Welcome to the 2018 Petroleum & Natural Gas Continuing Education and Training Standards Symposium

2018 – Houston, Texas USA

Sponsored by:

Integrity Advocate

WIFI: HHONORS
PROMOTION CODE: HPO18
Thanks to Our Sponsor

Integrity Advocate | Meet Darcy Chalifoux or Rob Day
www.IntegrityAdvocate.com
When poll is active, respond at PollEv.com/ipng. Text IPNG to 22333 once to join.
Meet the person next to you and enter their name and something unique about them. (Hobby, pastime or some interesting fact)

When poll is active, respond at PollEv.com/ipng

Top
Regarding the PNG industry recovery, I think ____________

- Respond at PollEv.com/iptn
- Text IPNG to 22333 once to join, then A, B, C, or D

A. Recovery is strong in our company.
B. Recovery is happening but slow.
C. Recovery is in sight but hasn't started.
D. Recovery? What recovery?
Does your organization currently follow a written standard for instructional design and delivery of your programs? If so, which one?
What do you believe is the biggest issue affecting the quality of continuing education and training today in the industry?

When poll is active, respond at PollEv.com/ipng

Top
Continuing Education and Training Standards

ANSI/IACET 1-2018 Standard For Continuing Education and Training

Category 1: Organization, Responsibility and Control
Category 2: Learning Environment and Support Systems
Category 3: Planning and Instructional Personnel
Category 4: Needs Analysis
Category 5: Learning Outcomes
Category 6: Content and Instructional Requirements
Category 7: Assessment of Learning Outcomes
Category 8: Awarding the IACET CEU and Maintaining Learner Records
Category 9: Evaluation of Learning Events

Petroleum and Natural Gas Addendum
Importance of Training Standards in the PNG Industry

Dr. Alton Payne,
Chief of Standards Development
Bureau of Safety and Environmental Enforcement
Industry Panel
Keys to Implementing CE/T Standards in PNG

Members of the IACET PNG Advisory Board
PART II
Industry Panel-Keys to Implementing CE/T Standards in PNG

IACET-PNG
Standards for Lifelong Learning - Petroleum & Natural Gas
ASTM Learning

Ensuring Quality through Standardizing Training

Tye Beard, Manager
ASTM Training & eLearning
Benefits for Standardizing Training
Benefit 1: Increase Productivity

- It increases productivity and efficiency
- Reduced learning curve
Benefit 2: Authentic Learning Experience

**Procedure A: Hazards (Section 8)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Question Type</th>
<th>Answer</th>
<th>Learning Outcome</th>
<th>Reference Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is assumed that anyone using this test method will either be fully trained and familiar with all normal laboratory practices, or will be under the direct supervision of such a person.</td>
<td>True/False</td>
<td>True</td>
<td>LO 2</td>
<td>8.1</td>
</tr>
<tr>
<td>Local legislative and statutory requirements are not relevant to the hazards of this test method.</td>
<td>True/False</td>
<td>False</td>
<td>LO 2</td>
<td>8.1</td>
</tr>
</tbody>
</table>
| Appendix X3 describes one way to achieve: (select all that apply)  
  a. A draft-free environment  
  b. Greater safety in operation for the instruments  
  c. Consistent, reliable test results | Multiple select | a. A draft-free environment  
  b. Greater safety in operation for the instruments  
  c. Consistent, reliable test results | LO 2 | Note 3 |

**Procedure A: Preparation of Apparatus (Section 9)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Question Type</th>
<th>Answer</th>
<th>Learning Outcome</th>
<th>Reference Section</th>
</tr>
</thead>
</table>
| To avoid disturbing the thermal equilibrium, the apparatus shall be assembled in a ______-free area.  
  a. light  
  b. moisture | Multiple choice | c. draft | LO 3 | 9.1 |
Benefit 3: Instills Confidence

• Provides the salesforce with the confidence needed to go to market
Benefit 4: Keeps us on the cutting edge

- Provide our Customers with best in class learning experience
Benefit 4: Keeps us on the cutting edge

QA Process

Section 12

The following steps apply for calculation and results. (Section 12)

