

Examples of typical cumulative effects on air		
Type of cumulative effect	Main characteristics of effect	Example
<b>Time crowding</b>	Frequent and repetitive effects	Incremental odour nuisance from a number of separate developments.
<b>Time lag</b>	Long delays between cause and effect	Time delay for oxides of nitrogen and VOCs in the presence of UV light to produce ground-level ozone.
<b>Space crowding</b>	High spatial density of effects	<ul style="list-style-type: none"> <li>Dust nuisance generated by several development/ demolition projects occurring simultaneously in the same area.</li> <li>Elevated particulate matter levels caused by numerous biomass micro-generation installations in an urban area.</li> </ul>
<b>Cross-boundary</b>	Effects occur some distance away from the source	<ul style="list-style-type: none"> <li>Long-range transport of air pollution.</li> <li>Production of ground-level ozone at a point far removed from the source of oxides of nitrogen and VOCs.</li> </ul>
<b>Synergistic</b>	Effects resulting from multiple sources or combined effects different in nature from the individual effects	<ul style="list-style-type: none"> <li>Combination of oxides of nitrogen and sulphur dioxide to produce smog.</li> <li>Combination of oxides of nitrogen and VOCs to produce ground-level ozone.</li> <li>Combination of oxides of nitrogen and sulphur dioxide with water in the atmosphere to produce acid rain.</li> </ul>
<b>Indirect</b>	Secondary effects resulting from a primary activity	Air pollutants deposited in soils becoming established in the food chain and negatively affecting human health and biodiversity (bioaccumulation).
<b>Nibbling</b>	Incremental effects	Small additional traffic pressures acting cumulatively on traffic loadings, leading to an overall increase in the emission of air pollutants.

**Note:** This table provides a framework to illustrate how this guidance could be used.