



INTERVENTION 3

Dust Control in Urban Areas

SUMMARY

Dust is often a major contributor to overall particulate levels in urban areas. Some of the dust is generated within the city, principally by roads and by construction work. It is often difficult to determine the extent to which the dust is made up of PM10 (typically mineral material) or PM2.5 (often combustion products), which have different overall health impacts. It can also be difficult to determine the original source of the dust, especially in dry parts of a country where wind-borne dust can travel long distances. There is limited data on effective interventions to reduce the health impacts of dust.

Air Quality and Health benefits: Low to medium, depending on the type of dust and the success in reducing levels

Carbon benefits: None

Costs: Low to moderate, depending on the scale and type of intervention.

Feasibility: Usually straightforward once

effective interventions have been identified

Key players: Wide range of parties have to be involved.

EXAMPLES

FUGITIVE DUST, BEIJING. To control fugitive dust, dust control technologies, processes, and management rules were promoted to reduce dust from construction sites, roads, and cleared land. In recent years, emissions of VOCs from establishments such as restaurants and vehicle repair facilities have also been included in air pollution control measures.

CONSTRUCTION AND ROAD DUST, DELHI.

As economic activities in the region outside Delhi are expanding, demand for housing and infrastructure has grown. These construction activities generate considerable dust emissions, adversely affecting air quality particularly during the autumn and winter months when the climatic conditions lead to the trapping of these particles in the air. Many construction companies fail to comply with dust-control measures set by

government. Road dust is one of the major sources of air pollution in Delhi. Despite a number of measures to address this issue, little progress has been made.

URBAN FORESTS TO IMPROVE AIR QUALITY, SANTIAGO. An analysis carried out in 2007 examined PM10 removal by Santiago's urban forests. Results indicate that managing municipal urban forests (trees, shrubs, and grass whose management is under the jurisdiction of Santiago's 36 municipalities) was a cost-effective policy for abating particulate matter. A comparison of the cost effectiveness of managing municipal urban forests and street trees to other control policies (e.g. alternative fuels) to abate PM10 in SMA was carried out. This concluded that municipal urban forest management efficiency was similar to these other air quality improvement measures, based on effectiveness and management costs. While the original analysis and cost should be updated, it suggested that the proposed increase of forests, vegetation, and green areas up to 100 hectares in the SMA under the Santiago Respira Program, could be considered a cost-effective measure to address air pollution.