

Mail Stop 4561

July 28, 2009

David Rendina
President and Chief Executive Officer
Global Cooling Technologies Corp.
112 North Curry Street
Carson City, Nevada 89703

**Re: Global Cooling Technologies Corp.
Registration Statement on Form S-1
Filed June 1, 2009
File No. 333-160366**

Dear Mr. Rendina:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Prospectus Cover Page

1. Please revise the cover page to state that there is no minimum number of shares that must be sold by the company for the offering to proceed and that the company will retain the proceeds from the sale of any of the offered shares. Consider deleting the seventh sentence of the first paragraph as it appears that this information is not appropriate for the cover page, or tell us in your response letter why you believe this information should be highlighted for investors on the cover page.

Risk Factors, page 5

Because our current President and Chief Executive Officer has other business interests...., page 8

2. You state that David Rendina, the President and Chief Executive Officer, currently devotes approximately five hours per week providing management services to the company. Please expand this risk factor to disclose Mr. Rendina's employment arrangements with other companies and any potential conflicts of interest or business opportunities that may arise from his involvement with these other companies.

We will incur ongoing costs and expenses for SEC reporting and compliance...., page 9

3. It appears there is a material risk that the company will lack sufficient capital resources to discharge the significant additional expenses that would be expected once it becomes a reporting company subject to the requirements of Section 15(d) of the Exchange Act. We note your disclosure on page 13 that you "anticipate spending an additional \$500,000 on professional and administrative fees, including fees payable in connection with the filing of this registration statement, complying with reporting obligations and arranging financing for Phase I and II of [y]our development program." Please expand this risk factor to alert investors to the substantial increases in administrative costs that will be experienced after the effective date, and indicate the anticipated minimum amount of such increased expenses.

We have yet to earn revenue and our ability to sustain our operations is dependent...., page 6

4. We note your disclosure here and elsewhere in the filing that if you fail to raise sufficient capital, the company may need to liquidate the business, and that "finances required to fully develop [y]our plan cannot be predicted with any certainty." Please disclose the *minimum* dollar amount of funding you require to conduct proposed operations for a minimum period of one year. Also, clarify here as you do in the Management's Discussion and Analysis that the total "expenditures over the next 12 months are expected to exceed the sum of both your cash on hand and amount to be raised in this offering," and that you will require additional funding but have "no current plans on how to raise the funds."

Use of Proceeds, page 9

5. Please state clearly the principal purposes for which the net proceeds in this offering are intended to be used in accordance with Item 504 of Regulation S-K. Also, disclose the interest rate of the loan by Mr. Rendina to pay for the offering expenses. See Instruction 4 to Item 504 of Regulation S-K.

Dilution, page 10

6. Based on the Staff's calculations, it appears that the net tangible book value per share would be \$0.08 per share assuming 50% of the shares are sold and \$0.06 per share assuming 25% of the shares. Accordingly, the dilution per share would be \$0.02 and \$0.04, respectively. Please provide the calculations that support the dilution per share information assuming (a) 50% of the shares are sold and (b) 25% of the shares are sold or revise your disclosures accordingly.

Management's Discussion and Analysis of Financial Conditions and Results of Operations, page 12

7. You state that you believe that your "cash balance is not sufficient to fund [y]our limited levels of operations for any period of time." We note that you estimate total expenditures to be approximately \$9 million over the next 12 months, while your current cash is \$7,125. Please amend your filing to provide more quantitative information regarding your financial requirements to enable investors to assess the company's financial condition and the likelihood it will be able to pursue its business plan, and the risks associated with a "no minimum" offering structure. See Item 303(a)(1) of Regulation S-K and Instructions 2 and 3 to Item 303(a) of Regulation S-K for additional guidance.
 - State the minimum period of time that you will be able to conduct planned operations using currently available capital resources
 - Discuss the impact on your business and any course of action you plan to take if you sell less than all of the securities being offered in this registration statement. In this regard, discuss whether you will continue to seek additional funding for the development program if you are unsuccessful in raising funds from this offering.
8. Please revise this section to discuss the most significant business challenges that management expects to encounter over the next year and beyond as well as the known trends, demands and uncertainties that may affect the company's financial condition. Consider discussing the material challenges of becoming a publicly reporting company.

Directors, Executive Officers, Promoter and Control Persons, page 19

9. We note that the biographical information of David Rendina does not include the dates of his employment for the past five years. We also note that Mr. Rendina is the Chief Executive Officer of Refinery Science Corp., in addition to his positions as President and Director, according to the registration statement filed by Refinery Science Corp. Please revise to include all details of his employment as required by Item 401(e) of Regulation S-K.
10. Please provide disclosure regarding the independence of your director as required by Item 407(a) of Regulation S-K.

Executive Compensation, page 20

11. You state that David Rendina received 10,000 shares of common stock in exchange for his services as President, Chief Executive Officer, and Chairman of the Board of Director for a term of one year beginning on July 8, 2008 pursuant to a Stock Subscription Agreement. It appears that this compensation should be disclosed in the summary compensation table in accordance with FAS 123R. See Item 402(n)(2)(v) of Regulation S-K. Please revise the disclosure, or advise us why you have not disclosed the dollar amounts in the summary compensation table. Further, it appears that the Stock Subscription Agreement has expired. Please update this disclosure and file any agreements that have been amended or any new agreement relating to Mr. Rendina's employment.

Description of Securities, page 22

12. You state on page 22 that as of July 12, 2009, there were 100,000 shares of common stock issued and outstanding held by one registered stockholder of record, but state elsewhere throughout in the filing that there were 10,000 shares of common stock as of July 12, 2009. Please revise.
13. We note your disclosure on page 23 that the description of the common stock and the blank check preferred stock are "qualified in its entirety by" the provisions of the Articles of Incorporation and Bylaws. Please ensure that this section provides a materially complete description of the securities and delete the disclaimer that the text in this section is "qualified in its entirety" by reference to the company's organizational documents.

Item 17. Undertakings, page 28

14. It appears that the undertaking required by Item 512(i) of Regulation S-K relating to Rule 430A does not seem applicable. Please revise or explain.

Exhibit 5.1. Opinion and Consent of Counsel

15. Please revise your legality opinion so that it references the class and amount of securities being offered for sale pursuant to your registration statement.

* * * * *

As appropriate, please amend your registration statement in response to these comments. Your responsive amendment should also include a marked copy of the amended filing that conforms with the provisions of Rule 310 of Regulation S-T. Marked copies such as those in HTML format that show changes within paragraphs help us to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that

we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rule 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

David Rendina
Global Cooling Technologies Corp.
July 28, 2009
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You may contact Kathleen Collins, Accounting Branch Chief, at (202) 551-3499 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Jan Woo, Staff Attorney, at (202) 551-3453. If you need further assistance, you may contact me at (202) 551-3735.

Sincerely,

Barbara C. Jacobs
Assistant Director

cc: Via facsimile at (206) 260-0111
Thomas E. Puzzo, Esq.
Law Offices of Thomas E. Puzzo, PLLC