

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**Environmental Tectonics Corporation**

(Exact Name of Registrant as Specified in its Charter)

**Pennsylvania**

(State or Other Jurisdiction of  
Incorporation or Organization)

**23-1714256**

(I.R.S. Employer Identification No.)

**County Line Industrial Park  
Southampton, Pennsylvania 18966**

(Address of Principal Executive Offices) (Zip Code)

2009 Employee, Director and Consultant Stock Plan  
(Full Title of the Plan)

**William F. Mitchell**

**President and Chief Executive Officer  
Environmental Tectonics Corporation  
County Line Industrial Park  
Southampton, Pennsylvania 18966**

(Name and Address of Agent for Service)

**(215) 355-9100**

(Telephone Number, Including Area Code,  
of Agent for Service)

Copies to:

William W. Matthews, III  
Klehr, Harrison, Harvey, Branzburg & Ellers LLP  
260 S. Broad Street  
Philadelphia, Pennsylvania 19102

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

**CALCULATION OF REGISTRATION FEE**

| Title of Securities<br>to be Registered  | Amount to be<br>Registered (1) | Proposed Maximum<br>Offering Price<br>Per Share(2) | Proposed Maximum<br>Aggregate<br>Offering Price(2) | Amount of<br>Registration Fee (2) |
|--|--------------------------------|--|--|-----------------------------------|
| Common Stock, par value \$0.05 per share | 1,000,000                      | \$ 1.20  | \$ 1,200,000                                       | \$ 66.96                          |

- (1) The maximum number of shares as to which stock options or other equity interests of Environmental Tectonics Corporation may be granted under the employee benefit plan referred to above. In accordance with Rule 416, this Registration Statement also covers an indeterminate number of shares as may become issuable by reason of the anti-dilution provisions of such plan.

(2) Estimated solely for purposes of calculating the registration fee. Pursuant to Rules 457(c) and (h), the Proposed Maximum Offering Price Per Share and the Proposed Maximum Aggregate Offering Price are computed on the basis of the average of the high and low prices for such security as reported on the Over-The-Counter Bulletin Board on August 31, 2009.

---

---

## TABLE OF CONTENTS

### PART II

[Item 3. Incorporation of Documents by Reference.](#)

[Item 4. Description of Securities.](#)

[Item 5. Interests of Named Experts and Counsel.](#)

[Item 6. Indemnification of Directors and Officers.](#)

[Item 7. Exemption from Registration Claimed.](#)

[Item 8. Exhibits.](#)

[Item 9. Undertakings.](#)

[SIGNATURES](#)

[EXHIBIT INDEX](#)

### **PART II**

#### **INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

##### **Item 3. Incorporation of Documents by Reference.**

The following documents filed with the Securities and Exchange Commission (the "Commission") by Environmental Tectonics Corporation, a Pennsylvania corporation (the "Company"), are incorporated herein by reference: (1) the Company's Annual Report on Form 10-K for the fiscal year ended February 27, 2009; (2) the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended May 29, 2009; (3) the Company's Current Reports on Form 8-K dated May 13, 2009, May 20, 2009, June 1, 2009, June 4, 2009 and July 2, 2009; (4) all other reports filed by the Company pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as amended (the "Exchange Act") since February 27, 2009; (5) the description of the Company's Common Stock, par value \$0.05 per share (the "Common Stock") contained in Item 1 of the Company's Registration Statement on Form 8-A filed with the Commission.

All documents filed by the Company pursuant to Section 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date this Registration Statement is filed with the Commission, and prior to the filing of a post-effective amendment which indicates that all securities offered by this Registration Statement have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is, or is deemed to be, incorporated by reference herein modifies or supersedes such prior statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement, except as indicated herein.

##### **Item 4. Description of Securities .**

Not applicable.

##### **Item 5. Interests of Named Experts and Counsel .**

Certain legal matters in connection with the shares of Common Stock being registered hereby have been passed upon for the Company by Klehr, Harrison, Harvey, Branzburg & Ellers LLP, 260 S. Broad Street, Philadelphia, PA 19102.

##### **Item 6. Indemnification of Directors and Officers .**

Sections 1741 through 1750 of Subchapter D, Chapter 17, of the Pennsylvania Business Corporation Law of 1988 (the "BCL") contain provisions for mandatory and discretionary indemnification of a corporation's directors, officers and other personnel and related matters.

