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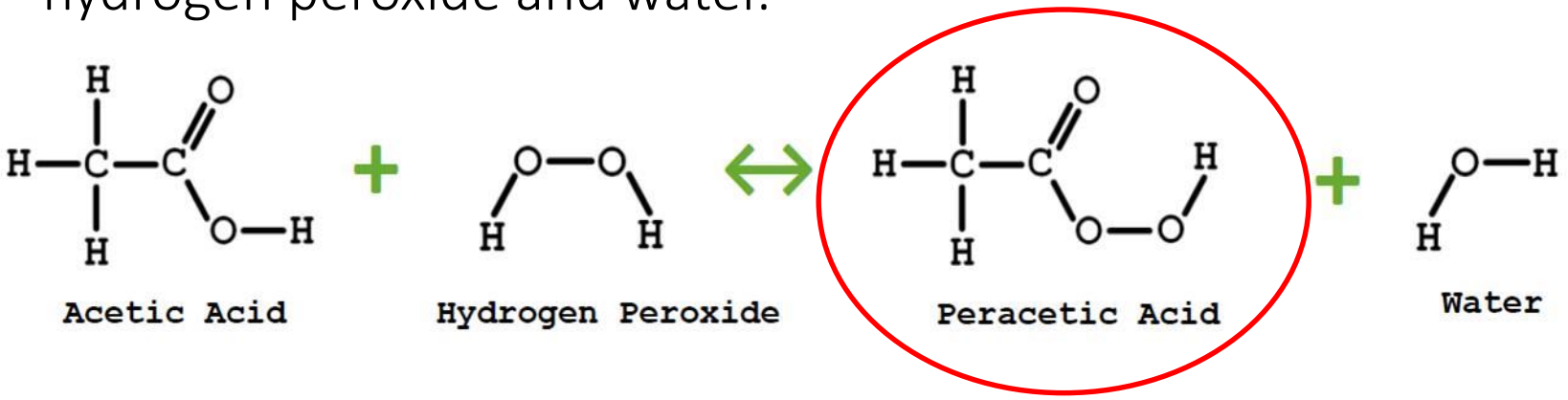
# Wastewater Disinfection with Peracetic Acid (PAA)

bp

# What is PAA?

Is produced from the reaction between acetic acid, hydrogen peroxide and water.




$H_2O$

$O_2$ $CH_3CO_2H$

Breaks down in the environment to water, acetic acid and oxygen

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# Drivers for Conversion

| | |
|---|---|
| $Cl_2$ / NaOCl DBPs | PAA does not produce disinfection byproducts |
| $Cl_2$ / NaOCl Toxicity | PAA does not require quenching |
| $Cl_2$ Safety | PAA does not require a Risk Management Plan |
| UV Performance | PAA is effective in low UVT and peak flows |
| UV Capital Cost | PAA requires very low to no capital cost to implement |

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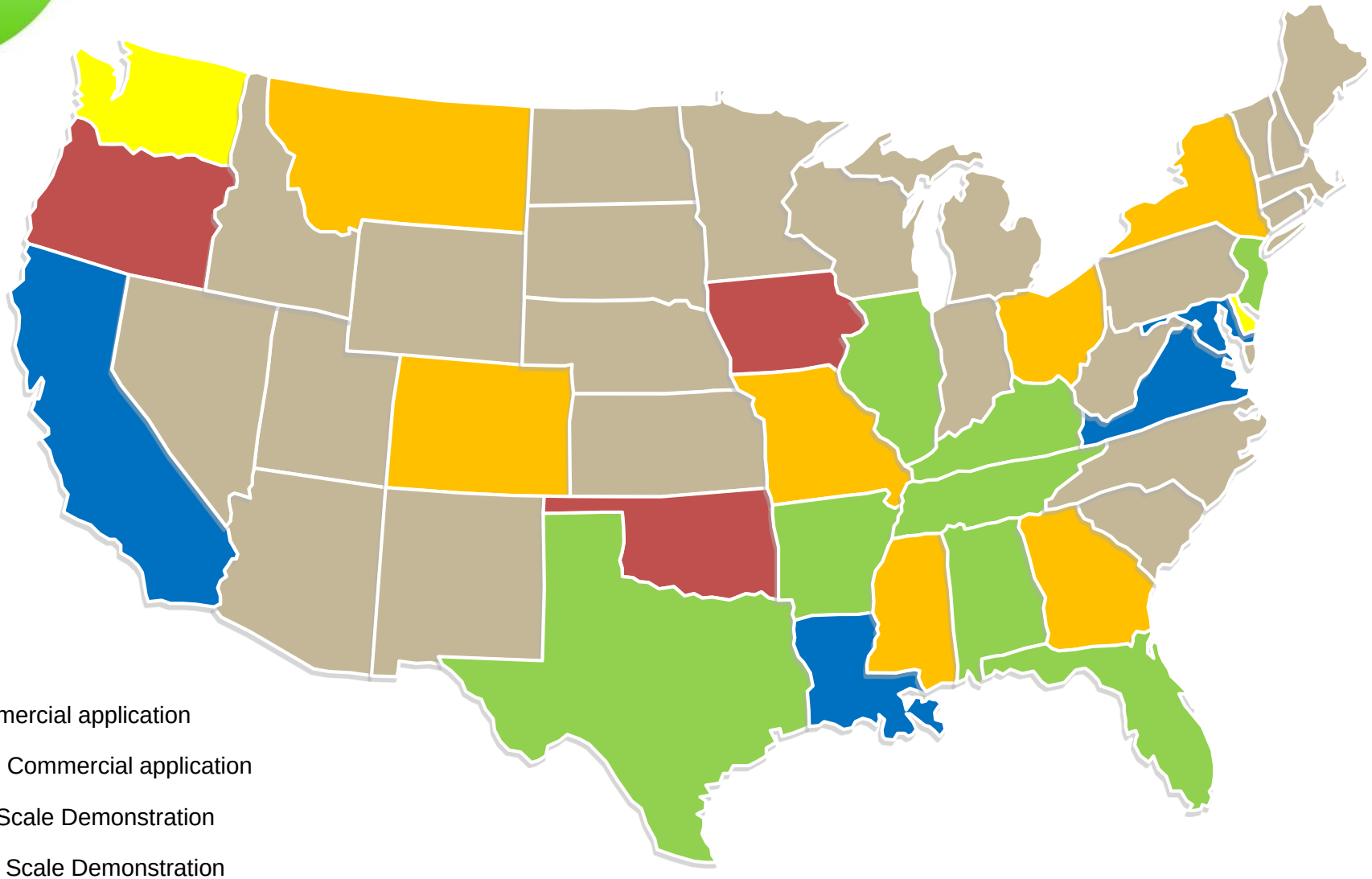
# WWTP use in North America



- Commercial application
- 2019 Commercial application
- Full Scale Demonstration
- Pilot Scale Demonstration
- PAA Residual Guidance

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# Largest PAA Application for WWTP Memphis, TN

M.C. Stiles Plant

M.C. Stiles and T.E. Maxon WWTPS:
30 million lbs of PAA / yr

PeroxyChem Wolf River production Plant

PeroxyChem PAA Dosing System

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