6. Training and competencies

**Purpose:** to ensure fabrication site personnel have the necessary qualifications and competencies for their job.

**Objectives:**
- to confirm that workers have the required skills and qualifications, and to provide extra training as needed
- to provide all unescorted personnel with a comprehensive site induction
- to verify competency of workers in critical positions
- to support short-service workers until they are established in the site workforce
- to train personnel to respond to emergency situations

**Expectations**

6.1 Training Plan

- The training plan includes subcontractors as defined in Section 7 – Subcontractor HSE management
- The training plan includes site induction, training needs assessment, task-based training, safety leadership training, the short-service worker program, Behavior Based Safety, and the necessary resources to deliver each component

6.2 Fabrication site induction

- The fabrication site induction is delivered in a language clearly understood by the trainees
- Induction is mandatory before unescorted access to the site is allowed
- The induction covers as a minimum:
  - Welcome to the site for new workers
  - The principle that cost and schedule never override the safety and well-being of the workforce
  - Site layout (e.g. work location, muster points, evacuation routes)
  - Standard personal protective equipment (PPE) requirements
  - Extra PPE for specific areas / tasks
  - Emergency response procedures (i.e. alarms, drills, muster, evacuation)
  - “No harm” culture and the incident/near miss reporting expectations
  - Expectations for behaviour-based safety participation
– Expectations for urgent hazard reporting
– Expectations for all workers to exercise stop work authority to prevent an incident
– Known HSE hazards and control measures – e.g. Life Saving Rules
– Expectations for Life-Saving Rules compliance, and consequence management
– Training matrix requirements and competency verification system
– Site security, access control, search requirements
– Drug and alcohol policy
– Test of workers’ understanding of the induction key points

Note: an abbreviated induction may be provided for visitors who are not working at the site, and who will be under escort at all times while at the site.

6.3 Assessment of training needs

• Training needs are assessed to match workers to the defined requirements of their position, forming an essential part of the training and competence program
• The training needs assessment is risk based, with extra focus and rigor around critical positions
• Worker positions are classified as one of the following:
  – safety critical positions and requisite competencies identified and assessed by the site or required by principal contractor or client
  – position with safety leadership responsibilities
  – trade or support position not included above
• Document experience and qualifications for existing and new personnel, including short service workers
• Personnel are assessed against the task-based and safety leadership training matrices for their position and the need for further training or competency assessment is determined
• When training gaps are identified, their significance is determined. Gap closure may be required before starting work at the site, or may occur within a defined time after starting work, depending on the potential consequence associated with the gap
  – Competencies for critical positions are assessed before work begins (e.g. drivers, radiographers, crane operators, etc.)
  – Mitigations (e.g. supervisor present at all times) are implemented if work is to begin before training gaps can be closed
• Criteria for review of training needs are established (e.g. new position, elapsed time, new technology, changes at the site)

This is an extract from IOGP report 597 – Fabrication site construction safety Practices, version 1, published March 2018. IOGP reports are subject to regular review and re-publication. In all cases, only the current version of report 597 is authentic.
6.4 Task-based training matrix

- Have a training and qualifications matrix that defines training, qualification, and competency verification requirements for each position. These requirements include, as applicable:
  - Qualifications (external or provided by site)
  - Training required by regulation
  - Competency assessment (theory and practice) for critical positions
  - Specific safety responsibilities [refer to safety leadership training matrix]

6.5 Safety training matrix

- Have a safety training matrix defining training requirements for each position or type of position. These requirements include as applicable:
  - Importance of leading by personal example regarding safety values and safety programs applicable at the site
  - How to facilitate a toolbox talk
  - Work management system, including JSA, work permits, SIMOPS
  - Hazard identification, near miss, incident reporting process
  - Behaviour Based Safety and Worker Care programs, including observations, safety interventions and leading difficult conversations
  - Safe work practice knowledge for areas of responsibility
  - Incident investigation
  - Management walkthroughs
  - HSE-related consequence management.

6.6 Short service workers (SSW)

Fabrication sites may use SSW to provide flexibility with workforce numbers and skills, or SSW may be expected to work long term at the site but only started recently. Incident records indicate that SSW are more likely to be injured at work and extra efforts are justified to prevent SSW incidents. SSW worker programs typically address the following:

- Defined criteria for promoting SSW to regular worker status after training gaps are closed and required time on site is achieved
- Defined criteria for separating short service worker from site if performance does not meet expectations
- Means of identifying SSW, e.g. through colour of hard hat or coveralls, or hardhat stickers
• Until training gaps are closed and/or minimum time on site is achieved, limit SSW a to specific tasks (e.g. operating certain types of equipment) or specific work environments (e.g. must be supervised at all times)
• Assign a designated SSW mentor and define competencies, roles and responsibilities for the mentor
• The maximum number or ratio of SSW in a work group is limited, with smaller proportion of SSW for higher risk work
• Have mitigation plans for when the defined SSW maximum number or ratio is not met
• Track the number of SSW in the workforce on a monthly basis and report to management
• Maintain records of SSW entry, promotion to regular worker or separation from site

6.7 Facilities and program structure

• Have qualified trainers, appropriate facilities, and management systems, to sustain the training program, including:
  – Required criteria for trainers (e.g. certifications, experience)
  – Criteria for refresher training of trainers
  – Description of training facilities (classroom and "hands on" facilities)
  – Description of training process and method of assessing what was learned
  – Suggestion process for workers to propose additional training
  – System to maintain records of training, qualifications, competency assessments, refresher training
  – Emergency response drills and exercises (medical, security, etc.)

Further reading

• IOGP 292 HSE Competency Management Guidelines for the Geophysical Industry
• Cogent and UKPIA, Guidelines for Competency Management Systems for Downstream and Petroleum Sites, Cogent, UK, 2011