

Practical guidance for managing the health risks associated with drilling fluids

2nd edition

PRACTICAL GUIDANCE FOR MANAGING THE HEALTH
RISKS ASSOCIATED WITH DRILLING FLUIDS

2nd Edition

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FOREWORD

In 1992, the Energy Institute (EI) published the first *Code of practice for the safe handling of drilling fluids*.

The development of this second edition of the EI guidance has been steered by the EI's Occupational Health and Hygiene Committee (OHHC) and the document has been updated by an OHHC sub-group following a literature review and consultation with drilling and well operations experts.

The aim of the document is to provide guidance for occupational hygienists in particular, but also for drilling personnel, managers and other health and safety professionals. It provides supplementary guidance to *Drilling fluids and health risk management: A guide for drilling personnel, managers and health professionals in the oil and gas industry* (OGP/PIECA, 2009), including principles of occupational health practice, roles and responsibilities, as well as specific health hazards and the suitable controls for the chemicals used.

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1 INTRODUCTION

It is recognised that exposure to the fluids and powders used in drilling operations associated with the exploration and production of oil and gas can give rise to health risks, and appropriate measures must be taken to eliminate or control them. Health effects include irritation of the skin, eyes and respiratory system with long-term exposure potentially leading to dermatitis or chronic respiratory illness (Searl and Galea, 2011). This publication should serve as a reference document for drilling and well services personnel and their associated management, as well as health, safety and environment professionals, occupational health and occupational hygiene professionals.

The aim of the document is to provide practical guidance for managing the health risks associated with drilling fluids and will complement the guidance on drilling fluids and health risk management (OGP/IECA, 2009). Drilling fluids include muds, cuttings, well service liquid and powder chemicals and associated chemical additives.

The health hazards related to drilling activities including noise, vibration, manual handling, and the return fluids/vapours/gases e.g. hydrogen sulfide gas, naturally occurring radioactive material (NORM) and materials used for cementing are outside the scope of this document.

Annex A is a checklist tool provided to review possible deficiencies in existing systems and procedures with respect to this guidance.