



9/3 at Ranipet, Tamil Nadu.

er - Rs.600 Crores

oyees - 450

ers all over the world.

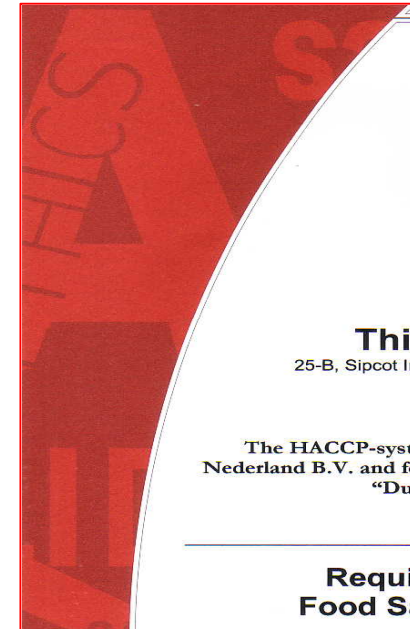
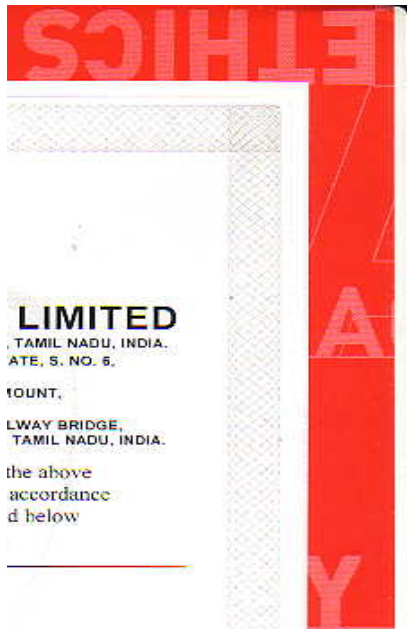


