

TECHNICAL GUIDANCE NOTE: Manual recovery on sand and gravel shorelines

02/11/2020



OBJECTIVE

Recovery of plastic nurdles using manual techniques. This approach is labour intensive, however the increased selectivity results in less debris being collected. Manual methods of recovery can involve shovels, brushes and wire-mesh scoops, as well as screens and trommels for later sorting.

RECOMMENDED END-POINT: Reasonable recovery rate– weight (g) of nurdles / worker / day.

SCOPE

For use on all sandy and gravel beaches where nurdles have been observed.

DESCRIPTION OF TECHNIQUE

1. Identify bands of stranded nurdles across the beach; high concentrations of nurdles are likely to be found along the high water mark (HWM), where other organic/inorganic debris may be found.
2. Workers should walk the along the beach collecting nurdles by sweeping/scooping nurdles into shovel or wire-mesh scoop, **taking care to minimise the volume of sand and other debris collected.**
3. Site supervisors should equip workers with the correct combination of tools according to their work area e.g. On wet sand, sweeping nurdles into shovels will be more effective. On dry sand, collection into mesh scoops and immediate sieving is likely to be more effective.
4. Where permitted, test pits should be excavated by dedicated teams to determine the presence of buried nurdles. If buried nurdles are found in a given area, they should be collected as per the above method.
5. Mobile screening/trommel stations should be set up to remove as much sand/debris as possible during cleaning up. Workers should empty the contents of their buckets at these stations onto tarpaulins for processing.
6. Following processing, recovered nurdles should be stored appropriately in labelled bags (beach name, weight, date of collection) for onward transport. As much as possible, organic debris should not be removed from the beach.

GENERAL RESOURCE REQUIREMENTS

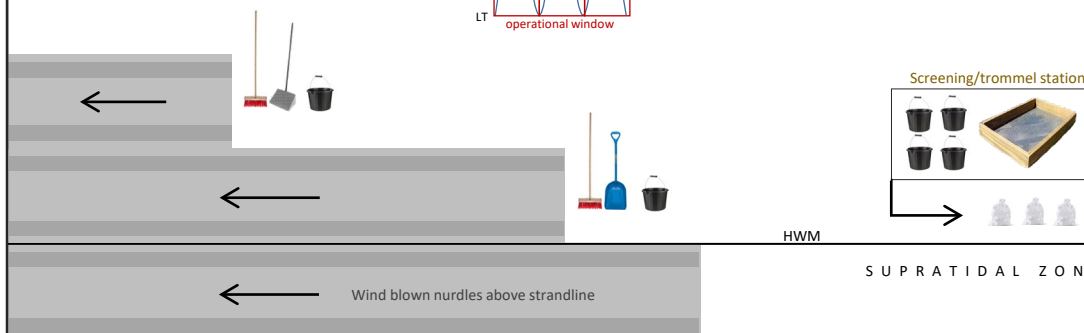
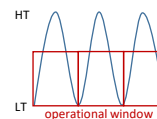
Manual labour;
Shovels, wire mesh scoops, brushes brooms, buckets and tarpaulins;
Portable sieves and trommels;
Strong bags for storage;
Appropriate transportation for personnel, equipment and waste;
Food and water

TECHNIQUE OUTLINE



SUBTIDAL ZONE

INTERTIDAL ZONE



OTHER CONSIDERATIONS

All workers must wear appropriate PPE whilst working including sun protection. Consideration to be given to the presence of sensitive species, especially when excavating sediment. Due attention should also be given to potentially harmful wildlife. No food or water packaging should be left by workers on the shoreline.