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English Version

Oil spill identification - Waterborne petroleum and petroleum products - Part 1: Sampling

Identification des pollutions pétrolières - Pétrole et produits pétroliers dans l'eau - Partie 1 : Échantillonnage

Identifizierung von Överschmutzungen - Rohöl und Mineralölerzeugnisse aus dem Wasser - Teil 1: Probenahme

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Foreword

This document (CEN/TR 15522-1:2006) has been prepared by CEN/BT/TF 120 “Oil spill identification”, the secretariat of which is held by SN.

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Introduction

Where an oil pollution incident has occurred, samples should be collected from both the spill and, wherever possible, the potential source of the pollutant, e.g. ship, shore tank, pipeline or road vehicle, in order to assist in the identification or confirmation of the source of the spill. The aim of this document is to give guidance on the best current practice for taking such samples.

This document does not contain details relating to all types of spill situation, but should only be regarded as general guidelines. However, by following these guidelines it should be possible to collect and provide legally valid samples that can be used in the process of identifying or confirming the source of the spill.

The issues addressed only cover the mechanics of sample collection. The command and control that may be put in place during incident response, the authorities who may request sample collection and the individuals who have the authority to collect samples, will vary from country to country and as a consequence these issues are not addressed.

1 Scope

This document provides guidance on taking and handling samples that are collected as part of an investigation into the likely source of a crude oil or petroleum product spill into a marine or aquatic environment. Guidance is given on taking samples from both the spill and its potential source.

If samples are to be used in connection with legal proceedings, this document should be read in conjunction with any documents issued by the regulatory authorities in the country and location where the spill has occurred.

Taking samples may involve hazardous materials, operations and equipment. This document is not intended to address all the safety and health aspects associated with the guidance given. It is the responsibility of the user to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

For the sake of clarity the word 'oil' is used throughout this document to mean either crude oil, a petroleum product or mixtures of such.

2 Normative references

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

EN ISO 3170, *Petroleum liquids - Manual Sampling (ISO 3170:2004)*

3 Principle

Samples form an important aspect of any investigation and care should be taken to ensure that they are as representative of both the spill and the potential source as possible. The samples shall be taken and placed in containers that will enable the samples to be transported safely and will retain the samples integrity over the period of time required to transport the samples to the laboratory for analysis and storage prior to analysis. They shall be clearly, unambiguously and uniquely labelled and sealed so that they cannot be opened without breaking the seal.

When investigating a spill, samples are usually taken from:

- The water surface (sea, river or lake);
- shoreline or banks (sand, shingle, rocks and oiled animals and vegetation);
- marine or river vessel's cargo tanks, fuel tanks, waste oil tanks, slop tanks, ballast tanks and bilges;
- land tanks and pipelines.

All spills and all potential sources of spills should be sampled. It is important to take samples from both the spill and the source even on such occasions where it seems quite clear from where the spill originates.

Sampling procedures, which are connected to liability investigations, shall be performed with great care and accuracy and every action shall be taken to prevent a decrease in the samples' value as evidence.

If a spill has scattered and only thin sheens remain on the water surface, every possible effort should be made to take a sample of the spill material. No sample volume is too small and samples that