## **Application Modifications and Enhancements**

# HiCAMS & DOH Vendor Version 8.4.7 were released Friday, 08/21/2015.

## **OVERVIEW OF THE RELEASE**

- Major components of this release include the implementation of the new electronic pay records functionality in the Pay Records desktop and the new Pay Records mobile windows (SQA 21623, 21606).
- Another major change in this release was the redefinition of how the Station fields on various windows throughout HiCAMS are entered. The Station fields are the Station From, Station From Fraction, Station To, Station To Fraction (SQA 21617).
- HiCAMS Version 8.4.7 is comprised of application fixes for production problems in various modules; and a data conversion for Pay Records.

#### **HiCAMS - General**

- Pay records with Source Document Type of 'Electronic Pay Record' at the time of the release were converted to 'Old Electronic Pay Record'. The Book and Page have been greyed out and disabled; but the values remain the same. The 'Old Electronic Pay Record' will display on the Verify Final Quantities window as all other records which are not 'Electronic Pay Record'. New 'Electronic Pay Record' entries created after August 21, 2015, will follow all the rules applied in the 8.4.7 release.
- The Station From, Station From Fraction, Station To, Station To Fraction fields have been redefined as numeric fields, and accept only zeros, whole numbers and decimal numbers. These fields are entered and displayed on multiple modules throughout HiCAMS. (SQA 21617).
- The Station fields are formatted according to whether they are associated with an English contract or Metric contract. If there is no contract associated, the default display is the English format. (SQA 21617).
- The modules which display or query all or some of the Station fields are: Pay Records, Tickets, Field Inspection Reports (Guardrail, Corrugated Steel Pipe, Structured Steel, Precast, Stay-In-Place), Densities (Asphalt Core QC, Asphalt Nuclear QC, Other Nuclear, Other Conventional) Samples, and Independent Assurance (SQA 21617).

#### **CONTRACT MAINTENANCE - Review Contract BOM**

• The Material Selection window works correctly and retains the Line Item selected by the user and does not reset to the top of the Line Item list (SQA 21582).

## **CONTRACT MAINTENANCE - Review Contract Details**

- Updated the Warranties window so that the columns are not allowed to be rearranged (SQA 21592).
- The CQI fields display on the Completion tab. These fields are entered on the Project Closeout Review CQI window (SQA 21595).

• Changed the Bridge Number field, on the Project Guarantee tab, to allow a larger value to be entered. A number up to 8 digits can now be entered. (SQA 21660).

## CONTRACT TRACKING - MRR Mobile Data Entry

- This window has been changed to include Alternate IDs on Prestressed Concrete (SQA 21607).
- Same functionality as what is available for Alternate IDs on Precast Concrete.

## **CONTRACT TRACKING - Reconcile MRR**

- This window has been changed to include Pre-stressed concrete Alternate IDs which need to be fixed and reconciled (SQA 21607).
- Same functionality as what is available for Alternate IDs on Precast Concrete.

#### **CONTRACT TRACKING - Review Material Receipts**

• The window has been fixed so that if a Plant ID is entered, modified or deleted in the grid, the application proceeds with validation check of material instead of terminating (SQA 21646).

## **CONTRACT TRACKING - Review Pay Records**

- Various changes were made to the existing 'desktop' version of the Pay Record window (SQA 21623).
- If 'Electronic Pay Record' Source value is selected, the Book and Page grid columns are greyed out and not editable. These pay records are displayed and verified individually on the Verify Final Quantities window (SQA 21623).
- Moved the Location fields from the Location tab to the General tab; removed the Location tab (SQA 21623).
- Moved the Substitutable Materials selection list from the General tab and placed it on the new Substitutable Materials tab (SQA 21623).
- Added the Field Measured Indicator on General tab; added calculated display field Quantity to Date above the tabs; added Estimate Number to the grid as display only (SQA 21623).
- The window has changed how the Station fields are entered and/or displayed (SQA 21617).
- The allowed entered value in the Fraction field cannot exceed two decimal places for an English contract. Format is '##.##' (SQA 21617).
- The allowed entered value in the Fraction field cannot exceed three decimal places for a Metric contract. Format is '##.###' (SQA 21617).

## **CONTRACT TRACKING - Pay Records Mobile Data Entry**

- NEW for version 8.4.7.
- This window uses most of the same functionality as the desktop Pay Record window, but is designed to be easier to use on a mobile device (SQA 21606).
- Any pay record type can be added/changed, but the default is 'Electronic Pay Record' (SQA 21606).
- There are three tabs which include a tab to list the existing pay records, a tab to add/change pay records, and a tab to select Substitutable Materials (SQA 21606).