Under Section 1741, subject to certain limitations, a corporation has the power to indemnify directors and officers under certain prescribed circumstances against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with an action or proceeding, whether civil, criminal, administrative or investigative, to which any of them is a party by reason of his being a director, officer, employee or agent of the corporation or serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise if he acted in good faith and in a manner he reasonably

believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal proceeding, has no reasonable cause to believe his conduct was unlawful.

Section 1742 provides for indemnification in derivative actions except in respect of any claim, issue or matter as to which the person has been adjudged to be liable to the corporation unless and only to the extent that the proper court determines upon application that, despite the adjudication of liability but in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for the expenses that the court deems proper.

Under Section 1743, indemnification is mandatory to the extent that the director, officer, employee or agent has been successful on the merits or otherwise in defense of any action or proceeding under Section 1741 or Section 1742 if the appropriate standards of conduct are met.

Section 1744 provides that, unless ordered by a court, any indemnification under Section 1741 or 1742 shall be made by the corporation as authorized in the specific case upon a determination that the representative met the applicable standard of conduct set forth in those sections and such determination shall be made: (i) by the board of directors by majority vote of a quorum of directors not parties to the action or proceeding; (ii) if a quorum is not obtainable and a majority of disinterested directors so directs, by independent legal counsel; or (iii) by the shareholders.

Section 1745 provides that expenses (including attorney's fees) incurred by an officer, director, employee or agent in defending a civil or criminal action or proceeding may be paid by the corporation in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of such person to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the corporation.

Section 1746 provides generally that, except in any case where the act or failure to act giving rise to the claim for indemnification is determined by the court to have constituted willful misconduct or recklessness, the indemnification and advancement of expenses provided by Subchapter 17D of the BCL shall not be deemed exclusive of any other rights to which a person seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement vote of shareholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding that office. Section 1746 also provides that a corporation may create a fund of any nature which may, but need not be, under the control of a trustee, or otherwise secure or insure in any manner its indemnification obligations.

Section 1747 grants a corporation the power to purchase and maintain insurance on behalf of any director or officer against any liability incurred by him in his capacity as officer or director, whether or not the corporation would have the power to indemnify him against that liability under Subchapter 17D of the BCL. Sections 1748 and 1749 extend the indemnification and advancement of expenses provisions contained in Subchapter 17D of the BCL to successor corporations in fundamental changes and to representatives serving as fiduciaries of employee benefit plans.

Section 1750 provides that the indemnification and advancement of expenses provided by, or granted pursuant to, Subchapter 17D of the BCL shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs and personal representatives of such person.

Section 5.05 of the Company's By-laws provides that the Company will indemnify current and previous directors and officers of the Company to the fullest extent permitted by applicable law. The Board may also indemnify other persons.

Section 5.07 of the Company's By-laws provides that the Company may maintain insurance to protect itself and any director or officer of the Company. The Company has purchased liability insurance for its directors and officers.

**Item 7. Exemption from Registration Claimed .**

Not applicable.

**Item 8. Exhibits.**

- 5.1 Opinion of Klehr, Harrison, Harvey, Branzburg & Ellers LLP, counsel to the Company, as to certain legal matters in connection with the shares of Common Stock being registered.
- 10.1 2009 Employee, Director and Consultant Plan, incorporated by reference to Annex A of the Company's Definitive Proxy Statement on Schedule 14A, filed with the Commission on May 28, 2009.
- 23.1 Consent of Friedman LLP, registered public accounting firm for the Company.
- 23.2 Consent of Klehr, Harrison, Harvey, Branzburg & Ellers LLP (included as part of Exhibit 5.1).
- 24.1 Power of Attorney (included on signature page of this Registration Statement).

**Item 9. Undertakings.**

1. The undersigned Company hereby undertakes:

- (a) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment hereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement.
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that paragraphs (1)(a)(i) and (1)(a)(ii) will not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(b) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the

securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. The undersigned Company hereby further undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the provisions, or otherwise, the Company has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Southampton, Pennsylvania, on the 4<sup>th</sup> day of September, 2009.

