The APGA Pipeline Engineer Competency Standards make up a framework for understanding competency and a means of assessing and documenting competency for pipeline engineers working in the offshore and onshore industries in Australia. They have consistent elements and a standard format that enables a quick understanding of requirements in every stream of pipeline engineering. Each competency standard clearly identifies the knowledge and experience required to achieve competence, the expertise that is the consequence of competence, and outlines the roles and responsibilities that a pipeline engineer will be able to undertake after achieving that competency. They are developed by panels of industry experts and then published for wide consultation.

The key elements of every competency standard are the description of the competency and its application, the knowledge, experience and expertise required to be assessed as competent and the outline of the roles and responsibilities that an engineer with this competency can undertake.
WHY DO WE NEED COMPETENCY STANDARDS?

Pipeline engineers must have a broad knowledge of the industry and a deep knowledge in their areas of expertise. The range of competency standards in both offshore and onshore sectors reflect this requirement. They have been designed to reflect industry expectations and so that pipeline engineers must achieve only the level of competency that the industry requires for specific roles, responsibilities and tasks. They are comprehensive and include competencies that may not be exclusive to pipeline engineering, but that are essential to the industry. No engineer will achieve competency in all (or even most) of the standards, nor are most likely to achieve competency in all the core competency standards, and this is not required.

The standard for the Australian pipeline industry, AS 2885, requires competent persons to make decisions and/or provide approval in a range of situations. Licensees and pipeline owners must be sure that the engineers making these decisions and approvals are competent to do so in each case.

The competency standards each include clear assessment criteria that help engineers and their employers to work out whether an engineer has the required competency for the role even when they come from different streams of the pipeline industry.
The competency standards can be used by engineers to plan their careers.

They are invaluable for team leaders to assess whether their teams have the competencies required to deliver a project.

Supervisors, training and development officers and human resources managers can use them to design performance assessment processes and training schedules.

Project planners can use the competency standards to help develop project teams.

They help to increase clarity in job descriptions and in other aspects of recruitment.

The competency standards can also help employers to recognise competency through experience rather than formal training.

Training providers can design courses that will have increased relevance to the industry.
The competency standards are classified by four streams: general, design, construction and operation to match the four main streams of the offshore and onshore pipeline industries. Some competency standards are relevant to more than one stream. The competency standards are grouped by area, such as corrosion control or flow assurance and process engineering, and stratified by level: core, elective and specialist. For example, if a manager is trying to decide if an engineer is qualified to determine the maximum allowable operating pressure (MAOP) and wall thickness as required by section 4.5.4 and section 5.4 of AS 2885, determining whether the engineer holds APGA competency standard DP006 for onshore pipelines will assist in making the correct judgement.
USE THE APGA PIPELINE ENGINEER COMPETENCY STANDARDS TO:

- Help you design your future as a pipeline engineer with a clear development path.
- Assess which courses will best equip you for your chosen future.
- Highlight gaps in your experience to help you take advantage of opportunities.
- Ensure you get the right qualifications and experience to specialise.
- Assist you to work out a training program with your supervisor.

- Assess whether your engineers have the knowledge and experience needed for your project.
- Help make informed decisions about competency in relation to AS 2885.
- Build strong teams that are right for the job.
- Design training and assessment programs that give your staff what they need.
TOOLS AND RESOURCES TO HELP USE THE COMPETENCY STANDARDS

APGA provides tools and other resources to help make the competency standards work for you. They include individual and group assessment tools, lists of courses mapped to the competency standard and a standard template for recording and verifying your experience. A competency portfolio is also available so that a record can be established for quick verification. Go to www.apga.org.au/training and follow the links.

WHERE CAN I FIND THE COMPETENCY STANDARDS?

The APGA Pipeline Engineer Competency Standards are available to members via the training section of the APGA website www.apga.org.au/training

DID YOU KNOW

- some training providers are designing their courses based on the competency standards
- organisations are using them to develop in-house training
- the competency standards form the basis for registration in the special area of practice of Oil and Gas Pipeline Engineering on the National Engineering Register and RPEQ.

FOR FURTHER INFORMATION

Visit the website www.apga.org.au/training and log in or email training@apga.org.au

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