

Tel :02) 2210-2176
E-mail: chpark@uoscc.uos.ac.kr

1.

가 가 가
,가 (UNEP)

80 40%가
530

33 가
가, 가

가
,가

2. 가

2.1.

가 가 가

가
, Pollution Prevention

가

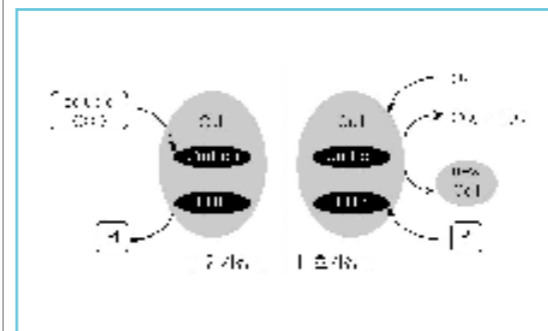
가
가

가
가

(SBR) 가

UASB

가
가



[1]

2.2 가
, A/O,
A2/O, Bardenpho, Phostrip, UCT, VIP

Biodenipho

가
,

2.3

가 가

가

가

가

가



[2] Belt Filter Press

3.

가가

upgrading

60 70%

가

가

. (< 1>)

	< 1>		(%)	
가				
(%)	98	94	89	88
가				
(%)	75	50	67	2

, , 가

가

(Membrane Bioreactor)

(Deep Shaft),

(UHDE process)

가

가

가

(aerator)

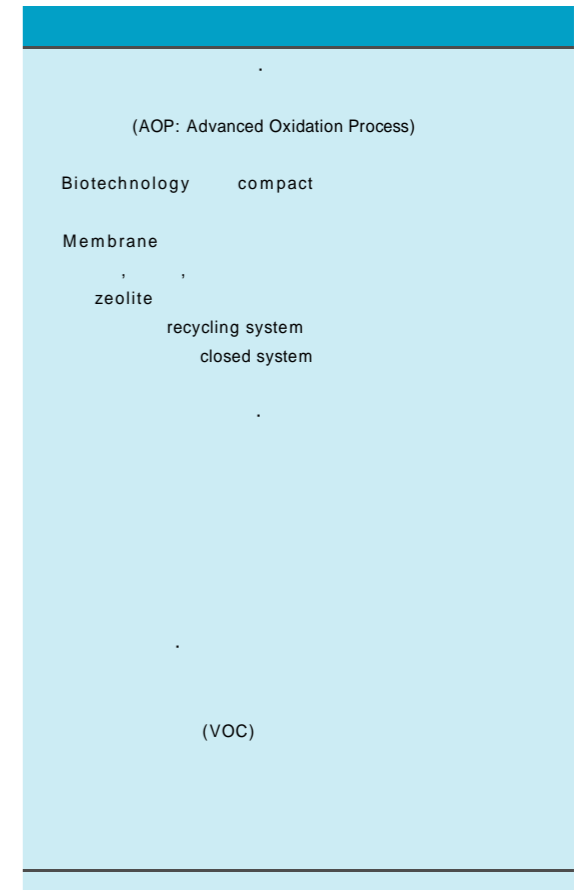
30%

UASB, AF, AFB

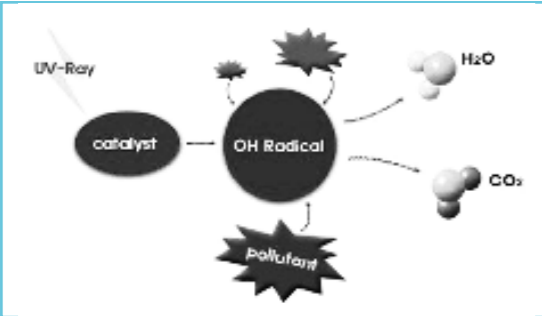
Aqua Renaissance

가

4.

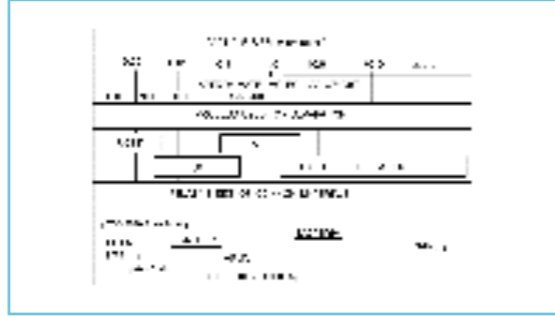


가 , membrane
 (AOP: Advanced Oxidation Process)
 , UV(Ultra Violet,)
 OH
 . AOP
 Ozone/High pH AOP, Ozone/Hydrogen Peroxide
 AOP, Ozone/UV AOP

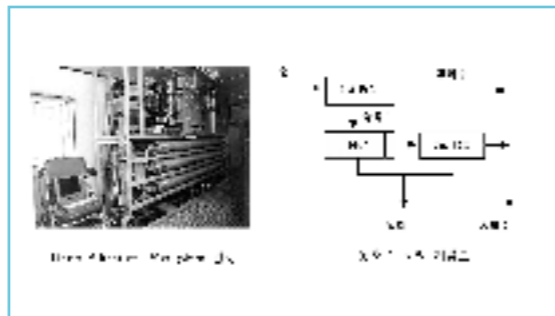


[3] UV
 Membrane
 . Membrane
 1970 ,
 Orange County Water Factory 21 project
 1970 37,500 ton

가 . 1985 Aqua
 Renaissance '90



[4] 가 membrane



[5] Nano filtration system pilot plant



[6] software - BioWin32 (Envirosim Associated, Ltd.)



[7]

5. _____

가
 energy reuse
 가

biotechnology , compact
 waste , energy

1. , " ; , 1997
2. , " 21 ; , 1997.4
3. , " G-7 ; 2 가 3 ; 1998.6
4. , " ; , 2000.7
5. , " () ; , 2000. 11
6. , " ; , 2000.3
7. , " ; , 1997
8. , " G-7 ; , 1999
9. Bernard J. Nebel and Richard T. Wright , " Environmental Science " 4th edition, Prentice Hall, 1993
10. , " - 9 ; , 2000. 11.