



# Drywall Investigation Update

Sarasota Town Hall  
Congressman Vern Buchanan  
October 12, 2010

This presentation has not been reviewed or approved by the  
Commission and may not reflect its views

# Overview

Investigation

Scientific Studies

Diplomatic Efforts

Assessment

# Major Milestones & Accomplishments

August

- ✓ Sent Investigative Team to China
- ✓ Ruled out Radiation Hazard
- ✓ Completed Field Work for 51-Home Study

September

- ✓ Launched [www.drywallresponse.gov](http://www.drywallresponse.gov)
- ✓ Released Elemental Analysis
- ✓ Released Preliminary Chamber Emissions Results

October



# Major Milestones & Accomplishments



November

- ✓ Released Indoor-Air Studies (10 and 51-Home Studies)

December

- ✓ Released Preliminary Electrical and Fire Hazard Analyses

January

- ✓ Established Procedure with CBP to Flag All New Drywall Imports for Investigation

- ✓ Nationwide Outreach to States to Determine Scope

- ✓ Provided Guidance to the IRS Concerning Possible Tax Relief

- ✓ Released Interim Identification Guidance

# Major Milestones & Accomplishments

January

✓ Released Interim Identification Guidance

Feb/March

✓ Convened Expert Roundtable

May/June

✓ Met with MDL Special Master

July/Aug

✓ Released LBNL Chamber Emission Results

Sept/Oct

✓ Released Bacterial Report

✓ Released Interim Remediation Guidance

✓ Identified Manufacturers of Problem Drywall

✓ Released Source Marker Study

✓ Revised Identification Guidance

✓ IRS Casualty Loss Guidance

**Largest Investigation in CPSC History**

# Science Based Investigation

- Investigation Followed Typical Paradigm

Isolate Drywall and Test for Chemicals

Test Air in Affected Homes

Test Corroded Household Components

Expose New Components to Corrosive  
Atmosphere

- Respected Laboratories and Scientists

Lawrence Berkeley National Laboratory

Sandia National Laboratories

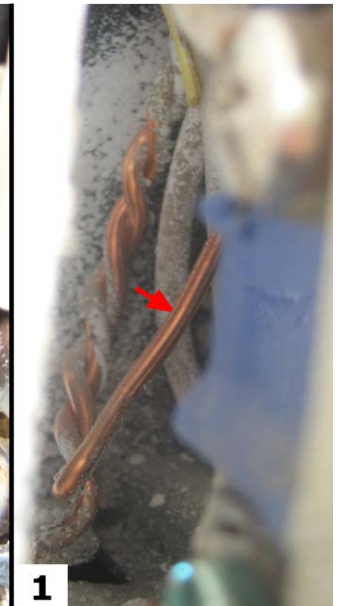
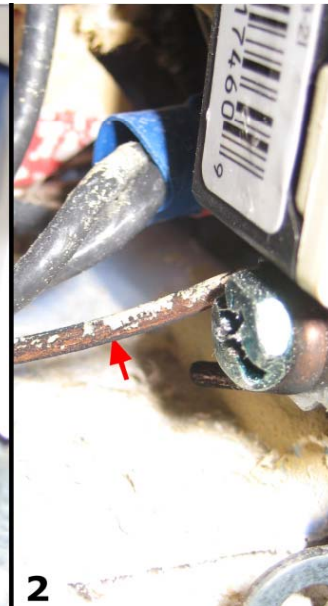
National Institute of Standards and  
Technology

