

Hydrocarbon management

HM 92

Model sampling plans for crude oil and liquid
hydrocarbon products

2nd edition

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MODEL SAMPLING PLANS FOR CRUDE OIL AND
LIQUID HYDROCARBON PRODUCTS

2nd edition

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FOREWORD

This publication was initially issued by the Energy Institute (EI) Joint Sampling Work Group (JSWG), which consists of representatives from the EI Hydrocarbon Management Committee (HMC), the EI Test Methods and Standardisation Committee (TMS) and the aviation Joint Inspection Group (JIG). This version was revised by EI HMC3.

The JSWG was established to produce guidance relating to manual sampling, to supplement and complement that which is contained in the various sampling standards and test methods. The guidance documents produced, including this document, are subject to the approval of the noted groups, which comprise technical specialists representing oil companies, equipment manufacturers, service companies, terminal and ship owners and operators.

Use of the model plans is encouraged and use of these plans by oil companies, inspection companies, terminals and refineries will help to ensure that sufficient samples are taken to satisfy normal testing requirements for transfers of crude oil and hydrocarbon products.

The EI encourages international participation and when producing publications its aim is to represent the best consensus of international expertise and good practice.

It is the intent of the JSWG to review this document regularly and to update it as required. Suggested revisions are invited and should be submitted to:

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1 SCOPE

This document provides model sampling plans for the manual sampling of liquid crude oil and petroleum products relating to shore tank, road tanker, railcar, drum container sampling, and ship loading or discharge operations.

Sampling of bunker deliveries to ships is not included, as this activity is considered to be adequately covered by existing international standards and local port requirements.

These model plans complement existing sampling standards by providing guidance on the type, location and volume of sample which should be drawn in order to provide sufficient sample for retention and also to enable a typical series of laboratory tests to be performed for the determination of product quality. For loading and discharge operations, the plans again provide recommendations regarding sufficient samples for retention and also for analysis and quality assurance relating to custody transfer.

This document does not address safety issues and the appropriate EI or American Petroleum Institute (API) publications, together with the International Safety Guide for Oil Tankers and Terminals (ISGOTT), Safety of Life at Sea (SOLAS), and Oil Companies International Marine Forum (OCIMF) publications should be consulted for applicable safety precautions.

Particular attention is drawn to the ISGOTT and inspectors should always refer to this guide. Local or national safety regulations should always be followed.

Careful consideration should be given to the nature and known hazards of the material being handled:

- Personnel should be made aware of the potential hazards, have access to safety data sheets, and be given instructions in safety precautions to be observed.
- All regulations covering entry into hazardous areas shall be observed.
- Particular care should be taken when accessing ships and shore tanks.
- Suitable personal protective equipment (PPE) shall be worn to provide protection against all known hazards associated with the operations.