

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

JUNE 17, 2008

ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934

CPEX Pharmaceuticals, Inc.
File No. 1-33895 - CF# 21942

CPEX Pharmaceuticals, Inc. submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from an exhibit to a Form 10 filed on December 21, 2007, as amended.

Based on representations by CPEX Pharmaceuticals, Inc. that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit will not be released to the public for the time period specified:

Exhibit 10.5 through April 11, 2013

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Michael Reedich
Special Counsel