Backwashing – Filters are cleaned by spraying water through the filter from the underside of the filter. Backwashing pushes the particles out of the filter so they can be drained away.

Clarifier - A settling tank. Mud settles to the bottom of this tank.

Coagulation - Small pieces of mud stick together to make a larger, heavier piece of mud that will settle to the bottom of the clarifier.

The particles of mud have negative charges that cause them to repel each other. Alum is added as a coagulant. The coagulant neutralizes the negative charges and the particles stick together. (see <u>section</u> <u>4 of this training document</u> for more information)

Disinfection – The destruction of disease causing organisms. . (see <u>section 5 of this training document</u> for more information)

Filtration – The removal of small particles in the water by passing the water through material that catches and holds the particles. (see <u>section 4 of this training document</u> for more information)

Flocculation – The slow mixing of water to cause the particles of mud to stick together. Flocculation occurs in the clarifier. The larger pieces of mud are called floc.

Loss of head – In a filter, loss of head means the filter is getting full of particles and the water is not able to easily flow through the filter. Loss of head is one way to tell that a filter needs to be backwashed.

Raw Water – River water before any chemicals have been added.

Sedimentation – Particles of mud get heavy and fall to the bottom of the clarifier.

Turbidity – How clear the water is. Muddy water has high turbidity. Tap water has low turbidity.