

# Hazard Recognition and Risk Management

## 1. Purpose and Scope

- a. The purpose of this procedure is to define the requirements and process for the management of Safety, Health and Environment (SH&E) related risk, including hazard recognition, risk assessment and control.
- b. The procedure also details the process for AECOM personnel to stop work if they consider a hazard exists and the risk cannot be mitigated to an acceptable level.
- c. The scope of this Procedure does not include Safety in Design (SiD) risk management. For ANZ employees refer to Safety in Design Procedure - ANZ for guidance and for other regions, where applicable, use your regional guidance documents.
- d. This procedure shall apply to all AECOM controlled operations in Asia Pacific and all work activities carried out by AECOM APAC Employees, Contractors and Subcontractors.

## 2. Risk Management Process

- a. Risk Management involves identifying the hazards associated with the work being reviewed, assessing the associated risks (severity and probability), selecting relevant control measures to implement and a monitoring and review of the controls.
- b. Risk management must be completed with reference to the applicable Work, Health and Safety Legislation and Codes of Practice to the jurisdiction the office / project is being operated in.
- c. Overviews of the SH&E Risk Management process for AECOM offices, projects and sites are provided in Appendix 1 and Appendix 2.
- d. Employees undertaking the risk management process shall be trained in the risk management methodology. This may be completed via SQS Training, project-based training or other specific training developed to be suitable for the level of risk management applied to the works.

### 2.1 Hazard Identification

- a. Hazard identification is the initial step in the risk assessment process and involves identifying potential sources of injury or harm to people, damage to property and/or damage to the environment.
- b. Prior to undertaking any activity, SH&E hazards shall be identified. A number of sources of information may be used to help inform the hazard identification process including but not limited to:
  - i. Client provided information and risk workshops.
  - ii. Initial stakeholder meetings with client / public / contractors / other entities prior to project commencement.

Consideration may be given to specific items including but not limited to:

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>• Interface points / hazards</li> <li>• Shared emergency response</li> <li>• Management of public</li> <li>• Traffic flows</li> </ul> | <ul style="list-style-type: none"> <li>• Delivery timing / arrangements</li> <li>• Client system requirements</li> <li>• Historical land use information</li> <li>• Operational constraints</li> </ul> | <ul style="list-style-type: none"> <li>• Security &amp; communications</li> <li>• Occupied buildings</li> <li>• Utilities and infrastructure</li> <li>• Environmental aspects</li> </ul> |
|--|--|--|
- iii. Reference to previous similar projects or undertakings. Review of risk registers and consultation with key personnel, including management and health and safety representatives.
  - iv. Internal company literature and database information on incidents, audits, lessons learnt, etc.

- v. Externally sourced hazard trend data from industry bodies and regulatory agencies.
- vi. Review of plant and equipment operating manuals, Safety Data Sheets, etc.

**Note:** All such sources of information and liaison shall be documented as part of the overall risk management process

- c. The identification of hazards is undertaken in a systematic manner during the development of:
  - i. Risk Registers
  - ii. Safety, Health and Environment Management Plans
  - iii. Safe Work Method Statements (SWMS/JHA) or Job Hazard Assessments (JHA)
  - iv. Step Back- ANZ only
  - v. 4Sight
  - vi. Other approved project-based risk assessment processes
- d. The list of hazard types in Appendix 3 may be used to assist the hazard identification process.
- e. Employees shall report any new, unusual or uncontrolled hazards that they identify in their working environment via the online Hazard Report in IndustrySafe or the Hazard Report Form - APAC.
- f. Where projects have implemented LifeGuard, this should be used as the preferred system unless the Safety, Health & Environment Management Plan (SHEMP) dictates otherwise.
- g. Any hazard presenting an immediate risk of physical harm shall be attended to immediately and where needed a Stop Work issued (Refer to Section 4) until the risk can be suitably mitigated to an acceptable level.

## 2.2 Risk Assessment

- a. Risks shall be assessed by combining estimates of the potential consequence of exposure to a hazard and the probability of this exposure occurring. The risk matrix in Table 3 shall be used to determine the risk rating.
- b. Risks shall be assessed prior to control implementation (Pre-control). Control measures must be identified to mitigate the risk associated with the hazards identified. A post control assessment of the risks is to be completed to validate that the risk level has been reduced to an acceptable level.

### 2.2.1 Consequence

- a. Consequence should be determined as the most likely or maximum reasonable outcome, not necessarily the worst-case scenario.
- b. The consequence rating shall be guided by the criteria outlined in Table 1.

