

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 29, 2022

Yaacov Nagar Chief Executive Officer 374Water Inc. 701 W. Main Street, Suite 410 Durham, NC 27701

Re: 374Water Inc.

Registration Statement on Form S-3

Filed December 22, 2022 File No. 333-268942

Dear Yaacov Nagar:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Patrick Fullem at (202) 551-8337 with any questions.

Sincerely,

Division of Corporation Finance Office of Manufacturing

cc: Damian Georgino