

TG n°10 Assessment of national treatment capabilities

In order to define the most suitable treatment, countries have first to assess their treatment capabilities for all waste and identify the suitable facility(ies).

Each country may achieve this work by following the actions outlined below.

1 Identify the facilities in country considering all types of waste and possible treatments.	
1 – A	<p>Step 0. Consider all possible treatments for each type of waste.</p> <p>Step 1. Identify facility(ies) in country that <u>could</u> treat the waste for each type of waste, and recommended treatment.</p> <p>Step 2. For each facility identified, fill the “Treatment facility information sheet” to assess the capability, suitability and limitations of the facility. And summarize the limitations, entry criteria, and comments.</p> <p>Step 3. Confirm that the facility can treat the type of waste: YES or NO</p>
	<p>See Figure 10: Main oil spill waste streams based on international practice, after the table below in this TG.</p> <p>📄 Use the Table 9: Waste treatment options assessment table, below in this TG</p> <p>Refer to the Questionnaire of REMPEC, Section 5</p> <p>📄 Refer to the TG n°11 “Treatment facility information sheet”, p.65</p>
1 – B	<p>Summarize the types of waste that can be treated in country. Identify the type(s) of waste that cannot be treated with existing facilities.</p>
2 Evaluate the different options for the waste that cannot be treated in country.	
2 – A	<p>Study the interest of planning the building specific installation and/ or the adaptation of existing installation for waste that cannot be treated in the country.</p>
	<p>① Refer to Appendix n°7 “Data sheets on (pre-)treatment and final disposal”, p.85 for general information on treatment, techniques and criteria to consider.</p>
2 – B	<p>Study the opportunity of exporting the waste to another country able to treat these waste (accordingly to the Basel Convention if applying).</p>
	<p>① Refer to Appendix n°10 “Main provisions of the Basel Convention”, p.111 for general information</p>

All waste (mixed)	Possible pre-treatment	Example of potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TG n°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
All (mixed)	Screening	Public works, construction				
All (mixed)	Sediment size sorting	Public works, construction				
Oil/ water mix	Decantation (Settling)	Deballasting station, port reception facilities				
Oil/ water/ sediment mix	Filtration	Deballasting station, port reception facilities				
Oil/ water/ sediment mix	Centrifugation	Deballasting station, port reception facilities				
Emulsion	Emulsion breaking	Deballasting station, port reception facilities				
Sorbent	Draining	Deballasting station, port reception facilities				
Liquid waste	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TG n°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Oil	Recycle as Alternative Fuel source	Use in refinery, Co-incineration in cement works, lime kiln, power plant etc.				N/A
Water – low HC content	Not required (?)	Waste water treatment plant				Discharge in environment
Water – higher HC content	Decantation (Settling), Filtration, Centrifugation	De-ballasting station				N/A
	Evapo-incineration	Evapo-incinerator				N/A
	Incineration in hazardous waste collection centre	Industrial incinerator				N/A
	Co-Incineration in cement works	Cement works				N/A
Other?	Other?					
Other?	Other?					
Semi-solids and solids waste	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TG n°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Fine sediment – low HC content	Washing	Soil washing plant, mines/quarries				Return on site Or Landfill/ road fill/ construction
	Flotation	Specialized unit/ company				Id. as above

	Stabilisation (quicklime)	Specialized soil remediation company				Id. as above
	Low Thermal Desorption	Specialized unit/ company				Id. as above
	Bio-treatments (in situ)	Specialized soil remediation company				Id. as above
	Landfarming	Specialized soil remediation company/ industrial/ urban mud treatment company				Id. as above
	Composting	Specialized soil remediation company, industrial/ urban mud treatment company				Id. as above
	Bio-pile	Specialized soil remediation company, industrial/ urban mud treatment company				Id. as above
	Surf washing	Public works company				Return on site
Fine sediment – higher HC content	Incineration in hazardous waste collection centre	Industrial incinerator				N/A
	Co-Incineration in cement works	Cement works				N/A
	Thermal desorption	Specialized unit/ company				N/A
	Vitrification	Specialized unit/ company				N/A
Other?	Other?					
Other?	Other?					
	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TG n°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Pebbles	Hot water and high pressure washing	Spill response company				Return on site
Pebble & small cobble (<15cm)	Washing (special units, concrete mixer)	Public works, depollution, mines/ quarries				Return on site
Large cobble and boulder	Other?					
Other?	Other?					
	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TG n°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Solid waste	Storage in special units / cells	Specialized unit/ company				Return on site
All types (mixed)	Vitrification	Specialized unit/ company				Return on site
All types (mixed)						

