

Screening Tool for Combustible Dust Management

This checklist serves to identify areas where combustible dust hazard management is inadequate and for prioritizing combustible dust hazard management activities. “No” responses may identify a fundamental gap in combustible dust hazard management. “Yes” responses may indicate that fundamental measures are at least partially in place. A detailed compliance analysis will identify specific hazard management improvement needs.

	Yes	No
Combustibility/Explosibility Potential and Parameters		
Have dust/particulates in the process been determined as combustible? <i>Awareness of combustibility characteristics is a pre-requisite to implement correct hazard control measures.</i>	<input type="checkbox"/>	<input type="checkbox"/>
If process changes have occurred since the last determination of combustibility/explosibility parameters, have these parameters been updated? <i>Deflagration controls may no longer be sized appropriately for explosibility parameters with process changes.</i>	<input type="checkbox"/>	<input type="checkbox"/>
Housekeeping		
Does dust accumulation obscure the color of surfaces surrounding process areas on a regular basis?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a documented plan in place to control dust accumulation in surrounding areas? <i>Documented plans support regular removal of accumulation & prevent unexpected accumulations from posing a hazard.</i>	<input type="checkbox"/>	<input type="checkbox"/>
Are inaccessible, obscured, or elevated surfaces prone to collecting dust? <i>Inaccessible areas can collect smaller particles and present a substantial secondary dust explosion hazard.</i>	<input type="checkbox"/>	<input type="checkbox"/>
Facility Siting		
Is deflagration venting provided to building areas with continuous/periodic ignitable combustible dust atmospheres?	<input type="checkbox"/>	<input type="checkbox"/>
If deflagration vents are used to protect buildings or vessels, is the venting routed to a safe area?	<input type="checkbox"/>	<input type="checkbox"/>
Are occupied buildings located to avoid impact from deflagrations?	<input type="checkbox"/>	<input type="checkbox"/>
Ignition Control		
Are process areas designated, labeled, and maintained as Class 2 Div I or Class 2 Div II? <i>Electrical area classification controls ignition sources from electrical equipment</i>	<input type="checkbox"/>	<input type="checkbox"/>
Is a program in place and effective at verifying bonding/grounding on equipment? <i>An effective bonding/grounding program needs to prevent static build-up/discharge internally or externally to equipment</i>	<input type="checkbox"/>	<input type="checkbox"/>
Is ignition from hot surfaces controlled/eliminated? <i>Examples of hot surfaces: unmaintained bearings, rotating equipment, heater systems, slipping belts, etc.</i>	<input type="checkbox"/>	<input type="checkbox"/>
Is a Hot Work program in place?	<input type="checkbox"/>	<input type="checkbox"/>
If particulates can decompose to create an ignition source, is the process/operation designed to prevent decomposition ignition hazards?	<input type="checkbox"/>	<input type="checkbox"/>
Equipment Design		
Have process vessels been evaluated for protection requirements from internal deflagrations?	<input type="checkbox"/>	<input type="checkbox"/>
Is regular maintenance performed for deflagration control systems and for vessels designed to contain explosions? (deflagration vents, active isolation for stopping flame-fronts, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Does the system prevent unintended accumulation of combustible dust in ductwork and equipment for all operating conditions?	<input type="checkbox"/>	<input type="checkbox"/>
Safety Management Systems		
Do Training/Procedures communicate the hazards of the process to applicable employees/ contractors?	<input type="checkbox"/>	<input type="checkbox"/>
Are incidents investigated (and systemic corrections made) when flammable dust releases occur, or where fires/deflagrations have occurred?	<input type="checkbox"/>	<input type="checkbox"/>