

US Department of Commerce  NIST-NATL INST OF STDS & TECHN 100 BUREAU DRIVE GAITHERSBURG, MD 20899-0001  ACCEPTANCE NOTIFICATION	Date 17 SEP 2009  Your Reference Number CPSC-I-09-0024
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To  CONSUMER PRODUCT SAFETY COMMISSION DIVISION OF PROCURMENT SERVICES 4330 EAST WEST HWY RM 517 BETHESDA, MD 20814-9932	Agency Reference No CPSC-I-09-0024-000-000  Please refer to this number in future communication with this agency
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The Agreement referenced above is:  <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Rejected	Estimated costs this order/modification  \$ 400,000.00  Period of Performance 15-SEP-2009 To 15-FEB-2010
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Advance Required: Yes

Fiscal Year and Amount  
 2009 \$ 400,000.00

Total Agreement Amount: \$ 400,000.00

Remarks and Attachments:

THIS ORDER IS ACCEPTED IN ACCORDANCE WITH NIST STATUTORY AUTHORITY (15 USC 271-278E). THE AMOUNT STATED IS THE ESTIMATED COST. FINAL CHARGES WILL BE BASED ON ACTUAL COSTS INCURRED WHICH INCLUDE DIRECTLY RELATED EXPENSES AND APPROPRIATE CHARGES FOR INDIRECT AND ADMINISTRATIVE EXPENSES (15USC278b(a)). AS DETERMINED THROUGH THE NIST COST ACCOUNTING SYSTEM. IN THE EVENT THE ESTIMATED AMOUNT IS NOT SUFFICIENT TO COMPLETE THE WORK OR IF EXCESS FUNDS APPEAR TO BE AVAILABLE FOR RETURN, YOU WILL BE ADVISED AS EARLY AS POSSIBLE.

PLEASE ADVANCE FUND TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY WORKING CAPITAL FUND (13X4650). NIST IS AUTHORIZED TO REQUIRE AN ADVANCE TO ITS WORKING CAPITAL FUND BY 15 USC 275a.

NIST IS BILLING THRU THE IPAC SYSTEM.

ATTN: DODIE KESSLER

Customer Approval:

Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

**NOT APPLICABLE**

Performing Agency Approval:

Name: John Quick  
 Title: JOHN QUICK  
Finance Operations Manager  
 Date: 9/18/09  
 Phone: \_\_\_\_\_

**INTERAGENCY AGREEMENT CPSC-I-09-0024  
BETWEEN THE  
U.S CONSUMER PRODUCT SAFETY COMMISSION AND  
THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY'S  
BUILDING AND FIRE RESEARCH LABORATORY**

**1. Introduction**

The U.S. Consumer Product Safety Commission, hereinafter referred to as CPSC, and the National Institute of Standards and Technology's Building and Fire Research Laboratory, hereinafter referred to as NIST-BFRL, hereby agree that NIST-BFRL shall provide technical services for conducting performance evaluations of fire safety components and provide results to CPSC, in accordance with the terms and conditions set forth below. This Interagency Agreement (IAG) will form part of CPSC staff's investigation of imported drywall.

**2. Authorities**

The authorities for NIST and CPSC to enter into this Agreement are:

- (1) NIST Authority 15 U.S.C. 271 et seq.; and
- (2) CPSC Authority 15 U.S.C. 2076(g) and 15 U.S.C. 2078(d).

As set forth in the attached "Determination and Finding Pursuant to 48 CFR 17.503," CPSC warrants that sufficient funding amounts are available, that this agreement is in the best interest of the United States Government, and that the services requested cannot be provided by contract as conveniently or cheaply by a commercial enterprise.

**3. Title**

"Performance Evaluations of Fire Safety Components Exposed to Emissions from Imported Drywall."

**4. Objective**

The purpose of this IAG is to conduct performance evaluations of fire safety components exposed to emissions from imported drywall to determine whether there is a loss in functionality of these components. CPSC will provide NIST-BFRL with field samples of smoke alarms and fire sprinklers collected from homes, and new samples subjected to accelerated aging/corrosion testing. NIST-BFRL will conduct performance testing on smoke alarms to evaluate the samples in accordance with the published procedures in the NIST Fire Emulator/Detector Evaluator<sup>1</sup> and fire sprinkler samples in accordance with "plunge test" portion of UL 199<sup>2</sup> or UL 1626<sup>3</sup>, as appropriate.

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<sup>1</sup> Fire Emulator/Detector Evaluator: Design, Operation, and Performance. Cleary, T. G.; Donnelly, M. K.; Grosshandler, W. L. NIST SP 965; February 2001.

<sup>2</sup> UL 199, Automatic Sprinklers for Fire-Protection Service

<sup>3</sup> UL 1626, Residential Sprinklers for Fire Protection Service

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NIST-BFRL will provide a report of the test results with data that will assist CPSC in determining possible safety hazards resulting from any degradation of these fire safety components from exposure to drywall emissions.

