US ECOLOGY, INC. Form 8-K May 19, 2011

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): May 19, 2011

US ECOLOGY, INC.

(Exact name of registrant as specified in its charter)

DELAWARE 0-11688 95-3889638
(State or other jurisdiction of incorporation or organization) (Commission File Number) (I.R.S. Employer Identification Number)

Lakepointe Centre I, 300 E. Mallard Drive, Suite 300

300 83706 Boise, Idaho (Zip Code)

(Address of principal executive offices)

(208) 331-8400 (Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- "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 7.01. Regulation FD Disclosure

Attached as Exhibit 99.1 and furnished for purposes of Regulation FD is an Investor Presentation to be given by the Company at the Houlihan Lokey 6th Annual Global Industrials Conference on Thursday, May 19, 2011 at the Grand Hyatt in New York City.

In accordance with general instruction B.2 of Form 8-K, the information in this report (including Exhibit 99.1) is furnished and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

The following exhibits relating to Item 7.01 shall be deemed to be furnished, and not filed:

99.1 US Ecology, Inc. Investor Presentation – May 2011.

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.

US ECOLOGY, INC. (Registrant)

Date: May 19, 2011 By: /S/ Jeffrey R. Feeler Jeffrey R. Feeler

Vice President & Chief Financial Officer

uring the taxable year.

Effectively Connected Income

Any dividend with respect to, or gain recognized upon the sale, exchange or other taxable disposition of, our common stock that is effectively connected with a trade or business carried on by a Non-U.S. Stockholder within the United States (or, if an income tax treaty applies, that is attributable to a permanent establishment or fixed base maintained by such Non-U.S. Stockholder in the United States) will be subject to U.S. federal income tax, based on the Non-U.S. Stockholder's net income,

Table of Contents

generally in the same manner as if the Non-U.S. Stockholder were a United States person for U.S. federal income tax purposes. If a dividend or gain is effectively connected with a U.S. trade or business of a Non-U.S. Stockholder that is a corporation for U.S. federal income tax purposes, such corporate Non-U.S. Stockholder may be subject to a "branch profits tax" at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty), subject to certain adjustments. Non-U.S. Stockholders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Annual reporting to the IRS and to each Non-U.S. Stockholder will be required as to the amount of dividends paid to such Non-U.S. Stockholder and the amount, if any, of tax withheld with respect to such dividends, unless the Non-U.S. Stockholder is an exempt recipient or otherwise establishes an exemption from such requirements. This information may also be made available to the tax authorities in the Non-U.S. Stockholder's country of residence. Dividends generally are not subject to "backup withholding" if the Non-U.S. Stockholder properly certifies as to its non-U.S. status (usually by completing an IRS Form W-8BEN or W-8ECI).

The payment of the proceeds of the sale, exchange or other disposition of our common stock to or through the U.S. office of a broker will be subject to both backup withholding and information reporting unless the Non-U.S. Stockholder certifies its non-U.S. status on IRS Form W-8BEN or W-8ECI or otherwise establishes an exemption. Information reporting requirements, but not backup withholding, will also generally apply to payments of the proceeds of a sale, exchange or other disposition of our common stock by non-U.S. offices of U.S. brokers or non-U.S. brokers with certain types of relationships to the United States unless the Non-U.S. Stockholder establishes an exemption.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from payments made to a Non-U.S. Stockholder may be refunded or credited against such Non-U.S. Stockholder's U.S. federal income tax liability, if any, provided that the required information is timely furnished to the IRS.

Withholding on Payments to Foreign Financial Entities and Other Foreign Entities

Recently enacted legislation, commonly referred to as the Foreign Account Tax Compliance Act, or "FATCA," generally will impose a new 30% withholding tax on U.S. source dividends and gross proceeds from the sale or other disposition of stock or property that is capable of producing U.S. source dividends paid to (i) a foreign financial institution (as defined in Section 1471(d)(4) of the Code) unless the foreign financial institution enters into a reporting agreement with the U.S. Treasury Department to collect and disclose certain information regarding its U.S. account holders (including certain account holders that are foreign entities that have U.S. owners) and satisfies certain other requirements, and (ii) certain other non-U.S. entities unless the entity provides the payor with information regarding certain direct and indirect U.S. owners of the entity, or certifies that it has no such U.S. owners, and complies with certain other requirements. The IRS and the U.S. Treasury have proposed regulations and preliminary guidance that provide for the phased implementation of the tax, pursuant to which the tax would apply to dividends paid with respect to our common stock after December 31, 2013, and proceeds from the sale, exchange or other taxable disposition of shares of our common stock occurring after December 31, 2014.

Table of Contents

UNDERWRITING

Barclays Capital Inc. and Jefferies & Company, Inc. are acting as representatives of the underwriters and joint book-running managers of this offering. Under the terms of an underwriting agreement, which will be filed by us as an exhibit to a Current Report on Form 8-K and incorporated by reference into this prospectus supplement and the accompanying prospectus, each of the underwriters named below has severally agreed to purchase from the selling stockholders the respective number of shares of common stock shown opposite its name below.

Underwriters	Number of Shares
Barclays Capital Inc.	
Jefferies & Company, Inc.	
William Blair & Company, L.L.C.	
BMO Capital Markets Corp.	
KeyBanc Capital Markets Inc.	

Total 8,000,000

The underwriting agreement provides that the underwriters' obligation to purchase shares of common stock depends on the satisfaction of the conditions contained in the underwriting agreement including:

the obligation to purchase all of the shares of common stock offered hereby (other than those shares of common stock covered by their option to purchase additional shares as described below), if any of the shares are purchased;

the representations and warranties made by us and the selling stockholders to the underwriters are true;

there is no material change in our business or the financial markets; and

we deliver customary closing documents to the underwriters.

Commissions and Expenses

The following table summarizes the underwriting discounts and commissions the selling stockholders will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares. The underwriting fee is the difference between the initial price to the public and the amount the underwriters pay to the selling stockholders for the shares.

	No Exercise	Exercise
Per share	\$	\$
Total	\$	\$

The representatives of the underwriters have advised us that the underwriters propose to offer the shares of common stock directly to the public at the public offering price on the cover of this prospectus supplement and to selected dealers, which may include the underwriters, at such offering price less a selling concession not in excess of \$ per share. After the offering, the representatives may change the offering price and other selling terms. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

We have agreed to pay expenses incurred by the selling stockholders in connection with the offering, other than the underwriting discounts and commissions, which are estimated to be \$0.5 million.

Table of Contents

Option to Purchase Additional Shares

The selling stockholders have granted the underwriters an option exercisable for 30 days after the date of this prospectus supplement, to purchase, from time to time, in whole or in part, up to an aggregate of 1,200,000 shares at the public offering price less the underwriting discounts and commissions. This option may be exercised if the underwriters sell more than 8,000,000 shares in connection with this offering. To the extent that this option is exercised, each underwriter will be obligated, subject to certain conditions, to purchase its pro rata portion of these additional shares based on the underwriter's underwriting commitment in the offering as indicated in the table at the beginning of this Underwriting section.

