Health, Safety and Environment Management Standard
HSE-001

Issue Date: April 1st 2021
Effective Date: June 1st, 2021
Version: 1.0
LafargeHolcim Group HSE
Contents
1. Purpose 3
2. Scope 3
3. General requirements 3
   3.1. Leadership and Engagement 3
      3.1.1. Policy and rules 3
      3.1.2. Roles, responsibilities and accountabilities 3
      3.1.3. Health, Safety and Environmental organization 4
      3.1.4. Rewards, recognition and consequence management 4
   3.2. Objectives, Planning and Management Review 4
      3.2.1. Health, Safety and Environment strategy 4
      3.2.2. Health, Safety and Environment Improvement Plan (HSE-IP) 4
   3.3. Operation and Support processes 5
      3.3.1. Competent people 5
      3.3.2. Induction & On-boarding 5
      3.3.3. Unit HSE Training Program 5
      3.3.4. Communication, consultation and empowerment 6
      3.3.5. Risk Management 7
      3.3.6. Emergency preparedness 8
      3.3.7. Documentation, record keeping and retention 9
   3.4. Performance Evaluation 9
      3.4.1. Audit, assurance and performance monitoring 9
      3.4.2. Performance Review 10
4. Document Control 10
5. Appendix A – Definitions 11
6. Appendix B – Environmental Aspects and Impacts Register (template) 12
1. Purpose
The purpose of the Health, Safety and Environment Management System (HSEMS) is to provide a structured proactive approach for overall continual improvement of all HSE processes to prevent any impact on the environment and/or harm to people.

The requirements of this Standard are aligned with the Group Health, Safety and Environment (HSE) policy as well as with ISO 14001 and 45001 Standards.

Units shall develop, implement and continually improve their HSEMS in accordance with the requirements of this Standard.

2. Scope
This Standard is mandatory and applies to all businesses and joint ventures where LafargeHolcim is the majority shareholder or the managing partner. This Standard applies to all individuals (employees/contractors, transporters, suppliers and visitors), sites, plants, construction projects, offices and any other locations where there are activities under the responsibility of LafargeHolcim.

Countries shall consider any local regulatory requirement applicable as well as specific H&S risks and environmental impacts which might be present in addition to what is defined in this standard and any subsequent HSE standard.

3. General requirements
3.1. Leadership and Engagement
3.1.1. Policy and rules
Group Health, Safety, and Environmental policy and rules articulate senior management's expectations and commitment to HSE, providing a visible direction for the entire organization and shall be displayed at all LafargeHolcim locations.

The HSE rules apply to everyone and are non-negotiable.

3.1.2. Roles, responsibilities and accountabilities
Roles and responsibilities shall be clearly defined and communicated at all levels of the organization. The assignment of roles and responsibilities shall be reviewed periodically and updated as required. HSE responsibilities shall be included in the job descriptions of all workers.

3.1.2.1. Leadership, annual objectives and budgeting
HSE shall be included in annual objectives, budget planning and routine staff meetings. Country and Unit leadership teams shall take the lead in promoting HSE and conducting HSE management reviews (see section 3.2.2. HSE-IP).

The unit shall assign owners from their leadership team for each of the applicable standards.

3.1.2.2. Line management and workers
Line management is responsible for all HSE implementation, communication and compliance in their respective areas.

Workers at every level of the organization shall be responsible and accountable for those aspects of the HSEMS over which they have control.

All levels of management shall hold their direct reports accountable for their HSE responsibilities.
3.1.3. Health, Safety and Environmental organization

A specific HSE organization shall be defined and implemented throughout the Group down to the site level to ensure that line management is adequately supported, guided, coached and challenged.

The country Head of Health, Safety and Environment function(s) shall report to the country CEO and be part of the country leadership team. Where Environment is separate from H&S, the functional head shall, at a minimum, report to a member of country ExCo.

