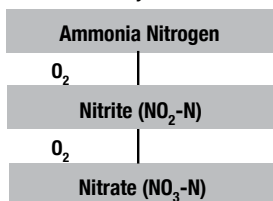
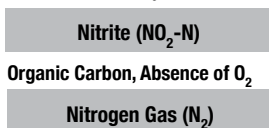


- Optimum pH 7.0 – 8.0
- D.O. > 2.0
- SRT > 5-8 days



- Denitrification (NO₃-N to Nitrogen Gas)
 - Conversion of Nitrates to Nitrogen Gas
 - » Requires carbon and anoxic conditions
 - Optimum pH 7.0 – 8.0
 - D.O. < 0.5 mg/l
 - SRT > 8-10 days



- Chemical treatment
 - Supplemental carbon may be needed to provide proper Carbon:Nitrogen ratio (typical ratios range from 4:1 to 10:1)
 - Carbon sources: Methanol, Ethanol, Acetic Acid, Sucrose, MicroC2000, MicroC, Unicarb, etc.
 - Supplemental alkalinity may be needed to maintain proper pH by balancing the acid produced by nitrification as changes in pH can have adverse effects on nitrification
 - 7.14 mg Alkalinity (as CaCO₃) is consumed per mg NH₃-N oxidized
 - Chemicals include: lime or bicarbonate