**Table 1 Consequence Guide**

Severity	People	Property Damage	Environmental Impact	Public Image / Reputation
<b>Catastrophic</b>	Fatality, Multiple Major Incidents	>\$1M, Structural collapse	Offsite impact requiring remediation	Government intervention
<b>Critical</b>	Permanent impairment, Long term injury/illness	>\$250K to \$1M	Onsite impact requiring remediation	Media intervention
<b>Major</b>	Lost/Restricted Work	> \$10K to \$250K	Release at/above reportable limit	Owner intervention
<b>Moderate</b>	Medical Treatment	> \$1K to \$10K	Release below reportable limit	Community or local attention
<b>Minor</b>	First Aid	</\$1K	Small chemical release contained onsite	Individual complaint

**2.2.2 Probability**

- a. The probability of the harm is expressed in terms of the frequency with which the consequence could occur.
- b. The assessment of probability should also consider the level of exposure to a particular hazard. For example, the probability of occurrence is much greater if the activity is a daily event involving a number of individuals compared with the same activity carried out twice a year by few people.
- c. Factors affecting the analysis of probability may include:
  - i. The number of times the situation occurs
  - ii. Duration of exposure
  - iii. Position of hazard
  - iv. Distractions
  - v. Lighting
  - vi. Quantities of materials involved
  - vii. Environmental conditions
  - viii. Competence of people involved
  - ix. Condition of equipment.
  - x. Control measures already provided.
- d. The probability rating shall be guided by the criteria outlined in Table 1.

**Table 2 Probability Guide**

Probability	Probability Description	Probability of Occurrence
<b>Frequent</b>	Expected to occur during task / activity	9/10
<b>Probable</b>	Likely to occur during task / activity	1/10
<b>Occasional</b>	May occur during the task / activity	1/100
<b>Remote</b>	Unlikely to occur during the task / activity	1/1,000
<b>Improbable</b>	Highly unlikely to occur, but possible during the task / activity	1/10,000

**2.2.3 Risk Rating**

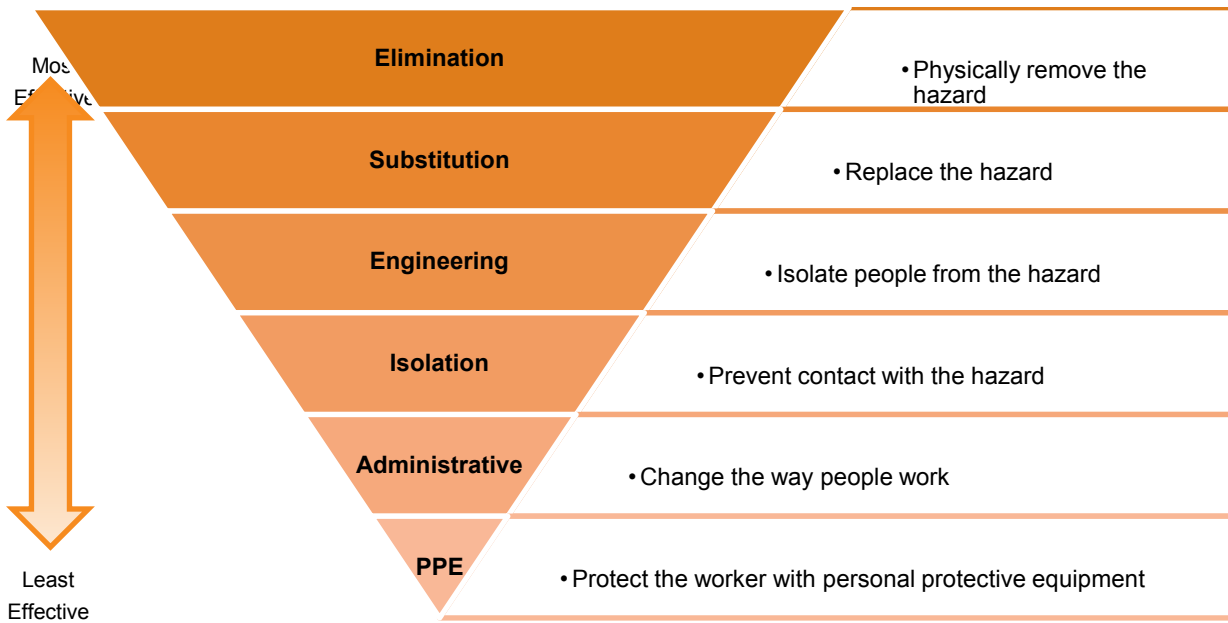
The risk rating is determined by intersecting the Severity Rating with the Probability Rating in Table 3 below.

**Table 3 Risk Matrix**

		Severity				
		High Risk	Medium Risk	Low Risk		
Probability		5 - Catastrophic	4 - Critical	3 - Major	2 - Moderate	1 - Minor
5 - Frequent	H25	H20	15	10	5	
4 - Probable	20	16	12	8	4	
3 - Occasional	15	12	M9	6	3	
2 - Remote	10	8	6	L4	2	
1 - Improbable	5	4	3	2	1	

## 2.3 Risk Control Measures

- a. Once the hazard has been identified and the risk assessed, the 'Hierarchy of Controls', outlined in , shall be used to ensure that the most effective method of control is considered.
- b. The control measures identified must be reasonable, achievable and clearly documented in the risk assessment. In most situations multiple controls types may be used in combination to achieve effective risk control.
- c. All SWMS/JHA which include pre-control (inherent) risks classified as High should be referred through to the project-based safety professional, Regional SH&E Manager or subject matter expert to check and review the integrity of the controls proposed.



