

**Department of Energy**

Washington, DC 20585

October 16, 2007

Mr. George Barney  
Senior Vice President  
Market Development and Technical Services  
Portland Cement Association  
5420 Old Orchard Road  
Skokie, IL 60077

Dear Mr. Barney:

As stated in our letter to you dated June 12, 2007, the Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is providing its response in reference to your letter to the DOE Office of the Chief Information Officer (CIO) requesting a correction of information disseminated pursuant to Section 515 of Public Law 106-554, also known as the Information Quality Act (IQA).

The DOE has reviewed your comments on the report titled "Investigation of the Impact of Commercial Building Envelope Airtightness on HVAC Energy Use," NISTIR 7238. We stand by NIST regarding the work in NISTIR 7238 as being scientifically acceptable with adequate utility, integrity, and objectivity, as required by the IQA and hereby deny your request for information correction.

In 2006, EERE and the Oak Ridge National Laboratory initiated a new research project regarding air filtration. The goal of this project is to develop a full set of data for a vast array of air barrier configurations. Before this research is completed, there will be a chance for stakeholders to review and comment on the project.

An appeal from an initial denial must be made within 30 calendar days of the date of the initial decision. Such an appeal must be made in writing and addressed to:

Office of the Chief Information Officer  
Attention: DOE Quality Guidelines  
U.S. Department of Energy  
Forrestal Building – Room 8H-085  
1000 Independence Avenue, SW  
Washington, D.C. 20585

or via Fax to (202) 586-7966.



An appeal of an initial denial must include:

- The requestor's name, address, current home or business address, and telephone number or electronic mail address;
- A copy of the original request and any correspondence regarding the initial denial; and
- A statement of the reasons why the requestor believes the initial denial was in error.

Please refer to the DOE's Information Quality homepage at <http://cio.energy.gov/infoquality.htm> for additional information.

If you have any additional questions, please contact me or Ms. TheAnne Gordon, Associate CIO for IT Planning, Architecture and E-government at (202) 586-9958.

Sincerely,



Daniel X. Sze  
Acting Director  
Information and Business Management Systems  
Office of Business Administration  
Energy Efficiency and Renewable Energy

cc: Thomas Pyke, CIO  
Jeffrey Martus, IM-11  
Jerry Dion, EE-2J



**VIA FEDERAL EXPRESS**

March 16, 2007

Office of the Chief Information Officer  
Attention: DOE Quality Guidelines  
U.S. Department of Energy,  
Forrestal Building -- Room 811-089  
1000 Independence Avenue N.W.  
Washington, D.C. 20585  
(Sent by e-mail and fax)

Chief, Management and Organization Division  
National Institute of Standards and Technology  
100 Bureau Drive, Mail Stop 3220  
Gaithersburg, MD 20899-3220  
(Sent by postal mail and e-mail, [info.quality@nist.gov](mailto:info.quality@nist.gov))

**Request for Correction of Information not Subject to Public Comment**

No DOE-CIO keywords apply

The Portland Cement Association (PCA) is requesting that a statement be issued formally withdrawing the report titled , "Investigation of the Impact of Commercial Building Envelope Airtightness on HVAC Energy Use," NISTIR 7238, authored by Steven J. Emmerich, Timothy P. McDowell, and Wagdy Anis. In addition, we request that dissemination of the report in any form to the public be discontinued until such time that the technical deficiencies in the content of the report enumerated below are properly addressed.

This request is made in accordance with Section 515 Public Law 106-554, Information Quality Act, the NIST Guidelines, "Information Quality Standards, And Administrative Mechanism,"<sup>1</sup>, and the DOE Guidelines titled "Final Report to the Office of Management and Budget on Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Department of Energy"<sup>2</sup>.

There are two fundamental reasons for PCA making this request. They are:

1. The methodology within the Report contains a fundamental error.
2. The conclusions within the report are based on air leakage from an erroneous set of building stock.

<sup>1</sup>[http://www.nist.gov/director/quality\\_standards.htm](http://www.nist.gov/director/quality_standards.htm), accessed August 28, 2006.

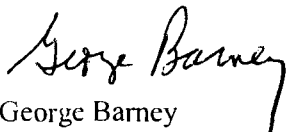
<sup>2</sup><http://cio.doe.gov/informationquality/finalinfoqualityguidelines.pdf>, October 1, 2002, accessed August 28, 2006.

Regarding the first reason, the report outlines the simulation of the energy losses of three different buildings types in five different cities both with and without tighter building envelopes. In particular, it attempts to explain the effect on air tightness of the envelope by applying an elastomeric coating to the interior surface of a masonry wall building, taping the sheathing joints of frame buildings with a durable adhesive tape material, or changing the exterior wrap material for a frame building from a residential weather/ air infiltration grade to a commercial grade wrap. The authors only examined the effect each of the air barrier systems would have on the air tightness on one component of the building, the opaque wall material. To determine the most cost effective combination of reducing air leakage, it is essential to also compare the effectiveness of sealing other components of the building (e.g. windows, doors, other penetrations and joints). The procedure actually used leads to an over emphasis on the opaque walls, and therefore not necessarily the most cost effective solution.

The second reason is based on the building stock which was used to evaluate the improvements for air leakage. It has been pointed out to the authors that most of the buildings included in the data base were constructed prior to the availability of the latest energy code requirements (including air leakage requirements). But these older buildings and their air leakage rates are being used as the benchmark for improvements using air barrier systems. These older buildings may have air leakage rates that are significantly greater than buildings built to present day code requirements. DOE even recognized this flaw in their evaluation of the NIST study and issued a public statement suggesting that a newer comprehensive study of buildings constructed to present energy codes be performed. DOE reasoned that such a study is necessary to validate the suggested air leakage of buildings in order to determine how much improvement can be expected from more stringent requirements such as mandated air barrier systems. A copy of the public statement issued by DOE at the June 2006 meeting of ASHRAE in Quebec City, Canada is attached for reference.

Based on these reasons PCA feels that DOE and NIST are doing a disservice to the building community by maintaining the NIST study in the public domain with the flaws it contains. This study is being used to wrongfully support changes to energy conservation codes and standards that would impose mandatory air barrier system requirements on building envelopes without adequate technical or economic justification.

Sincerely,



George Barney  
Senior Vice President  
Market Development and Technical Services

Attachment