

2.2 Waste sampling

Laboratory analyses of oil samples may be required for various objectives:

- ↳ to identify “responsible party” for judicial purpose;
- ↳ to compare the spilled oil with a potential source of pollution;
- ↳ to characterize the oil spilled in case of unknown source of spilled oil;
- ↳ to characterize oily waste mixtures collected during response to choose treatment options.

Refer to “Manual on Oil Pollution – Section VI, IMO. Guidelines for sampling and identification of oil spills”, 1998 Edition 1578 E, giving detailed and illustrated Instructions and recommendations on sampling methodology (equipment, safety, sampling procedures for different types of oily mixtures, samples identification, etc.).

In a judicial procedure, there are very strict rules to ensure that sampling can be used as evidence. In the case of waste management, when sampling for fingerprinting, these general procedures and guidelines are useful for sampling any type of oily material.

Proposed content of this Sub-section of the Plan

→ **Recommendations on oil spill waste sampling and analysis capabilities.**

Recommendations to develop this Sub-section

Refer to the **Questionnaire** of REMPEC, Section 6, Question 6-2

 Refer to TG n°2 “

Categories

Liquids



(source : Cedre)

Solids and semi-solids (oiled sand...)



(source : Cedre)

Polluted pebbles & stones



(source: Cedre)

Polluted sorbent



(source : OTRA)

Polluted seaweed



(source : OTRA)

Polluted solid waste



(source : OTRA)

Polluted fauna



(source : OTRA)

Visual estimation on oil content in different types of waste in not an easy exercise

Sand aspect and related hydrocarbon content in oiled sediment samples

Jyeh accident (Lebanon)

Coarse sand lightly oiled

Total Hydrocarbon content: 5,5 g/kg dried matter (0.5%)



Jyeh accident (Lebanon)

Fine sand heavily oiled

Total Hydrocarbon content 34 g/kg dried matter (3.4%)



For a first rough quantitative determination of oil content in waste (sediment, debris etc.) a gravimetric analysis can be done (after solvent extraction, the solution is dried and weighed and compared to the weight of original sample).

This approach does not replace Total Hydrocarbon Content precise analysis needed to determine waste treatment options.

Oil spill waste analysis for treatment", p.42.

A Technical sheet may be included in the OSWMP as well as the list and contacts of official and approved laboratories with sufficient capabilities to carry out the analysis of oil.



Sampling of OSW in glass container for analysis (Source: ITOPF)