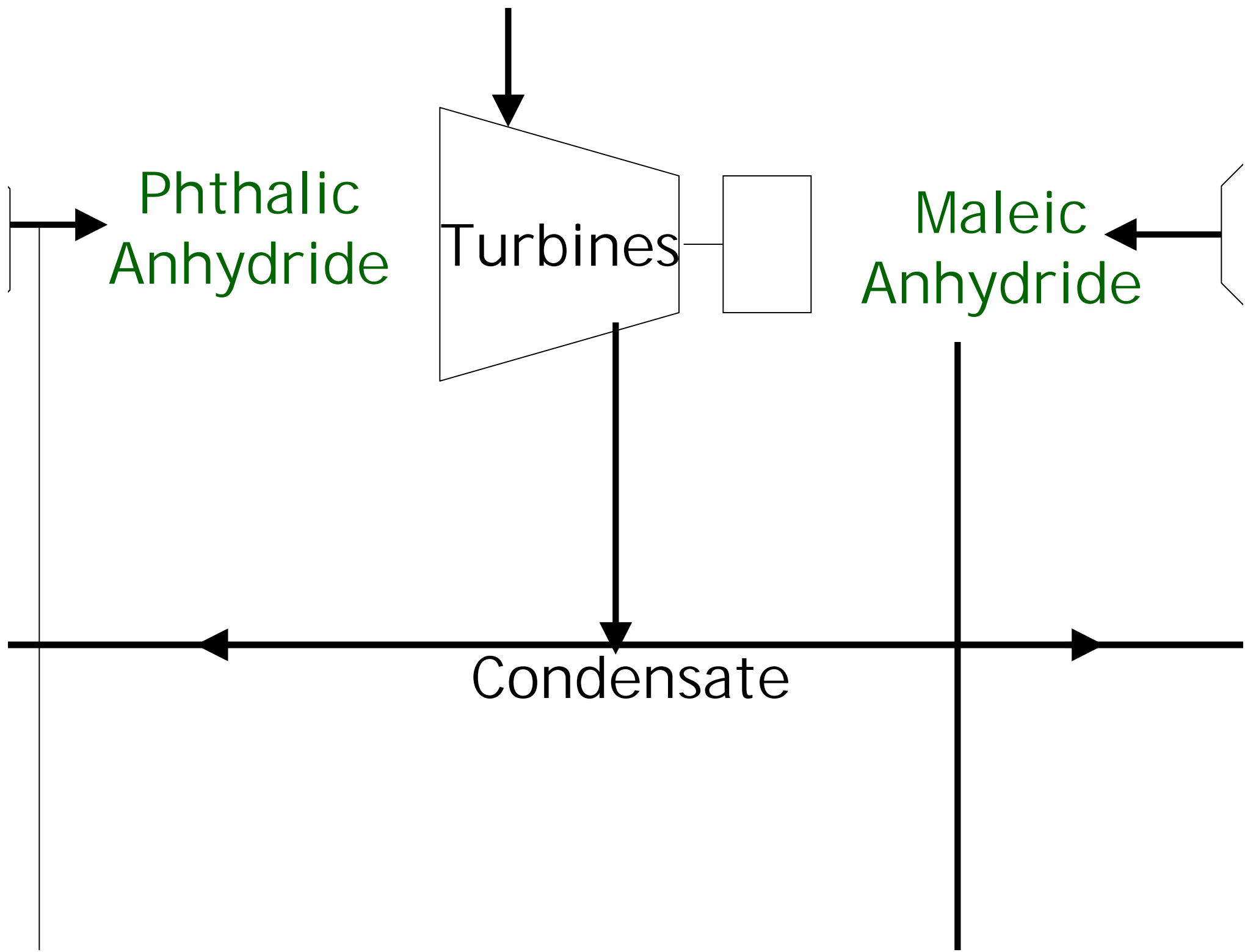
1994

2000

ISO 14001 : 2004

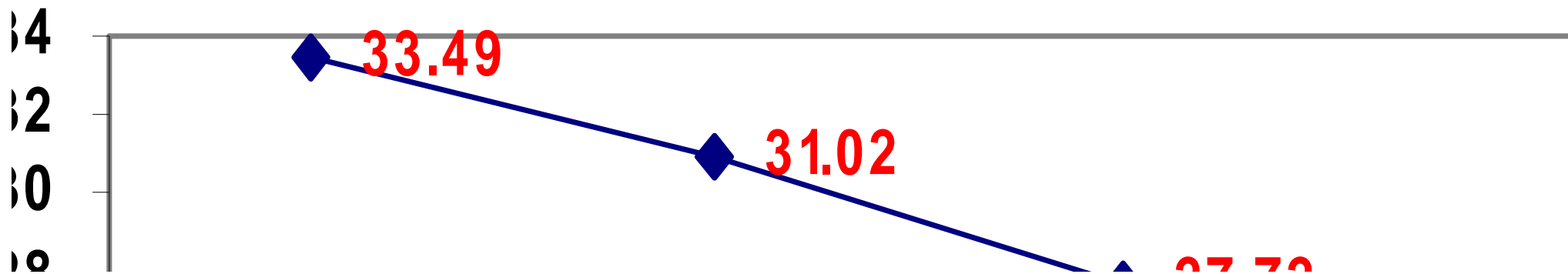
HA





	Industrial	MWH
	704580	21035
	672070	21668
	643940	23230
	677360	27599

Specific Water Consumption



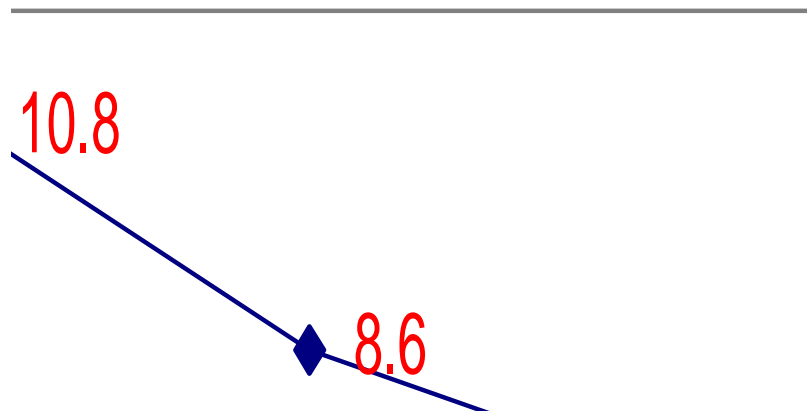
their product range.

