



Installing and Maintaining Baghouses

Particulate matter (PM) is solid or liquid droplets from smoke, dust, and condensing vapors. These microscopic particles can be suspended and carried in the air for long periods of time and over long distances. When inhaled, particles travel deep into the lungs and remain there, possibly causing long-term harm.

To reduce particle pollution, Spokane Regional Clean Air Agency (Spokane Clean Air) may require particulate control devices on different industrial processes. A common particulate control device is a baghouse.

Baghouses

Baghouses, sometimes referred to as fabric filters, are efficient particulate pollution control devices. Baghouses are used at many facilities to prevent particles, created by industrial processes, from entering the air. In concept, baghouses work like vacuum cleaners. Particles in an airstream are filtered out on the surfaces of bags housed inside the unit.

Spokane Clean Air regulations limit the maximum particulate outflow and the visibility of emissions from industrial processes.

Notice of Construction

All facilities that use a baghouse that is greater than 1,000 scfm and vents outside must obtain an approved Notice of Construction (NOC) permit prior to the construction or installation of the air pollution control equipment.

Annual Registration & Fees

Existing and new sources of air contaminants throughout Spokane County must also register with Spokane Clean Air and are subject to an annual registration fee, annual reporting of air emissions data and regular compliance inspections. The annual registration program enables Spokane Clean Air to maintain an inventory of air contaminants. Information is also used to evaluate air pollution control strategies to attain and maintain National Ambient Air Quality Standards.

On-site Inspections

Spokane Clean Air routinely performs inspections at registered sources to verify compliance with air pollution regulations. Inspection frequency may vary depending on agency resources and priorities. Inspectors also respond to citizen complaints which may result in an inspection.

Self-Inspections

Problems with your baghouse can increase particulate emissions. Baghouses must be kept in good working condition to effectively collect particles. Inspecting baghouses on a regular schedule can help prevent problems, such as equipment malfunctions and increased emissions.

Here's a rule of thumb: if you can see visible emissions from your baghouse stack, your baghouse is probably not working properly.

Use the Self-Inspection Checklist on the back to help determine if your baghouse is operating at its maximum efficiency.

Posting this checklist, or one you've created yourself, will serve as a visual reminder to conduct regular inspections. Regular inspections will help you stay in compliance and will reduce particulate emissions.

Break Downs

Contact Spokane Clean Air immediately. A compliance inspector will review the rules related to equipment break downs.

Baghouse Air Quality Self-Inspection Checklist

Date/time of inspection:

ACTIVITY:	Yes	No	Corrective Action Taken
1. Ductwork: - Were ducts checked and free of any leaks?			
2. Temperature: - Was temperature checked and determined to be okay? (air too hot could damage bags; air too cool may indicate leaks or condensation in the bags)			
3. Damper Valves: - Are all isolation, bypass and cleaning valves checked and working properly? (sealed tightly, gaps/leaks allow air into the system and reduce collection efficiency, increase visible emissions)			
4. Manometer: - Is manometer adjusted (should read "zero" before equipment is on)? - Check and record pressure drop across bags - Is pressure drop okay? (too high may indicate clogged bags and improper cleaning; too low may indicate holes in the bags or over cleaning)			
5. Bags: - Are bags properly fastened? Pulse jet must have adequate tension? - Are bags free of tears, holes, or abrasions? - Are replacement bags on hand? - Do you have a maintenance bag replacement schedule?			
6. Bag Cleaning Controls: - Are proper cleaning, sequence and cycle times being used? - Are compressed air lines or shakers working properly?			
7. Fan: - Is static pressure of the fan within normal range?			
8. Stack: - Is particulate visible in the baghouse exhaust? (particulate should not be visible)			
9. Hoppers: - Are hoppers okay? (not too full, bridging or plugging) - Are the hopper viewing doors/hatches closed? - Are the feeders working properly?			
10. Load Out Area: -Is particulate matter controlled during loadout into containers and/or trucks? (spills must be cleaned up immediately)			