

**Tonix Pharmaceuticals Holding Corp.**  
**509 Madison Avenue, Suite 306**  
**New York, New York 10022**

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December 18, 2013

**VIA EDGAR**

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, NE  
Washington, DC 20549

Attn: Erin Wilson, Esq.  
Division of Corporation Finance

Re: Tonix Pharmaceuticals Holding Corp.  
Registration Statement on Form S-3  
Filed November 26, 2013  
File No. 333-192551

Ladies and Gentlemen:

The following responses address the oral comment of the reviewing staff of the Commission pursuant to a telephone conversation by and between Erin Wilson of the Commission and James M. Turner of Sichenzia Ross Friedman Ference LLP relating to the Registration Statement on Form S-3 filed on November 26, 2013 (the "Registration Statement") by Tonix Pharmaceuticals Holding Corp. (the "Company").

1. Please revise the disclosure on the front cover page of the prospectus in accordance with Instruction 7 to Form S-3 in order to provide the calculation of the aggregate market value of the Company's outstanding common stock and the amount of all securities offered during the prior 12 calendar months.

**Response:**

The Company will revise the disclosure on the front cover page of the prospectus in accordance with Instruction 7 to Form S-3 in order to provide the calculation of the aggregate market value of the Company's outstanding common stock and the amount of all securities offered during the prior 12 calendar months.

2. In reviewing footnote 5 to the Calculation of Fee Registration Fee, we do not believe that the Company is entitled to an offset of the fee from the prior registration statement indicated. Please provide evidence that the Company is not required to deposit additional funds in its SEC account to cover such shortfall after the offset is removed.

**Response:**

After a review of the Company's account with the SEC and the fees incurred in connection with registration statements filed during 2013, the Company believes that the offset is correct and that the Company should have a credit of \$533.54. Exhibit A sets forth a chronology of transactions since January 1, 2013 to support this conclusion.

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After reviewing the transaction history from the Company's transfer agent, we have determined that the problems started in June 2013 when it appears that the S-1/A filing made on June 20, 2013 doesn't reflect that there should have been another \$500.86 cash filing fee incurred. There was a total fee of \$3,839.93, of which \$3,339.07 was previously paid. Then moving forward, there were fees incurred of \$2,203.13 in August 2013, which I believe the SEC calculated as the \$500.86 which wasn't incurred on June 20, 2013 plus the \$1,702.27 that was originally due, however, that \$1,702.27 was paid on May 10, 2013. So, Tonix got charged \$1,702.27 twice by the SEC.

We trust that the foregoing appropriately addresses the issues raised by your recent Letter of Comment. Thank you in advance for your prompt review and assistance.

Very truly yours,

/s/ SETH LEDERMAN

Seth Lederman

Chief Executive Officer

Cc: Marc J. Ross, Esq.  
James M. Turner, Esq.

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**EXHIBIT A**

<u>Date</u>	<u>Credit (Debit)</u>	<u>Explanation</u>
January 1, 2013	\$1,351.45	Cash available in the Company's SEC account
January 25, 2013	(\$1,335.98)	Filing fee for S-1 registration statement filed on January 25, 2013 (333-186223)
January 25, 2013	\$15.47	Cash available in the Company's SEC account
May 10, 2013	1,800.00	Cash deposit by the Company
May 10, 2013	\$1,815.47	Cash available in the Company's SEC account
May 10, 2013	(\$1,702.27)	Filing fee for S-1 registration statement filed on May 10, 2013 (333-188547)
May 10, 2013	\$113.20	Cash available in the Company's SEC account
June 5, 2013	2,000.00	Cash deposit by the Company
June 5, 2013	\$2,113.20	Cash available in the Company's SEC account
June 6, 2013	(\$1,636.80)	Filing fee for S-1/A registration statement filed on June 6, 2013 (333-186223) <sup>[1]</sup>
June 6, 2013	\$476.40	Cash available in the Company's SEC account
June 20, 2013	(\$500.86)	Filing fee for S-1/A registration statement filed on June 20, 2013 (333-188547) <sup>[2]</sup>
June 20, 2013	(\$24.46)	Cash owed to the SEC account
June 24, 2013	500.00	Cash deposit by the Company
June 24, 2013	\$475.54	Cash available in the Company's SEC account
November 22, 2013	6,500.00	Cash deposit by the Company
November 22, 2013	\$6,975.54	Cash available in the Company's SEC account
November 26, 2013	(\$6,440.00)	Filing fee for S-3 registration statement filed on November 26, 2013 (333-192541)
November 26, 2013	\$535.54	Cash available in the Company's SEC account

<sup>[1]</sup> This amendment was filed on the wrong SEC file number and was withdrawn on June 20, 2013

<sup>[2]</sup> The total amount of the registration fee on this filing was \$3,839.93, of which \$1,702.27 was paid on the initial filing on May 10, 2013, \$1,636.80 was an offset from the June 6, 2013 amendment that was filed and withdrawn, and \$500.86 was new fees owed on that date.