Typically a petrochemical company. The manufacturing process proportionately generates steam, and hence water consumption per unit of Power is a measure of performance.

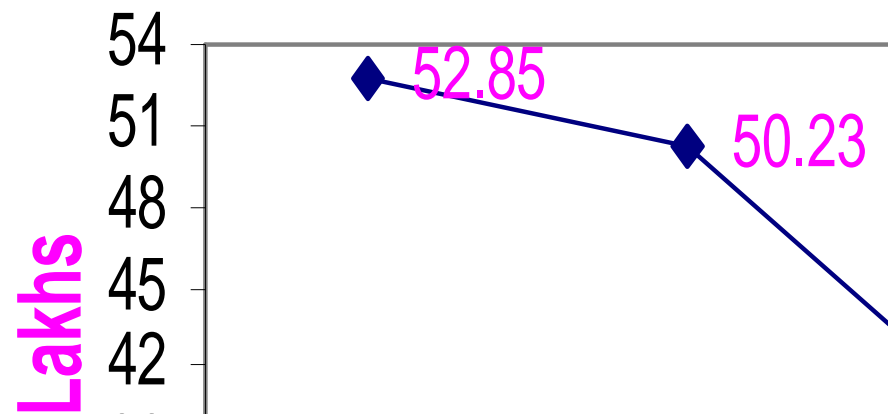
Metric	National Benchmark *	International Benchmark *	CPCB Benchmark
Water	80	<10	Not known

Sl	DOMESTIC Use	Rupees	MT	m ³
	4680	3228974	61100	1
	4680	3111057	61950	1
	4680	2984001	75584	8
	5340	3150930	91374	7

Water Consumption

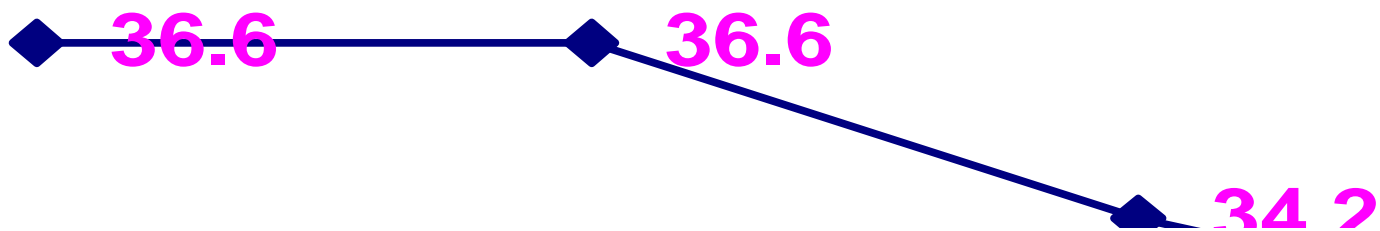


Specific Water



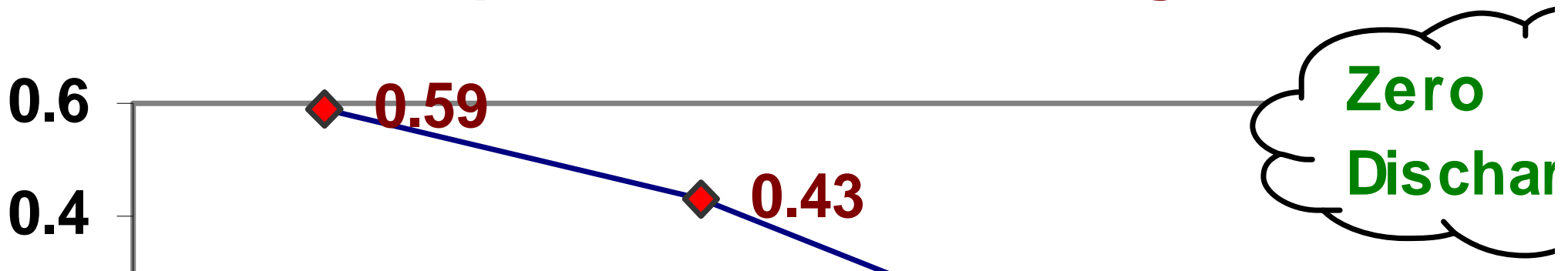
	(m ³)	per day	(Liter/pers
03-04	4680	350	36.6
04-05	4680	350	36.6
05-06	4680	375	34.2
06-07	5340	450	32.0