Lock-Up Agreements

We, all of our directors and executive officers, and the selling stockholders have agreed that, without the prior written consent of each of Barclays Capital Inc. and Jefferies & Company, Inc., we and they will not directly or indirectly, (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could reasonably be expected to, result in the disposition by any person at any time in the future of) any shares of common stock (including, without limitation, shares of common stock that may be deemed to be beneficially owned by us or them in accordance with the rules and regulations of the SEC and shares of common stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for common stock, (2) enter into any swap or other derivative transaction that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock (other than in connection with this offering), (3) make any demand for or exercise any right or file or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of common stock or securities convertible, exercisable or exchangeable into common stock or any of our other securities, or (4) publicly disclose the intention to do any of the foregoing, for a period of 90 days after the date of this prospectus supplement. The foregoing restrictions do not apply to (i) bona fide gifts and certain transfers to affiliates and family members, (ii) transfers by will or intestacy, (iii) the exercise of outstanding options, (iv) transactions relating to shares of our common stock or other securities of the Company acquired in open market transactions, block purchases or pursuant to a public offering, (v) in the case of each of our executive officers, sales by each executive officer of up to 30,000 shares of our common stock during the period beginning 30 days after the date of this prospectus, or (vi) the sale of shares of our common stock to the underwriters pursuant to the terms of the underwriting agreement, provided that, in the case of each of the foregoing clauses (i) and (ii), the transferee agrees to be subject to the same restrictions.

The 90-day restricted period described in the preceding paragraph will be extended if: (i) during the last 17 days of such 90-day restricted period we issue an earnings release or material news or a material event relating to us occurs; or (ii) prior to the expiration of such 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of such 90-day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or occurrence of a material event, unless such extension is waived in writing by Barclays Capital Inc. and Jefferies & Company, Inc.

Barclays Capital Inc. and Jefferies & Company, Inc., in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice. When determining whether or not to release common stock and other securities from lock-up agreements, Barclays Capital Inc. and Jefferies & Company, Inc. will consider, among other factors, the holder's reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested and market conditions at the time.

Table of Contents

Indemnification

We and the selling stockholders have agreed to indemnify the underwriters against certain liabilities, and to contribute to payments that the underwriters may be required to make for these liabilities.

Stabilization, Short Positions and Penalty Bids

The representatives may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Exchange Act, as follows:

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriters may close out any short position by either exercising their option to purchase additional shares and/or purchasing shares in the open market. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through their option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the NYSE or otherwise and, if commenced, may be discontinued at any time.

Neither we nor any of the underwriters makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters makes any representation that the underwriters will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

Electronic Distribution

A prospectus supplement in electronic format may be made available on the Internet sites or through other online services maintained by one or more of the underwriters and/or selling group members participating in this offering, or by their affiliates. In those cases, prospective investors may

Table of Contents

view offering terms online and, depending upon the particular underwriter or selling group member, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the representatives on the same basis as other allocations.

Other than the prospectus supplement in electronic format, the information on any underwriter's or selling group member's web site and any information contained in any other web site maintained by an underwriter or selling group member is not part of the prospectus supplement or accompanying prospectus, has not been approved and/or endorsed by us or any underwriter or selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

The New York Stock Exchange

Our shares of common stock are listed on the NYSE under the symbol "THR."

Stamp Taxes

If you purchase shares of common stock offered in this prospectus supplement, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus supplement.

Relationships

Certain of the underwriters and their affiliates have engaged, and may in the future engage, in commercial and investment banking transactions with us in the ordinary course of their business. They have received, and expect to receive, customary compensation and expense reimbursement for these commercial and investment banking transactions. In particular, Jefferies & Company, Inc., BMO Capital Markets Corp. and KeyBanc Capital Markets Inc. were initial purchasers in our senior secured notes offering in April 2010. In addition, affiliates of BMO Capital Markets Corp. and KeyBanc Capital Markets Inc. are lenders under our revolving credit facility. Barclays Capital Inc. and Jefferies & Company, Inc. served as the representatives of the underwriters in our IPO and William Blair & Company, L.L.C., BMO Capital Markets Corp. and KeyBanc Capital Markets Inc. served as co-managers of the IPO. Each of these transactions were negotiated on an arm's length basis and contained or contains customary terms pursuant to which those parties received or receive customary fees and reimbursement for out-of-pocket costs.

Selling Restrictions

European Economic Area

This document is not a prospectus for the purposes of the Prospectus Directive (as defined below).

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (as defined below) (each, a "Relevant Member State") with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date"), an offer to the public of any shares of our common stock which are the subject of the offering contemplated by this prospectus supplement, may not be made in that Relevant Member State other than:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b)
 to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending
 Directive (as defined below), 150, natural or legal persons (other than qualified investors as defined in the Prospectus
 Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the Initial Purchasers for
 any such offer; or
- (c) in any other circumstances fully within Article 3(2) of the Prospectus Directive,

S-38

Table of Contents

provided that no such offer of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common stock to be offered so as to enable an investor to decide to purchase or subscribe for our common stock, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

This prospectus supplement is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive, which we refer to as Qualified Investors, that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, which we refer to as the Order, or (ii) high net worth entities, falling within Article 49(2)(a) to (d) of the Order, and (iii) any other person to whom it may lawfully be communicated pursuant to the Order, all such persons which we refer to together as relevant persons. This prospectus supplement and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. In the United Kingdom, any investment activity to which this prospectus supplement relates will only be available to, and will only be engaged with, relevant persons. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

All applicable provisions of the Financial Services and Markets Act 2000 (as amended) must be complied with in respect to anything done by any person in relation to our common stock in, from or otherwise involving the United Kingdom.

Switzerland

This document, as well as any other material relating to the shares which are the subject of the offering contemplated by this prospectus supplement, do not constitute an issue prospectus pursuant to Article 652a and/or 1156 of the Swiss Code of Obligations. The shares will not be listed on the SIX Swiss Exchange and, therefore, the documents relating to the shares, including, but not limited to, this document, do not claim to comply with the disclosure standards of the listing rules of the SIX Swiss Exchange. The shares are being offered in Switzerland by way of a private placement, i.e., to a small number of selected investors only, without any public offer and only to investors who do not purchase the shares with the intention to distribute them to the public. The investors will be individually approached by the issuer from time to time. This document, as well as any other material relating to the shares, is personal and confidential and do not constitute an offer to any other person. This document may only be used by those investors to whom it has been handed out in connection with the offering described herein and may neither directly nor indirectly be distributed or made available to other persons without express consent of the issuer. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in (or from) Switzerland.

Hong Kong

The shares of our common stock offered hereby may not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made under that Ordinance, or

Table of Contents

(b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32, Laws of Hong Kong), or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares of our common stock offered hereby may be issued or may be in the possession of any person for the purpose of the issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to the shares of our common stock offered hereby which are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) or any rules made under that Ordinance.

Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of our common stock offered hereby may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Future Act, Chapter 289 of Singapore, which we refer to as the SFA, (ii) to a "relevant person" as defined in Section 275(2) of the SFA, or any person pursuant to Section 275 (1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares of our common stock offered hereby are subscribed and purchased under Section 275 of the SFA by a relevant person which is:

- (a)

 a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b)
 a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole whole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable within six months after that corporation or that trust has acquired the shares under Section 275 of the SFA except
 - (i) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA) and in accordance with the conditions, specified in Section 275 of the SFA;
 - (ii)

 (in the case of a corporation) where the transfer arises from an offer referred to in Section 275(1A) of the SFA, or (in the case of a trust) where the transfer arises from an offer that is made on terms that such rights or interests are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets;
 - (iii) where no consideration is or will be given for the transfer; or
 - (iv) where the transfer is by operation of law.

By accepting this prospectus supplement, the recipient hereof represents and warrants that he is entitled to receive it in accordance with the restrictions set forth above and agrees to be bound by limitations contained herein. Any failure to comply with these limitations may constitute a violation of law.

LEGAL MATTERS

Certain legal matters in connection with this offering, including the validity of the shares of common stock offered hereby, will be passed upon for us by Sidley Austin LLP, Chicago, Illinois. Certain legal matters in connection with this offering will be passed upon for the underwriters by White & Case LLP, New York, New York.

