

**TRAINING TITLE**

**CHEMICAL TREATMENT (WELL BORE, WELL AND LINES)**

**Training Duration**

**5 day**

**Training Venue and Dates**

<b>Ref. NO. PE088</b>	<b>Chemical Treatment (well bore, well and lines)</b>	<b>5</b>	<b>15-19 Sep. 2025</b>	<b>\$5,500</b>	<b>DUBAI, UAE</b>
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**In any of the 4 or 5-star hotels. The exact venue will be informed later.**

**Training Fees**

- **\$5,500 per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Lunch**

**Training Certificate**

**Define** Management Consultants Certificate of course completion will be issued to all attendees.

**TRAINING DESCRIPTION**

Chemical treatments are integral to maintaining the integrity, efficiency, and productivity of oil and gas operations. Whether it's preventing scale buildup, mitigating corrosion, or ensuring proper flow assurance, effective chemical treatments are crucial for wellbore, well, and pipeline operations. This 5-day course is designed to provide professionals in the oil and gas industry with comprehensive knowledge of chemical treatments used in these critical areas. The course will cover the selection, application, and monitoring of chemical treatments tailored to wellbores, wells, and pipelines.

**TRAINING OBJECTIVES**

**Upon the successful completion of this course, participants will be able to:-**

- Identify the types of chemicals used for wellbore, well, and pipeline treatments in oil and gas operations.
1. Understand the challenges associated with wellbore integrity, pipeline corrosion, scale formation, and flow assurance.
  2. Apply effective chemical treatments to prevent corrosion, scale, wax deposition, and hydrate formation in wells and pipelines.
  3. Select the appropriate chemical treatments based on well conditions, fluid types, and operational parameters.

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4. Utilize chemical injection techniques and equipment to ensure successful application of treatments.
5. Monitor and evaluate the performance of chemical treatments and troubleshoot issues to optimize results.
6. Address safety and environmental concerns related to the use of chemicals in the oil and gas industry.

### **WHO SHOULD ATTEND?**

This course is designed for professionals working in oil and gas operations who are involved in the selection, application, and management of chemical treatments, including:

- **Process Engineers and Technicians**
- **Production Operators and Supervisors**
- **Pipeline Engineers and Technicians**
- **Well Services Engineers**
- **Chemical Engineers and Chemists**
- **HSE (Health, Safety, and Environmental) Professionals**
- **Maintenance Engineers and Technicians**
- **Field Supervisors and Managers**

### **TRAINING METHODOLOGY**

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions and motivating everybody to find the right answers. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

Very useful Course Materials will be given.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Group Work & Practical Exercises
- 20% Videos & General Discussions

### **COURSE PROGRAM:**

#### **Day 1: Introduction to Chemical Treatments in Oil and Gas Operations**

- **Overview of chemical treatments in the oil and gas industry: wellbore, well, and pipeline applications.**

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- Types of chemicals used in wellbore and pipeline treatments: corrosion inhibitors, scale inhibitors, biocides, demulsifiers, surfactants, and others.
- Importance of chemical treatments in optimizing production, maintaining equipment integrity, and preventing downtime.
- Key challenges in well and pipeline operations: scale formation, corrosion, paraffin deposition, and microbial contamination.
- Introduction to the chemical selection process for wellbore, well, and pipeline treatments.
- Case studies: Real-world examples of successful chemical treatments in oil and gas operations.

### Day 2: Chemical Treatment for Wellbore and Well Integrity

- Understanding the wellbore environment: pressure, temperature, and fluid composition.
- Types of wellbore treatments: cementing, acidizing, fracturing, and well stimulation chemicals.
- Chemical treatments for wellbore integrity: corrosion prevention, scale control, and paraffin deposition.
- Chemical applications in workover operations: inhibiting corrosion and maintaining wellbore stability.
- Selecting appropriate chemical treatments for a wellbore based on well conditions.
- Group discussion: Case study of chemical treatments in wellbore and well integrity maintenance.

### Day 3: Chemical Treatments for Pipeline and Flow Assurance

- Overview of pipeline flow assurance issues: scale, wax deposition, corrosion, and hydrate formation.
- Types of chemicals used for pipeline treatments: corrosion inhibitors, scale inhibitors, wax inhibitors, and anti-hydrate chemicals.
- Chemical selection based on pipeline conditions: temperature, pressure, flow rate, and fluid composition.
- Chemical injection techniques for pipelines: continuous and batch injection, pigging systems, and chemical delivery systems.
- Monitoring the effectiveness of chemical treatments in pipelines: testing and performance evaluation.
- Case study: Real-life example of chemical treatments in pipeline flow assurance.
- Evaluating chemical treatment options for a given pipeline scenario.

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**Day 4: Chemical Treatment Application Techniques and Safety Considerations**

- Application techniques for wellbore, well, and pipeline chemical treatments: batch vs. continuous injection, downhole applications, and surface treatment systems.
- Equipment used for chemical treatment: injection pumps, mixing units, and delivery systems.
- Safety considerations in chemical handling, storage, and injection: personal protective equipment (PPE), material safety data sheets (MSDS), and emergency procedures.
- Best practices for optimizing chemical treatment effectiveness: monitoring, adjustments, and troubleshooting.
- Environmental impact of chemical treatments: waste management, disposal, and eco-friendly options.
- application of chemical treatment injection systems and monitoring tools.
- Group discussion: Identifying safety risks in chemical treatments and implementing mitigation measures.

**Day 5: Advanced Topics, Monitoring, and Troubleshooting Chemical Treatments**

- Advanced chemical treatment applications: enhanced oil recovery (EOR), well stimulation, and complex pipeline flow assurance.
- Monitoring chemical treatment performance: real-time data collection, sensors, and analytics.
- Troubleshooting common chemical treatment issues: underperformance, side effects, and chemical degradation.
- Emerging trends in chemical treatments: biodegradable and environmentally friendly chemicals, automation, and digitalization.
- Case study analysis and troubleshooting of chemical treatment issues in wellbore, well, and pipeline operations.
- Course review, Q&A, and certification distribution.

[www.definettraining.com](http://www.definettraining.com)

**NOTE:**

**Pre-& Post Tests will be conducted.**

**Case Studies, Group Exercises, Group Discussions, Last Day reviews, and assessments will be carried out.**

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