Per capita Water Consumption



m^3	m^3	%	m^3	%
2564	53680	59.9	35884	40.1
2965	64582	71.0	26383	29.0
5444	53266	80.2	13178	19.8
1756	64756	100	0	-

Specific Water Discharge



Implemented	Year	Cost		
		m ³	Rs. Lakhs	Rs.
Condensate at t + PA plant	2003	4460	0.27	
Condensate it.	2004	3000	0.18	
acidic water in	2005	2160	0.13	
osmosis Plant - arge Unit	2006	71357	4.3	
olers - Closed ater System	2006	29200	1.75	

Impact to the Society & Environment

Reduction of Water Level in Riverbed.

Reduction of Large in house Uses of Water.

Search for Alternative ways of Cooling.

Reduction of water loss in the conventional cooling system.

Importance of team work in environmental projects.

Effective Utilization of Treated Effluent into the Reduction in Raw Water Use.

Reverse Osmosis.

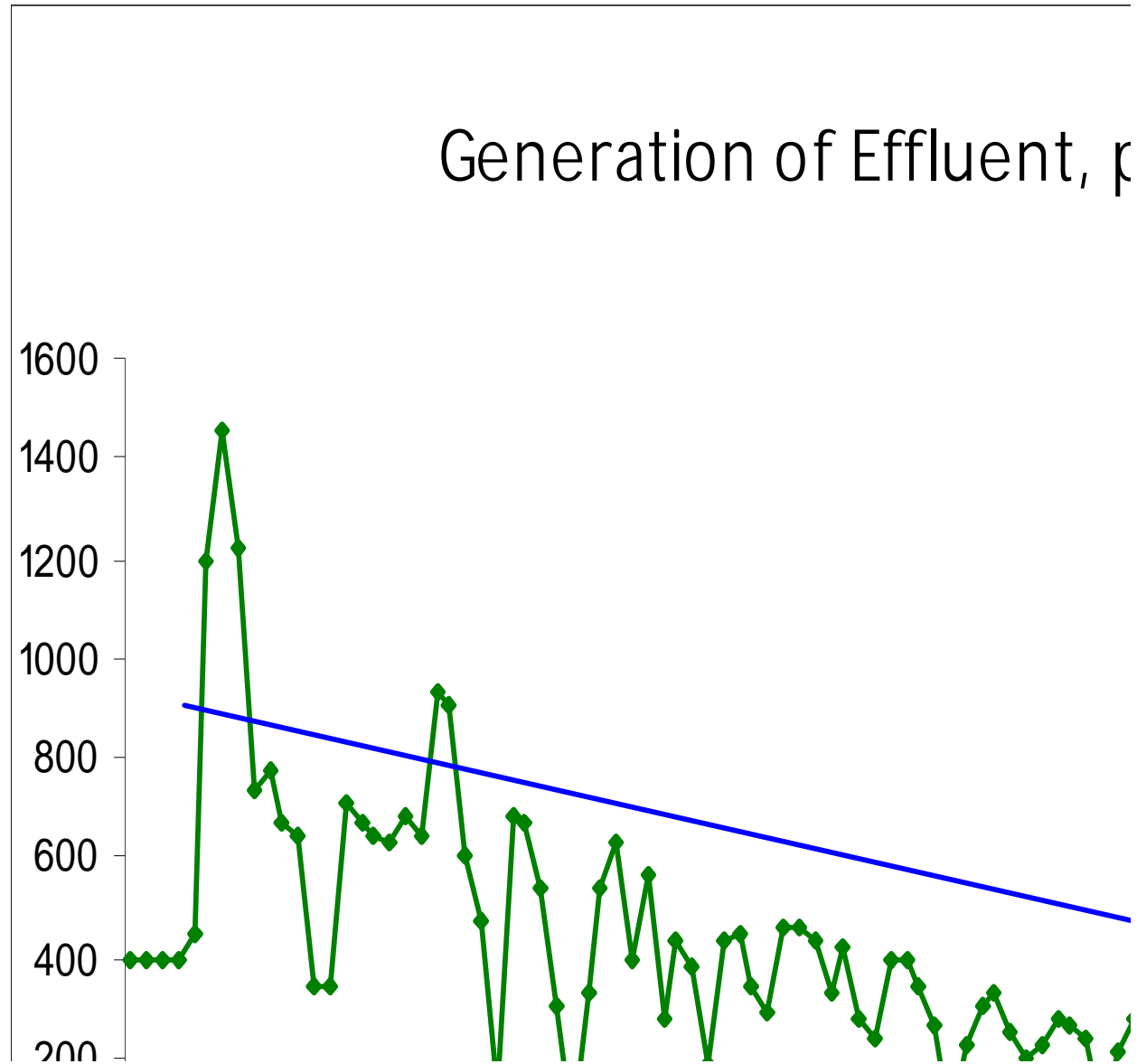
Treated Effluent

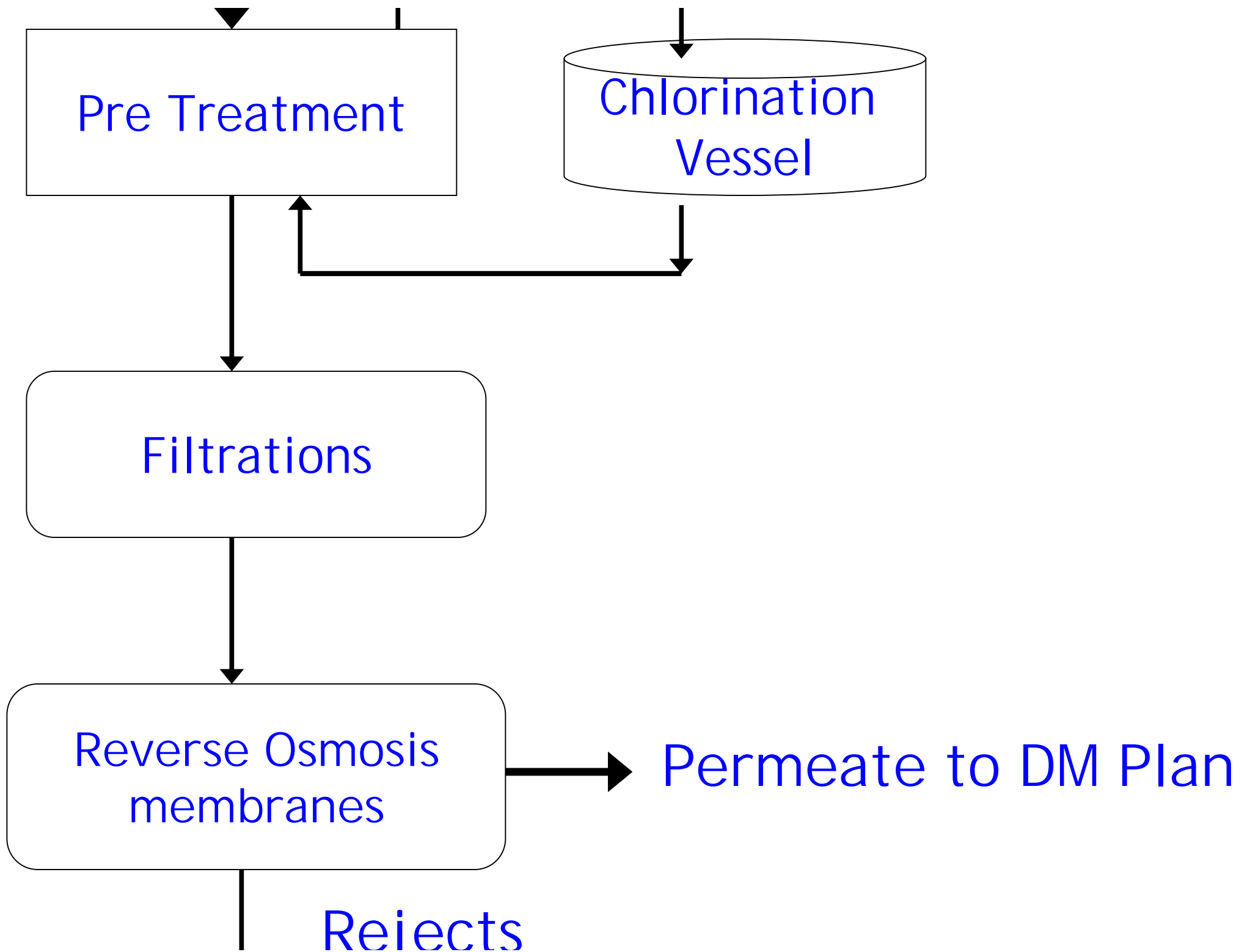
200 kl /day

Reverse Osmosis Unit

Direct Evaporator.

for irrigation





Thiru. Dharmendra Pratap Yadav. I. A. S.,

On 24th August 2006



) KL / Day.

stillation Condenser was cooled by circulating
re sensible heat was removed by evaporative c
loss of water.

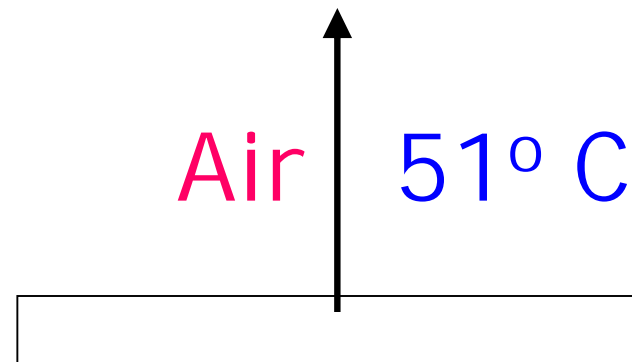
he evaporative cooling is switched over to w
xchanger (Fin Fan Cooler). Water is saved.