**Figure 1 Hierarchy of Controls**

## 2.4 Residual Risk Assessment

- a. Once the control measures have been identified, a post control assessment must be made to determine the residual risk.
- b. Where the residual risk remains Medium or High after the application of all reasonably practicable controls, approval to proceed is required as detailed in Table 4.

**Table 4 Residual Risk Approval Process**

Residual Risk Rating	Approval Process	Recommended Controls
<b>Low (1 to 4)</b>	Risk is tolerable, manage at local level	<ul style="list-style-type: none"> <li>Ensure SWMS/JHA/SHEMP controls in place and monitored for effectiveness and any changes to the work environment</li> </ul>
<b>Medium (5 to 9)</b>	Activity requires approval by the Project Manager – can be completed via review of the Risk Register and / or SWMS/JHA/SHEMP controls	<ul style="list-style-type: none"> <li>Ensure SWMS/JHA/SHEMP controls in place and monitored for effectiveness and any changes to the work environment</li> <li>Mandatory pre-start meetings, daily review of control effectiveness and opportunities to reduce risk</li> <li>All staff to be trained in Step back, 4Sight and Stop Work or project equivalent</li> <li>Verification of applicable competency of workers involved in task</li> </ul>
<b>High (10 to 25)</b>	Determine whether risk is tolerable. Activity requires approval by the Regional SH&E Manager and Project Lead (Highest Level of Authority on the project) e.g. Project Director or PM.	<p>As per medium and;</p> <ul style="list-style-type: none"> <li>Increased supervision by competent person(s) e.g. SQS, Engineer, etc.</li> <li>Fitness for work assessment of those involved in task</li> <li>Review of additional resources for contingencies</li> <li>Emergency Response Plan in place and tested</li> <li>Establishing permit to work system and exclusion zones around high risk activities</li> </ul>

**2.5 Review of Control Measures**

- a. Implemented control measures must be evaluated to ensure they are effective and do not introduce additional hazards. For project activities, this evaluation must be completed by the project team in the field and should be recorded in the SWMS/JHA /SHEMP or through the Step Back process.
- b. Findings from audits, inspections and incident reviews should be considered in the review of control measures to verify that control measures remain effective and where deficiencies are identified they should be rectified accordingly.

**3. Stop Work Process**

- a. It is AECOM's policy and firm commitment that employees are expected to stop their work to prevent exposure to work place hazards, including unsafe conditions or worker behaviours, without fear of reprimand or reprisal.
- b. Prior to initiating a stop work, AECOM employees and subcontractors must attempt to eliminate, mitigate or isolate the hazard.
- c. If the AECOM employees and subcontractors are not satisfied with the mitigation measures, as determined through the Risk Management processes, then they have the authority to stop work. The AECOM employee must notify the AECOM Project Manager of the stop work event immediately.
- d. Work associated within the affected area of operation must not resume unless the risk level has been reduced to an acceptable level and all identified controls have been implemented. All personnel affected by the Stop Work will be briefed on the corrective actions and preventative measures implemented.
- e. The Supervisor / Project Manager is responsible for ensuring that the stop work event is reported as an incident using IndustrySafe within 24 hours. Refer Incident Management Procedure - APAC.

- f. If employees do not have access to the internal IndustrySafe system, reports can be submitted using the following methods:
  - i. Via the public web form (<https://www.industrysafe.com/aecom/incidents/>)
  - ii. For ANZ based staff - Via the web-based Safety for Life App (available at <https://anzgeo.com/safetyforlife/>)
  - iii. A hardcopy Incident Notification Form - APAC submitted to the Regional SH&E Manager via email.
- g. Corrective actions must be entered into IndustrySafe and linked with the incident.

## 4. Risk Management Documentation

The following documentation is implemented by AECOM to record the risk management process.

### 4.1 Office SH&E Risk Registers

- a. Each Office shall develop and maintain a SH&E Risk Register.
- b. The Office SH&E Risk Register shall be developed and maintained by the Regional SH&E Manager in consultation with the relevant stakeholders (Human Resources, Facilities, Office SH&E Committee etc.).
- c. The Office SH&E Risk Register shall identify and assess SH&E Risks related to the office environment and controls for mitigating these risks.
- d. At intervals not exceeding one year and when there is a significant change, the Regional SH&E Manager, in consultation with workers and the Operations Manager must review the Risk Register and effectiveness of controls.

