



## **Mallory & Evans Service - Energy Savings Tasking**

Mallory & Evans Service performs energy saver tasking that was developed using tasking from EPA's Energy Star Program and other industry sources. The EPA's Energy Star Buildings Program incorporates preventive maintenance as part of a Building Tune-Up to make buildings more energy efficient through maintenance activities. This checklist is very effective, with potential savings reaching 15% of annual energy costs.

### **Building Tune-Up Actions - Controls**

Review energy management system and controls to assure proper operation:

- \_\_\_\_ Verify temperature and humidity setpoints are adjusted within comfort zones seasonally – higher in summer and lower in winter.
- \_\_\_\_ Verify heating and cooling season setpoints are at design values.
- \_\_\_\_ Verify night setback temperatures are used during unoccupied hours.
- \_\_\_\_ Verify controls are adjusted to prevent simultaneous operation of heating and cooling.
- \_\_\_\_ Verify controls are calibrated and operate as specified in the sequence of operation.
- \_\_\_\_ Verify dampers are tightly closed and linkages are operational.
- \_\_\_\_ Verify linkages are lubricated.
- \_\_\_\_ Verify tight seals on dampers and air-handling equipment.
- \_\_\_\_ Verify outside air economizer systems are maintained and operating properly.
- \_\_\_\_ Verify pneumatic lines are not leaking and no water in the pneumatic lines.
- \_\_\_\_ Verify the compressed air system is maintained and operating properly.
- \_\_\_\_ Verify gauges and thermometers are accurate.
- \_\_\_\_ Verify domestic hot water temperature setpoints are reduced to the minimum required (for example, by reducing a 180-degree setpoint to 120 degrees).

## Building Tune-Up Actions - Air Side Equipment

- \_\_\_\_ Package cooling systems: verify proper condenser fan operation, air-flow across condenser coils, superheat, subcooling, †refrigerant charge, and heat pump defrost cycle.
- \_\_\_\_ Package heating systems: verify proper burner adjustment, operating temperatures, and flue damper.
- \_\_\_\_ Verify humidifiers, evaporator coils, condenser coils, fan blades, and motors are clean.
- \_\_\_\_ Verify clean filters.
- \_\_\_\_ Verify bearings on fans and motors lubricated.
- \_\_\_\_ Verify proper shaft alignment on motors.
- \_\_\_\_ Verify that supply ducts are insulated.
- \_\_\_\_ Verify access doors are tightly sealed (no missing screws or latches).

## Building Tune-Up Actions - Water Side Equipment

- \_\_\_\_ Review operations and maintenance logs for major equipment each operational visit. Make necessary adjustments and provide recommendations to assure optimum equipment operation. When possible, operate one boiler, chiller, or †compressor at 90 percent capacity instead of two at 45 percent capacity.
- \_\_\_\_ Verify chiller refrigerant is clean and maintained at correct charge level, air is kept out of chiller, condenser and chill water †temperatures and flows are maintained at optimum levels, tube surfaces are regularly cleaned, and operating conditions are †regularly logged.
- \_\_\_\_ Verify boilers are maintained and operated to assure proper O2 trim, operating temperatures, flue damper, shell insulation, scale, and operating logs. Verify pipes and tanks are insulated. Verify pipes, steam traps, packing glands, valves, rings, orifices, gaskets, couplings, and impellers have no leaks and are well maintained. Verify strainer screens on pump systems are clean.
- \_\_\_\_ Verify pump motors and drives are lubricate and properly aligned.
- \_\_\_\_ Verify air separators are operating properly and there is no air entering the system.
- \_\_\_\_ Verify water systems are flushed.
- \_\_\_\_ Verify proper water treatment procedures are used to reduce fouling of transfer surfaces and the potential for biological growth.
- \_\_\_\_ Check cooling tower bleed-off to ensure that water and chemicals are not being wasted.
- \_\_\_\_ Verify gauges and thermometers are accurate.
- \_\_\_\_ Verify water side economizer systems are properly maintained and operated.
- \_\_\_\_ Verify tubes and other heat-exchange surfaces are regularly cleaned.