Environmental Health & Engineering

**Goal: Sound Science, Reliable Results**

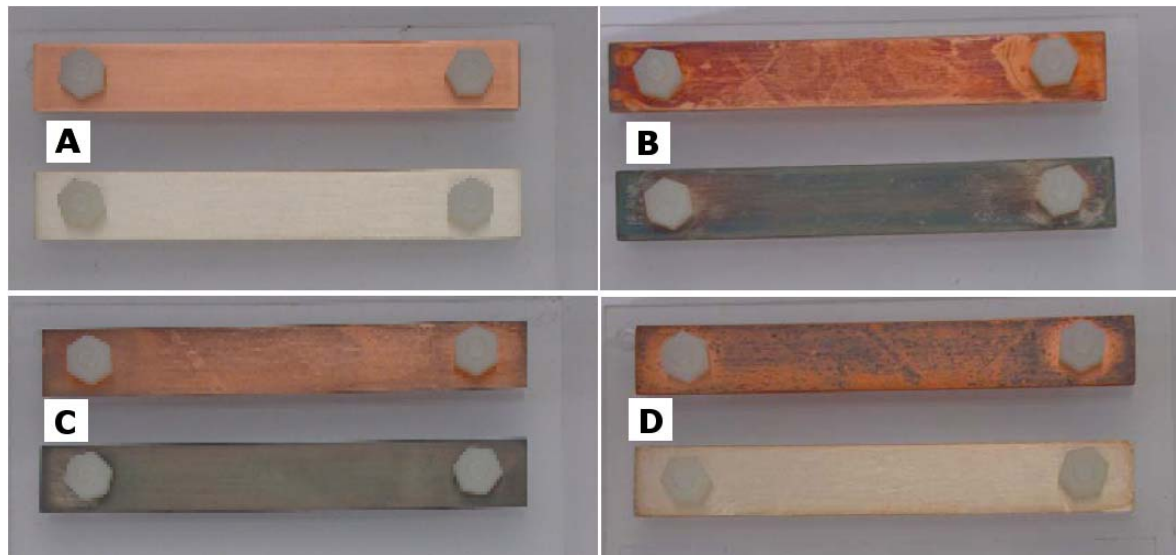
# 51-Home Study

- Home Systems Inspections
- Visual Inspection of Various Electrical, Plumbing, and HVAC System Components
  - Identification of Corrosion and Grading of Severity



# Corrosion Potential

- Corrosion Rates Significantly Higher in Complaint Homes
  - Home Component Inspection
  - Corrosion Coupon Analysis



# Results from Elemental and Indoor Air Studies

- Found a Strong Association:
  - Problem Drywall
  - Hydrogen Sulfide Levels
  - Corrosion
- Developed the Tool Set to Identify Problem Homes
  - XRF
  - Copper Coupons
  - Chemical Testing



**Results Lead Directly to Identification Guidance**

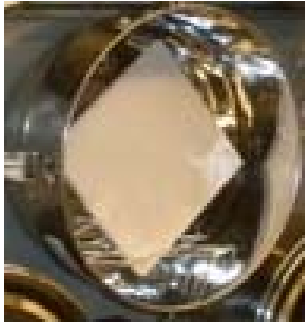
# Summary of Identification Guidance

- Two Step Process
  1. Corrosion + Drywall Installed in Recent Years
  2. Corroborating Evidence
    - Elemental Sulfur in Drywall Core
    - Copper Sulfide on Coupons, Wiring and/or Coils
    - Chinese Markings on Drywall
    - Sulfide Gas Emissions from Drywall
    - Corrosion Induced by Drywall in Test Chambers

