

## Design Alternatives

The most important aspect of good treatment facility design is to achieve or exceed the expected treatment capacity at the lowest cost (both in terms of cost and efficiency). The team considered multiple alternative design ideas that are within these identified criteria before choosing the best option to start the iterative design and testing process. After determining the criterion for each treatment technology design for the treatment design process, several treatment methods were analyzed for initial, essential, advanced, disinfection, and solids handling treatment. The team picked at least two methods from each treatment stage and compared the alternatives. Each alternative was rated using the decision criteria and rating scale. After that, a final decision will be made that includes the processes used, piping system, and pump selection. The figure below shows a flow chart that the team followed when establishing the alternative designs.

