


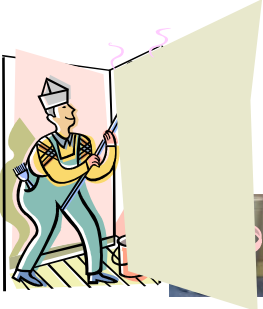







# Generic Environmental Protection Measures for Conducting Renovation Work at Shopping Centres

Problems	Recommended Measures in the Construction Stage
Odour	<ul style="list-style-type: none"> <li>✓ Enclose the renovation works area with tight partitions</li> <li>✓ Use dedicated and isolated ventilation ducts and exhaust points to extract and discharge renovation odour and to prevent it from contaminating the building's central air-conditioning system</li> <li>✓ Locate exhaust points for renovation odour in a dispersive area and away from air sensitive receptors</li> <li>✓ Use mechanical ventilation devices such as fan and blower for odour extraction.</li> <li>✓ Use odour absorbing and filtering materials/machines for absorbing irritating and volatile fumes</li> <li>✓ Use building material with zero or low level of VOC to help reduce odour nuisance</li> </ul> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>▲ Use of blower to extract out odour through isolated openings</p> </div> <div style="text-align: center;">  <p>▲ Enclose the renovation work area with tight partitions</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>▲ Use of volatile organic compound (VOC) free paint</p> </div> <div style="text-align: center;">  <p>▲ Use of photocatalytic oxidation reactor</p> </div> </div>
Dust	<ul style="list-style-type: none"> <li>✓ Enclose the renovation works area with tight partitions</li> <li>✓ Cement, sand, debris or other dusty materials should be covered up or kept moist</li> <li>✓ Spray water before breaking, grinding, sand papering or wood cutting operation</li> <li>✓ Fit vacuum cleaner to grinding, sand papering or wood cutting machines</li> <li>✓ Maintain good house-keeping and increase the cleaning frequency of the surrounding areas</li> <li>✓ Use enclosed vessels for transporting dusty materials</li> </ul>

	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>▲ Fit vacuum cleaner to grinding, sand papering or wood cutting machines</p> </div> <div style="text-align: center;">  <p>▲ Spray water when conducting dusty operation, such as breaking work</p> </div> <div style="text-align: center;">  <p>▲ Use plastic sheet to cover up sand, cement and debris to avoid fugitive dust</p> </div> </div>
<p>Noise</p>	<ul style="list-style-type: none"> <li>✓ Schedule noisy activities during unrestricted period and when there are least shoppers (eg between 8:30am to 11:00am)</li> <li>✓ Post advance notice to inform the affected parties, such as nearby shop owners or occupiers, on the schedule of noisy works</li> <li>✓ Use quiet machine, such as hydraulic crusher for demolition</li> <li>✓ Use noise barrier or absorber when using noisy machines</li> <li>✓ Fit noise muffler to noisy machines</li> <li>✓ Place rubber mat/pad beneath work benches and noisy machines</li> </ul> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>▲ Use quiet equipment, such as hydraulic crusher for demolition work</p> </div> <div style="text-align: center;">  <p>▲ Use movable barrier to shield noise when using noisy equipment</p> </div> </div>
<p>Demolition Debris</p>	<ul style="list-style-type: none"> <li>✓ Keep a record of the renovation waste generated from the premises undergoing renovation works</li> <li>✓ Avoid the accumulation of renovation waste by requiring its removal once it is generated and if possible assign a dedicated area for their temporary storage while awaiting removal</li> <li>✓ Encourage the use of wheeled bins/trolley with lid for the transport and storage of renovation waste. These bins may also be fitted with an tag to identify the owners/occupiers of the premises generating the renovation waste</li> <li>✓ Warn the suspected offenders and gather details on the origin of the renovation waste for potential flytipping incidents</li> <li>✓ Report to EPD of anyone seen dumping waste illegally</li> <li>✓ Enhance patrol and access control at potential flytipping blackspots</li> <li>✓ Enhance awareness by publicity works (distributing construction waste charging</li> </ul>

	<p>scheme related leaflets to the renovation contractors and these leaflets can be obtained from EPD)</p> <ul style="list-style-type: none"> <li>✓ Incorporate clear instruction on waste disposal in your guidance notes for the owner and contractor carrying out the renovation works</li> <li>✓ Consider opening a billing account with EPD and offer a value-added disposal service for renovation waste by charging the responsible owner accordingly</li> <li>✓ Separate the non-recyclable materials into inert materials (e.g. soil, concrete and bricks) and non-inert materials (e.g. general rubbish) prior to arranging their disposal</li> <li>✓ Set up separated areas/individual containers for collection of different recyclable materials, e.g. paper, wood, metal and plastic</li> <li>✓ Arrange with recyclers a regular collection schedule for the recyclable materials</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="370 757 871 1088"> </div> <div data-bbox="1018 824 1417 1088"> </div> </div> <ul style="list-style-type: none"> <li>▲ Billing account for construction waste disposal can be opened from the EPD's</li> <li>▲ Use wheeled bins/trolley with lid for the transport and storage of renovation</li> </ul>
<p>Solvent &amp; Paint</p>	<ul style="list-style-type: none"> <li>✓ Reuse residual paint and solvent as far as possible</li> <li>✓ Dry/cured paint (non-chemical waste) can be disposed of as normal refuse</li> <li>✓ Small quantity of household waste solvent or paint can be disposed with household refuse</li> <li>✓ Property management companies can consider to register as a chemical waste producer and offer a valued added service to centrally collect waste solvent or solvent-based paint for subsequent collection by licensed chemical waste collector</li> </ul>