

Application Modifications and Enhancements

HiCAMS and DOH Vendor Versions 8.1.1 were released Friday, January 21, 2011.

OVERVIEW OF THE RELEASE

HiCAMS Version 8.1.1 implements updates to the Project Certification Pre-Certification functionality, fixes various production problems in HiCAMS, and fulfills some user requests. Changes include:

- Adding the Project Certification module and submodules to right click popup menu.
- Removing the rule requiring Sample From = **Stockpile** when Test Category = **Quality Assurance**.
- Restoring the ability to enter a QA sample without having to specify a Line Item.
- Fulfilling a user request to allow users with the appropriate security to be able to change the **WBS element** or **Federal Aid Number** before the contract is Authorized.
- Adding **FHWA Operations Engineer** assignment to the Construction Division Assignments table so that Supplemental Agreement Notifications will be sent to only the Engineer assigned to the division that is assigned to the contract.
- Implementing changes that will allow users with the appropriate security to work with Test Formats directly.

CONTRACT MAINTENANCE - Review Contract Details

- Associated the **Administrative Division** to the **Office Location** on the Review Contract Details > Staff Tab rather than the office location of the Resident Engineer. This field can also be updated by users with the appropriate security. This completes updates to assign contracts to an Office Location instead of a Resident Engineer.

CONTRACT MAINTENANCE - Review Contract BOM

- Modified the **error message** received when a user tried to delete a material from the CBOM that was being used in any of the Project Certification Pre-Certification modules to reference the Module instead of the database table.

CONTRACT MAINTENANCE - Authorize Contracts

- Fulfilled a user request to allow users with the appropriate security to be able to change the **WBS element** or **Federal Aid Number** before the contract is Authorized.

CONTRACT ADJUSTMENTS - Review Supplemental Agreements

- Modified the approval logic to create the BSIP transactions for Division (D) contracts.

CONTRACT TRACKING - Review Tickets

- Added the **Binder Grade Pay** to the fields that are blanked when the Job Mix Formula is deleted from the Ticket Book data entry grid.

CONTRACT ESTIMATES - Review Estimates

- Corrected the **Open Issues** tab to display only the last sample in a string of check samples as the one that required disposition. Previously, all samples were listed. This is now consistent with Check Sample disposition requirements, i.e. that if Check Samples are entered, only the last sample in the string requires a disposition comment.
- Reversed the calculation used on the **Estimate Snapshot Report**. The original implementation had Paid to Date minus Received to Date. This has been changed to Received to Date minus Paid to Date.

FIELD INSPECTION REPORTS (FIR) - General

- Corrected the validation between the Represented Quantity and the Alternate ID Quantity so that it is no longer possible to have quantities that do not match.
- Corrected the validation so that it is no longer possible to enter a quantity greater than one when the Alternate ID Type is **Piece** or **Girder**.
- Changed the label on the Button used to link a Field Inspection Report to a Pay Adjustment Recommendation to say **PAR** instead of using the chain link icon. This brings the windows in line with the Density and Sample windows.

FIELD INSPECTION REPORTS (FIR) - Review Concrete Pavement

- Corrected the system calculation of the **Theoretical Pay Factor** and changed the **rounding** used for the **Strength Beam1**, **Beam2**, and **Strength Average**.
- Implemented **Office level** security. Now users can only update records for contracts assigned to their own office.
- Corrected the window opening process so that **Inquiry** users are taken directly to the window instead of being required to Specify Retrieval Arguments.
- Corrected the Save process so that **Comments** entered and Saved are not lost when the user switches to another contract.

FIELD INSPECTION REPORTS (FIR) - Review Field Inspection Reports

- CORRUGATED METAL PIPE: Modified the window so that when Material Type is changed, the **Alternate IDs** are automatically **VOIDed**.
- CORRUGATED METAL PIPE: Modified the window so that if a contract number is specified when a Report Name is entered to retrieve data, and the user subsequently hits the New button, the Contract Number entered to retrieve the date initially is defaulted into the Contract Number field for the New FIR.
- GUARDRAIL: Modified the window so that when Material Type is changed, the **Alternate IDs** are automatically **VOIDed**.
- GUARDRAIL: Modified the window so that if a contract number is specified when a Report Name is entered to retrieve data, and the user subsequently hits the New button, the Contract Number entered to retrieve the date initially is defaulted into the Contract Number field for the New FIR.
- PRECAST CONCRETE: Modified the window so that if a new Material is entered, the **Concrete Mix Design** is not retained.
- PRECAST CONCRETE: Modified the window so that when Material Type is changed, the **Alternate IDs** are automatically **VOIDed**.
- PRECAST CONCRETE: Modified the window so that if a contract number is specified when a Report Name is entered to retrieve data, and the user subsequently hits the New button, the Contract Number entered to retrieve the date initially is defaulted into the Contract Number field for the New FIR.
- PRESTRESSED CONCRETE: Modified the window so that if a new Material is entered, the **Concrete Mix Design** is not retained.
- PRESTRESSED CONCRETE: Corrected the **Report Title** used when the report is printed from the Field Inspection Report to say "Prestressed" instead of "Precast".
- PRESTRESSED CONCRETE: Modified the window so that when Material Type is changed, the **Alternate IDs** are automatically **VOIDed**.
- PRESTRESSED CONCRETE: Corrected the application so that the window no longer crashes when trying to validate that the material exists on some Contract Bill of Materials.
- PRESTRESSED CONCRETE: Corrected the application so that **Accepted Quantities** are no longer defaulted when the Inspection Results are Does Not Meet Specs.

