

November, 2016
BUILDING DIVISION

REQUIREMENTS FOR DUST PRODUCING PROCESSES

This guide applies to buildings or parts of buildings where combustible dusts are produced in quantities or concentrations that create an explosion or fire hazard. The BC Fire Code (BCFC) classifies such dust producing processes as Hazardous Processes in Part 5 of Division B. A building permit is generally required for the installation of dust collection systems, whether inside or outside a building.

Building Construction

A dust producing process may be considered a high-hazard industrial occupancy by the BC Building Code (BCBC). Applicants are advised to verify that the existing building can accommodate such an occupancy, prior to applying for the building permit. Copies of records and drawings of an existing building may be available from the Building Records Section at 604-591-4369.

Permit Application

The following documents and drawings are required at the time of building permit application:

- Building Permit Application form;
- Owner's Authorization form, if the applicant is not the owner;
- Site plan showing the location of the building on the property and the location of the tenant space in the building;
- Two (2) sets of sealed and signed mechanical drawings;
- Two (2) sets of electrical drawings;
- Schedule B from each Registered Professional submitting sealed drawings;
- Schedule A, if more than one Registered Professional is involved.

Drawing Requirements

The mechanical drawings shall be to an indicated scale and include:

- Type of occupancy (e.g. woodworking, plastics manufacturing, etc.);

- Floor plan of demising walls, as well as all rooms and uses within the suite;
- Location of dust collection system and all equipment that it serves;
- Exhaust ducts from each piece of equipment to the dust collection system, including all sizes labelled;
- Cross-section of dust collection system and exhaust ducts;
- Details of exterior wall or roof penetration of exhaust ducts;
- Dust collection system capacity, enclosure volume, and explosion venting openings;
- All other information to demonstrate compliance with Section 5.3 of the BC Fire Code.

Other Information

Separate plumbing and electrical permits are required for any plumbing and electrical work. Electrical work must be performed by a registered electrical contractor. Upon completion of the work authorized by the building permit and the related trade permits, and before final approval will be granted, Schedule C-B shall be submitted by each Registered Professional involved.

An approved Fire Safety Plan in conformance with BC Fire Code Section 5.1.5 is required to be in place prior to operating a dust collection system. The Fire Safety Plan must be prepared by the building owner or operator, and submitted directly to the Fire Prevention Office (8767 – 132 Street) of the Surrey Fire Department for review.

It is recognized that in some cases, the proposed method and quantity of dust removal may not be those intended by Section 5.3 of the BC Fire Code. A building permit may not be required if a Registered Professional can provide a sealed and signed letter stating that the proposed occupancy or operations does not produce combustible dusts in quantities or concentrations that can create an explosion or fire hazard.

Other Approvals

In addition to the building permit, applicants may need to satisfy requirements from other agencies such as the Surrey Fire Department and WorkSafe BC, prior to operating a dust collection system. Please inquiry directly with these agencies regarding their separate approval processes and requirements.