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Section # "C"

Assignment # "Q1"

HRT:

is a measure of the average length of time that a soluble compound remains in a constructed bioreactor. The volume of the aeration tank divided by the influent flowrate is  $T(\tau)$ , the hydraulic retention time.

SRT:

is the average time the activated-sludge solids are in the system. It is important design and operating parameter for the activated sludge process.

## (12) Decoupling SRT from HRT:

By decoupling the SRT from HRT, the liquid waste water can be

processed faster. HRT is the

time water is retained within

the digester and is equal to reactor volume dividing

by average volumetric flowrate.

In many instances a short

HRT will reduce capital

operation cost.



## Advantages of decoupling SRT from HRT

Technology has relatively low  
equipment cost.

\* HRT treatment system can be  
applied at small as well as  
larger scale.

\* HRT process can easily be  
achieved.

\* The HRT treatment technology  
does not require the import  
of expensive equipments.

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