

Selenium Removal

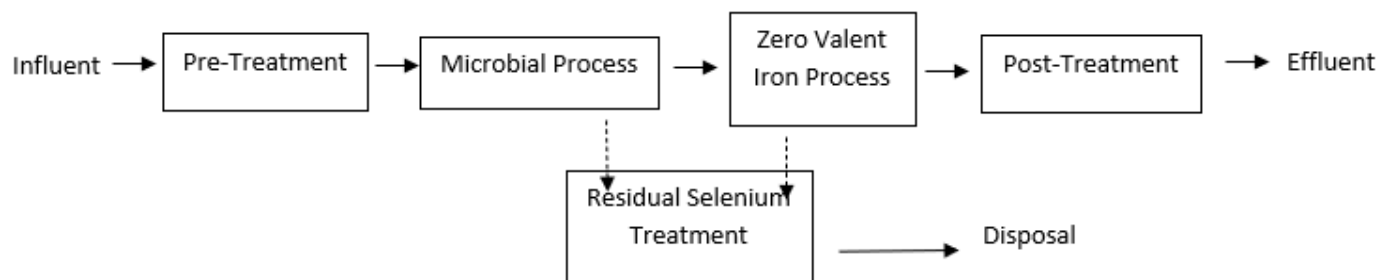
Natalie Mikels, Will Revelle, Jazmyne Silva, Fernando Tirado

Objective:

This goal of this project is to develop a cost-effective treatment technique to Lower levels of selenate and selenite in water.

Approaches:

- Use a combination of microbial and zero valent iron methods to achieve desired selenium levels.
- Utilize microbial process to remove majority of selenium at a lower cost before using ZVI to remove any further selenium necessary.
- Attempt to recover as much selenium as possible for external use.



Test Plan:

- The selenium before and after treatments will be analyzed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS).