

LOCATION:

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Correcting Water Hammer and Water Pressure Issues for Westin Arlington Gateway

Recently, WMI received a call from the Westin Hotel in Arlington, VA. The hotel had a number of guests complaining of a loud banging noise coming from the walls near their rooms. WMI auditors examined the hotel's cooling towers, condenser loops, chillers, make-up water system, chemical treatment system and related pumps to determine the cause of the water hammer. Water hammer is a pressure surge or wave resulting when a fluid in motion is forced to stop or change direction suddenly. As a result of this investigation, WMI had determined that the water hammer noise was coming from the condenser loop and was possibly a result of the way water was being made up into the cooling tower and/or that they had a backflow preventer in need of service. WMI proposed redirecting the smaller (1") make-up supply out of the condenser loop and increasing the size (1.5") then re-directing it into the tower with a traditional type fill valve. This 150' of new line was insulated, heated and aluminum cladded where needed. In addition, the existing back-flow preventer was rebuilt, and then tested and a new pulse meter (for SKADA and chemical feed hook-up) was installed. Not only did this take care of the hammering problem, the hotel has asked us back to look at pressure balance issue they are having that also affects their guest's showers.