

TECHNICAL GUIDELINES

TG n°1 Waste classification

The following table, proposed as a reference (Source: Cedre), provides a classification of the waste in seven categories depending on their nature and relative content and corresponding to distinct waste management streams.

Please note that the percentages are given in weight and simply provide an indication of the relative values.

Categories	% Oil	% Water (free)	Mineral matter	Organic matter	Comments
Liquids	> 10%	0 to 90%	< 10%	< 10%	Remove as much water as possible by settling.
Semi-solids & solids (sand...)	> 10%	10% to 20%	> 10%	< 10%	Define threshold according to pollutant.
Polluted pebbles & stones	> 10%	1%	> 80%	< 10%	Choice criterion: degree of surface polluted.
Polluted sorbent	> 5%	< 10%	< 10%	< 5%	Bulk, mops, pillows, sheets...
Polluted seaweed	> 5%	< 20%	< 20%	> 80%	Fermentable substance (oleo factory disturbance).
Polluted solid waste	> 5%	< 10%	< 10%	variable	Including gloves, boots, overalls, plastics, wood...
Polluted fauna	> 5%	< 15 %	< 10%	> 70%	Bird and mammal corpses.

Table 2: Waste classification

(Source: Cedre)

It should be noted that other classification could be used such as the one reported in the IPIECA (2004) Guidelines for oil spill waste minimization and management – Volume 12:

- ↪ pure oil,
- ↪ oil and water,
- ↪ oil and sediment,
- ↪ oil and organic debris, and
- ↪ oil and PPE/equipment.

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 is 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.