### 4.2 Project Risk Registers (PRR)

- a. Each AECOM project that is rated medium or high risk shall have a Project Risk Register, as per the requirements of the [Project Risk Management Procedure - DCS](#).
- b. The Project Risk Register shall be developed and maintained by the Project Manager. Senior management shall actively participate in the hazard identification and risk assessment process (e.g. attendance at risk workshops and review of Project Risk Registers), with the Project Manager / Director approving the project risk register or as delegated by the relevant jurisdiction Approval Matrix.
- c. The Risk Register should be recorded in ePM.
- d. The Project Risk Register shall identify and assess SH&E risks related to the project and controls for mitigating these risks and where applicable should be expanded to consider other project risks e.g. SiD, reputational risk, legislation etc. The PRR may be supplemented by more detailed supporting risk registers.
- e. Where AECOM is appointed as Principal Contractor on construction projects the project risk register shall identify permits and SWMS/JHA where relevant as minimum level administrative controls.
- f. Where AECOM is undertaking field works, the Project Risk Register should be reviewed by the Project Manager, in consultation with workers, at 90 days after mobilisation and at intervals not exceeding one year and when there is a significant change impacting the project.

### 4.3 Safety, Health & Environmental Management Plan (SHEMP)

- a. A SHEMP is a management tool used to document all SH&E processes for the project's duration.
- b. A SHEMP is mandatory for all projects:
  - i. Where AECOM is the nominated Principal Contractor, Lead / Head Contractor or Superintendent;
  - ii. Where AECOM will perform site work for Oil and Gas clients across the APAC region;
  - iii. Where AECOM enters a Joint Venture;
  - iv. Where the client has specifically requested this as a deliverable; or

- v. Where the Regional Risk Committee and / or Regional SH&E Manager has requested this as a condition of approval.
- c. A SHEMP should be considered for projects:
  - i. Large scale, long duration projects (typically greater than six months) which involve field activities; or
  - ii. Where AECOM is managing high risk activities.
- d. A SHEMP may include (but is not limited to) risks and control measures at a site, emergency response, site induction and training, roles and responsibilities, auditing requirements, site safety meeting records and other project specific information.
- e. The SHEMP shall be prepared by a project team member that has knowledge about the work to be conducted and who understands the project's scope and complexities.
- f. The SHEMP shall be reviewed and approved by the Project Manager who has overall obligations for the Work, Health and Safety of the Project. The Regional SH&E Manager / Nominated SHEMP Reviewers must review the SHEMP prior to mobilization to the site and 90 days after mobilization, annually thereafter and any time there is a change of task or hazard.
- g. Regional SH&E Managers may nominate SHEMP reviewers outside of the SH&E team. These individuals should be appointed based on relevant experience with a technical practice area and/or familiarity with a specific client account safety program.

**Note:** Residual Risk Approval Process in Table 4 requires Regional SH&E Manager sign-off for all Residual Risks rated as High.

#### **4.4 Safe Work Method Statements (SWMS) or Job Hazard Analysis (JHA)**

- a. A SWMS or JHA shall be used to identify risks and control measures for projects and all active field work. SWMS/JHA may form part of a SHEMP and should, where applicable, take guidance from higher-level tools (e.g. Project Risk Register) as well as client, legal and company requirements (e.g. Site Safety Rules, permit systems, etc.)
- b. The primary purpose of a SWMS / JHA is the identification and management of risk by specifically identifying site or task hazards or potential hazards, assessing the risks associated with that hazard and determining the necessary controls.
- c. SWMS are required to be in place for high risk construction work activities as defined in the relevant jurisdiction WHS Act or Regulations, Codes of Practice and Standards.
- d. Unless otherwise approved by the Regional SH&E Manager, the AECOM online SWMS tool or SWMS Template shall be used.
- e. SWMS / JHA shall be completed by staff experienced in the work to be conducted with input from stakeholders and the staff involved in the works. SWMS / JHA shall be reviewed and approved by the Project Manager and acknowledged by all staff completing the task prior to work commencing. Acknowledgement will be recorded via electronic signature or via physical signature on the printed copy. Any necessary information, training, or instruction identified as part of the SWMS / JHA shall be completed before the work activity commences.
- f. Where a SWMS / JHA is developed by the Project Manager, the Project Manager shall not 'self-approve' the SWMS / JHA. The Project Manager approval must be delegated in this instance.
- g. The following high-risk activities require Regional SH&E Manager approval of the SWMS / JHA. Note it is not acceptable for SH&E Representatives or nominated SHEMP Reviewers to approve high risk work activities unless the Regional SH&E Manager has formally delegated this authority e.g. via email.
  - i. Confined Space Entry
  - ii. Hazardous Materials
  - iii. Rail Activities
  - iv. Crane Lift Operations

- v. Working on Live Energy Sources
  - vi. Isolation Lockout De Energising
  - vii. Directly Engaged Subcontractors
  - viii. Excavations/Underground Services
  - ix. Live Traffic/Mobile Plant
  - x. Working at Heights
  - xi. Working over Water
  - xii. Driving Vehicles more than 200 km or >2 Hrs
  - xiii. Remote or Lone Work
  - xiv. Demolition
  - xv. Hot Work
  - xvi. Explosives / Blasting / UXO
- h. Within ANZ rail activities requires the SWMS to be approved by a Regional Rail Approver.
- i. The SWMS / JHA shall be used on site to review site hazards and confirm that the necessary controls are in place. The SWMS / JHA should be updated if any aspect of the task changes and the affected parties briefed on those changes
- j. Where AECOM engages contractors to undertake works on AECOM projects, a SWMS/JHA or equivalent Task Hazard Assessment must be developed by the contractor and submitted to the AECOM Project Manager for review and approval prior to commencement of works. This review should be undertaken using the Field Projects SWMS/JHA Checklist.