SAMPLING - Review Sample Details

- Restored the ability to enter a QA sample without having to specify a Line Item.

- Removed the rule requiring Sample From = **Stockpile** when Test Category = **Quality Assurance**.
- Changed how the Resident Engineer information is saved on a Sample record so that **Sample Notifications** are sent to the **current** Resident and Project Engineers instead of to the ones that were assigned to the Contract when the sample was entered.
- Corrected when HiCAMS requires **disposition comments** for Samples that are linked as **Check Samples**. Now, only the last sample in the chain requires a disposition.

PROJECT CERTIFICATION - Cross Module Data Report & Export

- Changed the Sort popup so that the column names displayed are decoded from the database column names.

PROJECT CERTIFICATION - Review Project Certification

- Enhanced the report printed from the **Contract Material Quantities** tab to not only respond to the Material Quantities List Filters but to also display what settings were used to generate the report.
- Implemented a new rule that states "If the Material Type requires any combination of Approved List, Visual Inspection, Catalog Cut, or Pretest with a Pretest Match Code equal to (=) 'No Match', no other method of Acceptance, and is Not Received, the quantity of material paid for on each Pay Record will count toward the total quantity of material accepted on a given contract. The Pay Record status must equal **Processed** before the quantity counts toward Acceptance. An example of this is the Material Type "Earthwork Excavations, Miscellaneous" MSG Version 1.0.

PROJECT CERTIFICATION - Review Asphalt Pre-Certification

- Corrected an Application Termination error that occurred when the lower grid of an empty Non-Compliant Testing Quantities tab was clicked.
- Eliminated the duplicate error message that was displayed when the "All PARs are Closed" linking icon was clicked on a contract that did not have any PARs.
- Eliminated the shifting that occurred in the lower datawindow of the Non-Compliant Testing Quantities tab when tabbing through the fields after a row had been entered.
- Updated the window functioning to set the focus in the required field after user acknowledges the required field error message.
- Changed the validation process so that users are able to update multiple rows without having to Save after every row change.

- Added the Line Item Unit of Measure (UOM), the Material UOM, and the Status Date to the **Non-Compliant Testing Quantities** tab.
- Added the latest Acceptance Method on the CBOM to the **Non-Compliant Testing Quantities** tab.
- Modified the application so that 0.00 is allowed in the **Pay Factor Non Comp %** column.
- Added a **flexible Notification** that is activated when the Asphalt Pre-Certification tasks are completed and the Verify button is clicked.
- Implemented the following rules for the window field edits and default values:
 - Pay Factor NonComp % column should default to NULL.
 - Allow user to check Non Compliant PAR Quantities on the General Tab even if some PAR NonComp % values are still NULL.
 - PAR Quantities tab should not require a Reason unless Pay Factor NonComp % is > 0.00.
 - Do not allow Pay Factor Non Comp % > 100 or < 0.
- Implemented the **Notification of Conversion Factor Change** that is sent when a conversion factor on an incorporated material is made after the Asphalt Pre-Certification is complete.

PROJECT CERTIFICATION - Review Material Pre-Certification

- Renamed for Version 8.1.1
- Changed the validation to no longer allow negative numbers to be entered in the Non Comp Quantity field.
- Changed the window action to return focus to the Deficiency tab if the user is viewing either the Activity Log or History tab when the Insert icon is clicked.
- Changed the validation process so that users are able to update multiple rows without having to Save after every row change.
- Added maintenance of the **Final Letter address** to the Constants table so that the addresses could be updated by user with the appropriate security.
- Added a **Print Setup** dialogue box to the **Final Letter** window.
- Made changes to the header and footer layout of the **Final Letter** to match exactly what is currently being used.
- Corrected the Save process in the Soils Pre-Certification module so that the name of the person setting contract record to Complete is recorded on the Activity Log tab. A random name had previously been entered.
- Disabled access to the **Status Letter button** if Pre-Certification Status was Precertified or Certified.