The country and units shall have a sufficient number of HSE professionals with adequate education, experience, training, capabilities and authority to implement their responsibilities.

3.1.4. Rewards, recognition and consequence management

Units shall publish a written reward, recognition and consequence management program to:

- reinforce positive HSE behavior, performance and contributions of workers and teams
- address non-compliance to HSE requirements with positive coaching and corrective measures

HSE performance and behavior shall be considered during the annual appraisal process and promotion decisions for all employees.

3.2. Objectives, Planning and Management Review

3.2.1. Health, Safety and Environment strategy

The Group’s HSE strategy is defined by the Group Executive Committee (ExCo) and the Board Committee HSE, Sustainability and Security Committee (HSSC).

Units shall develop their HSE programs to support the Group strategy and achieve the desired outcomes.

3.2.2. Health, Safety and Environment Improvement Plan (HSE-IP)

All countries and units shall develop an annual HSE-IP following the Group HSE-IP guide:

1. Discovery and budget
2. Planning process (Country)
3. Planning process (Unit)
4. Mid-year review
5. Year-end review

A management review shall take place within each country in order to understand and develop suitable inputs for the Discovery and Budget phase of HSE-IP. The HSE management review shall:

- Review HSE performance and identify any changes that impact HSE listed in the ‘Discovery and budget guide’ (e.g. audit and gap assessment results, culture survey, organizational changes, external stakeholders’ inputs and environmental impacts, new legal requirements) since the previous year’s review including new risks and opportunities
- Determine the continued suitability of HSE programs and processes
- Evaluate any need for change and establish actions to improve the system with the aim of driving continual improvement

At the country level, plans shall be developed for strategic objectives, which will be tracked in the Group tracking tool and be reviewed by country ExCo quarterly.

At unit level, strategic and routine plans shall be developed. Unit strategic plans shall be based on priorities selected from unit gap assessment.
3.3. Operation and Support processes

3.3.1. Competent people

Country and Unit HSE and HR shall define minimum HSE competency requirements (education, qualification, certification and experience) of all workers:

- For employees, competency requirements shall be formalized in their job descriptions
- For contractors, roles requiring qualification and certifications during pre-qualification process
- For HSE personnel, technical expertise, operational knowledge and interpersonal skills (e.g. change management, coaching, and communication skills) shall be formalized in the job descriptions.
  - Persons with specific environmental responsibilities (e.g. environmental permit coordinator, waste manifest issuers) shall be formally appointed

Units shall define a list of H&S key roles which require specific authorization to be issued. As a minimum, the following roles shall be covered: skill trade roles (e.g. electricians, welders), H&S permit to work issuers, mobile equipment operators (cranes, forklifts and other heavy mobile equipment). The unit authorization system shall cover:

- a competency verification process for the key roles, as a minimum checking validity of qualification and certification on annual basis
- a documented list of personnel authorized to perform specific roles kept updated with issue date and expiration date
- a practical field verification method to identify the worker authorization (i.e. badges, passport, digital systems)

3.3.2. Induction & On-boarding

Units shall have an Induction & On-boarding program:

- Initial induction:
  - Worker induction: all new workers shall undertake an induction session, covering at least, HSE policy, main risks, environmental aspects, impacts & controlling it, site facilities and site-specific procedures including emergency response
  - Visitor induction: any visitor entering the unit facilities shall undertake the HSE induction and get familiar with site risks and environmental impacts to which they might be exposed
  - An assessment shall be performed to confirm knowledge retention

- On-boarding: units shall define an on-boarding process to ensure workers get familiar with risks and environmental impacts present in their tasks:
  - Scope: new workers, newly appointed, promoted or transferred workers, and workers exposed to new major operational process changes
  - Timing: minimum period of the on-boarding process
  - Content: activities performed during the on-boarding period, including coaching with experienced employees
  - Approval: approval process by N+1 (or LH contract coordinator) at the end of the period

3.3.3. Unit HSE Training Program

The Unit shall implement a HSE Training Program covering the Group and Country HSE policies and rules, local and legal requirements, including managers, supervisors, members of the HSE function and shop floor levels.

