TECHNICAL
EDUCATION
ACADEMY

Operational Risk Management Center

COURSE PROGRAMME

000510

HSSE060 - Methods of Liquid Waste Treatment in the Oil and Gas Industry

"Methods for Processing Liquid Waste in the Oil and Gas Industry" is a comprehensive educational programme aimed at specialists and managers in the field of environmental protection and waste management in the oil and gas sector.



Learn from the Best in the Business!

Course overview

Duration: 5 days / 40 hours · Intermediate level

Why take this course

"Methods for Processing Liquid Waste in the Oil and Gas Industry" is a comprehensive educational programme aimed at specialists and managers in the field of environmental protection and waste management in the oil and gas sector. The course focuses on studying modern and effective methods for processing liquid waste, including mechanical, combined, thermal, chemical, and biological methods, as well as low-temperature pyrolysis and compounding methods.

Participants will delve into a detailed study of various types of waste generated at different stages of oil and gas extraction and processing, including waste from crude oil extraction, equipment operation and maintenance, contamination cleanup and control, and the production of petroleum products and hydrocarbon research.

Learners will gain the skills to identify and classify different types of waste, apply modern processing methods, and develop and implement waste management strategies. Throughout the training, they will learn to make informed management decisions, comply with environmental norms and standards in waste management, and conduct research in this area.

This course will not only expand the professional knowledge and skills of the participants but also help them become more responsible and effective specialists in waste management in the oil and gas industry.

Who it is for and how it helps

This course is beneficial for the following groups:

• Engineers, Technologists, Environmental Protection Specialists, and Waste Disposal Experts who wish to enhance their qualifications and understand modern methods for processing liquid and other waste.

• Students of Technical Universities studying the oil and gas industry, chemistry, ecology, or related disciplines. This course will help them understand how modern waste processing technologies work in the oil and gas industry.

• Decision-Makers in Oil and Gas Companies who can benefit from this course to gain insights into waste processing technologies and methods for making more informed and effective management decisions.

• Researchers and Scientists working on new methods and technologies for waste processing in the oil and gas industry can use this course to study the current state of technologies and identify potential areas for future research.

• Environmental Specialists, Waste Management Professionals, Environmental Activists, and Others who want to better understand the problems and solutions associated with waste in the oil and gas industry.

Course overview — continued

What you will learn

- Identify and classify various types of waste in the oil and gas industry
- Apply modern methods of waste processing
- Develop and implement waste management strategies
- Make informed management decisions in the field of waste management
- Comply with environmental norms and standards in waste management
- Conduct research in the field of waste management

Curriculum

Modules 01–06

01 Introduction to Waste Processing in the Oil and Gas Industry

- Definition and classification of waste in the oil and gas industry
- Types of waste produced during crude oil extraction and processing
- Principles and main processes of waste processing

02 Mechanical Processing Methods

- Settling, filtration, thermomechanical phase separation
- Use of decanters and tricanters for dewatering raw materials
- Practical examples and case studies of these methods

03 Thermal Processing Methods

- Principles of thermal waste neutralization
- Introduction to pyrolysis technology and its application
- Gasification as a method of thermal waste treatment
- Use of incinerator units for neutralizing oil sludges
- Practical examples and case studies of these methods

04 Chemical Processing Methods

- Sorption method: using humic substances for waste detoxification
- Bitumen waste processing using vacuum units
- Other methods of chemical processing
- Practical examples and case studies of these methods

05 Combined Waste Processing

- Various methods of comprehensive waste treatment
- Practical examples and case studies of these methods

06 Modern Innovations and Trends in Waste Processing in the Oil and Gas Industry

- Promising technologies and methods for waste processing
- Challenges and issues in waste processing
- Future directions and development of waste processing in the oil and gas industry

Programme instructor



Ekaterina Matveyeva

A highly motivated and experienced HSE and waste management professional. Education background - MSc, environment. Excellent personnel management skills, deep knowledge of health, safety and environmental standards and practices applicable in oil and gas industry, extensive experience in liaising with Contractors and Authorities in various countries, in particular development of waste management solutions for various legal environments.

Looking for a highly experienced and motivated HSE and waste management professional? Look no further than Ekaterina! With an MSc in Environment and extensive experience in the oil and gas industry, Ekaterina has the skills and knowledge necessary to excel in any waste management or HSE-related role.

In her most recent role as Project HSE Manager at Gydan Energy in Saint Petersburg, Ekaterina developed and implemented HSE management systems during the exploration phase, conducted incident investigations, and ensured legal compliance. In her previous role as Head of Waste Management at Assala Gabon, she managed a team and oversaw waste facilities of various sizes and designations, managing everything from operational waste to legacy waste and developing a waste management system for a newly acquired oil field.

Ekaterina's experience also includes roles as an HSE consultant for Tactise, an environmental and waste coach for DNO Iraq, an HSE Manager for Visionscape in Nigeria, and Head of Waste Management for Shell Iraq, among others. Throughout her career, she has been responsible for designing and constructing waste facilities, managing industrial and domestic waste, developing competence frameworks for staff, conducting incident investigations, and more.

In each of these roles, Ekaterina has demonstrated an unwavering commitment to safety and environmental standards and practices. She has liaised with contractors and authorities in various countries, developed waste management solutions for various legal environments, and managed budgets of up to $6 million per year.

If you're looking for a waste management or HSE professional with exceptional personnel management skills, deep knowledge of health, safety, and environmental standards, and extensive experience in liaising with contractors and authorities in various countries, look no further than Ekaterina. Contact her today to learn more about her qualifications and experience.

If you want to learn more about her career path and experience, we highly recommend watching the interview with her, conducted specifically for our Academy
https://www.youtube.com/watch?v=jRcOQq33j7Q

Participant ratings

Programme evaluation based on participant feedback

Overall programme rating — 4.8 / 5

Clarity of learning objectives	**4.6 / 5**
Confidence in applying knowledge and skills	**4.2 / 5**
Achievement of learning objectives	**4.6 / 5**
Relevance of content to job tasks	**4.6 / 5**
Suitability of difficulty for the level of preparation	**4.6 / 5**
Increase in knowledge	**4.4 / 5**
Skills development	**4.4 / 5**
Willingness to recommend the programme to colleagues	**4.6 / 5**

5 responses

Joining the programme

Contact the Academy and quote course code 000510 to confirm dates, delivery format, prices and enrolment terms.

Training for your team

Tell us your business goals, the roles and number of participants, and your preferred dates and location. This will help us discuss the right training option.

Preparing for the programme

The published programme does not specify any prerequisites. Contact us before enrolling to confirm how to prepare.

Discuss your training needs

mail@tecedu.org
www.tecedu.academy

Learn from the Best in the Business!