

LITTER HOT SPOT – MANUFACTURING

A LittaTrap™ was installed at a plastic manufacturer in Auckland, New Zealand and was monitored over a 12 month period.

Plastics New Zealand has been running the global Operation Clean Sweep programme for 2 years in New Zealand. They recommend changes to manufacturing sites to assist in protecting our waterways from accidental plastic pollution.

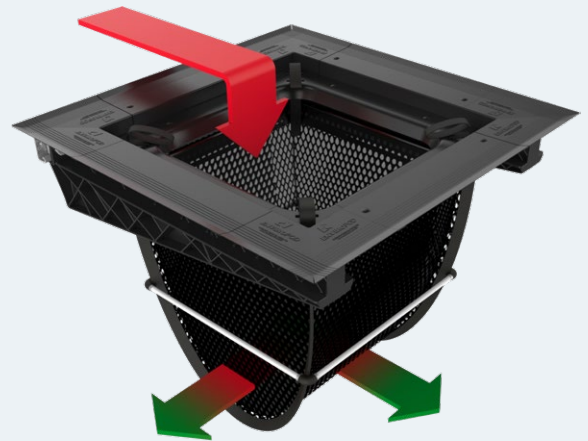
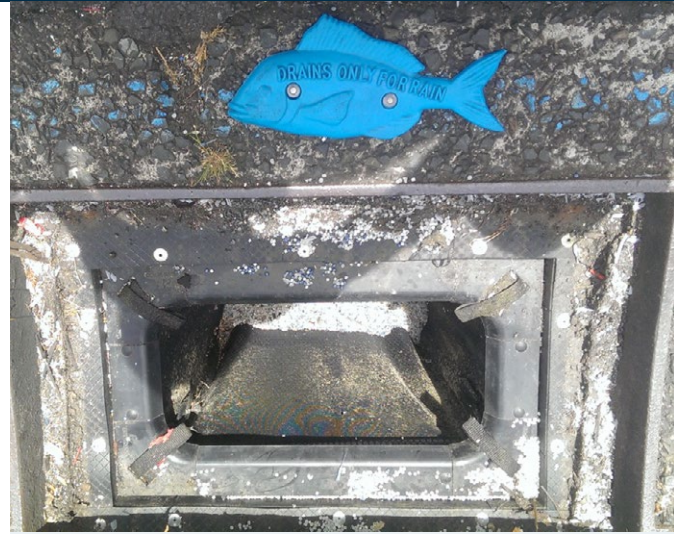
A range of solutions are recommended to manage accidental plastic pellet loss. One of these solutions is to retrofit filters inside stormwater catchpits in high risk areas such as loading/unloading zones, waste skips, and regrind operations where there is often spills of pellets and other plastic fragments.

Installing a filter into a catch basin prevents any accidentally spilled material from heading down the drain into the local waterway.



Auckland member, Medical Plastics Ltd, has been monitoring the effectiveness of one LittaTrap™ in their stormwater drain for the past 12 months.

Medical Plastics is a very clean site, however with all plastic manufacturing sites it is inevitable that there are accidental spills. At this site, the waste and recycling bins are located in the same area as the loading and unloading zone all of which flow to one stormwater drain.



The LittaTrap™ is a versatile catchpit insert system. It is easily installed in new or existing catchpits and may be configured to capture sediment or gross pollutants. For this trial the LittaTrap™ was installed with a 1mm fibreglass liner for full capture of the smallest particles. The LittaTrap™ is hand maintainable, allowing for low cost and frequent maintenance. Installing a LittaTrap™ will capture both positive and neutrally buoyant materials, including plastic pellets which are typically washed down a storm drain when it rains.

RESULTS

In the 12 months of sampling 4,853kg of material was collected in the LittaTrap™. Apart from the odd cigarette butt and a bit of leaf litter, the majority of that 5kg has been plastic. Sampling has shown that the LittaTrap™ has been very effective in catching the small resin pellets. Each of these pellets weigh 0.0221 grams each, equating to nearly 220,000 pellets captured and retained by the LittaTrap™.

5kg

of resin pellets, sprues
and other plastic debris
collected since installation

SAMPLE WEIGHT (G) OVER TIME INSTALLED

