

**DOCKETED**

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<b>Project Title:</b>	Improving Energy Compliance of Central Air-Conditioning and Heat Pump Systems
<b>TN #:</b>	224432
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# EQUIPMENT REGISTRATION

A Path to HVAC Compliance

Roy Eads 03 Aug 2018

## Non-permitted HVAC Changeouts Are Not Acceptable – Everyone Agrees

- Rampant Non-Compliance Exists
- Illegal Work Practices Can No Longer be Tolerated
- Third-Party Inspections Required by Law
- Enforcement with current strategies has proven to be unachievable
- Lack of Consequences – the benefit of non-permitted work outweighs permitted
- Non-Compliant HVAC changeouts have greater potential to under perform
- Proper system performance is paramount
- Non-compliant work may pose unchecked Health & Safety concerns

## Non-compliant work is more likely to...

- Provide an unfair competitive advantage to the non-compliant contractor
- Result in decreased comfort
- Increase energy use
- Increase peak demand
- Create a negative impact on the environment

## Federal Regulation has set a Precedent for Equipment Registration

### Federal Regulations Currently require Equipment Number Record Retention

- July of 2016, the Federal Regulations have set forth records retention provisions.
- These provisions explain the responsibilities of manufacturers, private labelers, distributors, contractors and dealers with respect to central air conditioners subject to regional standards.
- Records retention required includes: The manufacturer name, model number, serial number, location of installation (including street address, city, state, and zip code), date of installation, and party from whom the unit was purchased (including person's name, full address, and phone number).

*Enforcement of Regional Standards for Central Air Conditioners Final Rule, Section H. Records Retention and Requests, U.S. Department of Energy, Federal Register Vol. 81, No. 135, July 14, 2016*

## The HERS Registry has set a Precedent for Equipment Registration

The HERS registry currently requires Equipment Registration documentation

- *Installing Contractors have been required to record the make, model, and serial numbers of installed equipment for many years.*
- *HERS Raters have been collecting and verifying this data for years.*
- *The process is dependent on a building permit being issued, so unpermitted work is the broken link. Equipment Registration closes the gap.*

## Alternatives to Equipment Registration

- **Increased Training and Education is Needed, but Not Enough**
- **Online Permitting is Needed, but Not Enough**
  
- **Incentives Do Not Have Longevity and Cannot be Sustained**
- **Rapid Market Transformation Through Consumer Education Is Not Feasible**

## The Most Feasible Solution

Equipment Registration is the only viable solution at this point that has the teeth to improve compliance with the intensity and speed of execution that is needed to address non-compliance with successful results.

When designed properly to satisfactorily address plausible objections, it requires little effort on the part of each participant and offers fairness with a small investment that can potentially provide large rewards in the effort to meet our energy goals.