EXPERTS

The consolidated financial statements of Thermon Group Holdings, Inc. at March 31, 2012 (Successor) and 2011 (Successor), and for the year ended March 31, 2012 (Successor), the period from May 1, 2010 to March 31, 2011(Successor), for the period from April 1, 2010 to April 30, 2010 (Predecessor) and for the year ended March 31, 2010 (Predecessor), incorporated herein by reference to our Annual Report on Form 10-K for the year ended March 31, 2012, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing therein and which, as to the 2010 fiscal year, are based in part on the reports of MNP LLP, Bell Partners and Shanghai Jialiang CPAs, independent registered public accounting firms, with respect to Thermon Canada Inc., Thermon Australia Pty Ltd. and Thermon Heat Tracing & Engineering (Shanghai) Co., Ltd., respectively. The financial statements referred to above for the 2010 fiscal year are included in reliance upon such reports given on the authority of such firms as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We are incorporating by reference certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any information that we reference this way is considered part of this prospectus supplement.

We incorporate by reference into this prospectus supplement the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act other than information furnished pursuant to Item 2.02 or 7.01 (including any financial statements or exhibits relating thereto furnished pursuant to Item 9.01) of any Current Report on Form 8-K, unless expressly stated otherwise in such Current Report on Form 8-K. You should review these filings as they may disclose a change in our business, prospects, financial condition or other affairs after the date of this prospectus.

This prospectus supplement incorporates by reference the documents listed below that we have filed with the SEC but have not included or delivered with this prospectus supplement:

our Annual Report on Form 10-K for the year ended March 31, 2012;

our Quarterly Report on Form 10-Q for the quarter ended June 30, 2012;

our Current Reports on Form 8-K, filed with the SEC on April 2, 2012, May 10, 2012, June 19, 2012, August 6, 2012 and August 21, 2012; and

the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on April 28, 2011 under Section 12(b) of the Exchange Act, including any amendment or report filed for the purposes of updating such description.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act, and, as a result, are required to file periodic reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at http://www.sec.gov, from which interested persons can electronically access the registration statement, including the exhibits and schedules thereto. Copies of the registration statement, including the exhibits and schedules thereto, are also available at your request, without charge, from Thermon Group Holdings, Inc., 100 Thermon Drive, San Marcos, TX 78666, Attention: Investor Relations. Our telephone number at that address is (512) 396-5801. We also maintain an Internet site at http://www.thermon.com. Our website and the information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part.

PROSPECTUS

Thermon Group Holdings, Inc.

\$250,000,000 Aggregate Offering Price of Common Stock, Preferred Stock, Debt Securities, Warrants, Stock Purchase Contracts and Stock Purchase Units Offered by Thermon Group Holdings, Inc.

18,079,940 Shares of Common Stock Offered by the Selling Stockholders

We may offer and sell, from time to time, in one or more offerings, common stock, preferred stock, debt securities, warrants, stock purchase contracts and stock purchase units for an aggregate initial offering price up to \$250,000,000 in amounts, at prices and on terms that will be determined at the time of any such offering.

In addition, from time to time, this prospectus may also be used by the selling stockholders identified in this prospectus or in the applicable prospectus supplement to sell up to 18,079,940 shares of our common stock. We will not receive any proceeds from the sales of shares of common stock by the selling stockholders. This prospectus does not necessarily mean that the selling stockholders will offer or sell any shares. We cannot predict when or in what amounts the selling stockholders may sell any of the shares offered by this prospectus or any prospectus supplement. The prices at which the selling stockholders may sell the shares will be determined by the prevailing market price for the shares of our common stock or in negotiated transactions.

Each time we or the selling stockholders offer securities using this prospectus, we will provide specific terms of the offering in a supplement to this prospectus. The prospectus supplement may also add, update or change information contained in this prospectus. Any statement contained in this prospectus is deemed modified or superseded by any inconsistent statement contained in an accompanying prospectus supplement. You should read this prospectus and any prospectus supplement, as well as the documents incorporated by reference in this prospectus, carefully before you invest.

Our common stock is listed on the New York Stock Exchange, or NYSE, under the symbol "THR." On May 31, 2012, the closing price of our common stock was \$20.31. We have not determined whether we will list any of the other securities we may offer on any exchange or over-the-counter market. If we decide to seek the listing of any such securities, the prospectus supplement will identify the exchange or market.

Investing in our securities involves risks. See "Risk Factors" beginning on page 4 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

We or the selling stockholders may sell securities directly or to or through underwriters, dealers or agents. For additional information on the method of sale, you should refer to the section entitled "Plan of Distribution." The names of any underwriters, dealers or agents involved in the sale of any securities and the specific manner in which they may be offered, including any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth in the prospectus supplement covering the sale of those securities.

Prospectus dated June 21, 2012

TABLE OF CONTENTS

	Page	
About this Prospectus	1	
Market and Industry Data	2	
Cautionary Statement Regarding Forward-Looking Statements	3	
Our Company	4	
Risk Factors	4	
Use of Proceeds	4	
Ratios of Earnings to Fixed Charges	5	
Selling Stockholders	6	
Description of Capital Stock	9	
Description of Debt Securities	12	
Description of Warrants	14	
Description of Stock Purchase Contracts and Stock Purchase Units	15	
Plan of Distribution	15	
Legal Matters	17	
Experts	17	
Incorporation of Certain Documents by Reference	17	
Where You Can Find More Information	18	

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under the shelf registration process, we may offer and sell, from time to time, in one or more offerings, any combination of the securities described in this prospectus having an aggregate initial offering price of up to \$250,000,000. In addition, the selling stockholders may offer and sell, from time to time, up to 18,079,940 shares of our common stock, in one or more offerings and at prices and on terms that they determine at the time of the offering, as described in this prospectus.

This prospectus provides you with a general description of the securities we may offer and the common stock the selling stockholders may offer. Each time we or the selling stockholders offer securities using this prospectus, we will provide you with a prospectus supplement or other offering materials that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change the information in this prospectus. Please carefully read this prospectus and the applicable prospectus supplement, together with the documents incorporated and deemed to be incorporated by reference in this prospectus and the additional information described below under the heading "Where You Can Find More Information."

As allowed by SEC rules, this prospectus does not contain all the information you can find in the registration statement or the exhibits to the registration statement. For further information, we refer you to the registration statement, including its exhibits. Statements contained in this prospectus about the provisions or contents of any contract, agreement or any other document referred to are not necessarily complete. For each of these contracts, agreements or documents filed as an exhibit to the registration statement, we refer you to the actual exhibit for a more complete description of the matters involved. You should rely only on the information incorporated or deemed to be incorporated by reference or provided in this prospectus and the applicable prospectus supplement. Neither we nor the selling stockholders have authorized any person to provide you with any information or to make any representation that is different from, or in addition to, the information and representations contained in this prospectus and any applicable prospectus supplement or in any of the documents that are incorporated by reference herein or therein. If anyone provides you with different or inconsistent information, you should not rely on it.

You should assume that the information appearing in this prospectus and any applicable prospectus supplement, as well as the information contained in any document incorporated by reference herein or therein, is accurate as of the date of each such document only, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy by anyone in any jurisdiction in which such offer or solicitation is not authorized, or in which the person is not qualified to do so or to any person to whom it is unlawful to make such offer or solicitation.

Unless otherwise specified or the context otherwise requires, references to "\$" or "dollars" in this prospectus or any prospectus supplement are to United States dollars, and the terms "Thermon," "we," "our," "us" and the "Company," as used in this prospectus or any prospectus supplement, refer to Thermon Group Holdings, Inc. and its directly and indirectly owned subsidiaries as a combined entity. Our fiscal year ends on March 31, so references to a particular "fiscal" year are to the twelve months ended on March 31 of the given calendar year.

