

# Verification Testing Training for EPA-Recognized Certification Bodies

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# Agenda

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- Getting Started
- Product Selection
- Product Procurement
- Reporting
- Lunch
- Discuss Certification Issues
- Update on Data Transfer System from SRA
- Questions

# Getting Started



- Verification testing to a new or revised specification may not commence until the spec is effective.
- CBs will schedule their own testing cycles and selection dates.
  - A CB may select 10% at once at the beginning of the year, or 5% twice, etc.
- The percentage is pulled from the number of unique models the CB has on its list on the date of selection.

# Selection: Product Eligibility



- All unique models currently on EPA's qualified products lists are eligible for verification testing.
- At a minimum, 10% of unique models in each spec must be selected and tested each year.
  - CBs should round up to the nearest integer to determine the number of models to test.
  - In the event a selected model cannot be tested, CBs should select a replacement (if possible, from the same manufacturer).

# Selection: Product Eligibility

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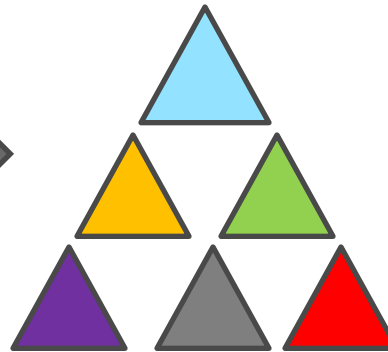
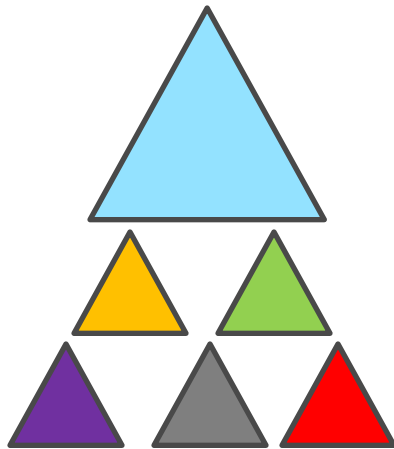


- Product selection will be at the product specification level, not product sub-categories.
  - 10% of ALL imaging products, NOT 10% each of printers, copiers, digital duplicators, etc.

# Selection: Private Labelers



- A privately labeled model (or models) and the OEM model with which it is associated count as one unique model. However, any one of the models may be selected.



1 OEM and 5 privately labeled products

All 6 are eligible for selection

Only one can be selected and tested

# Selection: Product Families

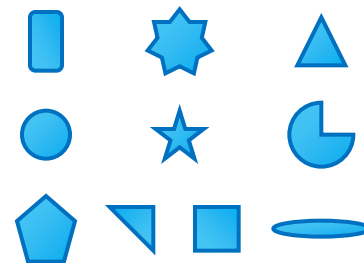
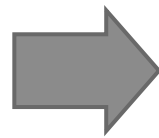


- Product families count as one model, but no more than one model per family may be selected.

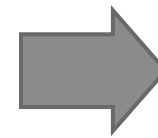
EXAMPLE:



**Assume 35 certified models across ten families**



**No more than one model per family may be selected**



**10% of 10 models = minimum of 1 model to be tested**

# Random Selection



- At least 50% of models should be randomly selected.
  - This number may be higher if the CB is not able to select 50% of models based on the factors in section 3c of the CB requirements document.
- On a rolling basis, EPA will accept nominations for products to include in verification testing and will share these with CBs.



# Confirming Product Selection



- A model may be excused from testing if its manufacturer or private labeler can demonstrate the same unique model (private labeled product or product from the same family) was selected and tested by another CB for verification testing in the past 12 months.
- For products eligible for off-the-line testing, manufacturers should confirm how procurement may be scheduled.
- All other objections to selection should be referred to EPA within 5 business days.

# Selection/Procurement: Off-the-line Testing



- The following product categories are eligible for off-the-line testing:
  - Servers
  - Workstations
  - Imaging products with speeds greater than 50 ipm
  - Commercial food service products
  - Light Commercial HVAC
- Per CB criteria, other examples where off-the-line testing may be appropriate include products that are:
  - prohibitively expensive to purchase and/or transport,
  - made-to-order,
  - otherwise unavailable through normal retail channels.
- CBs may check with EPA if uncertain about product eligibility for off-the line testing.

# Procurement: Identifying locations



- At the time of product selection, manufacturers are required to provide notification per section 4b of the CB requirements document:
  - Retail locations, including online outlets, where testing samples can be procured.
  - For lighting products, locations must be geographically diverse.
  - Provide access to the CB to select a unit(s) for testing in the case of warehouse or off-the-line procurement.
  - Products obtained off-the-shelf or from a warehouse must be in the U.S. (CB can check with EPA if the warehouse is near but outside the US.)

# Procurement: If a product is not available in the market



- If the product is part of a product family, determine if another member of that family is available in the market and select that one.
- Otherwise: product should be removed from the qualified product list (QPL).
  - Manufacturer responsible will need to reconfirm availability of ALL of its certified products.
  - CB should select another product for testing from that manufacturer.
  - CB should consider flagging the manufacturer for testing in subsequent years if there are ongoing issues with availability of selected products.