#### **4.5 Step Back Card (used with ANZ only)**

- a. The Step Back Card is a field risk assessment tool that has been developed to assist employees in the assessment of risk where additional hazards have been identified outside the approved SWMS / JHA.
- b. The Step Back Card can be used at the start of a new task, when conditions of a task have changed and / or when requested by a client.
- c. An acceptable alternative to completing a Step Back Card is for employees to use 4Sight and update their project safety documentation (SWMS / JHA / SHEMP) as required.

#### **4.6 4Sight Program**

- a. The 4Sight Program is a paperless behavioural based safety system which has been developed to assist employees in the identification of hazards and necessary controls prior to commencing a task.
- b. The basis of the 4Sight program is to encourage and remind employees to ask four simple questions before beginning a task:
  - i. What am I about to do?
  - ii. What could go wrong?
  - iii. What could be done to make it safer?
  - iv. What have I done to communicate the hazards?
- c. Employees should ask these questions of themselves, and of their fellow employees at the start of every task, when the scope of work changes or at any other time throughout the job.



## 4.7 Site Safety Rules

- a. The ANZ business has established a definitive set of non-negotiable Site Safety Rules (see Appendix 4) that are to be displayed in the workplace and communicated through inductions. The intent of these Rules is to highlight critical risk reduction measures and define behavioural lifesaving commitments.
- b. Note that legislative regulations in the APAC region may exceed the Site Safety Rules and are to be amended to meet local jurisdictions.

## 5. Terms and Definitions

- |    |                   |  |
|----|-------------------|--|
| a. | ePM               | Online Ecosystem Project Management module   |
| b. | Hazard            | A source or situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment or a combination of these.               |
| c. | Risk              | The possibility that harm (death, injury or illness) might occur when exposed to a hazard.   |
| d. | Risk Control      | Taking action to eliminate health and safety risks so far as is reasonably practicable, and if that is not possible, minimising the risks so far as is reasonably practicable. |
| e. | Pre-control risk  | The level of risk before the controls have been identified.  |
| f. | Residual risk     | The levels of risk remaining after the identified controls have been implemented.  |
| g. | JHA               | Job Hazard Analysis acts as a risk assessment tool that describes the task being performed, the inherent risks, control measures and the residual risk.                        |
| h. | 4Sight            | Individual last minute risk assessment conducted before undertaking a task involving SH&E risk.  |
| i. | Senior Management | Project Manager or higher and/or business support services external to the project   |

## 6. References

- a. Safety, Health & Environment Management System Manual – AECOM Global S2-001-SM1
- b. Risk Management Policy – AECOM Global R1-100-PL1
- c. Project Risk Management Procedure – DCS I2-231-PR1
- d. Incident Management Procedure – APAC - S3[APAC]-004-PR1
- e. Safety in Design Procedure - APAC – ANZ I3AN-221-PR1

## 7. Records

- a. Incident Notification Form – APAC - S3[APAC]-004-FM1
- b. Field Projects (SWMS) Checklist – APAC S3[APAC]-209-FM1
- c. Safe Work Method Statement (SWMS) – APAC S3[APAC]-209-FM2
- d. Hazard Report Form - APAC S3[APAC]-209-FM3
- e. Project Specific Health and Safety Plan Template – APAC S3[APAC]-209-FM4
- f. What If Hazard Analysis – APAC S3[APAC]-209-FM5
- g. IndustrySafe Hazard Reporting tool
- h. Office Risk Register

- i. Online SWMS tool (currently ANZ only)
- j. Project Risk Register
- k. Step Back Start Card (ANZ Only)
- l. Safety, Health and Environment Management Plan (SHEMP)