57. Evaporation loss is obtained from the difference in weight before and after 1 h at 250 °C. (Section 12.1)

\[ \text{Evaporation loss} = \frac{(B-A)-(C-A)}{B-C} \times 100 \]  \hspace{1cm} (1)

where:

- \( A \) = empty crucible weight,
- \( \theta \) = crucible plus sample weight, and
- \( C \) = crucible plus sample after 1 h of heating.
Benefit 4: Keeps us on the cutting edge

Help Desk Reports

- Zendesk Support ticketing system
- Track Customer History
- Email Notifications

Post Training Surveys

- In course survey options
- Post training notification/ survey link
Benefit 5: Return on Expectation (ROE)

- It has tremendous returns!
Thank you!

Tye Beard  
*Manager, Technical Training and e-Learning Services*  
Email: tbeard@astm.org  
Phone: 610-832-9539

For More Information:  
Visit: [www.astm.org/train](http://www.astm.org/train)  
Email: sales@astm.org  
Call: 1.877.909.ASTM (2786)
PART II
Industry Panel-Keys to Implementing CE/T Standards in PNG

IACET-PNG
Standards for Lifelong Learning - Petroleum & Natural Gas
IMPLEMENTING CE/T STANDARDS

IACET-PNG Symposium

12 September 2018
Parker Training History
## Training - Today

### Internal Course Training

<table>
<thead>
<tr>
<th></th>
<th>Sessions</th>
<th>Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1209</td>
<td>7459</td>
</tr>
<tr>
<td>2018*</td>
<td>695</td>
<td>3052</td>
</tr>
</tbody>
</table>

* As of July 2018

### External Training

<table>
<thead>
<tr>
<th></th>
<th>Attendees</th>
<th>% of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>336</td>
<td>4.3%</td>
</tr>
<tr>
<td>2018*</td>
<td>190</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

* As of July 2018
Training Accreditation & Standards

- Fully Accredited Drilling Contractor In-House Program
- Qualified to Issue the Land and Offshore Endorsement

- Approved SafeLandUSA and SafeGulf Provider
- Courses are delivered in Bahasa, English, Russian and Spanish
Competence Assurance

• Key Component of IMS
• Technical Competencies
  – Rig based positions
    • Superintendents to Derrickmen
    • Mechanics & Electricians
    • HSE Advisors & Managers
  – Casing Running Crews
  – Machine Shop Personnel
• IADC Accredited: Aug 2017
Implementation and Challenges

• Regional
  – Client
  – Nationalization
  – Regulatory

• Technological
  – Brake Handle vs Gen 6
  – Land vs Off-shore

• Cultural
  – Safety
  – Procedural Discipline
David E. Villarreal
Sr. Director QHSSE&T
david.Villarreal@parkerdrilling.com
PART II
Industry Panel-Keys to Implementing CE/T Standards in PNG

IACET-PNG
Standards for Lifelong Learning - Petroleum & Natural Gas
PART 1
Introduction of the ANSI/IACET 1-2018 Standard for Continuing Education and Training with Petroleum and Natural Gas Addendum

Bryan Wollam
Wollam Petroleum Advisors
President and CEO
IACET-1:2018 FOR THE PETROLEUM & NATURAL GAS INDUSTRY
INDUSTRY BUSINESS DRIVERS
Inconsistent Training & Competency Standards Around the Globe
Reasons for Inconsistent Competency

- No standards for 3rd party training providers to follow.
- Lack of Education Management Systems for training providers.
- No Consensus Group focused on education, training and competencies.
- Lack of Industry Standards that focus on education, training and competencies.
Discussion Point: Top 3 Cause of NPT

What do you think the top 2 causes of NPT is according to Service Supply Organizations internal investigations?
1. Competency/ Training
2. Lack of procedures
Did You Know?

The root causes for NPT and personnel injuries are within the Service Supply Organization control, according to their own internal investigations.
Personnel Training & Competencies are a contributing factors to many of the failures, environmental releases and injuries in the PNG Industry.