The Unit HSE Training Program shall include:

- **Training procedures**: covering program management, roles and responsibilities on HSE training, development and deployment of theoretical and practical training
- **Training Matrix**: defining initial training requirements for job families and for site specific activities., as well as renewal timeframe with refresher training
- **Annual Training Plan**: establishing an annual schedule of training based on the Training Matrix
- **Tracking system**: ensuring that training is completed according to the Annual Training Plan and appropriate documentation (awareness and training records) are filed.

- **Training content**: covering both initial and refresher training, including:
  - theoretical training (i.e. classroom, e-learning)
  - practical training and task-based practice using Safe Work Instructions (SWIs)

- **Training Assessment**: measuring post-training knowledge retention and effectiveness

### 3.3.4. Communication, consultation and empowerment

#### 3.3.4.1. Communication and Participation

Units shall develop a communication procedure to:

a) cascade relevant HSE information to all levels of the organization, including HSE results, fatalities, critical incident notifications, good practices and key lessons, organized through different communication channels:

<table>
<thead>
<tr>
<th>Channel</th>
<th>Target population</th>
<th>Content</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit HSE Performance</td>
<td>Unit-wide, all employees &amp; contractors</td>
<td>Overall HSE performance, incidents and workers recognitions and rewards</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly HSE Dialogue</td>
<td>Site-wide, all employees &amp; contractors</td>
<td>Specific HSE topics, Fatality Key Lessons, and a ‘find it &amp; fix it’ exercise</td>
<td>Weekly</td>
</tr>
<tr>
<td>Toolbox Talks</td>
<td>Each team under a</td>
<td>Brief on the activities of the day, Fatality Key Lessons and</td>
<td>Daily/per shift</td>
</tr>
<tr>
<td></td>
<td>supervisor</td>
<td>specific HSE messages</td>
<td></td>
</tr>
</tbody>
</table>

b) inform any change in the HSEMS, standards, rules and procedures to the affected workers

c) share relevant HSE information with external stakeholders, aligned with the country communication process(es) and as required by its compliance obligations

Units shall develop a worker participation and consultation procedure to:

a) enable bottom-up communication from workers, including mechanisms for collecting workers suggestions

b) execute the annual LH HSE culture survey to collect and measure workers feedback

c) promote worker participation and contribution to HSE initiatives (i.e. Global HSE Days, HSE-IP objectives, HSE challenges), which shall be taken into consideration as part of the performance appraisal process

#### 3.3.4.2. Engagement and field presence (“Boots on the Ground”)

Units shall implement an engagement and field presence program, aligned with Group “Boots on the Ground” framework that includes as a minimum:

- Promotion of field presence of supervisors and managers time, including time tracking
- Behavioral observations through Visible Personal Commitment (VPCs) and hazard and environmental aspects observations (Hazard Identification)
- Active listening initiatives (i.e. worker and peer shadowing, appreciative interviews),
- Regular recognition initiatives
- Performance targets for each manager and supervisor on: time in the field, VPCs, hazard and environmental aspects identifications
- A documented annual process to review program performance and identify improvement actions.

Country ExCo and direct reports shall lead by example and track own time in the field against defined targets.
3.3.4.3. Workers ability to stop unsafe work

Each unit shall have an empowerment process that enables workers to immediately stop work that they believe may be unsafe, unhealthy or harmful to the environment; this process shall reach all workers through regular training and communication.

3.3.4.4. Stakeholder engagement and conflict resolution

Units shall develop a stakeholder management process to proactively seek feedback and address grievances and conflicts both with internal (e.g., workers) and external (e.g., adjacent business, local communities) stakeholders.

