

## POLICY APPROACHES ADDRESSING MICROPLASTICS

The table below highlights the different approaches that can or have been implemented to reduce microplastic pollution within and across industry sectors. Examples listed link to suggested legislation to reference for each type of approach.

POLICY APPROACH	OVERVIEW OF METHOD	STRENGTHS	WEAKNESSES	EXAMPLES
<b>Microbead Bans</b>	Laws and regulations that limit the manufacture, import, sale, use and disposal of microbead products.	<ul style="list-style-type: none"> <li>– Reduce the use and sale of products containing microbeads</li> <li>– Targets point source pollution and primary microplastic</li> <li>– ‘Low hanging fruit ordinance’</li> </ul>	<ul style="list-style-type: none"> <li>– Not inclusive of all products containing microbeads</li> <li>– Not inclusive of sandblasting media where microbeads are used</li> <li>– ‘Low hanging fruit ordinance’</li> </ul>	<ul style="list-style-type: none"> <li>– <a href="#">New Zealand Waste Minimization (Microbeads) Regulations 2017</a></li> <li>– <a href="#">Canada Microbeads in Toiletries Regulations (SOR/2017-111)</a></li> </ul>
<b>Regulations on Industry Practices</b>	Best Management Practices (BMP) on microplastic pollution emissions (i.e. water discharge, sludge and air); clothing and product labelling; Extended Producer Responsibility (EPR); classification of plastic waste as hazardous material.	<ul style="list-style-type: none"> <li>– Targets point source pollution</li> <li>– Works within existing monitoring framework</li> <li>– Multi-industry regulation</li> <li>– State and/or federal implementation</li> <li>– Increased producer responsibility</li> </ul>	<ul style="list-style-type: none"> <li>– Poor/absent enforcement</li> <li>– Expensive and slow infrastructure modification</li> <li>– Many archaic or grandfathered-in systems in place on local or state level</li> <li>– Without legislative directive in place, voluntary measures have limited success</li> </ul>	<ul style="list-style-type: none"> <li>– <a href="#">Clean Water Act</a></li> <li>– <a href="#">AB-2379 Waste management: plastic microfiber</a></li> <li>– <a href="#">US Toxic Substances Control Act (TSCA)</a></li> </ul>
<b>Research Requirements</b>	Dedicated local and national microplastic research on environmental impacts. Monitoring microplastic content in water, food, air, agriculture (soil, fertilizers, produce)	<ul style="list-style-type: none"> <li>– Existing guidelines for creating robust monitoring programs</li> <li>– Monitoring can set management objectives</li> <li>– Creates reliable estimates of changes in space/time and creates baseline data</li> <li>– Data can be used at local/state/fed government levels to drive producer responsibility, multi-industry regulation and stricter point source pollution regulation</li> </ul>	<ul style="list-style-type: none"> <li>– Takes time</li> <li>– Funding source competition</li> <li>– Data collected may not comprehensively address issue</li> <li>– Requires consistent and reliable methods of sampling and sample characterisation</li> <li>– Requires a degree of consistency in frequency and location of sampling</li> <li>– Varying research approaches, not all compatible</li> </ul>	<ul style="list-style-type: none"> <li>– <a href="#">California, USA SB-1263 Ocean Protection Council: Statewide Microplastics Strategy</a></li> <li>– <a href="#">California, USA SB-1422. California Safe Drinking Water Act: microplastics</a></li> </ul>
<b>Comprehensive Strategies</b>	Legislation that addresses plastic pollution through multiple measures, including the above 3 regulatory actions and/or focuses on reduction or prevention of microplastic use or leakage through implementation of circular economy principles.	<ul style="list-style-type: none"> <li>– Places responsibility on producers</li> <li>– Addresses point &amp; non-point pollution sources</li> <li>– Regulates industrial use</li> <li>– Creates incentive to improve quality of products &amp; environmental performance</li> <li>– Generates positive socio-environmental impacts</li> <li>– Can use existing framework/models</li> </ul>	<ul style="list-style-type: none"> <li>– Requires strong Govt, leadership, oversight</li> <li>– Slow implementation</li> <li>– Can contain industry loopholes</li> <li>– New approach, no lessons to learn from others yet</li> </ul>	<ul style="list-style-type: none"> <li>– <a href="#">European Chemicals Agency (ECHA) Proposal for a restriction</a></li> </ul>