Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CLEAN ENERGY FUELS CORP.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

3020 Old Ranch Parkway, Suite 400 Seal Beach, California (Address of Principal Executive Offices) **33-0968580** (I.R.S. Employer Identification No.)

90740 (Zip Code)

2006 EQUITY INCENTIVE PLAN (Full title of the plan)

Andrew J. Littlefair President and Chief Executive Officer Clean Energy Fuels Corp. 3020 Old Ranch Parkway, Suite 400 Seal Beach, California 90740 (Name and Address of Agent For Service)

(562) 493-2804 (Telephone number, including area code, of agent for service)

Copy to:

Bruce A. Mann, Esq. Andrew D. Thorpe, Esq. Morrison & Foerster LLP 425 Market Street San Francisco, California 94105 Telephone: (415) 268-7000 Fax: (415) 268-7522

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 o

Accelerated filer x

Non-accelerated filer o (Do not check if a smaller reporting company)

Smaller reporting company o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)		Proposed Maximum Aggregate Offering Price	Amount of Registration Fee	
Common Stock, par value \$0.0001 per share	1,500,000 shares	\$	9.66	\$ 14,490,000	\$	808.54(3)

(1) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall cover any additional securities that may from time to time be offered or issued under the adjustment provisions of the employee benefit plan to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rules 457(c) and (h) promulgated under the Securities Act, based upon the average of the high and low prices of the registrant's common stock as reported on the Nasdaq Global Market on June 4, 2009.

(3) \$808.54 of the registration fee for this registration statement is being offset, pursuant to Rule 457(p) under the Securities Act, by the registration fees paid in connection with unsold securities registered by the registration Statement No. 333-137124 (initially filed on September 6, 2006).

EXPLANATORY NOTE

Pursuant to General Instruction E to Form S-8 under the Securities Act, this Registration Statement is filed for the purpose of registering 1,500,000 additional shares of our common stock to be issued pursuant to the Clean Energy Fuels Corp. Amended and Restated 2006 Equity Incentive Plan, which are the same class as those securities previously registered on Forms S-8 and filed with the Securities and Exchange Commission on August 14, 2007 (File No. 333-156776), April 14, 2008 (File No. 333-150331) and January 16, 2009 (File No. 333-145454), relating to the 2006 Equity Incentive Plan of the Registrant, and the contents of those Registration Statements, as amended, or as modified or superseded pursuant to Rule 412 under the Securities Act, are incorporated by reference into this Registration Statement.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the SEC are hereby incorporated by reference into this registration statement:

- (a) Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on March 16, 2009;
- (b) Quarterly Report on Form 10-Q filed on May 11, 2009;
- (c) Current Reports on Form 8-K filed on March 5, 2009, April 7, 2009, May 1, 2009 and May 11, 2009 and May 19, 2009; and
- (d) The description of our common stock which is contained in the registration statement on Form 8-A filed with the SEC on May 18, 2007.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, prior to the filing of a posteffective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this registration statement from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or deemed to be incorporated by reference herein modifies or supersedes such 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.

Item 8. Exhibits.

See Index to Exhibits.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) 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;

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(ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(i) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in 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 the Registration Statement.

(2) 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.

(3) 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.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 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 the 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant 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 Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant 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 Registrant 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant 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 has been signed on its behalf by the undersigned, thereunto duly authorized, in the City of Seal Beach, State of California, on June 5, 2009.

CLEAN ENERGY FUELS CORP.