- Electronic pay records added from the mobile window are displayed and verified individually on the Verify Final Quantities window (SQA 21606).
- The Station fields act the same as on the desktop (SQA 21606).
- The allowed entered value in the Fraction field cannot exceed two decimal places for an English contract. Format is '##.##' (SQA 21617).
- The allowed entered value in the Fraction field cannot exceed three decimal places for a Metric contract. Format is '##.###' (SQA 21617).

#### **CONTRACT TRACKING - Review Tickets**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

#### **CONTRACT TRACKING - Review Work Accomplished**

• Updated the window so that the columns are not allowed to be rearranged (SQA 21592).

#### **CONTRACT ESTIMATES - Verify Final Quantities**

- Electronic pay records added from the desktop or mobile window are displayed with additional columns and verified individually on the Verify Final Quantities window (SQA 21623, 21606, 21644).
- Electronic pay records display the Date, Station From/Station To, and Location (21623, 21606).
- Electronic Pay Record Only Indicator and Comments field were added to the window (SQA 21644).
- If Electronic Pay Record Only Indicator is checked, only Electronic Pay records are displayed (SQA 21644).

#### **DENSITY - General**

 The Station From and Station From Fraction fields have been redefined as numeric fields, and accept only zeros, whole numbers and decimal numbers. Two decimal places are allowed if associated with an English contract; three decimal places are allowed if associated with a Metric contract. The default is two decimal places if there is no associated contract. Only some of the Density types have the Station fields on the window (SQA 21617).

## **DENSITY - Review Density Asphalt Cores QC**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## **DENSITY - Review Density Asphalt Nuclear QC**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

#### **DENSITY - Review Density Other Conventional**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

#### **DENSITY - Review Density Other Nuclear**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## FIELD INSPECTION REPORTS (FIR) - General

 The Station From and Station From Fraction fields have been redefined as numeric fields, and accept only zeros, whole numbers and decimal numbers. Two decimal places are allowed if associated with an English contract; three decimal places are allowed if associated with a Metric contract. The default is two decimal places if there is no associated contract. Only some of the FIR types have the Station fields on the window (SQA 21617).

**CORRUGATED METAL PIPE:** Fixed window so that able to use word wrap without interfering with entering and saving a new FIR record (SQA 21618).

**CORRUGATED METAL PIPE:** The window has changed how the Station fields are entered and/or displayed (SQA 21617).

**GUARDRAIL:** The window has changed how the Station fields are entered and/or displayed (SQA 21617).

#### STAY-IN-PLACE:

- Changed the window so that the Results Tab is available on a FIR without an associated contract number (SQA 21616).
- The window has changed how the Station fields are entered and/or displayed (SQA 21617).

**STRUCTURAL STEEL**: The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## **INDEPENDENT ASSURANCE - General**

 The Station From, Station From Fraction, Station To, Station To Fraction fields have been redefined as numeric fields, and accept only zeros, whole numbers and decimal numbers. Two decimal places are allowed if associated with an English contract; three decimal places are allowed if associated with a Metric contract. The default is two decimal places if there is no associated contract. (SQA 21617).

## **INDEPENDENT ASSURANCE - Review IA Correlations**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## **INDEPENDENT ASSURANCE - View IA Records Pending Correlation**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

#### **INDEPENDENT ASSURANCE - View IA Records Pending Verification**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## **INDEPENDENT ASSURANCE - View IA Records Pending Completion**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

#### SAMPLING - General

 The Station From, Station From Fraction, Station To, Station To Fraction fields have been redefined as numeric fields, and accept only zeros, whole numbers and decimal numbers. Two decimal places are allowed if associated with an English contract; three decimal places are allowed if associated with a Metric contract. The default is two decimal places if there is no associated contract. (SQA 21617).

## **SAMPLING - Enter Sample Details**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## **SAMPLING - Review Sample Details**

• The window has changed how the Station fields are entered and/or displayed (SQA 21617).

## **SAMPLING - Review Test Results**

 The functionality to email test results in pdf format was introduced in HiCAMS. 8.4.6, but now also works with the latest version of Docudesk software. (SQA 21647).

## **PROJECT CERTIFICATION - Review Project Certification**

 The Project Certification Final Letter report is changed to print the phone number, fax number and website address as is printed on the DOT letterhead. The Final Letter report prints as: Telephone: 919-329-4000, Fax: 919-733-8742, Website WWW.NCDOT.GOV (SQA 21612).

## QUERY TOOL

**CONTRACT LINE ITEMS:** Added the Administrative Division Number and the Work Start Date columns and are available for querying (SQA 21656).

