Dust Impact Analysis

PURPOSE:

A Dust Impact Analysis provides guidance in the case of a request for the analysis of all demolition and construction projects including the wrecking or taking out of any load-supporting structural member of a structure or building and related handling operations, any on-site activities preparatory to or related to the building, alteration, rehabilitation or improvement of property, including, but not limited to the following activities: grading, excavation, trenching, loading, vehicular travel, crushing, blasting, cutting, planning, shaping, breaking, equipment staging/storage areas, weed abatement activities or adding or removing bulk materials from storage piles.

A Dust Impact Analysis provides information regarding significant health and environmental impacts associated with emissions of particulate matter (PM) and other criteria air contaminants. These emissions are often dispersed by construction and demolition projects. Particulate matter increases respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing. People with heart or lung disease, children and older adults are particularly sensitive to this pollutant. Particulate matter permitted to pollute the environment can harm plants and animals directly and can impair habitat, food, and water in which they need to survive. A Dust Impact Analysis allows applicants to identify PM sources and develop necessary plans to mitigate the PM exposure risk to the community.

PREPARED BY:

A Dust Impact Analysis must be prepared by a qualified construction contractor, development manager, and/or air quality practitioner(s).

CONTENTS:

A Dust Impact Analysis should include, at a minimum, but not limited to the following:

- Background on the site;
- Proposed Development and Project Scope (i.e., what is being developed/built? where is it situated? how many units will be built? etc.);
- Detailed descriptions of dust emitting sources and project details that may contribute to emissions (these will depend on the project details, i.e., operational activities, storage of materials, etc.);
- Sensitive receptors and potential impacts;
- Contingency Plans;
- Mitigation Measures for Emissions;

- Monitoring and Record Keeping, maintaining log/records of actions taken (proactive and reactive, i.e., application of calcium chloride, street swept/washed). This measure is to demonstrate due diligence of the proponent if any corrective/enforcement action is required; and,
- Listing and contact information of the project proponent, author of Dust Impact Analysis and staff and their corresponding responsibilities for dust management.

In addition, please review the Contractor's Environmental Handbook for guidance on mitigation practices. Applicants are not restricted to the mitigation measures or suggestions included in the Contractor's Environmental Handbook. If different measures are proposed please provide a rationale for the substitution, either within the document or in an accompanying cover letter.

OTHER INFORMATION:

- Contractor's Environmental Handbook: Best Practices for the reduction of Dust Emissions from Construction and Demolition Activities
- Homeowner's Environmental Handbook: Best Practices for the reduction of Dust Emissions from Construction and Demolition Activities
- Province of Ontario's Technical Bulletin: management approaches for industrial fugitive dust sources

REVIEWED BY:

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