## 5. Background Information

Some imported drywall installed in U.S. homes is reported to be associated with corrosion to central air conditioning components, copper tubing, and exposed copper wiring. There have been reports of premature failures of HVAC evaporator coils, electric appliances, televisions, and electrical switches in homes. A range of health effects have been reported by residents in these homes as well.

CPSC's investigation of drywall is proceeding simultaneously on three distinct tracks: (1) evaluating the relationship between drywall and reported health effects; (2) evaluating the relationship between drywall and effects on electrical, gas distribution, and fire safety components that can result in potential fire and shock hazards; and (3) tracing the origin and distribution of drywall in commerce to identify the scope of potential problems presented by drywall.

To assess impact on health, CPSC is determining whether scientific evidence can be developed linking chemical emissions from the drywall to the reported health complaints. At this time, however, any such relationship or long-term health effects are unknown. We are undertaking a multi-track testing approach to assess the impact on human health. The data collected will form the basis for a health risk assessment.

- *In-home air sampling (field) studies* - Continuous, real-time measurements of sulfur, acids, and gases, including the presence of refrigerant byproducts. Measurements will take into account environmental conditions (e.g., humidity), as well as time of day. Testing will be done over longer time periods because many symptoms have been reported to occur after hours of sleeping.
- *Laboratory elemental characterization studies of domestic and imported drywall* - Characterization of components of drywall and identification of any differences.
- *Laboratory chamber studies of domestic and imported drywall* - Chamber studies to separate and isolate chemical emissions from drywall as opposed to chemicals emitted from other home products (e.g., carpets, cleaners, paint, adhesives, and beauty products).

To assess the possible fire and shock hazards presented by imported drywall, the CPSC technical staff is conducting an engineering test program to determine the qualitative effects of emissions from imported drywall on residential electrical, gas distribution, and fire safety components. The engineering test program will consist of two major phases: (1) Examination of various components collected from affected residences (Field Component Analysis) and (2) Qualitative assessment of the reaction of new components to elevated levels of emissions (Accelerated Corrosion Testing).

## 6. Statement of Work

The following tasks shall be completed by NIST-BFRL under this IAG:

- Task 1. Test Plan Development.** NIST-BRFL will develop a test plan to identify the test procedures necessary to assess the performance of smoke alarms and fire sprinklers.

**Task 2. Field Component Performance Testing.** NIST-BFRL will conduct performance testing of field samples of smoke alarms and fire sprinklers in accordance with the test plan developed in Task 1 (hereinafter "Field Component Performance Testing"). CPSC staff is collecting field samples of smoke alarms and fire sprinklers from affected homes and will provide those to NIST-BFRL for testing. CPSC's current plan is to collect components from approximately 8 to 10 homes. The actual number of samples collected may be greater, depending on availability of homes and the possible need for geographic diversity depending on the results of CPSC's investigation. The following is an estimate of the number of components that will be collected from the field:

1. Smoke alarms – approximately 6 units from 10 homes totaling about 60 units
2. Fire Sprinklers – approximately 10 units from 10 homes totaling about 100 units.

**Task 3 Accelerated Corrosion Performance Testing.** NIST-BFRL will conduct performance testing of smoke alarm and fire sprinkler samples that have undergone accelerated corrosion exposure at Sandia National Laboratory (SNL) (hereinafter "Accelerated Corrosion Performance Testing"). The following components and quantities are planned for accelerated corrosion performance testing:

1. Smoke Alarms – six each of ionization and photoelectric alarms from three manufacturers, for a total of 36;
2. Fire Sprinklers – six each of glass bulb- and metal link-type sprinklers from three manufacturers, for a total of 36;
3. CPSC staff will also provide NIST-BFRL with an equal number of as-purchased smoke alarms and sprinklers from the same batches as those provided to SNL.

**Task 4. Performance Evaluation Report.** NIST-BFRL will prepare a detailed report documenting the test protocols and results of performance testing of samples collected through the Field Component Analysis program and the Accelerated Corrosion Performance Testing program. The report shall:

1. Be formatted in Microsoft Word;
2. Be provided in electronic and one hard copy;
3. Include, at a minimum:
  - a. Test protocols used for performance evaluation of smoke alarms and fire sprinklers;
  - b. Performance evaluation metrics;
  - c. Test results for each sample;
  - d. Photos of each sample.

## **7. CPSC Furnished Materials and Equipment**

CPSC will provide NIST-BFRL with (a) unmodified samples (consistent with manufacturer and type provided in parts (b) and (c) of this paragraph); (b) samples collected through the Field Component Analysis; and (c) Accelerated Performance Corrosion Testing programs. CPSC will

begin sending unmodified and field samples on the effective date of this IAG. Additional samples will be provided as soon as they have been collected and processed. New samples subjected to accelerated corrosion testing are expected to be received from SNL in November 2009. CPSC will send these samples to NIST-BFRL immediately thereafter.

#### **8. NIST Furnished Materials and Equipment**

NIST-BFRL agrees to furnish all necessary personnel, equipment, materials, services, and facilities to test the materials provided by CPSC in accordance with the tasks listed in the **Statement of Work**.

