

MECHANICAL COLLECTION ON THE SHORELINE



This technique consists in collecting the oil in order to facilitate its removal from the beach. Collection is carried out using a tractor or earthmoving equipment.

Collection of viscous oil using caterpillar excavator







- ✓ Pollution: heavy pollution, continuous slick
- ✓ Pollutant: slightly to very viscous oil
- ✓ Substrate: vast, flat foreshore with wet fine-grain sand (very damp to saturated), and a good load-bearing capacity, without ripple marks
- ✓ Site: accessible and sufficient load bearing capacity for earthmoving equipment, sufficiently large to allow vehicles to manoeuvre.



Basic equipment:

- ✓ Backhoe loader
- ✓ Grader/bulldozer
- ✓ Tractor or loader with front blade
- ✓ Front-end loader or lorry (for removal).
- PPE: At least suitable for heavy machinery operation.





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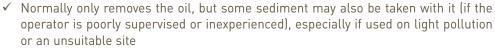
- Consists of bringing the oil together in order to facilitate its removal from the beach. Scraping is carried out using a tractor or earthmoving equipment fitted with a front blade in an oblique position. According to the viscosity of the oil, two options are available:
 - (case 1) fluid oil: radial or converging scraping towards a collection point on the foreshore; removal by pumping
 - (case 2) more viscous oil: concentration to form windrows, by successive slightly curving passes parallel to the water line; subsequent removal of windrows
- ✓ Should only be carried out on heavy pollution; do not use on moderate to light pollution.
- ✓ Inform and supervise operators; use experienced operators
- ✓ Work methodically
- ✓ Set up traffic lanes on the beach in order to reduce oil and sediment mixing.



- ✓ Don't remove excessive amounts of non-contaminated materials
- ✓ Don't fill the bucket of loader more than 2/3 capacity
- ✓ Don't drive on polluted materials.



IMPACT



- ✓ High risk of disturbance due to traffic and mixing of oil with sediment
- ✓ May lead to reduction of beach stability and beach erosion/loss of beach area.



Minimum workforce required: 2 people per vehicle (1 driver + 1 assistant)

Waste: oil mixed with a varying quantity of sediment; but can very rapidly become unselective if scraping is carried out on moderate pollution (should be avoided).

Bulldozer used for mechanical recovery operations



