



DIVISION OF
CORPORATION FINANCE

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

March 20, 2023

Gregory D. Swan
Chief Financial Officer
IperionX Limited
129 W Trade Street, Suite 1405
Charlotte, NC 28202

Re: IperionX Limited
Form 20-F for the Fiscal Year ended June 30, 2022
Filed August 26, 2022
File No. 001-41338

Dear Gregory D. Swan:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments 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 our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 20-F for the Fiscal Year ended June 30, 2022

Information on the Company

B. Business Overview

Exploration Results, page 33

1. We note that you have disclosures throughout the filing referencing a Scoping Study, which is listed as Exhibit 15.1, originally filed July 1, 2022 on Form 6-K. Please discuss this terminology with the qualified persons as it appears the technical report summary should be identified as an initial assessment, rather than a scoping or conceptual study, to utilize terminology that is prescribed by Item 1300 of Regulation S-K.

Unless you or the qualified persons do not believe the report meets the definition of an initial assessment, which would be necessary to support your disclosures of resources, please arrange to obtain and file a revised technical report summary that is properly identified as an initial assessment rather than a scoping study, and similarly conform your

references to the report in your filing. However, if you do not believe the report would be properly characterized as an initial assessment, tell us the reasons in your response.

D. Property, Plant and Equipment

Titan Project, page 42

2. We see that you have included a map on page 47, which appears to show the general location of the Titan Project. However, you must describe and illustrate with a map the location of your property, accurate to within one-mile, using an easily recognizable coordinate system, to comply with Item 1304(b)(1)(i) of Regulation S-K. Please expand your disclosures to provide the required description and map.
3. We note that you do not disclose the basket or weighted average price for your composite measure of Total Heavy Minerals (THM), used in determining your resource estimates; the associated metallurgical recoveries; or the operational costs and other parameters involved in establishing the economic cutoff grade.

Please modify your filing to include such details along with a description of the methodology and calculation used to determine your cutoff grade estimate to comply with Item 1302(d)(2) of Regulation S-K. This information should accompany your disclosures of resource estimates either in footnotes to the tabulations or in adjacent disclosures.

Exhibit 15.1

Technical Report Summary on the Titan Project, page E-0

4. The remaining comments in this letter pertain to the Technical Report Summary and the applicable content requirements. Please discuss these with the qualified persons involved in preparing the report. You will need to obtain and file a revised Technical Report Summary to address these concerns. We suggest that you provide us with the revisions that are proposed to address these comments in advance of filing an amended report.

Section 11.8 - Cut-off Grade, page E-28

5. Provide a description of the cutoff grade calculation and methodology, including all relevant parameters to comply with Item 601(b)(96)(iii)(B)(11)(iii). Such disclosures should specify the cutoff grade utilized in preparing the resource estimates, the Total Heavy Minerals (THM) basket price, metallurgical recovery for each component, all cost factors reflected in the estimate, and other details specified in the guidance above.

Section 13.3 - Production Target and Mine Schedule, page E-32

6. We understand that an optimized annual mining schedule has been prepared for the planned operations, targeting higher-grade materials. Provide disclosure of the modified cutoff grade used for the optimized schedule along with the associated parameters, such as basket price, metallurgical recovery, and cost factors, and explain how and when the remaining resources will be mined and processed, or clarify if there are no such plans.

Gregory D. Swan
IperionX Limited
March 20, 2023
Page 3

7. Provide (i) the final pit outline and (ii) disclosures of the numeric values for the annual Life of Mine (LOM) production for waste material and ore, along with the associated grades, to comply with Item 601(b)(96)(iii)(B)(13) of Regulation S-K.

Section 16.2 - Price Forecasts, page E-48

8. Provide a description of the individual salable product specifications and present the five-year historic prices with your forecast pricing to comply with Item 601(b)(96)(iii)(B)(16)(i) of Regulation S-K.

Section 17.1 - Environmental Studies, page E-49

9. Provide the qualified persons opinions as to the adequacy of the current environmental plans to comply with Item 601(b)(96)(iii)(B)(17)(vi) of Regulation S-K.

Section 19 - Economic Analysis, page E-57

10. Provide a detailed life-of-project cash flow analysis including the annual numerical values for all appropriate and associated line items to comply with Item 601(b)(96)(iii)(B)(19)(ii) of Regulation S-K. For example, this should include commodity prices, revenues, operational costs, capital costs, taxes, reclamation/closing costs, royalties, quantities of the mined and processed materials, associated grades, and the salable product quantities.
11. As inferred resources appear to have been included in deriving the after tax cash flow information, a separate after tax cash flow analysis excluding inferred resources should be presented with equal prominence to comply with Item 601(b)(96)(iii)(B)(19)(iv) and 1302(d)(4)(ii)(C) of Regulation S-K.

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.

You may contact George K. Schuler, Mining Engineer, at (202) 551-3718 if you have questions regarding the engineering comments or Karl Hiller, Branch Chief, at (202) 551-3686 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Energy & Transportation