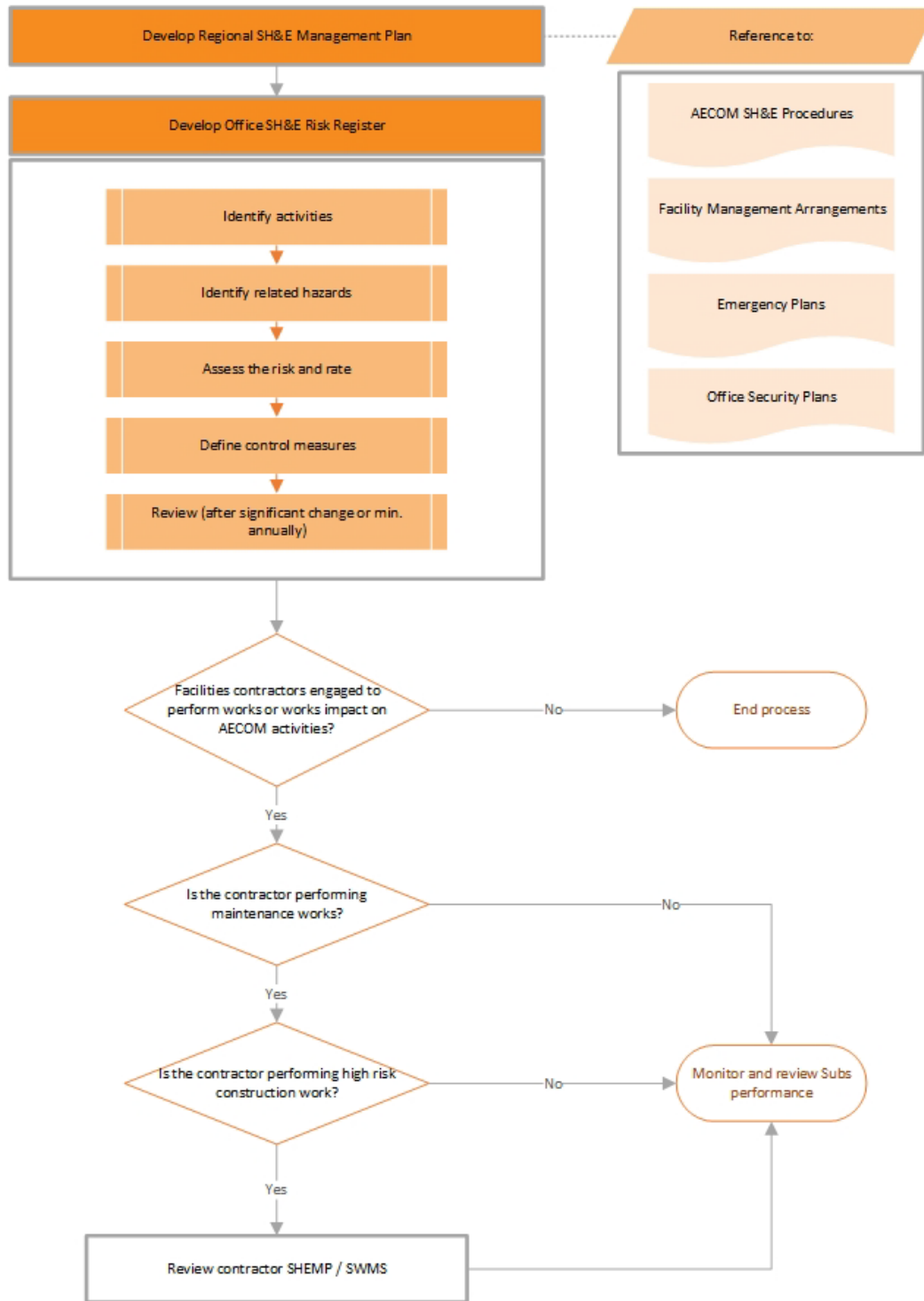
## 8. Appendices

- a. Appendix 1 – Risk Management Process: AECOM Offices
- b. Appendix 2 – Risk Management Process: AECOM Projects or Sites
- c. Appendix 3 – Hazard Types
- d. Appendix 4 – Site Safety Rules (ANZ)

