Manual of Petroleum Measurement Standards Chapter 17.1

Guidelines for Marine Cargo Inspection

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Introduction

These guidelines are intended to encourage uniform inspection practices for marine petroleum and chemical cargo quantity and quality control. Use of these guidelines will simplify the making of agreements for transferring petroleum and chemical cargoes and help ensure that the agreements can be clearly interpreted and executed between parties. The recommendations provided here are not intended to interfere in any way with provisions contrary to these guidelines that may exist in any contract or applicable recommended practices of other regulatory or standards bodies, nor are they intended to interfere with safety and environmental considerations or local conditions. These guidelines are not promulgated as the only acceptable method of custody transfer measurement or inspection practices. Guidelines for the inspection of marine cargo are subject to ongoing reappraisal and periodic change.

Measurement and sampling activities to be performed on board a vessel shall be accomplished in the presence of, or with the express permission of, the vessel's master or other appropriate authority. Activities to be performed at the loading and discharge shore facilities shall be accomplished in the presence of, or with the express permission of, the appropriate shore supervisory personnel.

For reasons of safety, only appropriate and approved equipment should be used. Local jurisdictional regulations regarding loading and unloading also shall be followed.

Guidelines for Marine Cargo Inspection

1 Scope

These guidelines specify the policy and minimum recommended practices for the manual and automatic measurement, sampling, and accounting for bulk quantities of crude oil (including spiked, blended, and reconstituted crude oil), petroleum products, and chemicals that are transported on marine vessels. The activities described in these guidelines include actions by producers, buyers, sellers, terminal operators, vessel owners and their crews, customs authorities, independent inspectors, and other parties with an interest in measurements.

Certain vessel or terminal configurations and cargo characteristics, particularly chemicals, may require extensive procedures and calculation methods not covered in this chapter.

Cargo calculations should be performed independently by the responsible parties or by their authorized representatives, or both. The results of the quality determinations and quantity calculations should be compared, and any differences resolved without delay. Each party involved in a custody transfer is responsible within their domain for contributing to a reconciliation of vessel and shore quantities and for seeking explanations for any discrepancies.

Any discrepancies relating to quality determination or calculated quantities, or both, should be recorded and reported to all interested parties. This procedure may be accomplished by issuance of a Letter of Protest (LOP) or Notice of Apparent Discrepancy. Every effort should be made to resolve discrepancies before the vessel departs.

The independent inspection report for the cargo custody transfer should be issued and distributed promptly.

These procedures are equally valid and applicable for either metric or customary units of measurement, provided that the same types of units are used consistently.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API. *Manual of Petroleum Measurement Standards* (*MPMS)* Chapter 3.1A, *Standard Practice for the Manual Gauging of Petroleum and Petroleum Products*

API. *MPMS* Chapter 3.1B, *Standard Practice for Level Measurement of Liquid Hydrocarbons in Stationary Tanks by Automatic Tank Gauging*

API. *MPMS* Chapter 4 (All sections), *Proving Systems*

API. *MPMS* Chapter 5 (All sections), *Metering*

API. *MPMS* Chapter 7 (All sections), *Temperature Determination*

API. *MPMS* Chapter 8.1, *Standard Practice for Manual Sampling of Petroleum and Petroleum Products*

API. *MPMS* Chapter 8.2, *Standard Practice for Automatic Sampling of Petroleum and Petroleum Products*

API. *MPMS* Chapter 8.3, *Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products*

API. *MPMS* Chapter 8.4, *Standard Practice for Sampling and Handling of Fuels for Volatility Measurement*