**Confirms Presence of Problem Drywall**

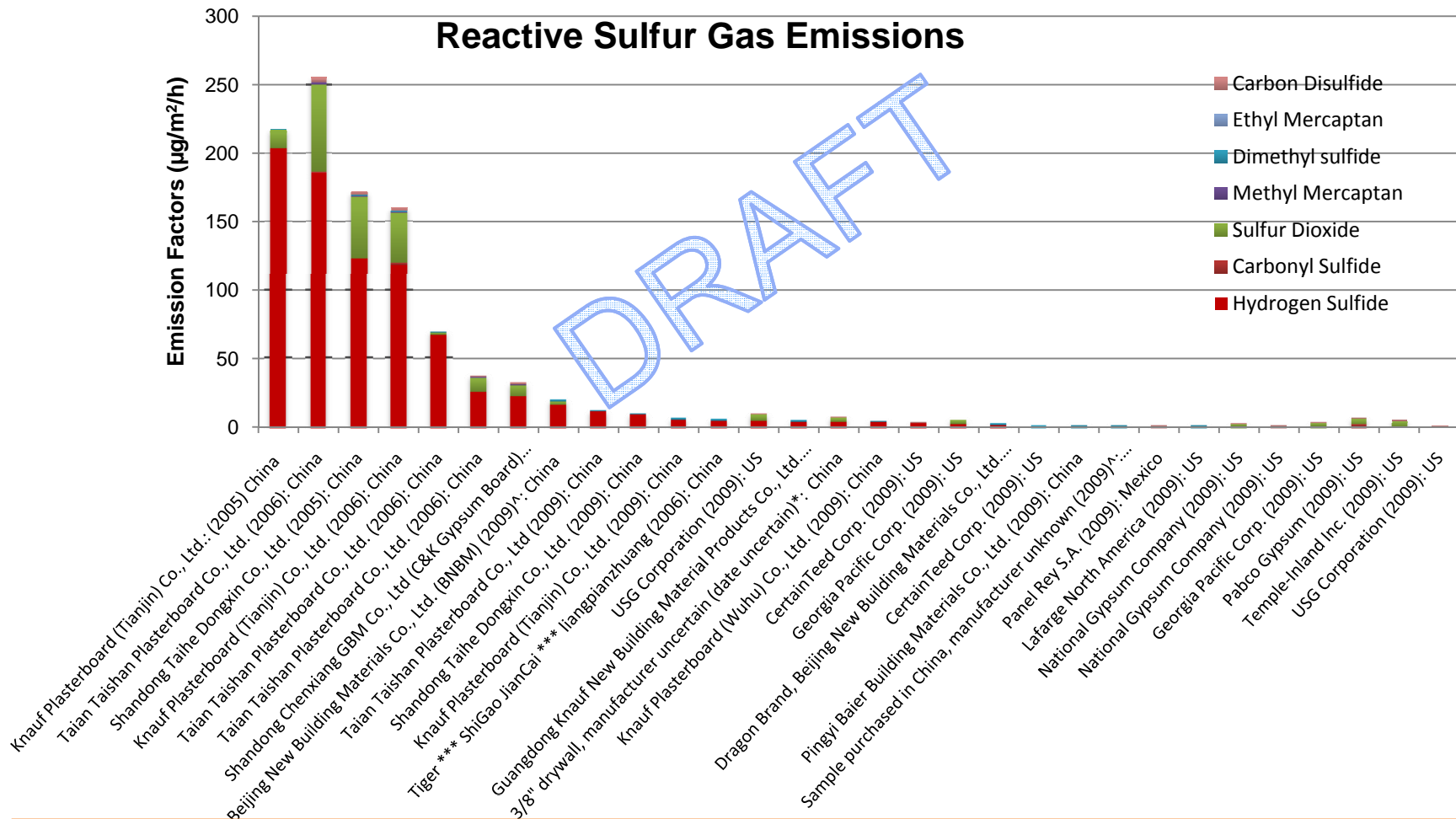
# Chamber Emissions Study

- Lawrence Berkeley National Laboratory
- Develop Novel Protocol
- Conduct Extended Testing



**Isolate Drywall and Measure its Emissions**

# LBNL Chamber Emission Study



**Certain Chinese Drywall Emits Hydrogen Sulfide**

# Interim Remediation Guidance

- Replace All:

**Problem Drywall**

**Fire Safety Alarm Devices**

**Electrical Components and  
Wiring**

**Gas Service Piping and Fire  
Suppression Systems**

# Wrapping Up The Science

- Refining Interim Identification and Remediation Protocols
- Investigating Long Term Corrosion
- Validating Remediation Results

**\$5 million • Largest Investigation in Agency History**

# China

- Met and Shared Technical Information with AQSIQ
- Visited Mines, Factories, and Collected Samples
- Ongoing Dialogue and Technical Sharing
- Sharing Results Indicating that Not All Chinese Drywall is Problem Drywall
- Recent Findings Enable us to Engage Chinese Government Regarding *Specific* Chinese Companies
- U.S.-China Strategic and Economic Dialogue, May 24-25, 2010

“Fair and Just ....”

- Chairman Inez Moore Tenenbaum, Biennial Safety Summit, Beijing, China October 26, 2010

# Options

- Chinese Manufacturers
- Civil Litigation
- Homebuilders
- Public Funds / Possible Tax Deduction