Startup the System

1. Check to make sure filter bags are installed properly.

2. Perform a leak test before start up of the collector. This will enable you to identify any filters that may have been installed incorrectly before the collector is brought back on line.

3. During initial start up make sure the cleaning system is deactivated. Leave the cleaning system deactivated until reaching a differential pressure of around 4" w.

4. If possible the system should be preheated to above the dew point with clean hot air before the introduction of particulate laden gas.

5. Activate rotary airlocks, pneumatic conveying equipment or discharge devices. This will help ensure any residual dust is removed prior to full system activation.

6. Check all monitoring devices for proper operation.

Shutdown the System

Proper equipment shutdown minimizes condensation and the possibility of fires on combustible dusts.

Process gasses cross a range of temperature where moisture condenses every time the system goes through startup and shutdown. The 'Dew Point' name is misleading, as it's a range of temperature, not a point. The longer it takes to cross this temperature range, the longer moisture can build and cause accumulation and bridging problems on the discharge system. Another problem involves fires that can self-ignite combustible materials under the right conditions, particularly when dust is accumulated.

Implementing the following shutdown procedure helps minimize these problems:

1. Stop the process equipment. The baghouse fan, pulsing system, and discharge continue running.

2. Wait for equipment surfaces to cool to ambient temperature.

3. Stop the baghouse fan. Gravity will discharge dust from the filter bags, so pulsing and discharge systems must continue running.

4. Wait until the baghouse hoppers are completely empty.

5. Stop baghouse pulsing and discharge mechanism.

As shown below, this simple shutdown procedure shortens the time when steel surfaces are exposed to moisture. Keeping the cleaning system and discharge also clears out the hopper to minimize the possibility of fires on combustible dust.