MARKET AND INDUSTRY DATA

Certain market and industry data included or incorporated by reference in this prospectus has been obtained from third party sources that we believe to be reliable. We have not independently verified such third party information and cannot assure you of its accuracy or completeness. While we are not aware of any misstatements regarding any market, industry or similar data presented herein, such data involves risks and uncertainties and is subject to change based on various factors, including those discussed under the headings "Cautionary Statement Regarding Forward-Looking Statements" and "Risk Factors" in this prospectus.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements within the meaning of the U.S. federal securities laws in addition to historical information. These forward-looking statements are included throughout this prospectus, including in the sections entitled "About this Prospectus," "Market and Industry Data," "Our Company" and "Risk Factors" and include, without limitation, statements regarding our industry, business strategy, plans, goals and expectations concerning our market position, future operations, margins, profitability, capital expenditures, liquidity and capital resources and other financial and operating information. When used in this discussion, the words "anticipate," "assume," "believe," "budget," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "will," "future" and similar terms and phrases are intended to identify forward-looking statements in this prospectus.

Forward-looking statements reflect our current expectations regarding future events, results or outcomes. These expectations may or may not be realized. Some of these expectations may be based upon assumptions, data or judgments that prove to be incorrect. In addition, our business and operations involve numerous risks and uncertainties, many of which are beyond our control, which could result in our expectations not being realized or otherwise materially affect our financial condition, results of operations and cash flows. The statements include but are not limited to statements regarding: (i) our plans to strategically pursue emerging growth opportunities in diverse regions and across industry sectors; (ii) our plans to secure more new facility, or Greenfield, project bids; (iii) our ability to generate facility maintenance, repair and operations, or upgrades or expansions, or MRO/UE, revenue, from our existing and future installed base; (iv) our ability to timely deliver backlog; (v) our ability to respond to new market developments and technological advances; (vi) our expectations regarding energy consumption and demand in the future and its impact on our future results of operations; (vii) our plans to develop strategic alliances with major customers and suppliers; (viii) our expectations that our revenues will continue to increase; (ix) our belief in the sufficiency of our cash flows to meet our needs for the next year; and (x) our expectations regarding anticipated benefits from the recently completed expansion of our principal manufacturing facility in San Marcos, Texas.

Actual events, results and outcomes may differ materially from our expectations due to a variety of factors. Although it is not possible to identify all of these factors, they include, among others, (i) general economic conditions and cyclicality in the markets we serve; (ii) future growth of energy and chemical processing capital investments; (iii) changes in relevant currency exchange rates; (iv) our ability to comply with the complex and dynamic system of laws and regulations applicable to international operations; (v) a material disruption at any of our manufacturing facilities; (vi) our dependence on subcontractors and suppliers; (vii) our ability to obtain standby letters of credit, bank guarantees or performance bonds required to bid on or secure certain customer contracts; (viii) competition from various other sources providing similar heat tracing products and services, or other alternative technologies, to customers; (ix) our ability to attract and retain qualified management and employees, particularly in our overseas markets; (x) our ability to continue to generate sufficient cash flow to satisfy our liquidity needs; and (xi) the extent to which federal, state, local and foreign governmental regulation of energy, chemical processing and power generation products and services limits or prohibits the operation of our business. Any one of these factors or a combination of these factors could materially affect our future results of operations and could influence whether any forward-looking statements contained in this prospectus ultimately prove to be accurate. See also "Risk Factors" included elsewhere in this prospectus regarding the additional factors that have impacted or may impact our business and operations.

Our forward-looking statements are not guarantees of future performance, and actual results and future performance may differ materially from those suggested in any forward-looking statements. We do not intend to update these statements unless we are required to do so under applicable securities laws.

OUR COMPANY

We are one of the largest providers of highly engineered thermal solutions for process industries. For over 50 years, we have served a diverse base of thousands of customers around the world in attractive and growing markets, including energy, chemical processing and power generation. We are a global leader and one of the few thermal solutions providers with a global footprint and a full suite of products (heating cables, tubing bundles and control systems) and services (design optimization, engineering, installation and maintenance services) required to deliver comprehensive solutions to complex projects. We serve our customers locally through a global network of sales and service professionals and distributors in more than 30 countries and through our four manufacturing facilities on three continents. These capabilities and longstanding relationships with some of the largest multinational energy, chemical processing, power and engineering, procurement and construction, or EPC, companies in the world have enabled us to diversify our revenue streams and opportunistically access high growth markets worldwide.

Our thermal solutions, also referred to as heat tracing, provide an external heat source to pipes, vessels and instruments for the purposes of freeze protection, temperature and flow maintenance and environmental monitoring. Customers typically purchase our products when constructing a new facility, which we refer to as Greenfield projects, or when performing maintenance, repair and operations on a facility's existing heat-traced pipes or upgrading or expanding a current facility, which we refer to collectively as MRO/UE. Our products are low in cost relative to the total cost of a typical processing facility, but critical to the safe and profitable operation of the facility.

The business of the Company was founded as a partnership in October 1954 and later incorporated in Texas in 1960. Thermon Group Holdings, Inc. was incorporated in the State of Delaware in 2010. Our principal executive office is located at 100 Thermon Drive, San Marcos, Texas 78666, and our telephone number is (512) 396-5801. Our website address is www.thermon.com. Information on, or accessible through, our website is not a part of this prospectus or any applicable prospectus supplement and is not incorporated by reference in this prospectus.

RISK FACTORS

An investment in our securities involves a high degree of risk. You should consider carefully the risk factors contained in our most recent Annual Report on Form 10-K, filed with the SEC and incorporated by reference herein. You should also carefully consider the information set forth under "Risk Factors" in any applicable prospectus supplement and in our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, subsequent to our most recent Annual Report on Form 10-K and incorporated by reference herein. You should also consider all other information contained in and incorporated by reference in this prospectus or any applicable prospectus supplement before making an investment decision. Additional risks and uncertainties that are not yet identified or that we think are immaterial may also materially harm our business, financial condition, results of operations and prospects and could result in a complete loss of your investment.

USE OF PROCEEDS

Unless we state otherwise in the applicable prospectus supplement, we expect to use the net proceeds from the sale of the securities for general corporate purposes, including capital expenditures, working capital, repayment or reduction of long-term and short-term debt and the financing of acquisitions. The net proceeds may be invested temporarily in short-term marketable securities or applied to repay short-term debt until they are used for their stated purposes.

We will not receive any proceeds from sales of shares of our common stock by any selling stockholder named in this prospectus or in any prospectus supplement. The proceeds from such an offering would be solely for the account of the selling stockholders. We have agreed, however, to pay certain expenses relating to the registration of the shares of common stock under applicable securities laws.

4

RATIOS OF EARNINGS TO FIXED CHARGES

Our ratios of earnings to fixed charges for each of the periods indicated are set forth below. The information set forth below should be read together with the financial statements and the accompanying notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K for the year ended March 31, 2011 and in our Quarterly Report on Form 10-Q for the three and nine months ended December 31, 2011, each of which is incorporated by reference herein.