# Procurement



- CBs should try to procure testing units from retail locations identified by the manufacturers, and online outlets of those retailers.
- CBs may not procure units from otherwise unknown internet sources (i.e., “grey market” sources).
- Units will be tested against the specification in effect at the time of procurement.

# Procurement: Test Sample Sizes



- Per directive 2011-04, number of units obtained for testing should be the same as the number used to qualify the product.
- If a product was qualified based on a single test, then verification testing will involve a single test.
- If a product was qualified based on multiple test samples, (e.g., per DOE certification sampling plan associated with Federal energy conservation standards):
  - Four units will be procured at once for verification testing.
  - A spot check will be performed on the first unit.
  - If the test result of the spot check fails by 5% or more, the additional 3 units will be tested and statistical methods applied to the results for purposes of determining a failure.

# Testing Location



- Verification testing shall be performed at an EPA-recognized, third-party laboratory; or,
- If the unit is obtained off-the-line from the manufacturing facility, the verification testing may be performed at an EPA-recognized, first-party laboratory provided that qualified CB personnel witness the test.

# Determining Testing Failures



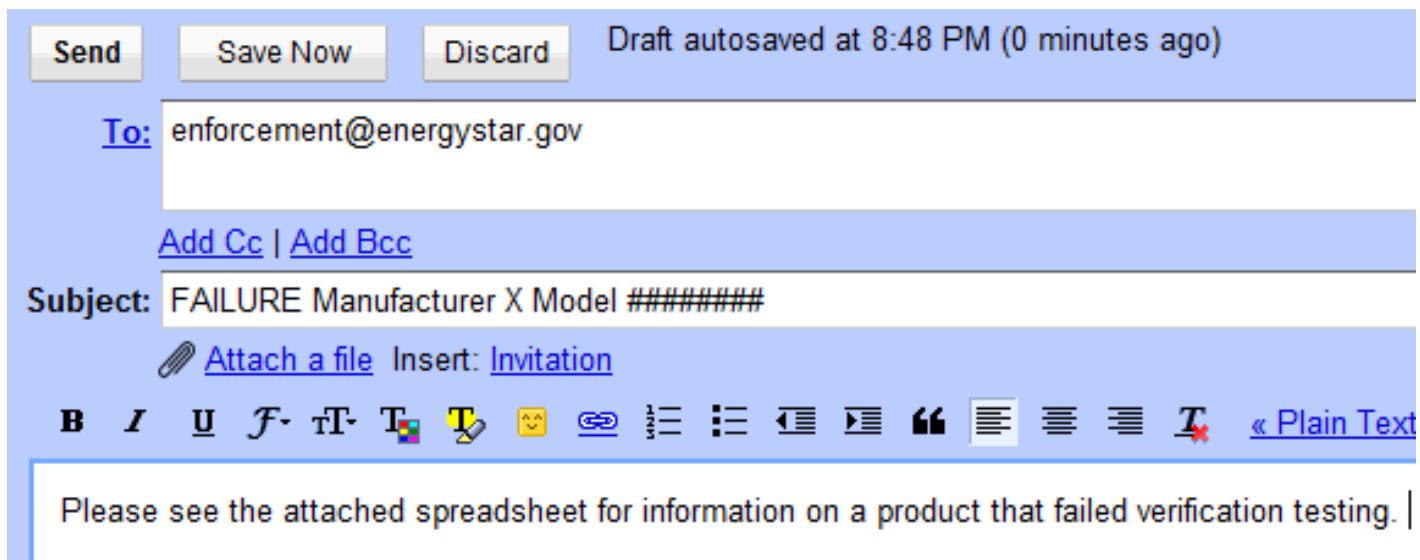
- Per directive 2011-04, testing failures are determined based on number of units tested.
- For tests conducted with one unit, unit must meet ENERGY STAR requirements.
- For tests conducted with four units, the mean will be used to determine if the model meets the ENERGY STAR requirements.



# Reporting



- CBs must report failures within 2 business days to [enforcement@energystar.gov](mailto:enforcement@energystar.gov).
- Use the subject line FAILURE followed by the manufacturer name and model number.



# Reporting



- The CB will submit an Excel spreadsheet with basic information on the testing failure, including:
  - Product name, model number, serial number.
  - Relevant initial test results.
  - Relevant verification testing results.
  - Date of verification test.
  - Where product was obtained.
  - Date product obtained.
  - Lab name and EPA org ID of lab where product was tested.

# Reporting



- Twice a year (January and July) CBs will need to provide a summary report of models tested during the previous six months, including:
  - Model name, number, and top-level test results.
  - Where the products were obtained and tested.
  - If products were obtained off-the-shelf and/or tested in a first party laboratory, CB must provide justification.
  - List of models that were selected but not tested, along with justification.
- CBs should highlight any issues with fulfilling verification testing requirements for EPA immediately.

