

## Plastics New Zealand

### Operation Clean Sweep Programme

The plastics manufacturing industry in New Zealand recognises that litter in the marine environment is an important issue for New Zealand, and for the planet. Since 2015, members of Plastics NZ, the industry association, have been proactively protecting their local waterways from accidental pollution under the banner of a programme called Operation Clean Sweep. The programme has resulted in improved stormwater protection on 33 NZ plastics manufacturing sites and the installation of more than 50 permanent filters inside site stormwater drains to prevent plastics getting into waterways.

#### About Plastics NZ

Plastics New Zealand is a voluntary membership organisation representing plastics manufacturers, suppliers and associated businesses throughout New Zealand.

Plastics NZ's mission is to maximise the development, growth and success of plastics-based technology in New Zealand in an economically, socially and environmentally responsible manner. Plastics NZ has been in operation for 70+ years and represents an industry which has a turnover greater than \$2.6 billion per year and employs more than 9,000 people.

#### The Nature of the Problem

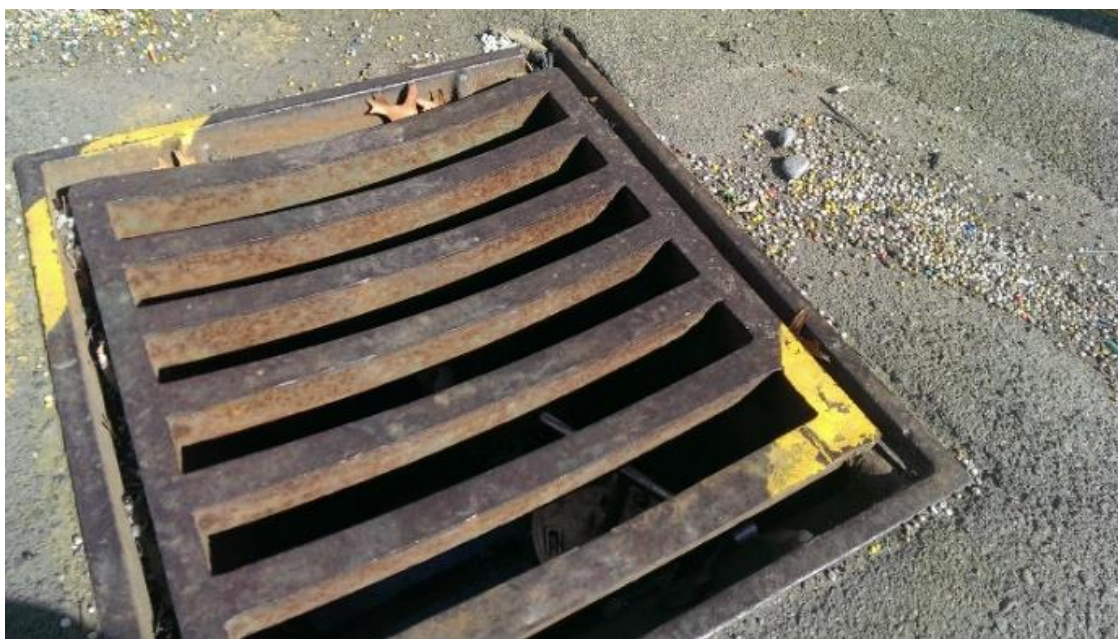
Plastic as a raw material is not manufactured in New Zealand. Rather, granules and sheets are imported into the country and converted into a multitude of products.

The plastic raw material is transported through the supply chain to factories throughout New Zealand, where it is handled and stored before being used in the manufacturing process.

During the handling and storage of the material, accidental spillages can occur. If these spillages find their way into site stormwater drains they can then be carried into local waterways, and eventually the sea.