	P	re-Predecessor/ Predecessor				cessor/ essor	
		Combined			Com	bined	
	Pre-Predecessor(Non-GAAP)(1)	Prede	cessor	(Non-G	AAP)(2)	Successor
							Months nded
	Fise	cal Year Ended	March 3	31,			nber 31,
	2007	2008	2009	2010	2011	2010	2011
Ratio of earnings to fixed							
charges(3)	12.0x	1.1x	3.8x	5.2x	(4)	(4)	1.6x

- (1) Derived from the consolidated financial statements of Thermon Industries, Inc. ("Pre-Predecessor") for the period from April 1, 2007 through August 29, 2007 and the consolidated financial statements of Thermon Holdings, LLC ("Predecessor") for the period from August 30, 2007 through March 31, 2008.
- (2)

 Derived from the consolidated financial statements of Predecessor for the period from April 1, 2010 through April 30, 2010, and the consolidated financial statements of the Company ("Successor") for the period from April 30, 2010 through March 31, 2011.
- (3)

 For purposes of computing the ratio of earnings to fixed charges, earnings consist of income before income taxes plus fixed charges.

 Fixed charges consist of interest expense, amortization of deferred financing fees and one-third of rental expense, which amount management believes is representative of the interest component of rental expense.
- Earnings were insufficient to cover fixed charges in fiscal 2011 and the nine months ended December 31, 2010 by \$56.2 million and \$52.2 million, respectively, due to increased interest and amortization expenses, financing fees and other non-recurring expenses related to the acquisition of a controlling interest in us by an investor group led by our private equity sponsors, as described below, which was completed on April 30, 2010.

SELLING STOCKHOLDERS

This prospectus also relates to the possible offering and sale, from time to time, of up to 18,079,940 shares of our common stock by CHS Capital LLC, or CHS; Thompson Street Capital Partners II, L.P., or TSCP; and Crown Investment Series LLC Series 4, or Crown, or affiliates thereof, which we refer to collectively as our private equity sponsors, and certain of our current and former executive officers, employees and directors. Information about our private equity sponsors and current and former officers, employees and directors that may offer shares of common stock pursuant to this prospectus will be set forth in one or more prospectus supplements or in filings that we make with the SEC under the Exchange Act that are incorporated by reference in this prospectus. Each of our private equity sponsors and current and former officers, employees and directors who may offer shares of common stock pursuant to this prospectus acquired the shares in transactions that occurred prior to the date of the filing of the registration statement of which this prospectus forms a part. Our private equity sponsors, led by CHS, acquired their shares as part of the April 2010 acquisition of a controlling interest in the Company. The acquisition was financed in part by an equity investment by our private equity sponsors and certain current and former members of management and key employees, whom we collectively refer to as the management investors. Our private equity sponsors and management investors acquired 24,875,669 shares of our common stock in exchange for an aggregate investment of \$129,252,000. Our private equity sponsors and management investors sold 6,074,902 shares of our common stock as part of our initial public offering, or IPO.

Material Relationships with Selling Stockholders

Securityholder Agreement

The selling stockholders and certain of our other existing equity holders are parties to an amended and restated securityholder agreement, as amended, which we refer to as the Securityholder Agreement, that sets forth certain significant provisions relating to, among other things, our board of directors, open market transfer restrictions, drag-along rights and registration rights.

Board of directors. The Securityholder Agreement provides that each of the parties thereto will vote its shares of our common stock and take all other necessary actions to cause our board of directors to include, so long as CHS owns, in the aggregate, capital stock representing 5% or more of the outstanding shares of our common stock, one director designated by CHS. CHS has the right to remove at any time, and to fill any vacancy arising from time to time with respect to, its respective designated director. In addition, the Securityholder Agreement provides that CHS and TSCP may designate a non-voting observer reasonably acceptable to us to attend any meetings of our board of directors, for so long as each owns, in the aggregate, capital stock representing 5% or more of the outstanding shares of our common stock.

Transfer restrictions. The Securityholder Agreement places certain restrictions on the transfer of our securities in the open market by current and former employee stockholders. Pursuant to the terms of the Securityholder Agreement, the management investors have agreed to certain limitations on their sales of our common stock in the open market. The provisions of the Securityholder Agreement effectively limit the aggregate number of shares of our common stock that may be sold during each calendar quarter by each management investor to 12.5% of the shares of common stock held by that management investor (taking into account any vested options) immediately following the sale of shares pursuant to the partial exercise of the underwriters' over-allotment option in the IPO on May 26, 2011. These limitations will cease to apply when CHS no longer owns 10% or more of the outstanding shares of our common stock.

Drag-along rights. In the event that CHS approves a sale of the Company (whether by merger, sale of shares of common stock, sale of substantially all of the assets of the Company and our

subsidiaries, or otherwise), all other securityholders party to the Securityholder Agreement must, upon CHS' request, sell in such transaction the same percentage of their respective shares of common stock as CHS proposes to sell.

Registration Rights

Demand registration rights. The holders of at least a majority of the shares of our common stock that were originally issued to or transferred to CHS (other than those shares sold by CHS in the IPO or pursuant to one or more public offerings under the registration statement of which this prospectus forms a part) may, subject to certain exceptions and conditions, demand registration of part or all of such shares under the Securities Act of 1933, as amended, which we refer to as the Securities Act. Such securityholders are entitled to request an unlimited number of demand registrations and to select the managing underwriter for any public offering pursuant to such a demand registration, subject to our reasonable approval; provided, however, that such a registration may not be demanded during the six-month period immediately following the effective date of any long-form registration statement. We may, but not more than once in any 365-day period, defer such a registration for up to six months if we are advised by our counsel that undertaking such registration would accelerate the disclosure of a material development involving us, and we determine in good faith that such disclosure is not in our best interests. The registration statement of which this prospectus forms a part has been filed pursuant to a request made by CHS pursuant to such demand registration rights.

Piggyback registration rights. If, at any time, we determine (or are required as a result of a demand registration) to file a registration statement with the SEC covering any shares of our common stock, other than shares of common stock or other securities that are issuable in an offering to our officers or employees pursuant to an employee benefit plan or in connection with the acquisition of a business, each securityholder party to the Securityholder Agreement will have the right to request that we include their shares of common stock in any such registration statement, subject to specified limitations.

Cutback. In connection with the above demand and piggyback registrations, the managing underwriters may limit, including entirely, the number of shares offered for marketing reasons. In such case, the shares to be included in the registration will be prioritized in accordance with the terms of the Securityholder Agreement.

Expenses. We are required to pay the expenses associated with preparing and filing any registration statement in connection with the above demand and piggyback registrations, other than any underwriting discounts and commissions applicable to the sale of shares.

Manager Equity Agreements

We and CHS have entered into manager equity agreements with each of our management investors, which set forth additional provisions relating to the ownership of our securities. Pursuant to the manager equity agreements, each management investor will maintain the confidentiality of our confidential or proprietary information obtained as a result of such management investor's employment and is subject to non-competition and non-solicitation covenants during employment and for a period of two years thereafter. Upon the termination of a management investor's employment for cause, we will have the option to repurchase any of such management investor's securities at the lower of cost or the fair market value (as determined in good faith by our board of directors) of such securities. Rodney Bingham, George P. Alexander and René van der Salm are among the management investors who are party to manager equity agreements.

Management Fee

In connection with the IPO, we entered into an agreement with our private equity sponsors to terminate the management and consulting services provided under a then existing management services agreement and to eliminate our obligation to pay to them any management fees going forward. Pursuant to the terms of this termination agreement, in May 2011 we paid a one-time cash termination fee in the aggregate amount of \$7,356,757 (of which \$5,032,570 was paid to CHS, \$1,159,936 was paid to TSCP, \$1,107,906 was paid to Crown and \$56,345 was paid to Star Investment Series LLC Series 1, an entity related to Crown). Our obligations with respect to the indemnification of our private equity sponsors or their respective affiliates and reimbursement of their expenses were not affected by this termination. We financed the payment of the termination and advisory fees from available cash on hand.