- A mechanism shall be implemented for workers to directly and anonymously raise issues or complaints with respect to HSE performance and management. The Group integrity line phone number must be posted and communicated to all workers at all sites.
- A mechanism shall be implemented for collecting inputs from external stakeholders and define improvement actions, if relevant, as part of the stakeholder engagement plan.

3.3.5. Risk Management

3.3.5.1. Management of Change (MoC)

Units shall establish a documented review process for any change that is not replacement-in-kind. A standardized checklist must be established covering the major H&S risks and environmental impacts introduced by changes in equipment, operation, personnel, materials and or legal requirements.

At a minimum, the process must include:

- Documented reviews completed by a multidisciplinary team which includes operations & HSE
- Reviews shall be conducted during design or procurement, pre-start-up and commissioning
- A process of sign off during each phase confirming that all HSE issues identified were adequately controlled, including requirements from licenses, authorizations and permits

A completed MoC document including all hazards identified, environmental aspects, and recommended controls shall be submitted with all CAPEX budget requests.

3.3.5.2. Critical risk management

Critical Controls shall be implemented in all applicable units.

The Critical Risk Management Program shall follow the Group CCM Program Guide and include the following as a minimum:

a) Unit manager shall be the owner of the Critical Control Management Program. They shall assign a responsible person/s on the unit management team for each applicable Priority Unwanted Event (PUE)
b) Verification of control effectiveness shall be conducted on an ongoing basis for all applicable Critical Risk Events and Critical Controls through quarterly Verification Reviews and regular VPCs targeting Critical Controls
c) Monitoring of performance shall include quarterly review of verification activity completion, control effectiveness and action completion where deficiencies are identified

3.3.5.3. Environmental impact management

Units shall assess and document the main environmental impacts due to its operations and identify the necessary controls. The units’ environmental impacts and controls register shall meet or exceed the Group registry template (see Appendix B – Environmental Aspects and Impacts Register) and be reviewed in case of adverse events and/or changes with potential impact on the environment.
3.3.5.4. Job risk management

All units shall have a Job Risk Management process in place. The process shall differentiate two type of jobs:

- Standard Jobs: all routine tasks as well as those which are likely to reoccur
- Non-Standard Jobs: unplanned and/or unpredictable activities, emergencies, or jobs performed for the first time

Standard Jobs shall have documented safe work instructions (SWI), meeting or exceeding the Group SWI template, written considering the hierarchy of controls, and reviewed and approved by a multidisciplinary team.

For non-standard jobs, safe work instructions shall be created using a blank SWI template, prior to the start of the task.

The job execution shall follow the steps below:

1. Preparation phase: All team members must review the SWI & relevant critical controls prior to beginning the task and the LOTOTO procedure if relevant. Exceptionally, for highly routine jobs (daily or weekly tasks), SWIs shall be reviewed monthly.
2. Permit-to-Work (PTW) completion approval and critical controls check: PTW must be completed according to LH HSE standards. Relevant critical controls shall be verified by an authorized permit approver prior to PTW sign-off.
3. Personal Risk Assessment (PRA): Personal risk assessments shall be performed right before task execution, covering hazards and controls that could not be anticipated in the planning phase. A single methodology shall be applied by all workers who are routinely refreshed through training.

All tasks requiring a permit shall be identified and communicated during the morning meeting. The discussion shall include coordination needs, hazards and controls. A visual display of the jobs shall be used to facilitate the discussion.

3.3.5.5. Safe Work Instruction (SWI) Continuous Improvement

The unit shall have a process to ensure continuous improvement on SWIs based on feedback from workers and to ensure appropriate controls, clarity and effectiveness of procedure. A process shall be established to capture feedback on the SWI’s clarity and effectiveness during the on-the-job review.