# Certification: Measured vs. Reported Values



- Measured and reported values must both meet the applicable ENERGY STAR specification.
- For products not subject to Federal energy conservation standards, the reported value shall not be more efficient than the measured value. More conservative ratings are allowed.
- For products subject to Federal energy conservation standards, the reported value should be the DOE certified rating.

# Certification: Data Submission Errors

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- Notify EPA immediately if you cannot resolve data submission errors.
- Only include markets listed on the templates.
- Do not include hyperlinks for URLs.
- Do not include units of measure.

# Certification: Date Available on the Market



- Issue: Accurate QPLs for customers
- Short-term
  - Currently, products do not show up on ES QPL until available on market.
- Long-term
  - CBs will check off whether or not product should be on QPL based on availability in U.S. market.
- CBs should work with manufacturers to make sure this field is accurate.

# Certification: Model numbers and listing product families

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- Issues CBs are experiencing now
- Addressing character limitations
  - Use of wildcards
  - Range of qualified models
  - Other options
- Listing product families in one row

# SRA Introduction

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- SRA International, Inc. is ENERGY STAR's IT support contractor
- Jon Luzader, IT Team Lead for the Qualified Product Exchange solution
- Brad Aabel, User-Experience Designer, Information Architect for QPX



# At Present



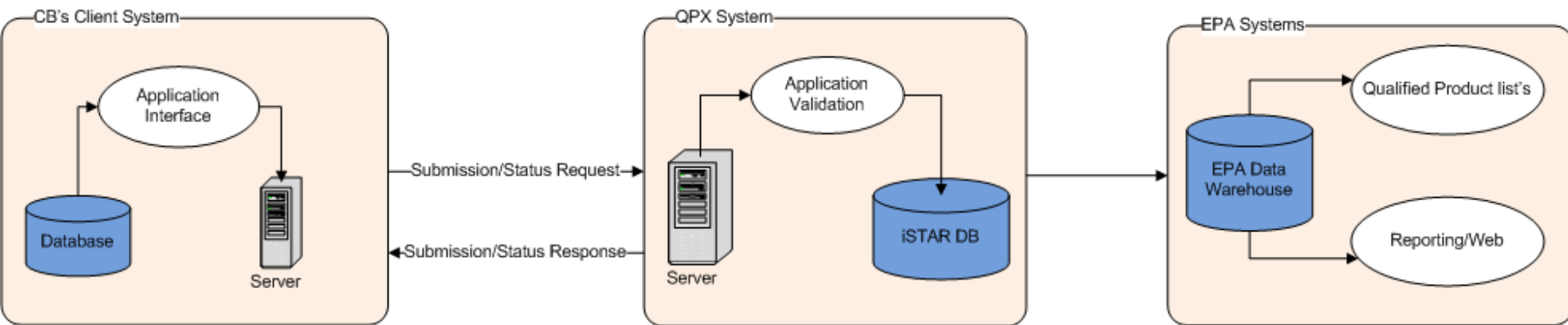
- Qualified Product Exchange (QPX) -Interim Solution
  - Fast, quick-fix solution for moving away from OPS
  - Excel based submissions
  - Cumbersome backend validation
  - Many manual aspects of the solution
  - Inefficient file storage
- OPS
  - Still in use for some products
  - Manual data entry by Manufacturing Partners

# Where we are Going



- QPX – Long-Term Solution
- Streamlined, automated submission process for all products
- Easier to manage than Excel
- Database friendly – easy integration
- Industry standard XML
  - Widely supported across multiple different platforms
- Upfront validation – ensures data quality

# High-Level Qualified Product Exchange (QPX) System Diagram



## Improvements over Current System

- Enhanced template validation process
- Fewer submission rejections
- XML vs. Excel – XML more easily manageable and database friendly
- Many different ways and options to integrate with QPX

# In Response to CB Survey Feedback



- Technical Support Page on the ENERGY STAR website
  - Supporting documentation
  - CB client web-services instructions and resources
    - I.E. How to interact with the web-service, send, receive, etc.
    - Specifications for sending and receiving information
  - FAQs
- EPA – Testing Information and criteria

# In Response to CB Survey Feedback



- Webinars prior to launch of each template
  - 1-2 hour sessions between SRA and CB Development teams to address technical requirements
  - Review of upcoming release features
  - Discuss any upcoming changes
  - Facilitate questions and answer session
  - Can be posted on web for future reference

# Template Format Overview



- HTML formatted version
- Human readable
  - Easily reviewable by non-developers
- Includes specifications on data requirements
  - Improves data quality
    - Character length restrictions (Min, Max, Range)
    - Data types (text, number, etc)
    - Embedded Lists within the template

# Release Timeframes



- QPX Core System – Fall 2011
- Will include support for the GHP template specification
  - Will **not** support Excel spreadsheet submissions once the GHP-XML service is live
- More information to follow in coming weeks on a template rollout strategy

# Questions?

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- For further inquiry on the long-term solution, please contact ICF/EPA and we can get back to you as soon as possible.





# Questions?



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