

Metro rail to create artificial aquifer for train maintenance

U.Tejonmayam
@timesgroup.com

Chennai: Chennai Metro Rail Limited (CMRL) will create an artificial aquifer to store excess water and use it during shortage to maintain its 42-train fleet. To create the recharge well, CMRL has begun looking for experts to conduct a hydrological study inside its Koyambedu office where the maintenance depot is located. A sewage treatment plant is also being expanded to cut down the metrowater supply by 50%.

“Artificial aquifers are quite popular in the Gulf countries. It will be like a water storage unit, but we won’t build pumps or tanks. We would be storing excess groundwater whenever available instead of letting it evaporate and use it during water shorta-

ge,” said a CMRL official. “Our regular supply of metrowater will also be stored here.”

Artificial recharge is a process where excess surface water is directed into the ground, either by using rechar-

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ge wells or by altering natural conditions to increase infiltration.

The CMRL uses nearly 1.5 lakh litres of water every day for washing the trains and for its air-conditioning system in its administration building where the operation control centre also functions.

At present, an official said, much of the water supply is from metrowater through pipelines, tankers and from a

nearby pond. A sewage treatment plant set-up inside the campus with a capacity of 75,000 litre/day is being used for gardening and cooling towers for the air-conditioning systems.

An expert will be employed to study the soil condition, groundwater table levels and potential as a storage system. “Since there is a pond nearby, we think the soil and the water levels will be good. Once the study is done, we will know how the recharge well can be,” an official said.

In two months, the sewage treatment will be expanded to double its capacity to 1.5 lakh litres a day, as nearly 75,000-litres of sewage is released from CMRL housing quarters where around 100 families live. The treated water will also be used in the toilets.