





After 1972:

Process Optimization and New Treatment Goals

Complete Mix Activated Sludge Step Aeration	Microstraining Sand Filtration
Contact Stabilization	Disinfection
Extended Aeration	Dechlorination
Oxidation Ditch	0
Kraus Process	Phosphate Removal
Pure-Oxygen	Ammonia Removal
	H50'C ENGINEERING

Conventional, Complete Mix, Step Aeration





Pure Oxygen Activated Sludge





History of Chlorination in the U.S.







LA Fish, Crab, Eel, Stingray Kill Plaguemines Parish, September, 2010









Columbia Regional Wastewater Treatment Plant



Primary, Aeration, Secondary Basins





Columbia's Vertication Vertication