3.3.5.6. Occupational health management

Units shall have a program that includes:

a) Fitness-for-work management processes that define risk/role based medical requirements, including: pre-employment, periodic screening and post-employment medical exams
b) Return-to-work management processes established, including case management and rehabilitation for injured/ill workers
c) Annual industrial hygiene plans shall be developed and completed each year including:
   - Personal monitoring for workers exposed to hazardous substances
   - Reducing exposures that exceed the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) and the local regulatory limits shall be addressed through the hierarchy of controls
   - Incorporating exposure reduction projects into the discovery and budget phase of the HSE-IP for review when preparing Country strategic plans

3.3.6. Emergency preparedness

Units shall ensure that adequate preparations are in place so that in case of an unwanted event our people, the public, the environment, our assets, and our reputation are protected from undue harm.
3.3.6.1. Emergency plans

Units shall develop emergency response plans that address all the different foreseeable emergencies that can occur on site and off site. The emergency response plans shall be aligned with requirements detailed in the Group Emergency Response Standard, covering at least periodic drills, procedures for different scenarios and training to relevant personnel.

3.3.7. Documentation, record keeping and retention

Units shall establish a process for creating, distributing, controlling and managing documents and records used and prepared in support of HSEMS requirements. For the control of documented information, the unit shall address the following activities, as applicable:

- distribution, access, retrieval and use;
- storage and preservation, including preservation of legibility;
- control of changes (e.g. version control);
- retention and disposition.

The documents and records shall comply with legal requirements relating to data protection, medical confidentiality and document retention.

Records subject to regulatory inspection should be segregated from other plant records.

All records should be retained at least for five years; where prolonged retention is necessary, this is specified in each standard. Shall comply with LafargeHolcim Record Retention and Deletion Directive

3.4. Performance Evaluation

3.4.1. Audit, assurance and performance monitoring

3.4.1.1. Gap Assessment Program

Each unit shall perform an internal annual HSE gap assessment following the Group HSE protocol and any additional local regulatory requirements.

The regulatory gaps assessment shall include:

- A register of applicable HSE requirements, originated from e.g.
  - regulations, permits, licenses
  - standards the unit commits to adhere to (e.g. ISO 45001 and 14001, industry standards)
  - agreements with workers and unions
  - commitments of the unit or the country to external stakeholders
- Periodic review of requirements and unit’s compliance status, at least every three years and in perspective of changes in the requirements framework (e.g. new legislation, new release of standards)
- Identification of upcoming requirements as inputs for the HSE Improvement Plan process

3.4.1.2. Audit Program

Group HSE conducts audits at planned intervals to assess whether the Units conform to the requirements of this HSEMS standard and other Group HSE standards.

The audit program shall ensure that:

- auditors are objective and the process is impartial
- the results of the audits are reported to relevant management

Countries shall support the audit program and ensure:

- Participating in the coordination, planning and scheduling process
- Appoint competent auditors to support audit program needs
- Audits follow the HSE Audit Program, protocol, schedule and tools
● Corrective action plans are developed with relevant stakeholders
● Audit findings are closed in a timely manner
● Finding closure is supported by evidence including root cause analysis for Level 1 and repeat findings

3.4.1.3. Scorecard
Health, safety and environmental performance shall be monitored and tracked using a Country HSE Scorecard. Countries shall submit information for their Country HSE Scorecard to Group HSE as requested and as part of the annual performance evaluation.

3.4.2. Performance Review
Units shall implement an HSE Committee covering at minimum:

a) Performance analysis
   • Review of the Unit HSE-IP progress and HSE performance indicators
   • Performance review of different site areas (per area owner), including e.g. housekeeping
   • Good performance recognised

b) Action closure
   • Incidents investigated and reviewed
   • Prioritization, facilitation and closure of actions from incidents, audits, PSM assessments, Critical Control Management, inspections, VPCs, HazIDs
   • Assign HSE workgroups to high risk, complex or delayed corrective actions

c) Management of change (MOC)
   • Review upcoming projects or changes (e.g. regulations, capex projects, process) and the associated MOC requests

d) Continuous Improvement opportunities
   • Improvement plans are in place, effective and progressing
   • Engagement and consultation is taking place with key stakeholders
   • The HSE Committee shall be cross functional, include workers and management, meet at least on a monthly basis and minutes of meeting shall be documented.

