

SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPARTMENT	PROGRAM: WELL & PUBLIC WATER SYSTEM		PAGE 1 OF 2
	POLICY/PROCEDURE: 04-04	EFFECTIVE DATE: 10/25/2004	SUPERCEDES: N/A
APPROVED BY:	Donna Heran, REHS, Director		
TITLE OF POLICY/PROCEDURE:	REMOVAL & INSTALLATION OF WATER WELL PUMPS AND EQUIPMENT		

JUSTIFICATION

For any irrigation, industrial, agricultural, domestic or public drinking water well that requires a wellhead seal to be removed or installed, the following procedures are to be complied with:

The owner, C-57, or C-61 licensed contractor shall obtain a pump permit from the Environmental Health Department (EHD) any time the seal on the wellhead is removed or broken.

POLICY AND PROCEDURE

All permanent well equipment that is to be removed from the well and/or installed in a well shall be placed on a clean surface such as plastic sheeting and wrapped to protect the equipment from contaminants that may be present on the ground, or in the air. The open well casing shall be covered when it is not being worked on to prevent entrance of contaminants from these sources. If the wellhead is left unattended, it shall be secured in such a manner that the cover cannot be removed, except by equipment or tools, in order to prevent unauthorized access to the wellhead and prevent the entrance of contaminants.

The following additional procedures apply to all domestic and public drinking water wells:

1. All permanent equipment to be installed in a well shall be sanitized with a chlorinated solution just prior to installation. This shall be done by spraying such areas with a solution that has a chlorine residual of not less than 200 parts per million (ppm).
(American Water Works Association (AWWA) C654-97, Section 4.4)
2. After permanent equipment is installed and the wellhead has been properly sealed, the well shall be chlorinated by:
 - Adding chlorine to the water in the well casing to achieve a chlorine residual of about 50 ppm.
 - Circulating the chlorinated water within the well casing and pump column.
 - Allow chlorinated water to rest in casing for at least 12 hours, but not more than 24 hours.
 - Pumping the well water to waste to remove chlorinated water.
(AWWA C654-97, Section 4.5)

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3. The discharge water shall be tested for chlorine residual. When zero chlorine residual is measured, the well shall continue to be pumped to waste for at least 15 minutes. The owner shall arrange with a certified lab to test the well water for the presence of Total Coliform bacteria. For a Public Water System, a certified lab shall collect the sample, which is labeled as “other”.
(AWWA C654-97, Section 4.5 and Safe Drinking Water Act, Title 22, Section 64426.1)
4. If the sample(s) show(s) the presence of Coliform bacteria, one of the following may be done:
 - Resample the well to ensure the sample(s) was not cross-contaminated.
 - Repeat the chlorination and testing procedures noted in (2) and (3) above.
 - Perform corrective action as determined by a qualified engineer experienced in water well disinfection or contact the EHD, Small Public Water System Program at (209) 468-3420.