*1. Plastic pellets that are the typical raw material used in NZ manufacturing*



*2. Example of a site stormwater drain with plastic raw material spilled around it*

## The Solution

Plastics New Zealand has signed up to a global plastics industry initiative called Operation Clean Sweep, a commitment from plastics industry organisations around the world to address the issue of plastic pollution coming from manufacturing sites.

## Assessments & Advice

Plastics New Zealand committed its own funding to help its members address potential pollution issues on their sites. The funding covers the time of an external expert to audit manufacturing sites throughout the country.

A site audit examines what the company currently has in place for pollution prevention, assesses their chemical and oil handling procedures, and looks closely at where and how plastic materials are handled. Each site is given a report containing any stormwater pollution risks, along with recommended actions to reduce those risks.



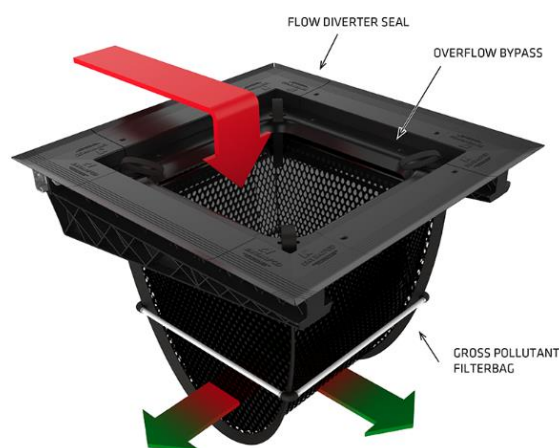
*3. An Operation Clean Sweep Audit underway*

After receiving a report, the sites can tap into further advice from the Plastics New Zealand contracted expert. Progress against the recommended actions is regularly tracked, and, upon completion of all actions, the company is issued an Operation Clean Sweep certificate.



## Keep New Zealand Beautiful 2017 Awards Entry

To date 54 plastics manufacturing sites across the country have been audited as part of the Operation Clean Sweep programme. These range from small businesses with only a handful of staff, to the New Zealand operations of large multinationals. So far 33 sites have adopted all the recommendations and have been issued Operation Clean Sweep certificates, with 21 currently working through their recommended actions.



4. A LittaTrap filter

### Stormwater Filter Solutions

The industry was looking for innovative solutions to help protect site stormwater drains from plastic pellets. Plastics NZ has partnered with specialist suppliers to offer state of the art solutions to manufacturing sites. For example, the LittaTrap (shown, right) is an invention of New Zealand company Stormwater360 Ltd. The LittaTrap has proved an excellent solution for stopping plastic particles from getting into site stormwater drains.

The effectiveness of the LittaTrap filter system is being monitored closely at one plastics manufacturing site in East Tamaki, Auckland. In the 5 months since being installed in a stormwater drain in a loading area of this site, the LittaTrap has collected over 2kg of plastic material that would have previously gone straight into the Tamaki Estuary.

More than 50 LittaTrap filters have been installed in stormwater drains on plastics manufacturing sites as a result of recommendations made through the Plastics NZ Operation Clean Sweep programme.



Figure 5. A LittaTrap in place on a manufacturers site, with collected material caught by the filter

### Awareness Raising

Early in 2017 the Environment Committee set an example for the industry by participating in a clean-up in the Tamaki Estuary.

The Plastics NZ Operation Clean Sweep Programme is now trying to encourage awareness of the wider marine pollution issue among members by organising a series of litter clean ups in Auckland, Hamilton and Christchurch in September 2017. Member companies are being encouraged to send staff to these clean-up events along waterways in industrial areas.



*6. Plastics industry representatives take part in a Tamaki Estuary clean-up*

### Next Steps

The programme is continuing to be rolled out to the membership of Plastics NZ. We have also started to offer a service to non-member plastics companies that has a relatively small cost to participate.

A further component will be added in late 2017, when companies will be offered the opportunity to have a spill training session delivered to their staff. This session will help to ensure company staff respond well to any onsite spills of plastics, chemicals and oils.