

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसा. नदी विकास एवं गंगा संरक्षण विभाग  
केंद्रीय जल आयोग  
बैराज एवं नहर निदेशालय



Government of India  
Ministry of Jal Shakti  
Dept. of Water Resources, RD&GR  
Central Water Commission  
Barrage & Canal Design Directorate

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Date: 16.08.2022

सेवा में,

Sh. Ashok K. Jeph  
Director, M&A dte, CWC  
Chandigarh

**विषय:** Inclusion of Bajaj Fibre Guard Fibrillated Polypropylene Fibres for Concrete in WRD Current Schedule of Rates (SOR)

**सन्दर्भ:**

1. Email received from Director, M&A, Chandigarh dt. 10.08.2022 ([dirachandigarh-cwc@nic.in](mailto:dirachandigarh-cwc@nic.in))

**महोदय,**

Kind reference is invited to the referred mail dt. 10.08.2022 vide which reports of CSMRS titled "Reports on various chemical tests performed on Poly Propylene Fibre sample to be used in concrete lining of a canal" was forwarded.

Going through the records attached therein, it was found that an expert group was constituted vide MoWR letter No. 31/12/2007-PR/ dt. 13.01.2010 to 'Provide advice regarding the finalization of design and specifications for geo-composite filter for improved drainage behind the lining and use of fibre-reinforced concrete for control of cracks and increased absorption resistance in the relining work of Sirhind Feeder and Rajasthan Feeder'.

As per the MoM dt. 08.03.2010 of the meeting of the expert group as mentioned above, it observed that "the technical information available does not cover toxic effects, if any, of the synthetic fibres in the water (in the present case, canal water is also to be used for drinking purposes). Any detached fibres on account of abrasion/any other cause could make the water unfit for consumption by human beings, cattle etc."

Now the report of CSMRS titled 'Report on various chemical tests performed on Poly Propylene Fibre sample to be used in concrete lining of a canal', with the following conclusion has been forwarded to this office:-

*"Based on all the above test performed, the tested Poly Propylene Fibre material is inert towards the extreme acidic and alkaline condition. Since, it is not altering the properties of distilled water after a week time and not releasing any toxic material in to distilled water, hence can be considered safe."*

As can be seen from the above facts, there are no design issues involved in the present situation. Moreover, the issue of Toxicity was raised by the expert group.

Hence, this office has no comments to offer and a decision reg. use of the referred material for concrete lining can be taken by appropriate authority based on the available facts.

This issues with the approval of Chief Engineer, Designs (N&W).

भवदीय

समीर कुमार शुक्ल  
(निदेशक)