

MANUAL CLEANUP

PRINCIPLE

Manual removal of oil from sand, with direct loading of waste into a loader

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



CONDITIONS OF USE

- ✓ **Pollution:** all types; most often scattered pollution; on large spills, if implementation of other techniques is impossible
- ✓ **Pollutant:** all types
- ✓ **Substrate:** all types; sufficient load bearing capacity for pedestrians and light equipment
- ✓ **Site:** all types sufficiently accessible and which tolerate intensive traffic.

EQUIPMENT

- **Basic equipment:**
 - ✓ Scrapers (paint scrapers, long handle scrapers...), rakes, brushes, forks...
 - ✓ Landing nets, shovels, trowels...
- **Extra equipment:**
 - ✓ Waste containers, big-bags, bins, plastic bags...
 - ✓ Front-end loader (for disposal).
- **PPE:** At least protective clothing: overalls, boots, gloves... depending on the nature of the pollutant, exposure and responder activity.



- ✓ Divide the response personnel among three functions:
 - collection/scraping/gathering
 - placing in bags/waste containers
 - disposal
- ✓ Rotate the teams among the three functions
- ✓ The waste can be disposed of manually or with the use of a front-end loader if possible.



- ✓ Don't over-fill bins, plastic bags
- ✓ Don't remove excessive quantities of sediments.



IMPACT

- ✓ Impact insignificant to heavy, depending on the type of substrate. Risk of destroying the structure of the substrate in marshes. Erosion
- ✓ Potentially destructive effects on vegetation (dunes, marshland)
- ✓ Deconstruction and destabilisation of the foot of the dune (upper end of beach); erosion, destruction of the dune and the associated vegetation, decrease in biodiversity and fertility by reduction of the low water mark
- ✓ Can tend to fragment the oil in certain conditions.



PERFORMANCE

This is a highly selective technique, but requires a lot of time and personnel. If not done correctly, there is a risk of removal of large quantities of clean sediment.

Manual removal of tar balls from a pebble beach

