

SCOPE

Substrates: all
Pollution: very light to very heavy
Pollutant: all
Sea: with or without tides



EQUIPMENT NEEDED

Basic equipment:

- Scrapers, rakes, brushes, forks, etc.
- Landing nets, shovels etc.

Extra equipment:

- Big-bags, bins, bags
- Tractor with loader (for removal)

DESCRIPTION/PRINCIPLE

The pollutant, polluted sediment and debris are removed by hand or with the help of manual tools and then stored for disposal.

The waste can be in bulk or put in bags, plastic rubbish bags, big-bags (providing the transport facilities and the intermediary storage facilities can cope with them) and is then disposed of by hand or better still with assistance from flat-bottomed boats.

CONDITIONS OF USE

Pollution: all types; most often scattered pollution; on widespread pollution, only if use of other techniques is impossible.

Substrate: all types; sufficient load bearing capacity for pedestrians and possibly light machinery.

Site: all types if they are sufficiently workable and providing they can cope with a high level of trampling.

IMPACT ON THE ENVIRONMENT

Physical: impact ranges from insignificant to high depending on the substrates. Risk of deconstruction of soil on marshland. Erosion.

Biological: same applies. Potentially destructive effects on flora (dunes, marshland).

PERFORMANCE

Yield: this will vary with the type of pollution and the site (from 0.2 to 2 m³ at the most per day per person).

Minimum workforce required: (order of magnitude for average sandy beach, 100 to 200 linear metres per day per team of 10 workers, including waste removal).

Waste: polluted debris and sediments with variable oil-content: 10 to 30% on scattered pollution but much more, especially during the first few days, in the case of a massive HFO spill.

OBSERVATIONS

- Ensure responders have at least the minimum in terms of protective clothing: overalls, boots, gloves, etc. depending on the nature of the pollutant, exposure and responder activity.
- Difficult working conditions: aim for optimum comfort in terms of equipment (innovate if necessary), logistics, supplies (water, coffee, meals...)
- This is a very selective technique, although it requires a lot of time and personnel.
- Organise the response: give the responders well-defined responsibilities (collection, raking, piling in heaps, putting waste in rubbish bags and disposal) and have strike teams rotate. The use of a loader replaces the latter two positions: the waste collected is directly placed in the loader and is then evacuated to an intermediate storage facility.
- Organise a chain to evacuate waste in places that are hard to reach.
- Ensure personal safety (signposting, supervision, no isolated individual should be out of sight etc.).
- Restrict the spreading of the pollution: set up traffic lanes, protect ground (geotextile), provide a decontamination area near the worksite exit.
- Always comply with environmental and safety instructions.