| WASHING IN WIRE MESH TANKS | N 21 |
|---|---|

SCOPE

Substrate: stones
Pollution: medium to heavy
Pollutant: all types
Sea: tidal or non-tidal

EQUIPMENT NEEDED

| Basic equipment: | Extra equipment: |
|---|---|
| - Wire mesh tank | - Stone supply (loader) |
| - Watertight skips | - Water supply (pump) |
| - High pressure washers | - Skimming/effluent absorption means |
| | - Effluent pumping/storage/settling system |

DESCRIPTION/PRINCIPLE

The sediments are washed off site in wire mesh tanks positioned over watertight skips. The stones collected are laid in thin layers in the tanks and are washed at high pressure with hot water using thermal washers. The effluents are collected in the skip, where the settling and skimming is carried out.

CONDITIONS OF USE

Pollution: all types, preferably fresh or little weathered oil.
Substrate: stones polluted to a varying extent.
Site: locally polluted shingle bar; washing offsite.

IMPACT ON THE ENVIRONMENT

Physical: none (do not wash stones from very crumbly shale rocks).
Biological: possible risk connected to the residual presence of pollutant and products or the destruction of vegetation on stones at the top of the shingle bar.

PERFORMANCE

Yield: variable (1 to 3 $m^3$/h depending on the size of the stones, the degree of pollution, the pollutant and the site).
Waste: water, oil, soiled fine sediment (+ possibly solvent).

OBSERVATIONS

- Requires a work area (car park, open space) on the back beach, relatively quick to set up.
- Limited output; concerns small volumes needing to be cleaned.
- Management of effluents necessary.
- Provide an anti-spray system on the edge of the skip.
- Requires good management (turnover, supply, storage and evacuation of sediments).
- Extremely heavily polluted sediments will need to be scraped beforehand.
- Operate a tight flow: continual removal and return of sediments to beach as soon they have been washed.
- The washed sediments are subjected to surfwashing to finish the cleaning.
- Using a washing agent is not always necessary. Tests can however be carried out to assess the potential gain. Only use a product that has been tested by a recognised organisation (for efficiency, toxicity, biodegradability).