

Colombia National Training on Decommissioning
17-20 September 2024

Knowledge Assessment Questions
(True/false or MCQ)

Module 1. Overview of decommissioning process

1. Historically, what was one of the first debates and important decisions regarding decommissioning?
 - a) Re-cycle decommissioned infrastructure or transport it to dump sites for burial.
 - b) Leave infrastructure on location (in the sea) or remove it and bring it to land.**
 - c) Transport decommissioned infrastructure by road or railway.
2. Consideration for decommissioning should happen after oil and gas assets are no longer needed? (True/False)
3. What parts of the oil and gas value chain have infrastructure that will eventually need decommissioning? Select one option.
 - a) Exploration and production
 - b) Storage and transport, and distribution
 - c) Refining and processing
 - d) Sales and marketing
 - e) All of the above**
4. The bulk of decommissioned material from continental (terrestrial or “onshore”) oil and gas infrastructure is made up of which type of product? Select one option.
 - a) Wood
 - b) Metal**
 - c) Vegetation
 - d) Hazardous waste
 - e) Plastic
5. Which two of the following impacts are NOT typically associated with decommissioning oil and gas infrastructure:
 - a) Increase in the price of oil or gas**
 - b) Disruption to rivers and surface water flows
 - c) Physical disturbance of forest, swamps or farmland
 - d) Large oil spills**
 - e) Odour, noise and disturbance to local communities

Module 2. Decommissioning in the oil and gas value chain, steps, challenges and obligations

1. Of the nine Key Principles of Sustainable Decommissioning Planning listed below, which four are directly relevant to the actual site that has been decommissioned? Select four options.

- a) Increasing operator self-regulation
 - b) Improving corporate social responsibility and social license to operate
 - c) **Reducing environmental and social impact**
 - d) Reclamation and recycling of materials
 - e) **Removal of hazardous waste and materials**
 - f) **Rehabilitation of areas affected during operation**
 - g) Financial assurance
 - h) Iterative process of learning and development
 - i) **Monitoring and enforcement**
2. When should an asset owner take into consideration how to decommission an asset?
- a) **When designing the asset in the conceptual phase**
 - b) As soon as the asset is bought, built or installed
 - c) When it is first commissioned
 - d) 5 years prior to execution
3. Which of the following are two important roles of the government with respect to decommissioning: Select two.
- a) **Make and update environmental laws, regulations, and standards.**
 - b) Contribute to the costs of decommissioning.
 - c) Provide experts and volunteers to assist with the planning of decommissioning.
 - d) **Enforce compliance through independent monitoring and inspection.**
 - e) Increase bureaucracy and obstruct inter-governmental coordination.
4. In Colombia, for which of the following are details required to be submitted in the decommissioning study to ANLA (national environmental licensing agency):
Select the
- a) Environmental impacts existing at beginning of decommissioning stage;
 - b) Management measures, final restoration activities, and pending actions;
 - c) Maps with the location of the infrastructure being decommissioned;
 - d) A list of environmental obligations derived from administrative acts, identifying those pending and fulfilled, and further compliance evidence;
 - e) Estimated expenses and commitment to comply with obligations pending to be fulfilled.
 - f) **All of the above.**
5. In Colombia, what must operators provide before initiating the decommissioning works? Select one.
- a) **Financial guarantees ensuring that decommissioning will be appropriately carried out.**
 - b) Proven experience of past successful decommissioning projects.
 - c) Inventory of the oil and gas infrastructure in the country.
 - d) Names and addresses of senior management of the company.

Module 3. Continental (terrestrial) decommissioning

1. Select the correct option for the typical sequence of the principle phases of decommissioning:

Option (a)

- 1) Project Planning
- 2) Pre-Decommissioning Assessment
- 3) Operations DDI
- 4) Hazardous Material Abatement / Universal Waste
- 5) Demolition
- 6) Dismantling / Equipment removal
- 7) Restoration

Option (b)

- 1) Pre-Decommissioning Assessment
- 2) Project Planning
- 3) Operations DDI
- 4) Hazardous Material Abatement / Universal Waste
- 5) Dismantling / Equipment removal
- 6) Demolition
- 7) Restoration

Option (c)

- 1) Project Planning
- 2) Pre-Decommissioning Assessment
- 3) Dismantling / Equipment removal
- 4) Operations DDI
- 5) Hazardous Material Abatement / Universal Waste
- 6) Restoration
- 7) Demolition

2. The purpose of the Plug & Abandonment of wells is to:

- a) Ensure environmental protection, safety, and regulatory compliance by permanently sealing non-productive wells to prevent leaks and contamination (True/ False)
- b) Hazardous materials potentially found at an oil and gas decommissioning site include hydrocarbons (oil, gas), drilling fluids, heavy metals, asbestos, lead-based paints, naturally occurring radioactive materials (NORM), hydrogen sulfide (H₂S), and various chemicals used in production and maintenance. (True/ False)
- c) After ceasing production of a continental (terrestrial) asset, the maintenance and inspection cost is reduced to nil as there is no requirement to maintain an asset that is no longer required for use or for production (True/ False)

3. There are different health and safety issues associated with equipment dismantling (removal of equipment for reuse) versus use of demolishing equipment via machine.

- a) Dismantling generally requires less hand-labour (e.g., rigging work) activities compared to demolishing equipment via machine. (True/ False)
- b) Dismantlement may be necessary in some cases (example space limitations). (True/ False)

Module 4. Environmental and social considerations during decommissioning

1. Which of the following stakeholder groups is NOT usually relevant to the continental (terrestrial) decommissioning process? Select one option.
 - a) National environmental regulator
 - b) Fisheries sector**
 - c) Oil and gas companies and operators
 - d) Local communities
 - e) Local NGOs
2. Which industry tools and procedures are NOT applicable in the decommissioning process? Select one option.
 - a) Comparative Assessment
 - b) Personal Development Plans (PDPs)**
 - c) Best Available Techniques (BAT)
 - d) Multi Criteria Decision Analysis (MCDA)
3. Decommissioning is only relevant in countries or regions where oil and gas reserves have been exhausted. (True/False)
4. In most countries, who is responsible for paying the costs of decommissioning? Select one option.
 - a) The government
 - b) Local NGOs
 - c) Local residents
 - d) The oil company or operator**

Module 5. Assessments, Site Clean-up & Reporting

1. Orphan (or abandoned) wells only exist in countries or regions where oil and gas reserves have been exhausted. (True/False)
2. In the case of abandoned (or orphan) wells, fuel storage tanks, pipelines and refineries which procedures should be followed for decommissioning? Select one option.
 - a) Only removal of infrastructure and site rehabilitation.
 - b) Assessment of impacts of decommissioning (according to national legislation requirements), involving best practice, implementation a regulator-approved Decommissioning Plan, final inspection, closure reporting and monitoring plan.**
 - c) Ignore and fence off the site to avoid access.
 - d) Burial of all the material and convert to industrial zone.
3. The commonly applied type and sequence of permitting and regulatory compliance documents for decommissioning are as follows. Select one option.
 - a) Decommissioning Plan and Close-out Report.
 - b) Decommissioning ESIA, Decommissioning Plan, Site Clearance and Close-out Report.**

c) Site Clearance and Certificate of Compliance.

d) Close-out Report, Decommissioning Plan and Decommissioning ESIA.

4. Site remediation, marking remains and safety zones are steps that take place before a site has been decommissioned. (True/False)