



DIVISION OF
CORPORATION FINANCE

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

January 9, 2024

Brian Semkiw
Chief Executive Officer
Spectaire Holdings Inc.
155 Arlington St.
Watertown, MA 02472

Re: Spectaire Holdings Inc.
Registration Statement on Form S-1
Filed December 21, 2023
File No. 333-276179

Dear Brian Semkiw:

We have conducted a limited review of your registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments.

Registration Statement on Form S-1

Risk Factors

We are engaged in multiple transactions and offerings of our securities..., page 10

1. We note your disclosure that in addition to this prospectus covering the resale by Keystone of up to 3,067,438 shares of Common Stock, you are currently planning to file a registration statement for the resale and issuance of additional securities and that the market price of shares of your Common Stock could drop significantly if the holders of the shares of Common Stock described therein sell them or are perceived by the market as intending to sell them. Please expand your disclosure to highlight the percentage of securities being registered for resale in that offering out of your total outstanding securities.

Brian Semkiw
Spectaire Holdings Inc.
January 9, 2024
Page 2

Our Warrants are exercisable for shares of our Common Stock, which exercises will increase..., page 11

2. Please disclose the exercise price of the warrants compared to the market price of the underlying securities and the likelihood that warrant holders will exercise their warrants, resulting in proceeds to your company. Please also disclose in your risk factors and MD&A sections the impact on your liquidity and the ability of your company to fund your operations on a prospective basis as a result of warrant holders choosing not to exercise their warrants.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Liquidity and Capital Resources, page 63

3. In light of the significant number of redemptions in connection with your charter extension and business combination and the unlikelihood that the company will receive significant proceeds from exercises of the warrants because of the disparity between the exercise price of the warrants and the current trading price of the common stock, expand your discussion of capital resources to address any changes to and the impact of the redemptions on the company's liquidity position and your ability to fund your operations since the business combination.

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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Juan Grana at 202-551-6034 or Jane Park at 202-551-7439 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Industrial Applications and
Services

cc: Stephen Ranere, Esq.