Agreements with Management

In connection with the IPO, we entered into indemnification agreements with each of our directors and certain officers, including all of our named executive officers. The indemnification agreements and indemnification provisions included in our second amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. For further information, see Item 10, "Directors, Executive Officers and Corporate Governance Indemnification of Directors and Officers" in our Annual Report on Form 10-K for the year ended March 31, 2011, which is incorporated by reference herein.

DESCRIPTION OF CAPITAL STOCK

The authorized capital of the Company consists of 150,000,000 shares of common stock, \$0.001 par value per share, of which 30,351,412 shares are issued and outstanding as of May 31, 2012, and 10,000,000 shares of preferred stock, \$0.001 par value per share, of which no shares are issued and outstanding as of the date of this prospectus. The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our second amended and restated certificate of incorporation and amended and restated bylaws, and to the applicable provisions of the General Corporation Law of the State of Delaware, which we refer to as the DGCL.

Common Stock

Shares of our common stock have the following rights, preferences and privileges:

Voting Rights. Each outstanding share of common stock entitles its holder to one vote on all matters submitted to a vote of our stockholders, including the election of directors. There are no cumulative voting rights. Generally, all matters to be voted on by stockholders must be approved by a majority of the votes cast by the shares of common stock present in person or represented by proxy and entitled to vote.

Dividends. Subject to the rights of the holders of any preferred stock which may be outstanding from time to time, the holders of common stock are entitled to receive dividends as, when and if dividends are declared by our board of directors out of assets legally available for the payment of dividends. We currently intend to retain earnings to finance the growth and development of our business and for working capital and general corporate purposes. In any event, any determination to pay dividends will be at the discretion of our board of directors and will be dependent upon our results of operations and cash flows, our financial position and capital requirements, general business conditions, and legal, tax, regulatory or contractual restrictions on the payment of dividends, including the restrictions contained in the agreements governing our outstanding indebtedness and any other factors our board of directors deems relevant.

Liquidation. In the event of a liquidation, dissolution or winding up of our affairs, whether voluntary or involuntary, after payment of our liabilities and obligations to creditors and any holders of preferred stock, our remaining assets will be distributed ratably among the holders of shares of common stock on a per share basis.

Rights and Preferences. Our common stock has no preemptive, redemption, conversion or subscription rights. The rights, powers, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Merger. In the event we merge or consolidate with or into another entity, holders of each share of common stock will be entitled to receive the same per share consideration.

Preferred Stock

Our second amended and restated certificate of incorporation provides that the board of directors has the authority, without action by the stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more classes or series and to fix for each class or series the powers, rights, preferences and privileges of each series of preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any class or series, which may be greater than the rights of the holders of the common stock. There are no shares of preferred stock currently outstanding as of the date of this prospectus. Any issuance of shares of preferred stock could adversely affect the voting power of holders of common stock, and the likelihood that the holders will receive dividend payments and payments upon liquidation could have the effect of delaying, deferring or preventing a change in control.

Anti-Takeover Effects of Provisions of Our Second Amended and Restated Certificate of Incorporation, Our Amended and Restated Bylaws and Delaware Law

Some provisions of Delaware law, our second amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could have the effect of delaying, deterring or preventing another party from acquiring or seeking to acquire control of us. These provisions are intended to discourage certain types of coercive takeover practices and inadequate takeover bids and to encourage anyone seeking to acquire control of us to negotiate first with our board of directors. However, these provisions may also delay, deter or prevent a change in control or other takeover of our company that our stockholders might consider to be in their best interests, including transactions that might result in a premium being paid over the market price of our common stock, and also may limit the price that investors are willing to pay in the future for our common stock. These provisions may also have the effect of preventing changes in our management.

Certificate of Incorporation and Bylaws

Our second amended and restated certificate of incorporation and amended and restated bylaws include anti-takeover provisions that:

authorize our board of directors, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, and with respect to each series, to fix the number of shares constituting that series and establish the rights and other terms of that series;

require that actions to be taken by our stockholders may be taken only at an annual or special meeting of our stockholders and not by written consent;

specify that special meetings of our stockholders can be called only by our board of directors, the chairman of our board of directors, our chief executive officer or our president;

establish advance notice procedures for stockholders to submit nominations of candidates for election to our board of directors and other proposals to be brought before a stockholders meeting;

provide that our amended and restated bylaws may be amended by our board of directors without stockholder approval;

allow our directors to establish the size of the board of directors by action of the board, subject to a minimum of three members;

provide that vacancies on our board of directors or newly created directorships resulting from an increase in the number of our directors may be filled only by a majority of directors then in office, even though less than a quorum;

do not give the holders of our common stock cumulative voting rights with respect to the election of directors; and

prohibit us from engaging in certain business combinations with any "interested stockholder" (as defined below) unless specified conditions are satisfied as described below under " Business Combinations."

Business Combinations

We have opted out of Section 203 of the DGCL, which regulates corporate takeovers. However, our second amended and restated certificate of incorporation contains provisions that are similar to Section 203 of the DGCL. Specifically, our second amended and restated certificate of incorporation

provides that we may not engage in certain "business combinations" with any "interested stockholder" for a three-year period following the time that the person became an interested stockholder, unless:

prior to the time that person became an interested stockholder, our board of directors approved either the business combination or the transaction which resulted in the person becoming an interested stockholder;

upon consummation of the transaction which resulted in the person becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding certain shares; or

at or subsequent to the time the person became an interested stockholder, the business combination is approved by the board of directors and by the affirmative vote of at least 66²/₃% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, consolidation, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an interested stockholder is a person who, together with that person's affiliates and associates, owns, or within the previous three years owned, 15% or more of our voting stock. However, in the case of our company, CHS, TSCP and Crown, and any of their respective permitted transferees receiving 15% or more of our voting stock, will not be deemed to be interested stockholders regardless of the percentage of our voting stock owned by them. These provisions could prohibit or delay mergers or other takeover or change in control attempts with respect to us and, accordingly, may discourage attempts to acquire us.

Corporate Opportunity

Our second amended and restated certificate of incorporation provides that we renounce any interest or expectancy in, or in being offered an opportunity to participate in, any business opportunity that may be from time to time presented to our private equity sponsors or any of their respective affiliates (other than us and our subsidiaries), subsidiaries, officers, directors, agents, stockholders, members, partners and employees and that may be a business opportunity for such private equity sponsor, even if the opportunity is one that we or our subsidiaries might reasonably have pursued or had the ability or desire to pursue if granted the opportunity to do so. No such person will be liable to us for breach of any fiduciary or other duty, as a director or officer or otherwise, by reason of the fact that such person, acting in good faith, pursues or acquires any such business opportunity, directs any such business opportunity to another person or fails to present any such business opportunity, or information regarding any such business opportunity, to us unless, in the case of any such person who is our director or officer, any such business opportunity is expressly offered to such director or officer solely in his or her capacity as our director or officer. None of our private equity sponsors has any duty to refrain from engaging directly or indirectly in the same or similar business activities or lines of business as us or any of our subsidiaries.

Limitations on Liability and Indemnification of Officers and Directors

Our second amended and restated certificate of incorporation and amended and restated bylaws limit the liability of our directors to the fullest extent permitted by the DGCL and provide that we will indemnify our officers and directors to the fullest extent permitted by the DGCL. We currently maintain director and officer liability insurance, and intend to continue doing so if such insurance remains available on commercially reasonable terms.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, located at 6201 15th Avenue, Brooklyn, New York 11219.

