**Section 604.500 General Clarification Requirements**

a) All community water supplies designed to treat surface water must have a minimum of two clarification units. The clarifiers must be capable of meeting the plant design capacity with one clarifier removed from service.

b) For community water supplies treating groundwater under the direct influence of surface water, the community water supply must have a minimum of two clarification units if clarification is provided.

c) Community water supplies designed to treat groundwater will be required to have a minimum of two clarification units if clarification is provided.

d) Design of the clarification process must:

1) allow units to be taken out of service without disrupting operation;

2) start manually following shutdown;

3) minimize hydraulic head losses between units to allow future changes in processes without the need for repumping; and

4) if flow is split, provide a means of measuring and modifying the flow to each train or unit unless flow paths are equivalent and hydraulic controls are provided.