This letter is to address the software security requirements pertaining to our EVB-034 water treatment valve controller. Specifically, it is addressing KDB 594280 D01 and DO2 relating to software configuration control and device security.

The EVB-034 control board does use a radio transmitter that has the ability to be controlled, to some degree, through software. However, none of the ability to control the radio is exposed to anyone who would install, service or use the equipment. All software releases at Chandler Systems, Inc. are peer reviewed and tested to ensure proper operation and to ensure that no software-controlled radio parameters are changed during updates.

Chandler Systems, Inc. is in full control of any software updates as well as the software update process. The processor on the control board has a secure bootloader to update the firmware and is distributed with "Flash patches disabled", which prevents malicious code from circumventing the secure boot checks. All firmware is signed with private keys when it is built. The bootloader contains the public keys that it uses to verify the firmware is a valid distribution. The signing verification uses ECDSA P256 algorithm to accomplish the verification. Furthermore, the processor has read protection turned on, so that someone who has physical access to the device cannot read the program from the device. These measures guarantee that only updates distributed by Chandler Systems, Inc. would be accepted by the control board. A user is only able to update their equipment through precompiled software that is pre-tested and distributed by Chandler Systems, Inc.

Finally, there are no settings that change based on location or country of use.

Best Regards,

Aaron Wolfe, PE