- Protecting our Community
- Protecting our Environment
- Protecting our Marine & Wildlife
- Protecting our Workers
IACET PETROLEUM & NATURAL GAS ADVISORY BOARD

- Taskforce 01: Upstream Standards Committee
- Taskforce 02: Midstream Standards Committee
- Taskforce 03: Downstream Standards Committee
- Taskforce 04: Manufacturing Standards Committee
Benefits of Standardization

- Consistency in Training & Competency
- Risk Mitigation
- Global Acceptances
- Reduction in NPT & Injuries
- Compliance to Industry Standards, Specifications & Legal Requirements
ANSI/IACET 1-2018 Standard for Continuing Education and Training

- Category 1 Organizational Responsibility
- Category 2 Learning Environment & Support Systems
- Category 3 Planning & Instructional Personnel
- Category 4 Needs Analysis & Course Design
- Category 5 Learning Outcomes
- Category 6 Content & Instructional Requirements
- Category 7 Assessment of Learning Outcomes
- Category 8 IACET CEUs and Records
- Category 9 Evaluation of Learning Events
ANSI/IACET 1-2018 with Addendum for PNG Additional Requirements

- Compliance legal & other;
- Aligning learning and working environments with safety;
- Competency for designers;
- Instructor competency, and performance evaluation & analysis;
- Accredited Train-the-Trainer;
- Outsourced training providers must meet the standard;
- In-depth Industry Needs Analysis;
- 3rd party customer satisfaction;
- Education Management System;
- Analysis of EMS, courses, exams, instructor performance;
- Annual management review;

- Provider capability & capacity;
- In-depth course designs;
- Course review and release process;
- Align learning outcomes and designs;
- Two pilots per course;
- Instructional strategies defined;
- Assessment methods align to needs analysis, design & learning outcomes;
- Assessment of validity and reliability;
- NCR process;
- Internal Audits – EMS, courses, Instructors, IACET CEU integrity;
- Course capability process measuring participant reaction, learning, results;
- Records for EMS, assessor, instructor, designer, participants, evaluation for 7 years
<table>
<thead>
<tr>
<th>Standard/Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>API Q1</td>
</tr>
<tr>
<td>API Q2</td>
</tr>
<tr>
<td>API &amp; ISO Product</td>
</tr>
<tr>
<td>ISO 9001</td>
</tr>
<tr>
<td>ISO 14001</td>
</tr>
<tr>
<td>ISO 45001</td>
</tr>
<tr>
<td>BSEE &amp; OSHA</td>
</tr>
<tr>
<td>IADC, API, INE, ISO, etc.</td>
</tr>
</tbody>
</table>
Did You Know?

A fraction of the PNG Training Providers teaching technical and regulatory requirements meet an industry education & training standard.
INDUSTRY COOPERATION & IMPORTANCE OF 3RD PARTY TRAINING PROVIDER ACCREDITATION
IACET 1 PNG
Cooperation

- Operators
- Service Supply Organizations
- Training Providers
- Regulators & IACET
- Education & Industry Experts
Who Backs Up Your Training

Our Industry Trade Organizations do not back up technical training or the participants knowledge.

It’s not their responsibility.
IACET 1 PNG Standard

Intent & Application

Certification for 3rd Party Training Providers

Compliance for Operators & Service Supply Organizations

Ensures training consistency and risk mitigation

Global acceptance and regulatory alignment

Ensures training consistency and risk mitigation

Global acceptance and regulatory alignment
IACET 1 PNG Focus Area

- Education Management System (EMS)
- Course
- Competent Instructor
FUTURE
FOR
IACET-PNG
• Industry adoption & application of the IACET 1 PNG Standard
• Trained & Competent Oil & Gas Commissioners
• Certification for 3rd Party Training Organizations
• Compliance for Operators & Service Supply Organizations
• 3rd Party Training Provider Piloting
• Development of Competency Standards & Programs
QUESTIONS
PART II
IACET Standard and PNG Addendum Overview, Discussion and Q and A.
AWARDS LUNCHEON
2018 Petroleum & Natural Gas Continuing Education and Training Standards Symposium

2018 – Houston, Texas USA

Sponsored by:

Integrity Advocate
Darcy Chalifoux
Director of Business Development
Robert Day
Principal, Integrity Advocate
The I-CAB Foundation is a non-profit organization that provides online competency assessment tools with the goal of improving global workforce competency through access to cumulative competency metrics.

www.I-CAB.org

Robert Day
Licensed Paralegal | Licensed Investigator
CSP, Grad IOSH, CPP, PCI,
CPMSIA, CRSP, CHRP, Fire Eng Tech
Director of Innovation and Regulatory Affairs
Canadian Association of Petroleum Producers (CAPP)

- Represents companies that explore for, develop and produce natural gas and crude oil throughout Canada and to the USA.

