### Emissions from the Site

#### 2.3 Air Pollution During Construction

<table>
<thead>
<tr>
<th>Exclusions</th>
<th>None</th>
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<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Minimise air pollution during the construction of buildings and the infrastructure serving buildings.</td>
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<td><strong>Credits Attainable</strong></td>
<td>1</td>
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<td><strong>Pre-requisites</strong></td>
<td>Observance and compliance with the Air Pollution Control Ordinance and its subsidiary regulations, particularly the Air Pollution Control (Open Burning) Regulation and Air Pollution Control (Construction Dust) Regulation and Air Pollution Control (Smoke) Regulation.</td>
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<td><strong>Credit Requirement</strong></td>
<td>1 credit: for applying adequate mitigation measures for dust and air emissions during the construction as the recommended by the Environmental Protection Department; and demonstrating compliance with the air quality management guidelines as detailed in the Environmental Monitoring and Audit Manual.</td>
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<td><strong>Assessment</strong></td>
<td>Where demolition is included as part of the works it shall be included in the assessment. The Client shall submit confirmation in the form of a report from suitably qualified person that the works have been carried out without violation of the Air Pollution Control Ordinance and no conviction or complaint about air pollution from the site has been upheld by the Environmental Protection Department. The Client shall present evidence in the form of specifications and contract documents detailing the requirements to control dust and air emissions generated by construction activities. The Client's representative on site shall be responsible for monitoring and reporting on the execution of the instructions. The representative shall confirm in writing to the Assessor that the control of dust on site followed the requirements as laid down in the specifications and contract documents. The Client shall also present evidence in the form of a report prepared by a suitably qualified person that the monitoring and audit of Respirable Suspended Particulates (RSP) and Total Suspended Particulates (TSP) has been satisfactory for the scale of the works involved. For major projects compliance with EPD's Environmental Monitoring and Audit Manual [1] is required. For those projects for which this is not a requirement the frequency of the monitoring can be reduced, and/or monitoring undertaken during key phases of construction. For instance, 1-hour TSP monitoring should be undertaken with a sampling frequency of at least three times in every six days, and when the highest dust impact occurs.</td>
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#### Background

The Air Pollution Control Ordinance (APCO) is the main legislative framework governing the control of air pollution activities. Air pollution control regulations are enacted under the APCO for specific air pollution control purposes. Under the APCO, air pollution emissions from construction activities are subject to control under five regulations:

- Construction Dust Regulation
- Specified Processes Regulation
Smoke Regulation
Fuel Restriction Regulation
Open Burning Regulation

Dust generated by various construction site activities can make a significant contribution to local air pollution. High levels of dust, combined with other outdoor air pollutants, can cause respiratory problems. Inhaled particles may aggravate asthma and bronchitis, and very small particles may cause cancer. Dust also reduces visibility, dirties clothing and buildings, and increases the rate of corrosion. All these effects decrease the quality of life and cost money. Good site practices are the major mitigation measures for prevention or minimisation of air pollution from construction activities. Practical guidance on the control of air pollution during construction is available from the Environmental Protection Department. Measures include:

- effective water sprays to be used to water exposed working areas that can generate dust;
- fine particle materials on site to be enclosed and covered;
- wheel washing facilities shall be installed and used by all vehicles leaving the site; and
- at the end of the works, all bare surface to be hydroseeded as soon as possible.

A Guide, published by the Hong Kong Construction Association (HKCA) [2], aims to enhance the environmental awareness of the construction industry and to provide steps and practical solutions to identify and mitigate environmental problems which are often encountered on construction sites.

The Guide can assist project/environmental managers and engineers to implement environmental protection on construction sites, starting from the project planning stage (e.g. tender bidding) to implementation, with detailed descriptions of environmental impacts and mitigation measures. Particular attention has been focused on environmental issues and mitigation measures with regard to various construction activities including piling and civil and building works.

1 Environmental Protection Department, Generic Environmental Monitoring and Audit Manual, Chapter 2, Air Quality.