

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

January 10, 2024

Robert Rasmus Chief Executive Officer Advanced Emissions Solutions, Inc. 8051 E. Maplewood Ave, Suite 210 Greenwood Village, CO 80111

> Re: Advanced Emissions Solutions, Inc. Registration Statement on Form S-1 Filed January 4, 2024 File No. 333-276375

Dear Robert Rasmus:

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 Abby Adams at 202-551-6902 with any questions.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services

cc: Jonathan Whalen, Esq.