4. Document Control

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>Section Revised</th>
<th>List of Changes</th>
<th>Revised by</th>
<th>Approved by</th>
</tr>
</thead>
<tbody>
<tr>
<td>04-2016</td>
<td>New Group Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04-2021</td>
<td>ALL</td>
<td>- Incorporate Environment - Align to ISO requirements - Updates to Risk Management sections - General updates to align with current Standards and Programs - Remove duplicate requirements existing in other standards (e.g. Contractors Management, Incident Reporting Classification and Investigation (IRC&amp;I))</td>
<td>HSLT</td>
<td>Head of HSE</td>
</tr>
</tbody>
</table>
5. Appendix A – Definitions

**Accountability**: a person is accountable to a person of higher authority for task areas which have been delegated to them. Accountability follows lines of command and reporting relationships within the organizational hierarchy.

**Authorized**: a person having official permission or approval

**Competence**: the combination of training, skills, experience and knowledge that a person has and the ability to apply them to perform a task safely.

**Corrective action**: action to eliminate the cause/s of non-conformity or an incident and to prevent recurrence.

**Document**: written standards, procedures, work instructions, etc. that describe intended actions.

**Environment**: Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans.

**Environmental Aspect**: Element generated (can be generated) by an organization’s activities, products or services, and this element can impact the environment (i.e. can cause change to the environment).

**Environmental Impact**: Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization’s activities, products or services.

**Environmental Impact Assessment**: Process that ensures that all Environmental Impacts are evaluated within the scope of an organization. The assessment can be completed to evaluate the environmental footprint of specific operations as well as in the Management of Change process.

**Hierarchy of Controls**: the following hierarchy shall be used in the development and application of controls:

1. Elimination of the hazard;
2. Substitution of less hazardous materials, processes, operations or equipment;
3. Engineering and process controls;
4. Warnings/signage, administrative controls or management strategies; and
5. The use of personal protective equipment (PPE).

**Lagging indicator**: measure the end result of health and safety processes, policies and procedures. They are a record of things that have already happened. Examples of lagging indicators are number of injuries, lost time injury frequency rate and days away from work as a consequence of incidents, amongst others.

**Leading indicator**: focus on future health and safety performance with the intent of continuous improvement. They are a signal and monitor of what is being done on an ongoing basis to prevent illness and injury. Examples of leading indicators are number of workers trained in a specific topic, % of completion of HSIP and number of health and safety audits, amongst others.

**Line management**: includes managers and supervisors who have direct management responsibility for workplaces or sections of workplaces including workers and contractors and other persons who may be present in those workplaces. Their responsibilities include the basic functions of planning, organizing (including staffing), leading and controlling.

**Non-conformity**: non-fulfilment of a requirement.

**Process**: set of interrelated or interacting activities which transform inputs into outputs.

**Procedure**: specified way to carry out an activity or a process.

**Permit-to-Work (PTW)**: Documented procedure that authorizes certain people to carry out specific work within a specified time frame. It sets out the controls required to complete the work safely.
Record: document that provides evidence of results achieved or activities performed, e.g. training records, meeting minutes, risk assessments, permits to work, amongst others.

Responsibility: a task area, duty, obligation, or liability delegated to a person by a higher authority for which they are held accountable by the higher authority.

Risk Assessment: the overall process of hazard identification, risk analysis and risk evaluation. It involves the evaluation of the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is acceptable.

Unit: a site or a group of sites that are under the responsibility of a single line manager.

Worker: Any individual performing work on our site or as part of our management control off-site. This includes both employees and contractors.

6. Appendix B – Environmental Aspects and Impacts Register (template)