
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT PURSUANT TO SECTION 13 OR 15(D) OF
THE SECURITIES EXCHANGE ACT OF 1934**

Date of Earliest Event Reported
September 24, 2010

Environmental Tectonics Corporation

(Exact name of registrant as specified in its charter)

Pennsylvania

(State or other jurisdiction of incorporation of organization)

1-10655

(Commission File Number)

23-1714256

(IRS Employer Identification Number)

County Line Industrial Park
Southampton, Pennsylvania

(Address of principal executive offices)

18966

(Zip Code)

Registrant's telephone number, including area code (215) 355-9100

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
-
-

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

On September 24, 2010, the Board of Directors of Environmental Tectonics Corporation (the “Company”) elected Linda J. Brent, Ed.D., to the Company’s Board of Directors.

The Board has determined that Dr. Brent is independent under applicable laws and regulations.

There is no arrangement or understanding between Dr. Brent and any other person pursuant to which Dr. Brent was elected as a director, and there are no related party transactions involving Dr. Brent.

Dr. Brent will receive compensation for her service as a non-employee director pursuant to the Company’s director compensation policy which is set forth the Company’s Annual Report on Form 10-K, filed on May 27, 2010.

A copy of the press release of the Company announcing Dr. Brent’s election is attached as Exhibit 99.1 and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

The following exhibits are furnished or filed in accordance with Item 601 of Regulation S-K:

99.1 Press of the Company announcing the election of Linda J. Brent to the Board of Directors of Environmental Tectonics Corporation

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ENVIRONMENTAL TECTONICS CORPORATION
Registrant

Date: September 29, 2010

By: /s/ Duane D. Deaner
Duane D. Deaner
Chief Financial Officer

**Environmental Tectonics Corporation Announces the Expansion of its
Board of Directors**

Linda J. Brent, Ed.D., Appointed as a Member

Southampton, PA, U. S. A., September 29, 2010. Environmental Tectonics Corporation (OTC Bulletin Board: ETCC) (“ETC” or the “Company”) today announced the appointment of Linda J. Brent, Ed.D., to its Board of Directors. Dr. Brent brings the total of ETC Board members to seven.

Dr. Brent currently serves as the CEO and Senior Managing Associate for the ASTA Group, LLC, a business development, communications and consulting firm. Additionally, she provides support to the National Training and Simulation Association (NTSA) for strategic planning. Her former positions include serving as Vice President, Business Development of TYBRIN Corporation, with L-3 Communications as Corporate Director of Homeland Security, Director of Advanced Programs for the Link Simulation and Training Division, and as the Director of Operations for Link’s Orlando location. Dr. Brent also spent ten years at Lockheed Martin Corporation in various capacities. She is married with three children and holds Bachelors and Masters Degrees and a Doctorate in Education.

William F. Mitchell, ETC’s Chairman and President, stated, “I am very pleased that Linda has agreed to join our Board of Directors. Her vast experience and knowledge of the simulation field will be invaluable in helping ETC promote our tactical flight simulation and Advanced Disaster Management Simulator product groups.”

ETC was incorporated in 1969 in Pennsylvania and last year we celebrated our 40th anniversary. Our core technologies include the design, manufacture and sale of Training Services (TSG) which includes (1) software driven products and services used to create and monitor the physiological effects of flight; (2) high performance jet tactical flight simulation, and; (3) driving and disaster simulation systems, and Control Systems (CSG) which includes: (1) steam and gas sterilization; (2) testing and simulation devices for the automotive industry, and; (3) hyperbaric and hypobaric chambers. Product categories included in TSG are Aircrew Training Systems (ATS) and flight simulators, disaster management systems and entertainment applications. CSG includes sterilizers, environmental control devices and hyperbaric chambers along with parts and service support.

This press release includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are based on ETC’s current expectations and projections about future events. These forward-looking statements are subject to known and unknown risks, uncertainties and assumptions about ETC and its subsidiaries that may cause actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

These forward-looking statements include statements with respect to the Company’s vision, mission, strategies, goals, beliefs, plans, objectives, expectations, anticipations, estimates, intentions, financial condition, results of operations, future performance and business of the company, including but not limited to, (i) projections of revenues, costs of materials, income or loss, earnings or loss per share, capital expenditures, growth prospects, dividends, capital structure, other financial items and the effects of currency fluctuations, (ii) statements of our plans and objectives of the Company or its management or Board of Directors, including the introduction of new products, or estimates or predictions of actions of customers, suppliers, competitors or regulatory authorities, (iii)

statements of future economic performance, (iv) statements of assumptions and other statements about the Company or its business, (v) statements made about the possible outcomes of litigation involving the Company, (vi) statements regarding the Company's ability to obtain financing to support its operations and other expenses, and (vii) statements preceded by, followed by or that include the words, "may," "could," "should," "looking forward," "would," "believe," "expect," "anticipate," "estimate," "intend," "plan," or the negative of such terms or similar expressions. These forward-looking statements involve risks and uncertainties which are subject to change based on various important factors. Some of these risks and uncertainties, in whole or in part, are beyond the Company's control. Factors that might cause or contribute to such a material difference include, but are not limited to, those discussed in our Annual Report on Form 10-K for the fiscal year ended February 26, 2010, in the section entitled "Risks Particular to Our Business." Shareholders are urged to review these risks carefully prior to making an investment in the Company's common stock.

The Company cautions that the foregoing list of important factors is not exclusive. Except as required by federal securities law, the Company does not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by or on behalf of the Company.

Contact: Duane D. Deaner, CFO Tel: 215-355-9100 (ext. 1203) Fax: 215-357-4000
ETC — Internet Home Page: <http://www.etcusa.com>