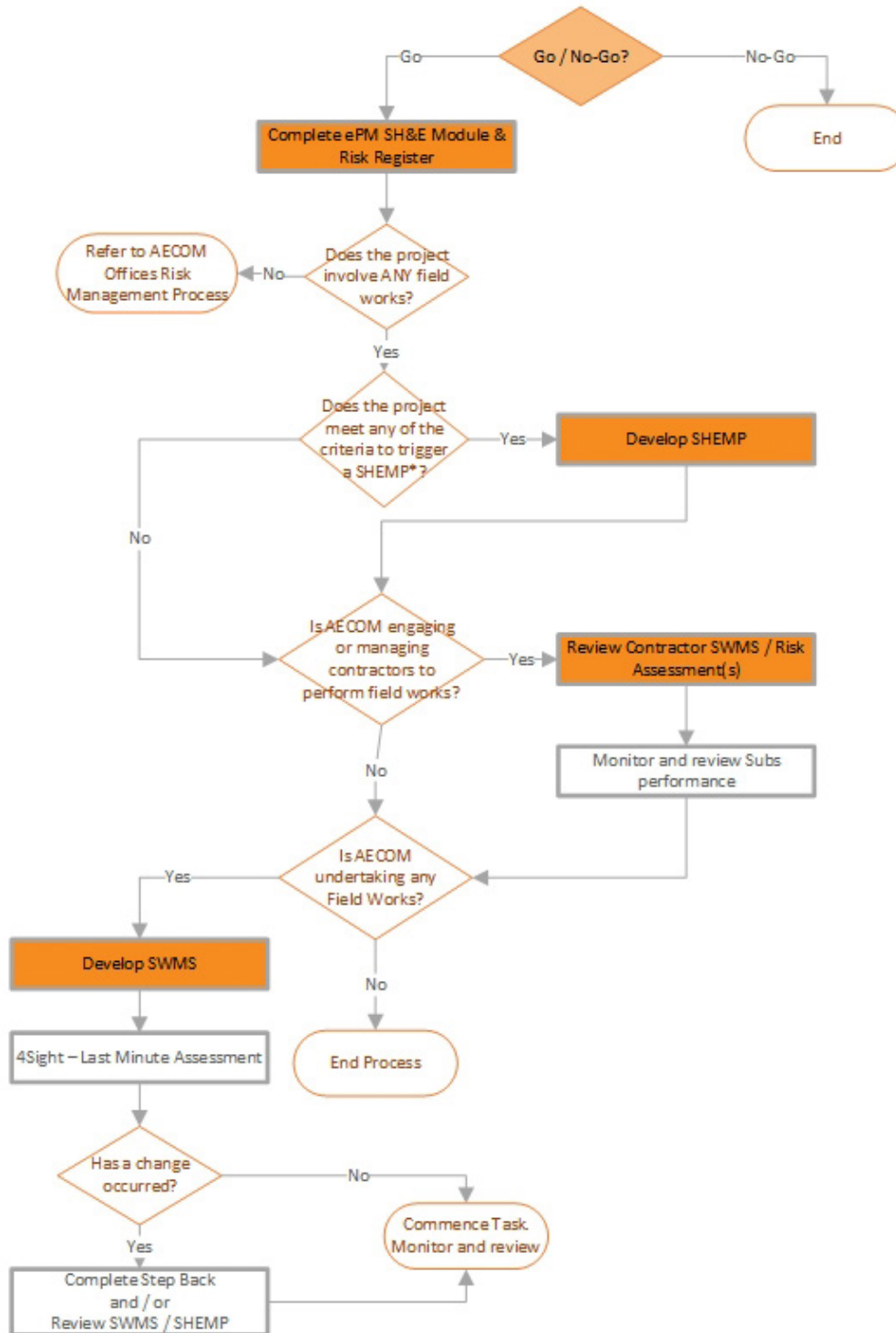
## 9. Change Log

Rev #	Change Date	Description of Change	Location of Change
0	08-May-2018	Initial Release	All
1	08-Jan-2019	Inclusion of Stop Work process. Mandatory SHEMP triggers revised. PM self-authorisation of SWMS prohibited.	Section 3.0 Section 4.3 b Section 4.4 f

## Appendix 1 Risk Management Process: AECOM Offices
























**Appendix 2 Risk Management Process: AECOM Projects or Sites**



\*SHEMP triggers outlined in Section 4.3

## Appendix 3 Hazard Type

Hazard Types		Hazard Example
Biological	 Biological	<ul style="list-style-type: none"> <li>Exposure to algal, bacterial, fungal, viral or parasitic agents</li> <li>Animal, insect and spider bites/stings</li> <li>Sharps/needle-stick exposure</li> </ul>
Body Mechanics	 Body Mechanics	<ul style="list-style-type: none"> <li>Hazardous manual handling – handling heavy, unstable or awkward objects/loads, repetitions movements, maintaining static or awkward work postures, tasks or using tools that require excessive force.</li> </ul>
Chemical	 Chemical	<ul style="list-style-type: none"> <li>Inhalation of dusts, gases, fumes, vapours and mists</li> <li>Ingestion of chemicals / substances</li> <li>Absorption of chemicals / substances through the skin</li> <li>Note in Hong Kong chemical hazards are classified into seven categories: Explosive, Oxidizing, Flammable, Toxic, Corrosive, Harmful and Irritant (see below images)</li> </ul> <div style="text-align: center;">          </div>
Electrical	 Electrical	<ul style="list-style-type: none"> <li>Contact with live electrical parts (overhead or underground powerlines, welding electrodes, induced voltage, stored voltage)</li> <li>Exposure to high fault currents (within switchboards, battery banks)</li> <li>Mechanical damage to power leads, fixed electrical wiring</li> <li>Ingress of water into electrical components</li> <li>Static electricity</li> </ul>
Environmental	 Environmental	<ul style="list-style-type: none"> <li>Air contamination from uncontrolled release of gas or stored chemicals (spills / leaks)</li> <li>Water contamination (including oil spill, disposal into storm water or incorrect drain)</li> <li>Ground / soil contamination (oil, chemical, contaminant spills / leaks)</li> <li>Release of harmful solid, liquid or gas during transport on or off site</li> <li>Bushfire / explosion</li> <li>Incorrect waste disposal</li> <li>Import of unauthorised soils, materials, plant or machinery</li> </ul>
Gravity	 Gravity	<ul style="list-style-type: none"> <li>Fall from height</li> <li>Falling object from height</li> <li>Slips and trips (same level)</li> <li>Access/work beneath a suspended load/unstable object</li> </ul>
Mechanical	 Mechanical	<ul style="list-style-type: none"> <li>Contact with moving plant/parts (cutting, shearing, drawing in, entanglement, etc.)</li> <li>Contact with sharp objects/edges</li> <li>Contact with moving vehicles/mobile plant</li> <li>Struck by projectiles or ejected items (including struck in the eye by a foreign object)</li> <li>Mechanical damage to services, PPE or other items</li> </ul>
Motion	 Motion	<ul style="list-style-type: none"> <li>Motion that is present in all moving objects and people.</li> <li>Includes people climbing and walking, moving machinery components, vehicles, cranes and hand tools</li> <li>Any movement where “In-line-of-fire” incidents are possible</li> </ul>

