

Control of Particulate Matter and Visible Emissions

Potential Environmental Impacts:

Particulate matter and visible emissions from air polluting sources, such as diesel and gasoline engines, may have significant effects on human health and air quality. Air pollution from particulate matter may aggravate existing heart and lung disease, change the body's defenses against inhaled materials, and damage lung tissue.

Legal Requirements:

Pursuant to Section 22a-174-18 Regulations of Connecticut State Agencies (RSCA), mobile sources of air emissions, such as diesel equipment, transportation vehicles, and other vehicles and equipment emitting either particulate matter or visible emissions, shall not cause or allow:

- Any visible emissions from a gasoline powered mobile source for longer than five (5) consecutive seconds.
- Visible emissions from a diesel powered mobile source of a shade or density equal to or darker than twenty percent (20%) opacity for more than ten (10) consecutive seconds, during which time the maximum shade or density shall be no darker than forty percent (40%) opacity; or
- A mobile source to operate for more than three (3) consecutive minutes when such a mobile source is not in motion, except as follows:
 - When a mobile source is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control,
 - When it is necessary to operate defrosting, heating, or cooling equipment to ensure the safety or health of the driver or passengers,
 - When it is necessary to operate auxiliary equipment that is located in or on the mobile source to accomplish the intended use of the mobile source,
 - To bring the mobile source to the manufacturer's recommended operating temperature,
 - When the outdoor temperature is below twenty degrees Fahrenheit (20 degrees F),
 - When the mobile source is undergoing maintenance that requires such mobile source be operated for more than three (3) consecutive minutes, or
 - When a mobile source is in queue to be inspected by U.S. military personnel prior to gaining access to a U.S. military installation.
- No person shall cause or allow any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking

reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall be in accordance with good industrial practice as determined by the commissioner and shall include, but not be limited to:

- ▶ The use of water or other appropriate material to prevent airborne particulate matter generated by the demolition of buildings or other structures; construction operations: the clearing or grading of land; or the grading, construction or improvement of roads;
 - ▶ The application of asphalt, water, suitable materials or covers to material stockpiles and other surfaces that can give rise to airborne particulate matter;
 - ▶ The use of hoods, fans, fabric filters or other devices to enclose and vent the handling of materials that can give rise to airborne particulate matter;
 - ▶ The covering, while in motion, of open-bodies trucks, open-bodied trailers and railroad cars transporting materials capable of giving rise to airborne particulate matter;
 - ▶ The prompt removal of earth and other material deposited onto paved streets by trucking, earth moving equipment, erosion or other means; and
 - ▶ The use of contaminated methods for sandblasting or similar operations.
- No person shall cause or allow the emission of visible particulate matter beyond the legal boundary of the property on which such emission occurs that either:
 - ▶ Remains near ground level beyond such property boundary; or
 - ▶ Diminishes the health, safety or enjoyment of people using a building or structure located beyond the property boundary.
 - No person shall emit particulate matter into the ambient air in such a manner to cause a nuisance.

Best Management Practices:

- ✦ Conduct industrial activities that may produce particulate matter, inside of in an enclosed area.
- ✦ Avoid conducting debris-producing activities on windy days.
- ✦ Ensure all employees, subcontractors, and delivery services are made aware of the above air regulations.
- ✦ Do as much debris producing work as possible away from property lines as well as the water.

Checklist for Clean Marina Certification:

There are no Clean Marina certification criteria specific to the control of Particulate Matter and Visible Emissions.