Environmental Tectonics Corporation

By: /s/ William F. Mitchell

William F. Mitchell  
President and Chief Executive Officer

## POWER OF ATTORNEY

### KNOW ALL PERSONS BY THESE PRESENTS

That the undersigned officers and directors of Environmental Tectonics Corporation, a Pennsylvania corporation, do hereby constitute and appoint William F. Mitchell and Duane D. Deaner, or any one of them, the lawful attorney-in-fact and agent, each with full power and authority to do any and all acts and things and to execute any and all instruments which said attorney and agent determines may be necessary or advisable or required to enable said corporation to comply with the Securities Act, and any rules or regulation or requirements of the Commission in connection with this Registration Statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this Registration Statement, to any and all amendments, both pre-effective and post-effective, and supplements to this Registration Statement and to any and all instruments or documents filed as part of or in conjunction with this Registration Statement or amendments or supplements thereof, and each of the undersigned hereby ratifies and confirms all that said attorneys and agents, or any one of them, shall do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| Name  | Capacity  | Date              |
|---|---|-------------------|
| <u>/s/ William F. Mitchell</u><br>William F. Mitchell | Chairman of the Board, Chief Executive Officer, President and Director<br>(Principal Executive Officer) | September 4, 2009 |
| <u>/s/ Duane D. Deaner</u><br>Duane D. Deaner         | Chief Financial Officer (Principal Accounting and Financial Officer)                                    | September 4, 2009 |
| <u>/s/ Stephen F. Ryan</u><br>Stephen F. Ryan         | Director  | September 4, 2009 |
| <u>/s/ H.F. Lenfest</u><br>H.F. Lenfest               | Director  | September 4, 2009 |
| <u>/s/ George K. Anderson</u><br>George K. Anderson   | Director  | September 4, 2009 |
| <u>/s/ George A. Sawyer</u><br>George A. Sawyer       | Director  | September 4, 2009 |

---

## EXHIBIT INDEX

| <u>Exhibit No.</u> | <u>Document</u>   |
|--------------------|---|
| 5.1                | Opinion of Klehr, Harrison, Harvey, Branzburg & Ellers LLP, counsel to the Company, as to certain legal matters in connection with the shares of Common Stock being registered. |
| 23.1               | Consent of Friedman LLP, registered public accounting firm for the Company.   |
| 23.2               | Consent of Klehr, Harrison, Harvey, Branzburg & Ellers LLP (included as part of Exhibit 5.1).   |
| 24.1               | Power of Attorney (included on signature page of this Registration Statement).  |



**KLEHR, HARRISON, HARVEY, BRANZBURG & ELLERS LLP**

**260 S. Broad Street**

**Philadelphia, PA 19102**

September 4, 2009

Environmental Tectonics Corporation  
County Line Industrial Park  
Southampton, Pennsylvania 18966

Re: Environmental Tectonics Corporation  
Registration Statement on Form S-8

Gentlemen:

We are rendering this opinion in connection with the registration by Environmental Tectonics Corporation, a Pennsylvania corporation (the "Company"), of 1,000,000 shares ( the "Shares") of its Common Stock, par value \$.05 per share, under the Securities Act of 1933, as amended, pursuant to the above-referenced Registration Statement (the "Registration Statement"). The Shares are reserved for issuance in accordance with and pursuant to the terms of the Company's 2009 Employee, Director and Consultant Stock Plan (the "Plan").

We have reviewed the Certificate of Incorporation, as amended, and the By-laws of the Company and have examined copies of the Plan, the resolutions adopted by the Company's Board of Directors, and originals or copies, certified or otherwise identified to our satisfaction, of such other documents, evidence of corporate action, certificates and other instruments, and have made such other investigations of law and fact, as we have deemed necessary or appropriate for the purposes of this opinion.

Based on the foregoing, and upon such further investigation as we have deemed relevant, we are of the opinion that the Shares, when issued in accordance with and pursuant to the terms of the Plan and any related award agreement or certificate, including payment of the applicable purchase price, will be duly authorized, validly issued, fully paid and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement relating to the Shares and to the use of our name wherever appearing in the Registration Statement and any amendment thereto.

Very truly yours,

/s/ Klehr, Harrison, Harvey, Branzburg & Ellers LLP

Klehr, Harrison, Harvey, Branzburg & Ellers LLP

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statement Form S-8 of Environmental Tectonics Corporation of our report, dated May 12, 2009 relating to the consolidated financial statements, which appear in Environmental Tectonics Corporation's Form 10-K for the year ended February 27, 2009.

/s/ Friedman LLP  
East Hanover, New Jersey

September 4, 2009