Hazard Types		Hazard Example
<b>Noise / Vibration</b>	 <p>Noise / Vibration</p>	<ul style="list-style-type: none"> <li>• Exposure to elevated noise levels (noise that may cause hearing damage / employee discomfort)</li> <li>• Contact with vibrating plant/vehicles</li> <li>• Contact with vibrating tools/objects</li> </ul>
<b>Pressure</b>	 <p>Pressure</p>	<ul style="list-style-type: none"> <li>• Release of stored gas, liquid, solid under pressure</li> <li>• Release of spring/tension energy</li> <li>• Contact with pressurised agent</li> </ul>
<b>Psychosocial</b>	 <p>Psychosocial</p>	<ul style="list-style-type: none"> <li>• Working for excessive time periods and/or while fatigued</li> <li>• Working under the influence of alcohol/drugs or other agents</li> <li>• Exposure to workplace bullying, harassment, violence</li> </ul>
<b>Radiation</b>	 <p>Radiation</p>	<ul style="list-style-type: none"> <li>• Exposure to ionising radiation source (radioactive materials, industrial radiography, non-destructive testing)</li> <li>• Exposure to non-ionising radiation source (ultraviolet, laser, welding flash, infrared, microwave, radiofrequency, electromagnetic energy (EME))</li> </ul>
<b>Thermal (Heat/Cold)</b>	 <p>Thermal</p>	<ul style="list-style-type: none"> <li>• Contact with hot/cold objects / parts</li> <li>• Excessively hot/cold environments (including heat stress / frost bite etc.)</li> </ul>
<b>Work Environment</b>	 <p>Work Environment</p>	<ul style="list-style-type: none"> <li>• Inadequate lighting</li> <li>• Wet/slippery floor or surfaces</li> <li>• Uneven/unstable ground or working surface</li> <li>• Weather conditions (including flooding, lightning, wind)</li> <li>• Working alone or in remote locations</li> <li>• Atmospheric contaminants</li> <li>• Restricted access or working space</li> <li>• Inability to communicate due to noise</li> <li>• Working around water / inability to swim</li> </ul>

Appendix 4 Site Safety Rules (ANZ)

**AECOM**

Australia New Zealand  
**AECOM Site Safety Rules**

**4SIGHT**  
 BEFORE BEGINNING A TASK ASK YOURSELF FOUR IMPORTANT QUESTIONS:

- What am I about to do?
- What could go wrong?
- What could be done to make it safer?
- What have I done to communicate the hazard?



You **MUST** attend a Site Safety Induction **BEFORE** being allowed access to the site. This could be a documented toolbox talk or safety huddle.



JSA/SWMS **MUST** be reviewed prior to commencing work, upon any changes of scope or following an incident.



All workers **MUST** be trained, certified and carry appropriate licences for the task they are completing.



Sub-contractors **MUST** be pre-qualified, have current, project specific safety documentation & insurances and be appropriately supervised by AECOM staff.



Valid permits **MUST** be in place for all works.



Appropriate Personal Protective Equipment (PPE) identified in project safety documentation and must always be worn on site.



Injuries, Incidents and near misses **MUST** be reported immediately – on site and in the office. Use IndustrySafe system to log the incident.



Step Back process should be implemented for all non-routine activities and if conditions are deemed unsafe – **STOP WORK**.

**Life Saving Commitments**

*I will...*

**NEVER** walk under a suspended load.

**NEVER** introduce an ignition source to a flammable atmosphere.

**NEVER** enter a trench greater than 1.5 metres without adequate shoring, benching or battering.

**NEVER** enter a confined space without the appropriate training/competency, equipment and emergency rescue support.

**NEVER** use handheld devices while driving.

**CHECK** that the correct isolations are in place before completing tasks on sources of energy.

**ALWAYS** stay out of equipment danger zones at all times.

**ALWAYS** ensure positive communications have been achieved before approaching equipment/ plant.

**ALWAYS** wear appropriate safety equipment when working at heights.

**ALWAYS** be 'fit for work' and ensure I am trained and competent to undertake my task.

**ALWAYS** comply with site rules and procedures, speak up if I see something that is not right and do a risk assessment before and during a task as required.