Used materials from worksites: PPE, nets, bags, ropes, boom & Oiled solid waste	Incineration in hazardous waste collection centre	Industrial incinerator				N/A
All types (some restrictions)	Incineration in mobile incinerators	Specialized unit/ company				N/A
All types (some restrictions)	Co-Incineration in cement works (Alternative Raw Material)	Cement works, lime kiln				N/A
Solid waste lightly oiled	Incineration in domestic incinerators	Domestic waste incinerator				N/A
Lightly oiled vegetation	Burning on site	None specific				N/A
	Other: - Evapo-incineration - Pyrolysis	Specialized unit/ company				
Sorbent	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TGN°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Sorbent full of oil, risk-free composition	Incineration in domestic incinerators	Domestic waste incinerator				N/A
Sorbent full of oil, <u>non</u> -risk-free composition	Incineration in hazardous waste collection centre	Industrial incinerator				N/A
Other?	Incineration in cement works	Cement works, lime kiln				N/A
Other?	Other?					
	Other?					
Sea weed	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TGN°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Seaweed lightly oiled (oil content <5%)	Bio-treatment in-situ	Specialized soil remediation company				N/A
Seaweed lightly oiled (oil content <5%)	Composting	Specialized soil remediation company				N/A
Seaweed oiled (oil content <20%)	Bio-pile	Specialized soil remediation company				N/A
Seaweed oiled (oil content <20%)	Incineration in domestic incinerators	Domestic waste incinerator				N/A
Seaweed heavily oiled (oil content >20%)	Incineration in hazardous waste collection centre	Industrial incinerator				N/A

	Incineration in cement works	Cement works, lime kiln				N/A
Other?						
Other?						
Fauna	Step 0 Consider possible treatments	Potential facilities	Step 1 Name of facility(ies)?	Step 2 Limitations / Entry Criteria? Fill info sheet for each facility (TG n°11)	Step 3 Confirm? Yes / No	Recommended Final disposal
Dead oiled birds or mammals	Incineration					N/A
Other?		Knacker's yard				

Table 9: Waste treatment options assessment table

→ Refer to the Appendix n°7 "Data sheets on (pre-)treatment and final disposal", p.85 for further information on the each treatment method.

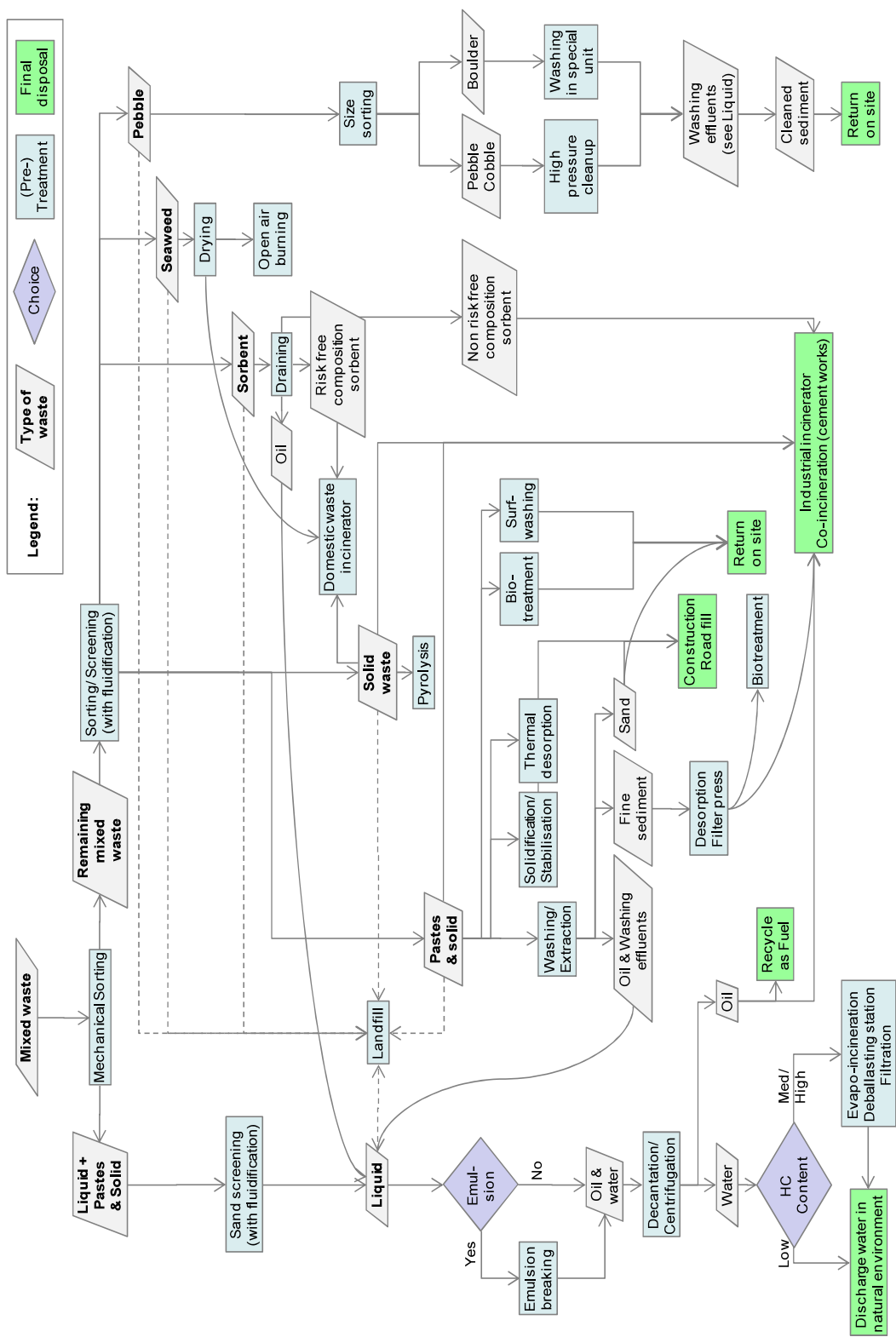


Figure 10: Main oil spill waste streams based on international practices

(Source: modified from Cedre)