RESULT: Reduction in consumption of Raw water

l/day

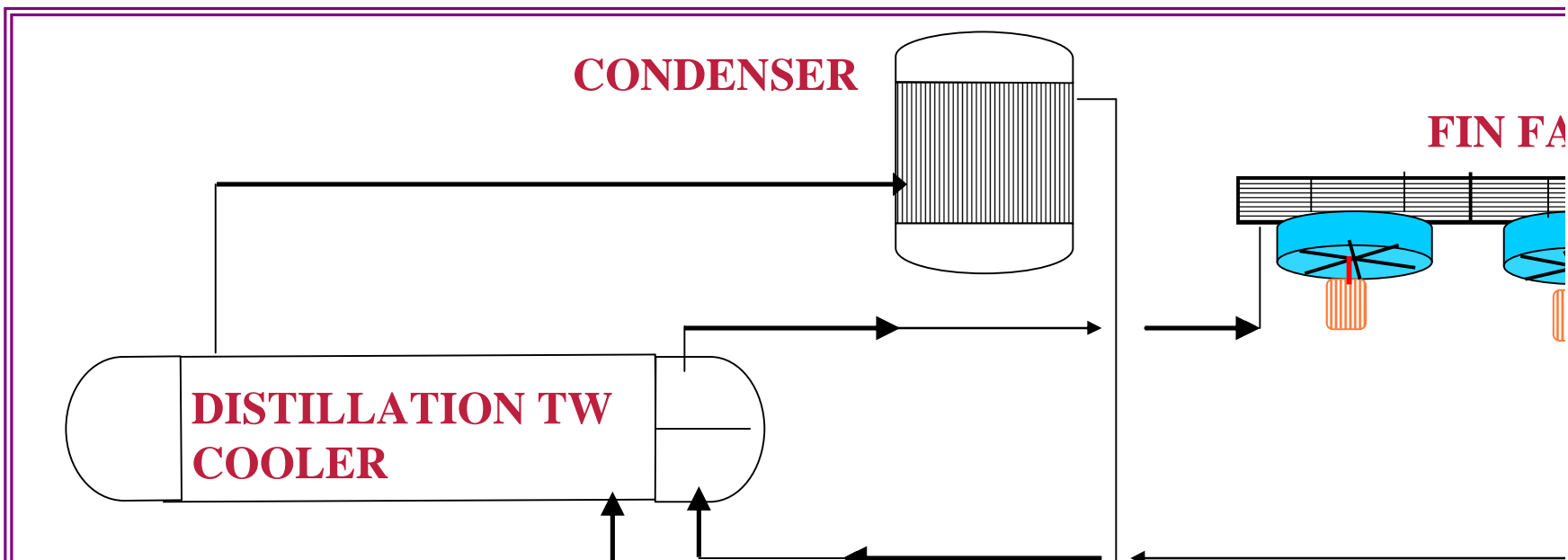
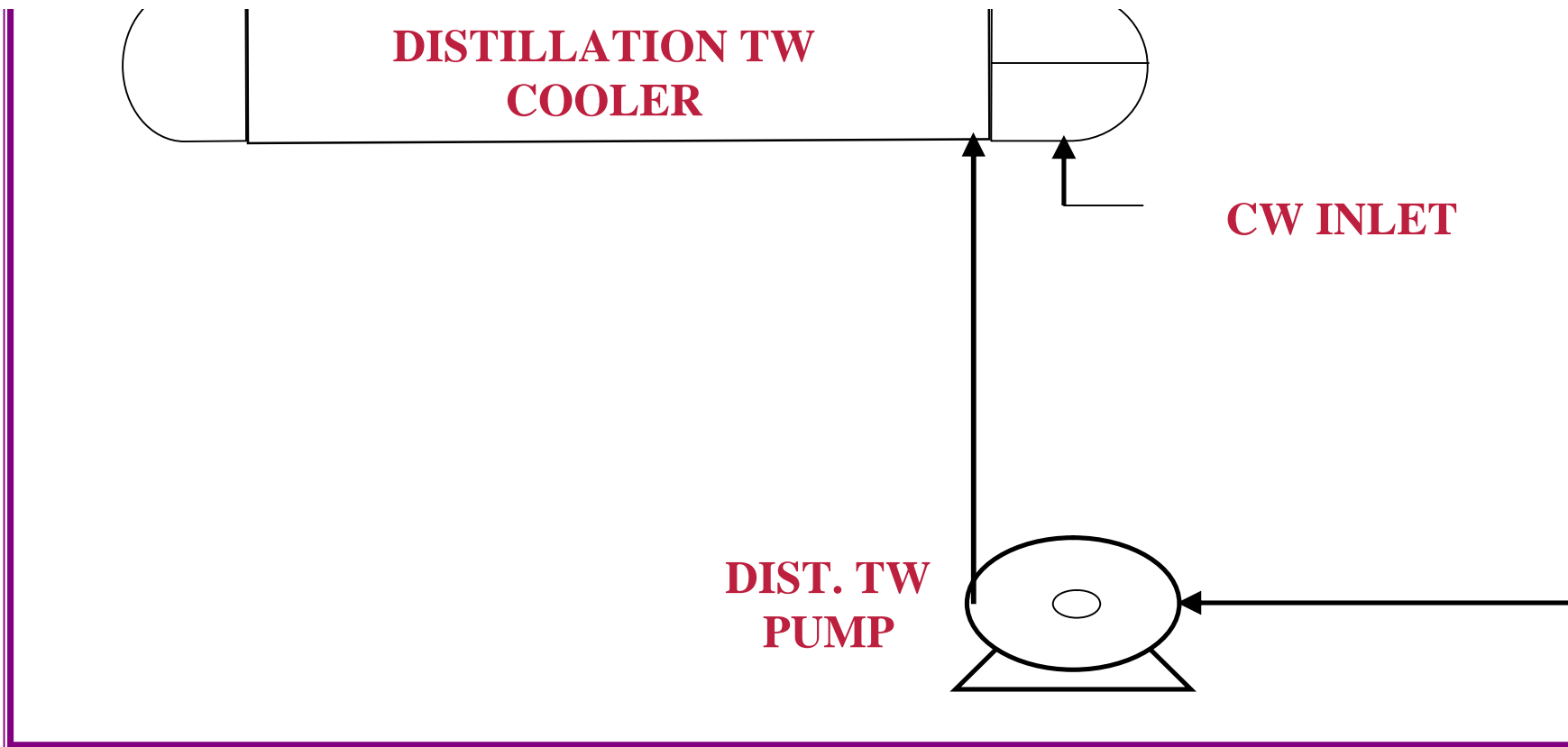
210

