



KERALA WATER AUTHORITY

No. AB-KIIFB-308/2021-22

Dated: 20.06.2022

From

The Executive Engineer

To

Superintending Engineer ,
Kerala Water Authority,
PH Circle,
Muvattupuzha

Sir

Sub:- Regarding the construction of Checkdam at Thonithady near Upputhara area in Idukki District.

Ref:- Letter No.DGC/AEE II /Damsafety/26/2022 dtd 7.2.2022 adressed to the Managing Director Kerala Water Authority

May I invite your kind attention to the subject matter.'KIIFB-AWSS to Ayyappancovil panchayath' is the project envisaged to ensure potable water supply to Ayyappancovil and Kanchiyar panchayath as well as Kattappana Municipality,where there is an acute shortage of drinking water during the summer season.Construction of major componets associated with the project has already been completed. Inorder to meet the demand of seven million litres per day all through the year,especially during summer,it is necessary to ensure the sustainability of the source by providing a water retaining structure which could cater the said demand.This would only be possible by constructing a check dam across the Periyar river at Thonithadi, almost 250 M. down stream to the existing well cum pump house.For the investigation and construction purpose a temporary path was cleared only to carry materials for construction,.

The flow details has been collected from the dam safety department twice , prior to the designing of check dam.Once in 2018 and other by the beginning of 2022.

From the obtained flow details , it is evident that the source faces a lean period during the months from February to May.On certain days the flow almost touches zero.The cross section of the river is varying from 726.5 to 731.9 M and average rock level is 730 M.So the situation strongly demands a water retaining structure to ensure a pumping of 7MLD water from the existing well cum pump house built within the FRL of Idukki Reservoir.

The check dam is constructed with a base level of 730 M. below ground level.It helps to obstruct water flowing below 730 M and removable shutter is proposed for a height of 1.8 M. above the base level.So in rainy season all shutters are removed to ensure water freely flowing above 730 m.In summer temporary shutter is placed to raise the water level up to 731.8 M.It is designed like a submersible check dam so water can move above the check dam in both direction.

The report comprising the details of proposed check dam is attached herewith for favour of necessary action.

Yours faithfully,
GIREESH K L
Executive Engineer





The document is digitally approved. Hence signature is not needed.