Random Testing and Verification Testing

Membership Meeting
June 19, 2014
Random Testing and Verification Testing Overview

• **Purpose:** Retain credibility of CRRC-rated products in the marketplace by verifying reported solar reflectance and thermal emittance values

• **CRRC Role**
  1. Administer program by coordinating with relevant parties (manufacturers, collection agencies, EPA)
  2. Ensure consistency and impartiality by following procedures
  3. Enforce compliance to program requirements
  4. Complete program before end of the year
### Timeline for 2014

<table>
<thead>
<tr>
<th>Action</th>
<th>Date</th>
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<tbody>
<tr>
<td>• EPA nominations for VT and random product selection</td>
<td>Jan - Feb</td>
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<tr>
<td>• Notification email to manufacturers and product data collection</td>
<td>Feb - Mar</td>
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<td>• Product collection by collection agency</td>
<td>Mar - Sept</td>
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<tr>
<td>• Product testing and evaluation of test results</td>
<td>May - Dec</td>
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2014 Random Testing Process

1. Product info (location and contact)
2. Product Collection List
3. Site Visit
4. Samples
5. Sample Packages
6. Test Results

CRRC

Collection Agency

Manufacturers

AITLs
2014 Random Testing

Progress – 109 (RT) and 37 (VT) Total

<table>
<thead>
<tr>
<th>At Stage</th>
<th>Number of products</th>
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<tbody>
<tr>
<td>1. Product info collection</td>
<td>6</td>
</tr>
<tr>
<td>3. Manufacturer site visits</td>
<td>81</td>
</tr>
<tr>
<td>5. Sample packages to AITLs</td>
<td>22</td>
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</tbody>
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Verification Testing Requirements

• 10% of active, qualified products list must be randomly selected for Verification Testing

• EPA can nominate up to half of current year’s products
  – 2014:
    
    $37 \text{ VT only}$
    $+ 37 \text{ RT overlap}$
    $= 74 \text{ Total}$

• EPA actively monitoring and supporting VT efforts
Differences between RT and VT

- Enforcement guidelines
- VT tests solely for solar reflectance
- Criteria for passing a product
  - RT: ±0.05 tolerance
  - VT: minimum values dependent on product type

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Solar Reflectance</th>
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<tbody>
<tr>
<td>Low Slope</td>
<td>≥ .65</td>
</tr>
<tr>
<td>Steep Slope</td>
<td>≥ .25</td>
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</table>

Source: ENERGY STAR Program Requirements
Changes to 2014 VT

• EPA Policy Update – “Products not available”
  – Products which cannot be easily procured due to no recent sales in U.S./no inventory
  – ENERGY STAR certification terminated temporarily
  – Can be re-activated once product sold to consumer or manufactured (i.e. “becomes available”)

• Immediate impact on manufacturers and consumers
Random Testing Working Group

- **Goals:** Streamline testing programs by improving existing procedures and policies
- Currently looking to resolve issues related to product availability
- Participation in future meetings welcomed
  - Email: arshak@coolroofs.org
Questions