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Depending On The Weather

To say that weather is an obsession is an understatement! For example, since 1792, farmers in North America have based many of their decisions on an almanac dedicated to predicting weather a year at a time. Weather-band radios are common items in homes and businesses these days. And who doesn't pay attention to the constant stream of television, Internet and/or non-weather-radio forecasts around us?

We base our wardrobes on the weather. We plan our personal activities around it. Many of us turn to the topic as a go-to conversation-starter with people we know and don't know.

Bad weather is especially compelling. Its effect on the human condition—*from extremes in heat and cold to catastrophic events like droughts, tornadoes, hurricanes, floods, etc.*
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is always going to be top news somewhere. Wherever bad weather occurs, it never fails to remind us of Mother Nature's awesome power.

Most of us are accustomed to adjusting and preparing, to some extent, for changes in seasons. This time of year, many in northern climes are into a semi-annual weather-dependent ritual: switching on our heating systems, stowing our outdoor furniture and recreational equipment and tuning up our chosen gear for removing or playing in the snow.

In the world of maintenance, changes related to the coming winter can trigger a cascade of work orders (i.e., erecting or taking down window protection or snow-drift barriers, changing out outdoor gearbox lubricants for winter-grade viscosities, lubricating roof fans and HVAC-unit bearings before the snow flies, etc.). Those involved in fleet maintenance are changing to winter tires and lubricant viscosities. Indoors, where most industrial maintenance takes place, the approach of winter plays a subtler role, and isn't necessarily recognized as a factor in preventive strategies.Those involving lubrication are a case in point.

In spring and fall transition months (and in summer months, in desert environments) warm days followed by cooler-to-cold nights can play unexpected tricks, particularly when lubrication pumping systems are located high in a facility (i.e., those on overhead conveyors systems) or in unheated rooms.

Viscosity changes with colder temperatures, thickening a lubricant and making it more difficult to pump. In a pneumatic delivery system, the pump can stall, rendering the system use-less until the temperature rises in the mid- to late-morning hours. At that point the pump begins to operate again as if nothing happened. Unless the lubrication system has a no-flow time-out warning device, many maintenance departments are oblivious to the problem until a premature failure occurs due to lack of lubrication (something that's almost impossible to diagnose when the system seems to be working satisfactorily). Fortunately, the fix for this situation is simple—*and inexpensive*
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Review your facility to assess the potential for this problem by taking lubricant spot temperatures with an infrared thermometer or thermographic camera on an evening or night shift. If you find the pumping system location is subject to large temperature drops, install a thermostat-regulated block heater or trace wire (like those used in car engines or hot water heaters in more northern climates) in or around the oil reservoir and plug it in. For grease systems, wrap a blanket heater or trace-wire heater around the reservoir and plug it in. Checking and controlling these units is managed via printed work orders to unplug them in late spring and to clean and plug them back in come early fall.

One thing we can depend on is that the weather will change—*and possibly impact a maintenance strategy when we least expect it.*
Don't be caught off guard. Good Luck!
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