Decommissioning within the offshore UK oil and gas industry: a practical guide to worker health protection



DECOMMISSIONING WITHIN THE OFFSHORE UK OIL AND GAS INDUSTRY: A PRACTICAL GUIDE TO WORKER HEALTH PROTECTION

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FOREWORD

This technical publication has been produced by the Energy Institute (EI) with contributions from Wood PLC. It is intended to provide guidance on the health protection of workers involved in decommissioning projects in the offshore United Kingdom (UK) oil and gas industry.

The primary focus of this technical publication is to highlight and describe the potential health hazards and risks to workers involved in the decommissioning of offshore oil and gas structures, and explain how these risks are potentially magnified during decommissioning. Health planning, management and mitigation are discussed briefly as this is already well documented in other publications, and these processes are generally established and in use by the operators and other companies involved in decommissioning.

The aim of this technical publication is to assist those involved in decommissioning projects; however, the information contained in this technical publication is provided as guidance only. While every reasonable care has been taken to ensure the accuracy of its contents, the El, and the technical representatives listed in the acknowledgements, cannot accept any responsibility for any action taken, or not taken, on the basis of this information. The El shall not be liable to any person for any loss or damage which may arise from the use of any of the information contained in any of its publications.

Whilst written in the context of the UK legislative and regulatory framework, the principles set out in this publication may similarly be applied in other countries, providing national and local statutory requirements are complied with. Where the requirements differ, the more stringent should be adopted.

Suggested revisions are invited and should be submitted to the Technical Department, Energy Institute, 61 New Cavendish Street, London, W1G 7AR.

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The information contained in this publication is provided as guidance only and while every reasonable care has been taken to ensure the accuracy of its contents, the El cannot accept any responsibility for any action taken, or not taken, on the basis of this information. The El shall not be liable to any person for any loss or damage which may arise from the use of any of the information contained in any of its publications.

1 INTRODUCTION

1.1 PURPOSE

The purpose of this technical publication is to identify and explain the potential risks to the health of workers who are engaged in the decommissioning of offshore oil and gas facilities.

This technical publication concentrates on the health risks themselves and how they arise or are magnified during decommissioning. The same substances that are present during production may still be present and pose additional risks when an installation is decommissioned and dismantled.

Installation, operating and maintenance teams should be made fully aware of the potential hazards and risks which may be present on the installation. However, the awareness of contractor work teams may be less. Regular site workers may not be familiar with many of the decommissioning site activities and the potential hazards and risks. A good example of this is the increased exposure to hydrogen sulfide (H₂S) and other toxic gases and substances as a result of stagnant liquids remaining in spaces, which are then exposed during dismantling by personnel who were not involved with the operational facility.

To reduce the exposure to risk, companies should ensure that they plan, manage and mitigate the risks to their workers involved in decommissioning. However, this is generally no different to what is required during normal operation of the facilities, and companies should utilise their existing processes and procedures to continue to manage the risks throughout the decommissioning process.

This technical publication is intended to assist UK offshore oil and gas industry operators and contractors to fully know and understand the extent of the potential health hazards and risks to workers involved in offshore decommissioning.

1.2 SCOPE

This technical publication is applicable to activities involved in the decommissioning of offshore oil and gas facilities in the UK. It is intended to identify and raise awareness of the potential health risks to workers involved in the dismantling and removal of facilities offshore, and the subsequent dismantling and disposal of the facilities onshore.

It should also help to ensure that the potential health hazards are anticipated, recognised, evaluated and controlled, and that suitable control measures, that meet as low as reasonably practicable (ALARP) principles are put in place, managed and monitored.

This technical publication also aims to assist the user to identify when to get additional support, what type and from whom, at the different phases of a decommissioning project.

1.3 APPLICATION

The intended audience for this technical publication is the operators, contractors and other parties who are directly involved in the decommissioning of offshore oil and gas facilities,