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of the debt securities that we may issue from time to time in the form of one or more series of debt securities. We may offer secured or unsecured debt securities which may be senior or subordinated and which may be convertible. The applicable prospectus supplement and/or other offering materials will describe the specific terms of the debt securities offered through that prospectus supplement as well as any general terms described in this section that will not apply to those debt securities. To the extent the applicable prospectus supplement or other offering materials relating to an offering of debt securities are inconsistent with this prospectus, the terms of that prospectus supplement or other offering materials will supersede the information in this prospectus. In this "Description of Debt Securities," unless otherwise indicated, "we," "our," "the Company" and similar words refer to Thermon Group Holdings, Inc. and not any of its subsidiaries.

The debt securities will be issued under one or more indentures to be entered into between us and one or more trustees. References herein to the "indenture" and the "trustee" refer to the applicable indenture and the applicable trustee pursuant to which any particular series of debt securities is issued. The terms of any series of debt securities will be those specified in or pursuant to the applicable indenture and in the certificates evidencing that series of debt securities and those made part of the indenture by the Trust Indenture Act of 1939, as amended, which we refer to as the Trust Indenture Act. We may issue senior, subordinated and convertible debt securities under the same indenture.

The following summary of selected provisions of the indenture and the debt securities is not complete, and the summary of selected terms of a particular series of debt securities included in the applicable prospectus supplement also will not be complete. You should review the applicable form of indenture and the applicable form of certificate evidencing the debt securities, which forms have been or will be filed as exhibits to the registration statement of which this prospectus is a part or as exhibits to documents which have been or will be incorporated by reference in this prospectus. To obtain a copy of the indenture or the form of certificate for the debt securities, see "Where You Can Find More Information" in this prospectus. The following summary and the summary in any applicable prospectus supplement are qualified in their entirety by reference to all of the provisions of the indenture and the certificates evidencing the debt securities (including any amendments or supplements we may enter into from time to time which are permitted under the debt securities or any indenture), which provisions, including defined terms, are incorporated by reference in this prospectus.

Unless otherwise specified in a prospectus supplement, the debt securities will be direct unsecured obligations of the Company and will rank junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness, and will be structurally junior to all existing and future indebtedness incurred by our subsidiaries. Any debt securities designated as senior will rank equally with any of our other senior and unsubordinated debt. Any debt securities designated as subordinated will be subordinate and junior in right of payment to any senior indebtedness. There may be subordinated debt securities that are senior or junior to other series of subordinated debt securities.

The applicable prospectus supplement will set forth the terms of the debt securities or any series thereof, including, if applicable:

the title of the debt securities and whether the debt securities will be senior debt securities or subordinated debt securities;

any limit upon the aggregate principal amount of the debt securities;

whether the debt securities will be issued as registered securities, bearer securities or both, and any restrictions on the exchange of one form of debt securities for another and on the offer, sale and delivery of the debt securities in either form;

the date or dates on which the principal amount of the debt securities will mature;

if the debt securities bear interest, the rate or rates at which the debt securities bear interest, or the method for determining the interest rate, and the date or dates from which interest will accrue;

if the debt securities bear interest, the dates on which interest will be payable, or the method for determining such dates, and the regular record dates for interest payments;

the place or places where the payment of principal, any premium and interest will be made, where the debt securities may be surrendered for transfer or exchange and where notices or demands to or upon us may be served;

any optional redemption provisions, which would allow us to redeem the debt securities in whole or in part;

any sinking fund or other provisions that would obligate us to redeem, repay or purchase the debt securities;

if the currency in which the debt securities will be issuable is United States dollars, the denominations in which any registered securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof;

if other than the entire principal amount, the portion of the principal amount of debt securities which will be payable upon a declaration of acceleration of the maturity of the debt securities;

the events of default and covenants relevant to the debt securities, including the inapplicability of any event of default or covenant set forth in the indenture relating to the debt securities, or the applicability of any other events of defaults or covenants in addition to the events of default or covenants set forth in the indenture relating to the debt securities;

the name and location of the corporate trust office of the applicable trustee under the indenture for such series of notes;

if other than United States dollars, the currency in which the debt securities will be paid or denominated;

if the debt securities are to be payable, at our election or the election of a holder of the debt securities, in a currency other than that in which the debt securities are denominated or stated to be payable, the terms and conditions upon which that election may be made, and the time and manner of determining the exchange rate between the currency in which the debt securities are denominated or stated to be payable and the currency in which the debt securities are to be so payable;

the designation of the original currency determination agent, if any;

if the debt securities are issuable as indexed securities, the manner in which the amount of payments of principal, any premium and interest will be determined;

if the debt securities do not bear interest, the dates on which we will furnish to the applicable trustee the names and addresses of the holders of the debt securities;

if other than as set forth in an indenture, provisions for the satisfaction and discharge or defeasance or covenant defeasance of that indenture with respect to the debt securities issued under that indenture;

the date as of which any bearer securities and any global security will be dated if other than the date of original issuance of the first debt security of a particular series to be issued;

13

whether and under what circumstances we will pay additional amounts to non-United States holders in respect of any tax assessment or government charge;

whether the debt securities will be issued in whole or in part in the form of a global security or securities and, in that case, any depositary and global exchange agent for the global security or securities, whether the global form shall be permanent or temporary and, if applicable, the exchange date;

if debt securities are to be issuable initially in the form of a temporary global security, the circumstances under which the temporary global security can be exchanged for definitive debt securities and whether the definitive debt securities will be registered securities, bearer securities or will be in global form and provisions relating to the payment of interest in respect of any portion of a global security payable in respect of an interest payment date prior to the exchange date;

the extent and manner to which payment on or in respect of debt securities will be subordinated to the prior payment of our other liabilities and obligations;

whether payment of any amount due under the debt securities will be guaranteed by one or more guarantors, including one or more of our subsidiaries;

whether the debt securities will be convertible and the terms of any conversion provisions;

the forms of the debt securities; and

any other terms of the debt securities, which terms shall not be inconsistent with the requirements of the Trust Indenture Act.

This prospectus is part of a registration statement that provides that we may issue debt securities from time to time in one or more series under one or more indentures, in each case with the same or various maturities, at par or at a discount. Unless otherwise indicated in a prospectus supplement, we may issue additional debt securities of a particular series without the consent of the holders of the debt securities of such series outstanding at the time of the issuance. Any such additional debt securities, together with all other outstanding debt securities of that series, will constitute a single series of debt securities under the applicable indenture.

We intend to disclose any restrictive covenants for any issuance or series of debt securities in the applicable prospectus supplement.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase debt securities, shares of common stock or shares of preferred stock. We may issue warrants independently or together with other securities. Warrants sold with other securities may be attached to or separate from the other securities. We will issue warrants under one or more warrant agreements between us and a warrant agent that we will name in the prospectus supplement.

