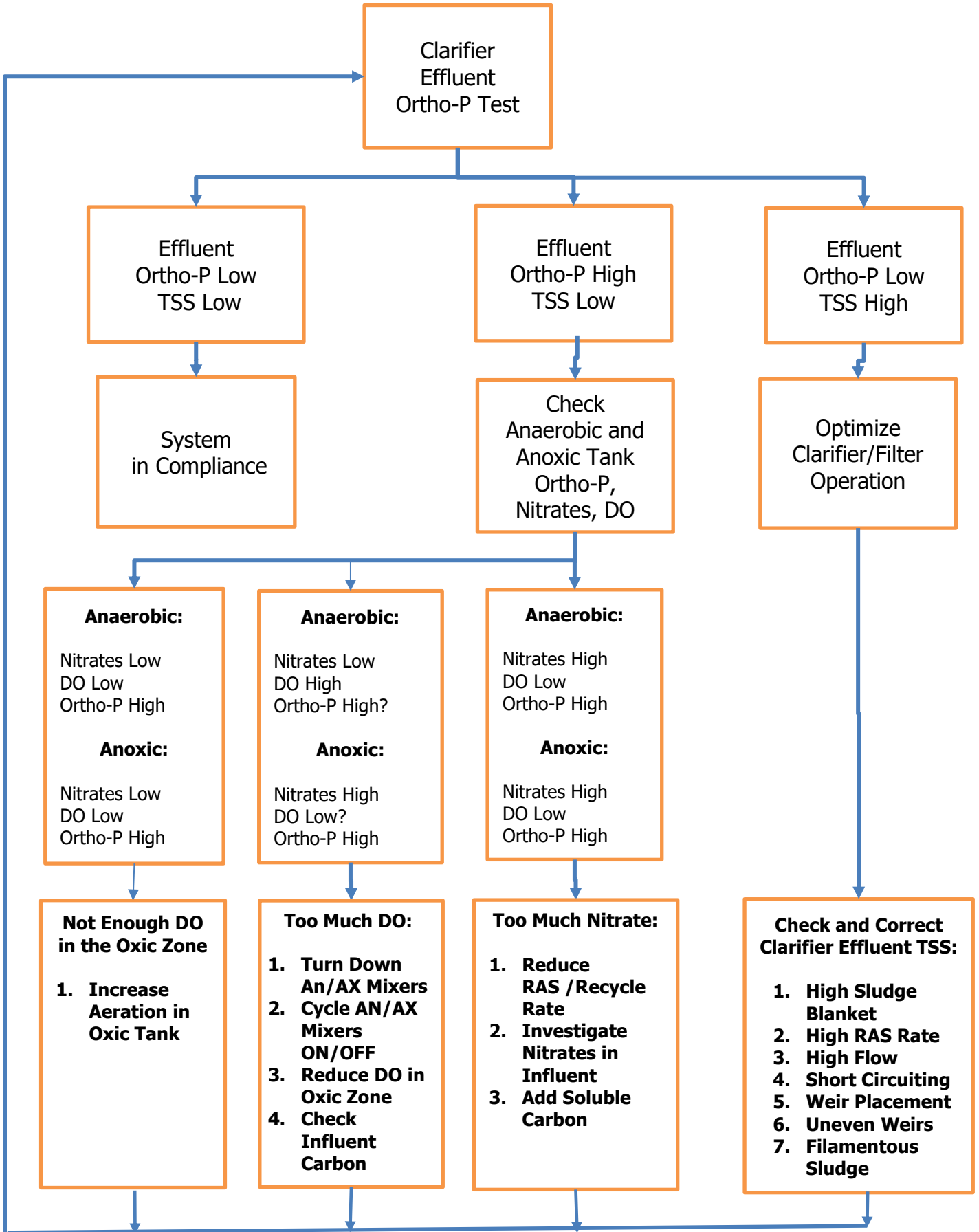


Process Control Flow Chart for Ortho-P Release in Anaerobic Tank



Clarifier
Effluent
Ortho-P Test

Effluent
Ortho-P Low
TSS Low

System
in Compliance

Effluent
Ortho-P High
TSS Low

Check
Anaerobic and
Anoxic Tank
Ortho-P,
Nitrates, DO

Effluent
Ortho-P Low
TSS High

Optimize
Clarifier/Filter
Operation

Anaerobic:

Nitrates Low
DO Low
Ortho-P High

Anoxic:

Nitrates Low
DO Low
Ortho-P High

Anaerobic:

Nitrates Low
DO High
Ortho-P High?

Anoxic:

Nitrates High
DO Low?
Ortho-P High

Anaerobic:

Nitrates High
DO Low
Ortho-P High

Anoxic:

Nitrates High
DO Low
Ortho-P High

Not Enough DO in the Oxidic Zone

1. Increase Aeration in Oxidic Tank

Too Much DO:

1. Turn Down An/AX Mixers
2. Cycle AN/AX Mixers ON/OFF
3. Reduce DO in Oxidic Zone
4. Check Influent Carbon

Too Much Nitrate:

1. Reduce RAS /Recycle Rate
2. Investigate Nitrates in Influent
3. Add Soluble Carbon

Check and Correct Clarifier Effluent TSS:

1. High Sludge Blanket
2. High RAS Rate
3. High Flow
4. Short Circuiting
5. Weir Placement
6. Uneven Weirs
7. Filamentous Sludge