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(54) Title: METHOD FOR ACTIVATED SLUDGE WASTEWATER TREATMENT WITH HIGH DISSOLVED OXYGEN LEVELS

(57) Abstract: An activated sludge wastewater treatment method is provided. The disclosed method includes: receiving a stream of wastewater into a mixed liquor in an uncovered activated sludge basin; introducing high purity oxygen to the mixed liquor in the activated sludge basin to produce euoxic conditions (i.e. a dissolved oxygen level in the range of between about 5 mg to 15 mg) in the activated sludge basin; passing a portion of the mixed liquor in the activated sludge basin through a clarifier to separate activated sludge and produce an effluent stream and an activated sludge stream; and recycling a portion of the activated sludge stream to the activated sludge basin to produce a mixed liquor having a solids loading of between about 3000 mg and about 10000 mg of suspended solids per liter of mixed liquor and a solids retention time of between about 7 days and 40 days.



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