#### **DENSITY**:

**Asphalt Core QC:** The Station From Fraction field has changed the display format to.include three decimals. The Station fields have been redefined as numeric in HiCAMS.(SQA 21617).

**Asphalt Nuclear QC:** The Station From Fraction field has changed the display format to.include three decimals. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**Other Nuclear:** The Station From Fraction field has changed the display format to.include three decimals. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**Other Conventional:** The Station From Fraction field has changed the display format to.include three decimals. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**FIELD INSPECTION REPORTS:** Added the Authorized By, Authorized Date, Created By, Created Date history columns and are available for querying on most of the FIRs, except for the Concrete Pavement FIR query which did not change. (SQA 21620).

**Guardrail FIR:** The Station From field has changed the display format to include three decimals on the right side of the + sign. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**Corrugated Metal Pipe FIR:** The Station From field has changed the display format to include three decimals on the right side of the + sign. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**Structured Steel FIR:** The Station From field has changed the display format to include three decimals on the right side of the + sign. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**Precast FIR:** The Station From field has changed the display format to include three decimals on the right side of the + sign. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**Stay-In-Place FIR:** The Station From field has changed the display format to include three decimals on the right side of the + sign. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**INDEPENDENT ASSURANCE:** The Station From and the Station To fields have changed the display format to include three decimals in the Fraction number (which is right side of the + sign). The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

#### PAY RECORDS:

- The Station From and the Station To fields have changed the display format to include three decimals in the Fraction number (which is right side of the + sign). The Station fields have been redefined as numeric. (SQA 21617).
- Added the new column Field Measured Indicator (SQA 21629).

**SAMPLES:** The Station From and the Station To fields have changed the display format to include three decimals in the Fraction number (which is right side of the + sign). The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

**TICKETS:** The Station From Fraction and Station To Fraction fields have changed the display format to include three decimals. The Station fields have been redefined as numeric in HiCAMS (SQA 21617).

## **REFERENCES - Concrete Mix Designs**

ASSIGN CONTRACTS: The 312U report, printed from the Assign Contracts window, changed so now uses the Signature and Job Title information from Vendor, instead of a hardcoded name and title. The Signature and Job Title information is maintained on the Vendor Technical Review Signatures window. Added the user name of person who made the assignment on the Assign Contracts window in HiCAMS(SQA 21650).

#### ADMIN - Codes Table

• CONSTANTS: Added new column QAP STATUS MESSAGE PART 2. Purpose of this new column is to display on the QAP as a splash screen (SQA 20383).

#### **DOH Vendor - General**

- The Product Detail tab on the Review Product Maintenance window was changed to include Recycled Content fields and are made available for querying (SQA 21587).
- Approved Product website will be changed, separately and outside of HiCAMS, to include the display of the Contains Recycled Content checkbox.

#### **TECHNICIAN - Review Signatures**

 Added the Structural Materials Engineer title with the name Brian Hunter and his signature to be used by the 312U CMD report. The 312U CMD report printed from the CMD Assign Contracts window prints the title, name and signature at the bottom of the report (SQA 21650).

#### **PRODUCER/SUPPLIER - Review Producer/Supplier**

• The Review Producer/Supplier window was changed to include a new Materials tab. The Materials tab provides the ability to maintain a mapping between an aggregate material and the producer/supplier facility which makes that material. Only Aggregate materials will be maintained on this tab. The purpose of this mapping maintained in Vendor is to provide QAP Aggregate a filtered selection list of aggregate materials made at a producer/suppliers facility plant. (SQA 21605).

#### **PRODUCTS - Review Product Maintenance**

The Product Detail tab/window was changed to include Recycled Content fields -Contains Recycled Content checkbox, Recycled Content Percentage, and the Explanation text box (SQA 21587).

## QUERY TOOLS

**PRODUCTS:** Added the Recycled Content, Recycled Content Percentage, and the Recycled Content Explanation columns and are available for querying (SQA 21587).

#### **QAP- General**

- The splash screen message will display more text on the QAP landing page. HiCAMS added a new column to maintain the increased text (SQA 20383).
- QAP Aggregate: A filtered selection list is provided based on the producer supplier/facility entered, and only shows the materials for that specific facility (SQA 21593).
- The V samples now exist in the QAQC tables maintained in HiCAMS, and will be included when data is provided from HiCAMS to QAP. The V sample production data has been converted so can be seen in QAP (SQA 21675).
- Add QAP Query Tool functionality to both HiCAMS and QAP. These fields will be included in query tool: Facility ID, Facility Name, Facility Type, Material Description, Plant ID, Producer/Supplier, Sample Date, Sample Number, Sample Type Code, Sampled By, Tested By (SQA 20470).