



Why Phosphates are not good in water treatment?

Phosphates are the chelats and it is the family of the chemicals which can bound the minerals/metals and keep them in the solution. When phosphate compounds are added to the water with dissolved iron; it bound/surround the iron. This bounded/surrounded iron is known as sequestered iron. This sequestered iron cannot react with the oxygen and precipitate itself.

Following are the main reason for not using phosphates in water treatment.

- 1. Not effective at higher concentration of metals.
- 2. Releases sequestered metals at high temperature.
- 3. Releases sequestered metals at low pH.
- 4. Less effective with time. They revert themselves from poly to ortho phosphates.
- 5. Increase bacterial growth in pluming system.
- 6. Increase weed and algae growth dramatically in water body such as lakes, rivers etc.
- 7. Nonworking for already turned rusty Iron, Manganese and other metals.
- 8. Not commonly use in drinking water.
- 9. Makes the water taste metallic.
- 10. Makes the water slippery.

Effects

Instability of the phosphate compounds in acidic solution will result in the breakdown of the phosphates and releases the minerals/ metals such as iron, manganese, calcium, and etc (all the minerals/metals it has surrounded before). This is the case when the titration test is performed for the detection of the iron in the water. In result, titration acid will break down the phosphates and releases the iron back into the water.

Adding of phosphate compound is not

recommended prior to any oxidation based iron removal technology. When phosphate added water is passed through the media, it will pass through the media without any precipitation. Because it is not possible to oxidize the surrounded iron. Therefore, as explained above the titration test after the oxidation based iron removal treatment (permeate water) will result in detection of iron and other minerals.

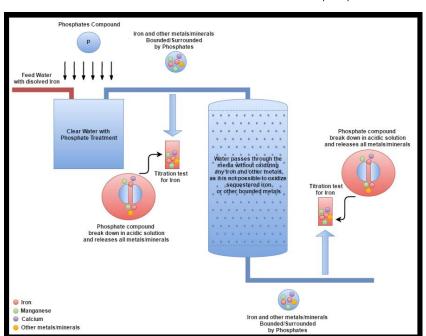
Note: This is the same case if you perform the titration test before the treatment (feed water).

Solution

The only solution to work filter media properly and to avoid the leakages of subjected concentration, is to remove phosphates prior to the Katalyst-Light or any other technology in the same category. Watch Water products FERROLOX and Catalytic Carbon is one of the best product to remove phosphates from the water.









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