### THE ENR PARTICIPANTS

#### Manufacturer

- In-State
- Out-of-State

#### Distributor

- Warehouse
- Wholesaler
- Retailer

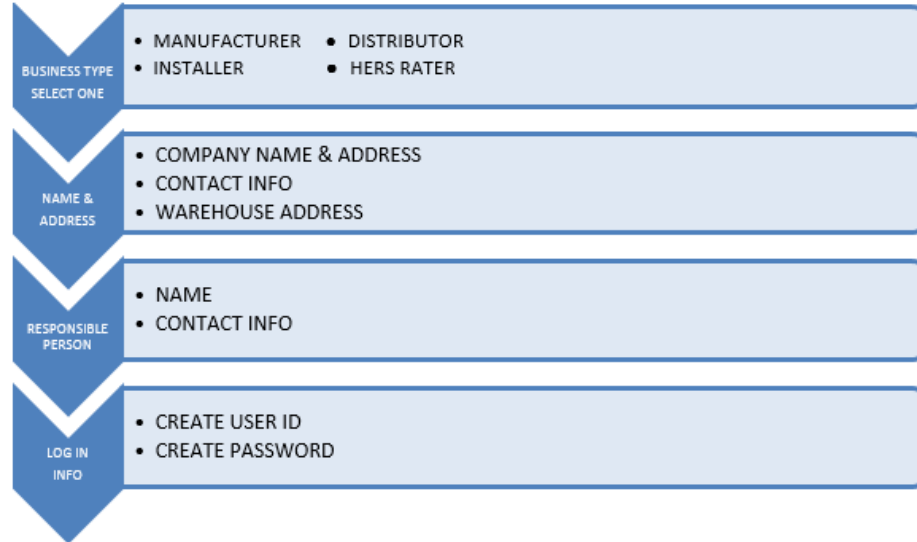
#### Installer

- HVAC Contractor
- General Contractor
- Homeowner

#### HERS Rater

- Performs Field Verification & Diagnostic Testing

## PARTICIPANT REGISTRATION INPUT PROCESS

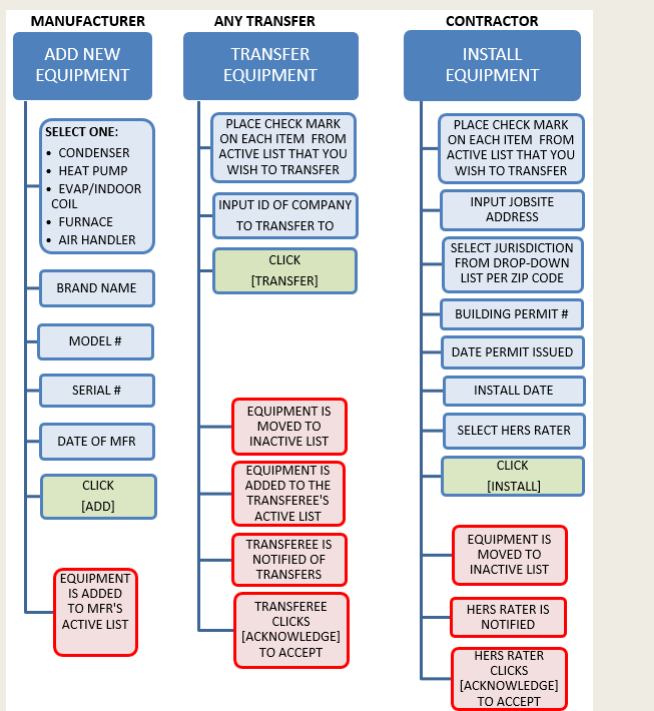


## DATA SCREENS AVAILABLE AFTER SECURE LOGIN

ACTIVE LIST	INACTIVE LIST	PERSONAL PROFILE	Manufacturers Only
<ul style="list-style-type: none"> <li>List of all HVAC equipment in your possession</li> </ul>	<ul style="list-style-type: none"> <li>List of all equipment that has been transferred to others</li> <li>No longer in your possession</li> </ul>	<ul style="list-style-type: none"> <li>Contains your contact info, password info, settings</li> <li>Edit this list as needed</li> </ul>	<ul style="list-style-type: none"> <li>Add equipment to the ENR Database</li> </ul>

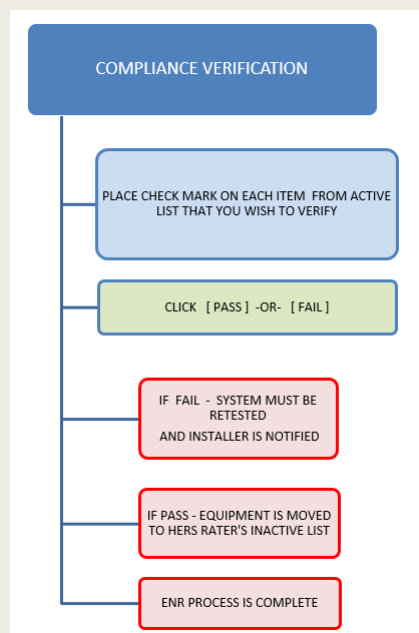
### DATA INPUT FLOW CHART

- SIMPLICITY
- MINIMAL CLICKS
- AUTO-POPULATED EQUIPMENT LISTS
- AUTO-POPULATED CLIENT LIST FOR TRANSFERS
- THE CONTRACTORS' INPUT MAY BE INTEGRATED INTO THE HERS REGISTRY



### HERS RATER INPUT FLOW

- FINAL INSPECTION
- PASS OR FAIL
- UPDATES THE EQUIPMENT REGISTRATION REGISTRY



## EQUIPMENT REGISTRATION

### A Plan for Standards Compliance and Enforcement of HVAC Alterations

Follow-up to Equipment Number Registration Docket No. 12-EBP-1 TN 71535

**In Response To:**

Improving Energy Compliance of Central Air-Conditioning and Heat Pump Systems  
- SB 1414 Compliance Plan

**For Consideration In:**

Notice of Lead Commissioner Workshop on the Promotion of  
Regulatory Compliance in the installation of Central Air Conditioning

**Referenced Primary Document by Same Author:**

Equipment Number Registration (ENR)  
Docket No. 12-EBP-1  
TN No. 71535  
July 08 2013

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