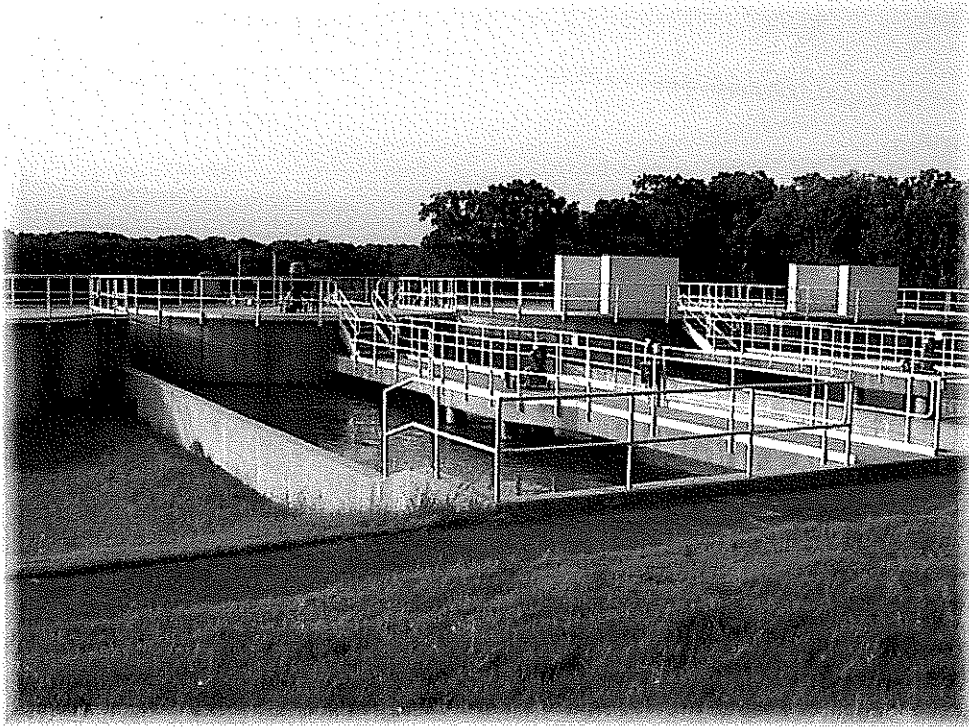


Town of Edgartown, MA
Wastewater Treatment Facility
BIOLOGICAL TREATMENT UNITS

see Design Criteria below photos



Anoxic Zone



Anoxic Zone

Activated Sludge Process	with Nitrification	and Denitrification
Type	Eimco Carrousel™ Aeration	Eimco Carrousel™ Aeration
No. of Aerobic Basins (provided)	2	2
No. of Basins Operating		
Winter	1	1
Summer	2	2
Volume ea. (MG)	0.41	0.41
No. Aerators per Basin	2	2
Aerator Power ea. (HP)	30 / 15 (2 speed)	30 / 15 (2 speed)
No. of Anoxic Basins (provided)	2	2
No. of Basins Operating		
Winter	1	1
Summer	2	2
Volume ea. (MG)	0.135	0.135
No. Mixers per Basin	1	1
Mixer Power ea. (HP)	5	5
Internal Recycle Capacity (%)	1,000	1,000
Internal Recycle (MG) per Basin	3.75	3.75
BOD Loading (#BOD/d/1000cf)	25.8	29.9
MLSS (mg/L)		
Winter	2,000	2,000
Summer	3,500	3,500
Range		
Winter	2,000 to 5,000	2,000 to 5,000
Summer	3,000 to 5,000	3,000 to 5,000
MCRT (days)		
Winter	30	30
Summer	15	15
Range		
Winter	10 to 18	10 to 18
Summer	20 to 40	20 to 40
Alpha	0.90	0.90
Beta	0.95	0.95
Net Yield (lbs. solids/lbs. BOD)		
Winter	0.45	0.45
Summer	0.51	0.51
Oxygen Coefficient (lbs. O₂/lbs.)		
BOD	1.25	1.25
Ammonia	4.60	4.60
Wastewater Temperature (Degrees C)		
Minimum	16	16
Maximum	25	25
F/M		
Winter	0.03	0.04
Summer	0.1	0.14
Detention Time (hrs.)		
Winter	81.3	69.8
Summer	30.5	26.1