Heat removed	: 3.3 million kcal
Heat removed by	
- Convective cooling	: 70 KI / day
- Radiation	: Fin fan coolers
- Evaporation	
- Windles	: 3
- Exchange Area	: 6596 m ²
- The Fin Fan Cooler system	: Rs.50 lakhs



Temp

E



Effluent Reuse.

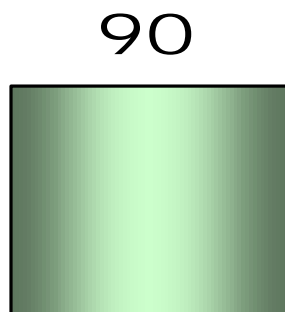
50 kl /day

Effluent is sent for biodegradation.

RT: Effluent is separated into condensate and mixed acid as a product.

l/day

RESULT: Reduction in Effluent Generation



TREATED: 50 KL /day

3

(Tons/day)

RY:

or leather Industry

SATE:

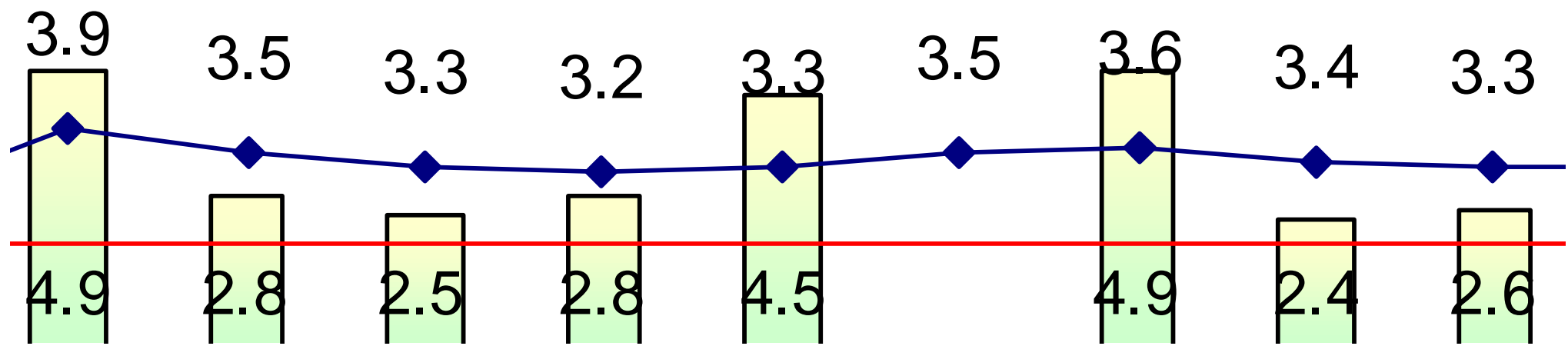
placement of DM Water



by review of performance,
v of Targets;
plan by plant personnel;
S.

Maleic anhydride Plant

Specific consumption of DM water



secondary school children in villages
n of school children in projects
ervation of natural resources - water.
plantation .

l Colony:

water harvesting scheme in operation.

ation by all in World Environment Day.

iservation of natural resources.

lection & implementation of suggestions

ation of "Zero Discharge" status.

on in consumption of water through instal
onal Fin Fan coolers.

ion of by products from Effluents.

of Treated Effluent to process.

oment of Bio Tech route for the manufactu
cts.