUND YOUR VEHICLE, THEN YOU SHOULD STOP IMMEDIATELY.** Do not continue backing until you have located this person and are assured that there is no one else behind your vehicle. You can NEVER assume that a person around your vehicle has seen you or heard you, and you can NEVER assume that anyone will get out of the way. It should be second nature for you to stop in this situation and to remain stopped until it is clearly safe to proceed. **WHEN IN DOUBT, STOP.**

Contracted haulers and drivers must not use cell phones or other communication devices at all, unless you are (1) in a building or trailer, (2) in a properly secured, safely located, and completely stopped vehicle that is not performing or waiting to perform operations (for example, you may not use cell phones while loading, unloading, or waiting to load/unload), or (3) receiving, or responding, to instructions related to the work at hand (but only if it is safe to do so).

To ensure that vehicles and pedestrians remain segregated, a site risk assessment must be performed to identify a clear plan to keep pedestrians away from vehicle and equipment traffic. If rules for the site are already established, employees and contractors must understand the segregation plan and follow it.

Contracted haulers and drivers shall comply with all applicable weight regulations and inspect all loads prior to leaving or entering



CRH's projects or facilities. No driver shall leave or enter CRH's projects or facilities with an overweight, unsecured or unsafe load.

CONTRACTORS, PLEASE READ:

THE SAFETY REQUIREMENTS OUTLINED IN THIS HANDBOOK ARE IN NO WAY INTENDED TO CONSTITUTE AN EXHAUSTIVE LIST, OR EVEN A SUMMARY, OF ALL THE VARIOUS LEGAL AND CONTRACTUAL RESPONSIBILITIES AND/OR DUTIES THAT YOU ASSUME; NOR DO THESE SAFETY RULES REPRESENT A COMPREHENSIVE LIST OF THE MOST IMPORTANT SAFETY CONCERNS. THEREFORE, YOU ARE STRONGLY ENCOURAGED TO ACTIVELY SEEK OUT AND OBTAIN WHATEVER ADDITIONAL INFORMATION AND ADVICE (INCLUDING, WITHOUT LIMITATION, LEGAL ADVICE) THAT YOU NEED TO FULLY AND STRICTLY COMPLY WITH ALL LEGAL AND CONTRACTUAL REQUIREMENTS GOVERNING YOUR WORK.

All contractors, subcontractors and their employees must be trained in accordance with all applicable legal requirements for the scope of their work prior to actually performing the work. CRH Americas Materials (CRH) is in no way responsible for providing, conducting, determining or overseeing the various training requirements applicable to your work.

CRH AMERICAS MATERIALS (CRH) RESERVES THE RIGHT TO REVISE THESE RULES AS IT SEES FIT AT ANY TIME, WITH OR WITHOUT NOTICE.

**“If I SEE something, I will STOP
and DO something.”**





Americas Materials
SOUTH DIVISION

Put safety first

We value safety.

We protect and look
out for each other.

Safety is a shared,
uncompromised value.