The prospectus supplement relating to any warrants we are offering will include specific terms relating to the offering. These terms will include some or all of the following:

the title of the warrants;

the aggregate number of warrants offered;

the designation, number and terms of the debt securities, shares of common stock or shares of preferred stock purchasable upon exercise of the warrants and procedures by which those numbers may be adjusted;

the exercise price of the warrants;
the dates or periods during which the warrants are exercisable;
the designation and terms of any securities with which the warrants are issued;
if the warrants are issued as a unit with another security, the date on and after which the warrants and the other security will be separately transferable;
if the exercise price is not payable in U.S. dollars, the foreign currency, currency unit or composite currency in which the exercise price is denominated;
any minimum or maximum amount of warrants that may be exercised at any one time;
any terms relating to the modification of the warrants; and
any terms, procedures and limitations relating to the transferability, exchange or exercise of the warrants.
DESCRIPTION OF STOCK PURCHASE CONTRACTS AND STOCK PURCHASE UNITS
We may issue stock purchase contracts, including contracts obligating holders to purchase from us, and us to sell to the holders, a specified number of shares of common stock at a future date or dates, which we refer to in this prospectus as stock purchase contracts. The price per share of common stock and number of shares of common stock may be fixed at the time the stock purchase contracts are issued or may be determined by reference to a specific formula set forth in the stock purchase contracts. The stock purchase contracts may be issued separately or as a part of units consisting of a stock purchase contract and our debt securities or debt obligations of third parties, securing the holders' obligations to purchase the shares of common stock under the stock purchase contracts, which we refer to in this prospectus as stock purchase units. The stock purchase contracts may require holders to secure their obligations thereunder in a specified manner. The stock purchase contracts also may require us to make periodic payments to the holders of the stock purchase units or vice-versa and such payments may be unsecured or prefunded on some basis.
The applicable prospectus supplement will describe the terms of any stock purchase contracts or stock purchase units. The description in the prospectus supplement will not necessarily be complete, and reference will be made to the stock purchase contracts, and, if applicable, collateral or depositary arrangements, relating to the stock purchase contracts or stock purchase units. Material United States federal income tax considerations applicable to the stock purchase units and the stock purchase contracts will also be discussed in the applicable prospectus supplement.
PLAN OF DISTRIBUTION
We or the selling stockholders may sell the applicable securities covered by this prospectus from time to time in one or more transactions, including, without limitation:
directly to one or more purchasers;
through agents;

to or through underwriters, brokers or dealers; or

through a combination of any of these methods.

A distribution of the securities offered by this prospectus may also be effected through the issuance of derivative securities, including, without limitation, warrants, subscriptions, exchangeable securities, forward delivery contracts and the writing of options.

15

In addition, the manner in which we may sell some or all of the securities covered by this prospectus and the manner in which the selling stockholders may sell their shares of common stock, include, without limitation, through:

a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;

purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;

ordinary brokerage transactions and transactions in which a broker solicits purchasers; or

privately negotiated transactions.

We or the selling stockholders may also enter into hedging transactions. For example, we or the selling stockholders may:

enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of shares of common stock pursuant to this prospectus, in which case such broker-dealer or affiliate may use shares of common stock received from us or the selling stockholders, as applicable, to close out its short positions;

sell securities short and re-deliver such shares to close out our or the selling stockholders' short positions;

enter into option or other types of transactions that require us or the selling stockholders, as applicable, to deliver shares of common stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the shares of common stock under this prospectus; or

loan or pledge the shares of common stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event of default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

A prospectus supplement with respect to each offering of securities will state the terms of the offering of the securities, including:

the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;

the public offering price or purchase price of the securities and the net proceeds, if any, to be received from the sale by us or the selling stockholders;

any delayed delivery arrangements;

any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;

any discounts or concessions allowed or reallowed or paid to dealers; and

any securities exchange or markets on which the securities may be listed.

16

The offer and sale of the securities described in this prospectus by us, the selling stockholders, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

at a fixed price or prices, which may be changed;
at market prices prevailing at the time of sale;
at prices related to the prevailing market prices; or
at negotiated prices.

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallowed or paid to underwriters, dealers, agents or remarketing firms may be changed from time to time. The selling stockholders, underwriters, dealers, agents and remarketing firms that participate in the distribution of the offered securities may be "underwriters" as defined in the Securities Act. Any discounts or commissions they receive from us or the selling stockholders and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We or the selling stockholders will identify any underwriters, agents or dealers and describe their commissions, fees or discounts in the applicable prospectus supplement.

Members of the Financial Industry Regulatory Authority, Inc., or FINRA, may participate in distributions of the offered debt securities. In compliance with the guidelines of FINRA, as of the date of this prospectus, the maximum discount or commission to be received by any FINRA member or independent broker-dealer may not exceed 8.0% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

The legality of the securities offered hereby will be passed upon for us by Sidley Austin LLP, Chicago, Illinois. The legality of the securities offered hereby and certain other matters for any underwriters, dealers or agents will be passed upon by counsel as may be specified in the applicable prospectus supplement.

EXPERTS

Our consolidated financial statements as of March 31, 2011(Successor) and 2010 (Predecessor) of Thermon Holdings, LLC, and the related consolidated statements of operations, members'/shareholders' equity, and cash flows for the period from May 1, 2010 to March 31, 2011(Successor), for the period from April 1, 2010 to April 30, 2010 (Predecessor) and for the years ended March 31, 2010 and 2009 (Predecessor), incorporated in the registration statement of which this prospectus forms a part by reference to the Company's Annual Report on Form 10-K for the period ended March 31, 2011, have been audited by Ernst & Young LLP, independent registered public accounting firm, as stated in their report thereon appearing therein, and are based in part on the reports of MNP LLP, Bell Partners and Shanghai Jialiang CPAs, with respect to Thermon Canada Inc., Thermon Australia Pty Ltd. and Thermon Heat Tracing & Engineering (Shanghai) Co., Ltd., respectively. The financial statements referred to above are included in reliance upon such reports given on the authority of such firms as experts in accounting and auditing.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We are incorporating by reference certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any information that we reference this way is considered part of this prospectus.

We incorporate by reference into this prospectus the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial registration statement and prior to effectiveness of the registration statement and (ii) between the date of this prospectus and the date of the closing of each offering, other than information furnished pursuant to Item 2.02 or 7.01 (including any financial statements or exhibits relating thereto furnished pursuant to Item 9.01) of any Current Report on Form 8-K, unless expressly stated otherwise in such Current Report on Form 8-K. You should review these filings as they may disclose a change in our business, prospects, financial condition or other affairs after the date of this prospectus.

This prospectus incorporates by reference the documents listed below that we have filed with the SEC but have not included or delivered with this prospectus:

our Annual Report on Form 10-K for the fiscal year ended March 31, 2011, filed with the SEC on June 20, 2011;

our Quarterly Reports on Form 10-Q for the quarters ended June 30, 2011, September 30, 2011 and December 31, 2011, filed with the SEC on August 12, 2011, November 14, 2011 and February 9, 2012, respectively;

our Current Reports on Form 8-K filed on May 13, 2011, June 2, 2011, June 7, 2011, July 11, 2011, August 5, 2011, November 22, 2011, April 2, 2012 and May 10, 2012, and our Current Report on Form 8-K/A filed on July 7, 2011; and

the description of Thermon Group Holdings, Inc.'s common stock contained in the Company's registration statement on Form 8-A filed with the SEC on April 28, 2011 under Section 12(b) of the Exchange Act, including any amendment or report filed for the purposes of updating such description.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is, or is deemed to be, incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act, and, as a result, are required to file periodic reports, proxy statements and other information with the SEC. We have filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the shares of our common stock covered by this prospectus. This prospectus is a part of that registration statement. The registration statement contains additional important information about us and our capital stock. The rules and regulations of the SEC allow us to omit from this prospectus certain information that is included in the registration statement. You should refer to the registration statement and its exhibits to read that information.

You may read and copy the registration statement, the related exhibits, the periodic reports we file and the other material we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at http://www.sec.gov, from which interested persons can electronically access the registration statement, including the exhibits thereto. Copies of the registration statement, including the exhibits thereto, are also available at your request, without charge, from Thermon Group Holdings, Inc., 100 Thermon Drive, San Marcos, TX 78666, Attention: Investor Relations. Our telephone number at that address is (512) 396-5801. We also maintain an Internet site at http://www.thermon.com. Our website and the information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part.

8,000,000 Shares

Thermon Group Holdings, Inc.

Common Stock

Prospectus Supplement September , 2012

Joint Book-Running Managers

Barclays

Jefferies

Co-Managers

William Blair

BMO Capital Markets

KeyBanc Capital Markets