By: /s/ Andrew J. Littlefair

Andrew J. Littlefair

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Andrew J. Littlefair and Richard R. Wheeler, jointly and severally, the undersigned's true and lawful attorney-in-fact and agent, each with full power of substitution and resubstitution, for the undersigned and in his or her name, place and stead, in any and all capacities (including the undersigned's capacity as a director and/or officer of Clean Energy Fuels Corp.), to sign any or all amendments (including post-effective amendments) to this registration statement and any other registration statement for the same offering, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agent, or his or her substitute, acting alone, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Name	Title	Date
/s/ Andrew J. Littlefair		June 5, 2009
Andrew J. Littlefair	President, Chief Executive Officer (Principal Executive Officer) and Director	
/s/ Richard R. Wheeler		June 5, 2009
Richard R. Wheeler	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	
/s/ Warren I. Mitchell		June 5, 2009
Warren I. Mitchell	Chairman of the Board of Directors	
/s/ John S. Herrington		June 5, 2009
John S. Herrington	Director	
/s/ James C. Miller III		June 5, 2009
James C. Miller III	Director	
/s/ Boone Pickens		June 5, 2009
Boone Pickens	Director	
/s/ Kenneth M. Socha		June 5, 2009
Kenneth M. Socha	Director	
/s/ Vincent C. Taormina		June 5, 2009
Vincent C. Taormina	Director	*
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EXHIBIT INDEX

The following documents are filed as exhibits to this registration statement:

Exhibit

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- 23.1 Consent of KPMG LLP
- 23.3 Consent of Morrison & Forester LLP (included in Exhibit 5.1)
- 24.1 Power of Attorney (See Signature Page)

MORRISON | FOERSTER

425 MARKET STREET SAN FRANCISCO CALIFORNIA 94105-2482

TELEPHONE: 415.268.7000 FACSIMILE: 415.268.7522

WWW.MOFO.COM

MORRISON & FOERSTER LLP

NEW YORK, SAN FRANCISCO, LOS ANGELES, PALO ALTO, SAN DIEGO, WASHINGTON, D.C.

NORTHERN VIRGINIA, DENVER, SACRAMENTO, WALNUT CREEK

TOKYO, LONDON, BEIJING, SHANGHAI, HONG KONG, SINGAPORE, BRUSSELS

June 5, 2009

Clean Energy Fuels Corp. 3020 Old Ranch Parkway, Suite 400 Seal Beach, California 90740

Re: Clean Energy Fuels Corp. 2006 Equity Incentive Plan

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-8 (the "<u>Registration Statement</u>") of Clean Energy Fuels Corp. (the "<u>Company</u>") to be filed with the Securities and Exchange Commission (the "<u>SEC</u>") in connection with the registration under the Securities Act of 1933, as amended, (the "<u>Securities Act</u>") of an aggregate of 1,500,000 shares (the "<u>Shares</u>") of your common stock, \$0.0001 par value (the "<u>Common Shares</u>"), which will be issuable under the Clean Energy Fuels Corp. 2006 Equity Incentive Plan, as amended and restated (the "<u>Plan</u>").

We have examined the originals, or photostatic or certified copies, of such records of the Company and certificates of officers of the Company and of public officials and such other documents as we have deemed relevant and necessary as the basis for the opinion set forth below. In our examination, we have assumed the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies.

For the purpose of the opinion rendered below, we have assumed that in connection with the issuance of the Shares under the Plan, the Company will receive consideration in an amount not less than the aggregate par value of the Shares covered by each such issuance.

Based upon the foregoing examination and in reliance thereon, and subject to the qualifications, assumptions and limitations stated herein and in reliance on the statements of fact contained in the documents that we have examined, we are of the opinion that the Shares, when issued and sold in accordance with the terms set forth in the Plan, will be validly issued, fully paid and non-assessable Common Shares.

We consent to the use of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ Morrison & Foerster LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors Clean Energy Fuels Corp.:

We consent to the incorporation by reference in the registration statement on Form S-8 of Clean Energy Fuels Corp. and subsidiaries of our report dated March 13, 2009, with respect to the consolidated balance sheets of Clean Energy Fuels Corp. and subsidiaries as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity and comprehensive (loss) income, and cash flows for each of the years in the three-year period ended December 31, 2008, and the related financial statement schedule, which report appears in the December 31, 2008, annual report on Form 10-K of Clean Energy Fuels Corp.

Our report dated March 13, 2009 refers to a change in the method of accounting for uncertain tax positions.

/s/ KPMG, LLP Los Angeles, California June 5, 2009