- CAPP’s member companies produce about 80 per cent of Canada’s natural gas and crude oil with revenues of about $120 billion a year.

- CAPP’s mission, is to advocate for and enable economic competitiveness and safe, environmentally and socially responsible performance.
“Training can be both a regulatory requirement and a method of risk mitigation.”
Training as a Critical Control

- Well control
- BOP
- Emergency Response
- Confined space
- Pentane BLEVE response
- DCS Control Systems
- Flaring protocols
- Plume management
Addressing the Need: Industry Guidance

CAPP Online Training
Identity Verification and Remote Proctoring (IVRP) Guide
8.1.1 The Provider shall have a process to ensure the learner’s identity is verified through checking a form of government issued identification.

8.7 The Provider shall have a process that validates attendance throughout the learning event.
Key Events

● **2016 Industry Event:** Spectra Energy notice to contractors re: Ground Disturbance training for supervisors “… security issues have been identified; specifically confirmation of the student’s attendance”

● **2016 Industry Event:** Suncor Energy re: Ground Disturbance training for supervisors. “If an online version of this course is utilized, the contractor must demonstrate the course has proof of identity verification and participation through proctoring.”

● **2017 Alert:** Chartered Professionals in Human Resources (CPHR) issued an [alert and criteria to membership](#) conducting online training of any regulatory, due diligence and/or operational significance.
2017 Regulatory Interpretation: "An online course that does not identify the participant does not meet the minimum standard.” #10114935

2017 Regulatory Addition (re OSHA Training): "only in-person training and actively proctored online training will be accepted“- New York City

2018 Regulatory Interpretation: "The training agency should not be providing proof of training for students they cannot verify completed the course." Request #16874685

2018 Industry Response: Energy Safety Canada is now using ID verification and proctoring technology for online training offered to industry
Guide Contents

- **Utilization Rational**
  - Type of online training where most applicable

- **Privacy Considerations**
  - Use, retention and access to IVRP data/media, minimization (returning learners)
Guide Contents

- Technological / Process Considerations
  - Invasive applications, scheduling, LMS compatibility

- Accessibility Considerations
  - Mobile devices, on-demand
Thank you
AWARDS LUNCHEON

2018 Petroleum & Natural Gas Continuing Education and Training Standards Symposium

2018 – Houston, Texas USA

Sponsored by:
Our Customers

Over 5,000 organizations including...

Dr. Patti Phillips
President & CEO
ROI Institute
IACET-PNG Honorable Mention Training Award
EXEMPLARY TRAINING AWARD
SOCAR-AQS
Distinguished Service Award
Nuria Castellanos
TechnipFMC
BREAK – 15 minutes
2018 Petroleum & Natural Gas Continuing Education and Training Standards Symposium

2018 – Houston, Texas USA
Learner Preferences for Continuing Engineering Education in PNG

Dr. Charles Baukal
Director, John Zink Institute
Show Me the Money: Demonstrating the ROI of Training Programs
Dr. Patti Phillips
President & CEO
ROI Institute

IACET-PMG
Standards for Lifelong Learning - Petroleum & Natural Gas
BREAK – 15 minutes

2018 Petroleum & Natural Gas Continuing Education and Training Standards Symposium

2018 – Houston, Texas USA
Group Discussions and Speaker Q and A
GROUP ACTIVITY – BY TABLE

- Summarize the presentations you heard with you colleagues and come up with three questions to ask the presenters (Phillips and Bakaul)? Be prepared to share.

- Develop a list of three problems your organization deals with that you would like to receive collective wisdom and ideas about?
Closing Remarks and How to Get Involved
Bryan Wollam and Joe McClary
Please complete the symposium evaluation

https://www.surveymonkey.com/r/IACETPNG