#### **9. Confidentiality Requirements**

This work is being funded to support a federal investigation that has potential for litigation. Except as may be required by the Freedom of Information Act or any other provisions of law or order from a court of competent jurisdiction, any information developed from this IAG must be held in the strictest of confidence and may not be shared with outside entities unless permission is granted by CPSC in writing. NIST shall notify CPSC immediately about any request from an outside party for any information related to this IAG.

Notwithstanding the forgoing, NIST shall have the right to publish all information developed from this IAG, and to create derivative information there from, without restriction or permission, once CPSC certifies to NIST that CPSC has completed its investigation, litigation or regulatory action.

#### **10. Period of Performance**

The period of performance shall begin on the effective date (September 15, 2009) agreed to by both parties and shall not extend beyond 150 calendar days (February 15, 2010). Performance may not begin until on or after the last date of signature on this IAG. This agreement may be modified by mutual consent of CPSC and NIST.

#### **11. Delivery of Performance**

All deliverables required under the terms and conditions of this IAG shall be provided to the CPSC. The following items shall be performed or delivered to CPSC in accordance with the schedule below:

##### **Delivery Item**

##### **Performance**

A. Test plan to identify test procedures for the assessment of the performance of smoke alarms and fire sprinklers.

Within 15 calendar days after IAG effective date (Approximately September 15, 2009)

- |    |   |   |
|----|---|---|
| B. | Bi-weekly activity reports of samples tested from Field Component program               | Beginning October 15, 2009 and every two weeks thereafter. (email to project officer) |
| C. | Draft Summary Report of Unmodified, Field, and Accelerated Corrosion Testing Components | By January 15, 2010   |
| D. | Final Report on Performance Evaluation Testing  | By February 15, 2010<br><br>(As detailed in Task 4 of the Statement of Work)          |

## 12. Funding and Accounting Data

Estimated funding requirements to complete the tasks and provide deliverables for this IAG are \$400,000.00. CPSC agrees to transfer funds to NIST in the form of advanced payment. At least quarterly, the parties will reconcile balances related to revenue and expenses for work performed under the agreement. The transfer of funds shall be from CPSC to NIST through the On-Line Payment Collection (OPAC) system using the following accounting data:

### CPSC Accounting Data:

ALC: 61-00-0001  
 TIN: 520978750  
 DUNS: 069287522  
 US TREAS CODE: 6190100  
 ACCT DATA: 09 PS EXFM 4400 33712 253A

### NIST Accounting Data:

ALC: 13060001  
 TIN: 530305706  
 DUNS: 929956050

## 13. Disagreements

Should disagreement arise on the interpretation of the provisions of this agreement, the dispute shall be resolved pursuant to the Business Rules for Intragovernmental Transactions delineated in the Treasury Financial Manual, Vol. 1, Bulletin 2007-03, Section VII (Resolving Intragovernmental Disputes and Major Differences).

## 14. Termination and Modification

Either party may terminate this Agreement at any time with 90 days written notification. If CPSC cancels the order, NIST is authorized to collect costs incurred prior to cancellation of the order plus any termination costs. This Agreement may be modified through a written amendment agreed to by both Parties.

## 15. Liaison Officers

A. NIST Project Officer

Jason Averill  
National Institute of Standards and Technology  
Phone: (301) 975-2585

B. CPSC Project Officer

Rohit Khanna  
U.S. Consumer Product Safety Commission  
Office of Hazard Identification and Reduction  
4330 East-West Highway, Room 611  
Bethesda, MD 20814  
Phone: (301) 504-7546

C. CPSC Finance Officer


U.S. Consumer Product Safety Commission  
Directorate for Administration, Accounting Operations  
4330 East-West Highway, Room 522  
Bethesda, MD 20814

Agency Payment Officer:

Ms. Deborah Peebles Hodge  
Phone: (301) 504-7130


Approved and Accepted for

NIST

BY:   
JOHN QUICK  
TITLE: Finance Operations Manager  
DATE: 9/18/09

Approved and Accepted for

CPSC

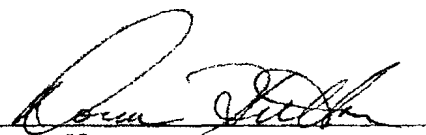
BY:   
TITLE: \_\_\_\_\_  
DATE: 9/11/09

Memorandum for the Record

August 24, 2009

Subject: CPSC-I-09-0024

1. This interagency agreement is established between the Consumer Product Safety Commission (CPSC) and the National Institute of Standards and Technology (NIST). NIST will provide technical services for conducting performance evaluations of fire safety components and provide results to CPSC with regard to drywall.
2. This service is essential to the work of the CPSC staff to carry out its obligations in areas of regulatory development, compliance and enforcement.
3. NIST has unique and specialized knowledge, capabilities and facilities to perform this service which are not available at CPSC. These services cannot be obtained as conveniently or economically by contracting directly with a private source.
4. The most effective method of obtaining these services is by obtaining them from NIST. Therefore, use of this interagency acquisition is determined to be in the best interest of the Government.
5. Sufficient funding is available.

  
Donna Hutton  
Contracting Officer

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