



ASX RELEASE

Acquisition of Neosil

EMERYVILLE, California and BRISBANE, Australia, 10 June 2008: Peplin, Inc. (ASX:PLI) today announced that it had signed a definitive agreement to acquire Neosil, Inc., a privately-held, dermatology-focused company in an all stock transaction. The purchase price of US\$6.7 million (approximately A\$7.0 million) in shares of Peplin stock represents the amount of net cash held by Neosil at signing. Peplin shares are valued based on the volume weighted 10-day trailing average closing price of Peplin's CDIs on the Australian Securities Exchange (ASX) immediately preceding the signing of the agreement (A\$0.4256). On a pro-forma basis Neosil shareholders will own approximately 7.3% of Peplin following the transaction. The Boards of both companies have recommended the transaction which is subject to shareholder approval.

Following the transaction Neosil would become a wholly-owned subsidiary of Peplin. In addition to its net cash, Peplin will also acquire Neosil's intellectual property portfolio which comprises two early clinical stage development programs: the first a hair growth stimulation technology with potential application in the treatment of hair loss and the second, a broad spectrum anti-microbial technology with potential application in the treatment of acne.

Peplin intends to use the net cash obtained from the acquisition to continue the development of its lead product candidates PEP005 (ingenol mebutate) Gel for actinic keratosis and PEP005 (ingenol mebutate) Gel for basal cell carcinoma. Peplin believes that Neosil's proprietary technologies in hair loss and acne could enable it to expand its product pipeline in the future, although Peplin does not expect to commence further development of these programs before 2009.

Additional terms of the transaction

Under the terms of the agreement Peplin will offer approximately 819,000 shares of its common stock (equivalent to approximately 16.4 million CHES Depository Interests or CDIs) in exchange for all equity interests of Neosil. The closing of the transaction is subject to customary closing conditions, including a minimum net cash position by Neosil, stockholder approval of both companies and an independent expert having concluded that the transaction is fair and reasonable to Peplin's stockholders. Peplin intends to file a notice of meeting and explanatory materials, together with an independent expert's report, with ASX and to call a special meeting of its stockholders to consider the proposed acquisition. The transaction is expected to be completed in the third quarter of 2008.

Peplin does not anticipate retaining any of the Neosil employees and has accounted for the cost of rationalization in the calculation of net cash. Peplin's board of

PEPLIN, INC.

6475 Christie Avenue, Emeryville, CA 94608, USA
Tel: +1-510-653 9700 Fax: +1-510-653 9704

Level 2, Brisbane Portal, 1 Breakfast Creek Road, Newstead, QLD, 4006, Australia
Tel: +61-7-3250 1200 Fax: +61-7-3250 1299

www.peplin.com

directors and its management are not anticipated to change as a result of the transaction.

The shares of common stock issued by Peplin in the transaction are not registered under the Securities Act of 1933, as amended, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. Peplin has committed to use commercially reasonable efforts to file and have declared effective by the US Securities and Exchange Commission (SEC) a registration statement relating to the shares of its common stock tendered as consideration in this transaction.

Investor conference call

Peplin will host an investor conference call to discuss this announcement at 9:00 am Australian Eastern Standard Time, Wednesday, 11 June 2008. The dial-in numbers are 1800 157 000 (Australia) and 888 830 9551 (US) with code 802 246 63.

Further information:

Michael Aldridge
Chief Executive Officer
Tel: +1-510-653 9700
michael.aldridge@peplin.com

Hill & Knowlton
Sue Cook or Ian Pope
Tel: +61-2-9268-0242
scook@hillandknowlton.com.au

ABOUT PEPLIN

Peplin is a development stage specialty pharmaceutical company focused on advancing and commercializing innovative medical dermatology products. Peplin is currently developing PEP005 (ingenol mebutate), which is the first in a new class of compounds and which is derived from the sap of *Euphorbia peplus*, or *E. peplus*, a rapidly growing, readily available plant commonly referred to as petty spurge or radium weed. *E. peplus* has a long history of traditional use for a variety of conditions, including the topical self-treatment of various skin disorders, including skin cancer and pre-cancerous skin lesions. Peplin's lead product candidate is a patient-applied topical gel containing ingenol mebutate, a compound the use of which Peplin has patented for the treatment of actinic keratosis, or AK. This product candidate is currently in Phase II clinical trials and is referred to as PEP005 (ingenol mebutate) Gel.

FORWARD LOOKING STATEMENTS

This press release contains "forward-looking statements" as defined under U.S. federal securities laws, including, but not limited to, Peplin's clinical development plan referred to herein. These forward-looking statements can be identified through the use of words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "may," "will," and variations of these words or similar expressions. Forward looking statements are based on management's current, preliminary expectations and actual results could differ materially as a result of various risks and uncertainties, including, but not limited to, delays in the completion of clinical trials resulting from, among other things, ambiguous or negative interim results, failure to close the acquisition of Neosil, Inc., unforeseen safety issues, failure to conduct the clinical trials in accordance with regulatory requirements or clinical protocols, suspension or termination of a clinical trial by the FDA or other regulatory authorities, lack of adequate funding to continue a clinical trial and other important factors disclosed from time to time in Peplin's disclosures to the ASX. Forward-looking statements speak only as of the date they were made. No undue reliance should be placed on any forward-looking statements. Such information is subject to change, and we undertake no obligation to update such statements.