



DIVISION OF
CORPORATION FINANCE

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

June 20, 2024

Anastasios Arima
Chief Executive Officer
IperionX Ltd
129 W Trade Street
Suite 1405
Charlotte, NC 28202

Re: IperionX Ltd
Form 20-F/A for the Fiscal Year ended June 30, 2023
Filed February 20, 2024
Response Dated May 28, 2024
File No. 001-41338

Dear Anastasios Arima:

We have reviewed your May 28, 2024 response to our comment letter and have the following comment.

Please respond to this letter within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our April 3, 2024 letter.

Form 20-F for the Fiscal Year ended June 30, 2023

Information on the Company, page 52

1. We understand from your responses to prior comments one through four regarding the economic assessment underlying your estimates of mineral resources that your 0.4% cut-off grade reflects the concentration of mineralization that is expected to be processed and is consistent with establishing the prospects of economic extraction when based on your estimates of future commodity prices, and estimates of future mining and processing costs, as provided in Table 2 on page 10 of your response.

We also note that such pricing and unit cost assumptions are not apparent from the disclosures on page 44 of your amended Form 20-F, concerning a "revenue cost break even calculation" which indicates that your cut-off grade has been calculated assuming

Anastasios Arima
IperionX Ltd
June 20, 2024
Page 2

historical 2017 to 2021 annual average prices, and operating cost estimates of \$3.00/t ROM mining, \$3.00/t ROM processing, \$0.40/t ROM transport, and \$0.90/t ROM general and administrative costs. There are similar disclosures on page 24 of the technical report summary, regarding the pricing and costs related to your 0.4% THM cut-off grade.

Please confirm that you will provide disclosures in your upcoming annual report on Form 20-F, and in an update to the technical report summary to explain how the 0.4% cut-of grade is correlated with your economic assessment, including your estimates of future prices and costs, as provided in Table 2 on page 10 of your response.

Please contact John Coleman at 202-551-3610 or Karl Hiller at 202-551-3686 if you have questions regarding comments.

Sincerely,

Division of Corporation Finance
Office of Energy & Transportation