- Updated the bitmap file location for the **State Seal** used on the **Final Letter** so that it would appear on letters printed in Production.

PROJECT CERTIFICATION - Review Soils Pre-Certification

- Corrected a processing runtime error that occurred when switching between the Non-Compliant Testing Quantities and Non-Compliant PAR Quantities tabs.
- Eliminated the duplicate error message that was displayed when the "All PARs are Closed" linking icon was clicked on a contract that did not have any PARS.
- Eliminated the shifting that occurred in the lower datawindow of the Non-Compliant Testing Quantities tab when tabbing through the fields after a row had been entered.
- Updated the window functioning to set the focus in the required field after user acknowledges the required field error message.
- Changed the validation process so that users are able to update multiple rows without having to Save after every row change.
- Added the Line Item Unit of Measure (UOM), the Material UOM, and the Status Date to the **Non-Compliant Testing Quantities** tab.
- Added the latest Acceptance Method on the CBOM to the **Non-Compliant Testing Quantities** tab.
- Modified the application so that 0.00 is allowed in the **Pay Factor Non Comp %** column.
- Corrected the Save process so that the name of the person setting the Soils Pre-Certification to Complete is recorded on the Review Materials Pre-Certification Activity Log tab. A random name had previously been entered.
- Added a **flexible Notification** that is activated when the Soils Pre-Certification tasks are completed and the Verify button is clicked.
- Implemented the following rules for the window field edits and default values:
 - Pay Factor NonComp % column should default to NULL.
 - Allow user to check Non Compliant PAR Quantities on the General Tab even if some PAR NonComp % values are still NULL.
 - PAR Quantities tab should not require a Reason unless Pay Factor NonComp % is > 0.00.
 - Do not allow Pay Factor Non Comp % > 100 or < 0.
- Implemented the **Notification of Conversion Factor Change** that is sent when a conversion factor on an incorporated material is made after the Soils Pre-Certification is complete.

QUERY TOOL

- DENSITY - All Types: Fulfilled a user request by adding **Administrative Division Number** and **Resident Engineer** to the list of available fields that can be used for display or as criteria.
- FIELD INSPECTION REPORTS, MATERIAL RECEIPTS, MINIMUM SAMPLING GUIDE, and SAMPLES: Completed the work begun in Version 8.1 to decode **Alternate ID Types** correctly.

STANDARD REPORTS - General

- Changed the code that generates the Contract Description to allow it to process instances where double quotes occur, as when a length is described as 12'-6".

REFERENCES - Asphalt Mix Designs

- Moved the **Trade Secret** warning statement so that long comments are no longer overwritten.
- Updated the navigation through the fields when the **Enter key** is used so that all fields are accessed in order.

REFERENCES - Job Mix Formulas

- Moved the **Trade Secret** warning statement so that long comments are no longer overwritten.

REFERENCES - Test Formats

- Made the following changes to the Test Formats window:
 - Provided a warning message when user enters the window but does not have update access and/or is not in the spc database group. In production, user gets a db error when attempting to save changes.
 - Added general test format info to the upper portion of the window so that the user does not have to flip back to the Template List tab to see format title, expiration date, import data, and last user id.
 - Added a **Validate Formula** option (check box). When a new version of a test format is imported, the application will run a cursory check of the spreadsheet's data layout tab to make sure there are no gaps in user field codes and field references. This will catch most functional errors not usually caught until the format is in use. The results of the formula validation appear on the new "Formula Result" tab.
 - When a new version is imported, a **Copy Info** button appears in the upper right corner of the window. If none of the template's general information is changing

from version to version (title, owning lab & Metric/English code), use can click this button and those values will be copied forward from old version to new version so that user does not have to rekey this info.

- Added a new **Show Report Info** button was added to the upper portion of the window so the user can view the Report Layout from this screen. The Report Layout was not viewable at all from the Test Formats Maintenance window before.

ADMIN - Codes Table

- CONSTANTS: Added Final Certification - Full Oversight and Final Certification - Not Full Oversight fields.

TOOLS - Notifications

- Fulfilled a user request to display the **Notification Alert** and the **Notification Message** on the same window, eliminating the need to tab to read the full message. The grid displaying the notification alerts has been reduced, and the data originally displayed on the Message Tab is now displayed in the lower portion of the window. All original functionality is still available in the redesigned window.

ADMIN - Security

- Fulfilled a user request to add a **Comments** box to each Staff Record.

PRODUCTS - Review Product Maintenance

- Added a field for the **email address** of the Contact in DOH Vendor's Review Product Maintenance window.