# Tank Farm Maintenance Procedure

## Platform Scale Calibration

**USQ # Routine Maintenance**

<table>
<thead>
<tr>
<th>Rev-Mod</th>
<th>Release Date</th>
<th>Justification</th>
<th>Summary of Changes</th>
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<tr>
<td>C-0</td>
<td>04/30/2015</td>
<td>Periodic review recommendation to delete the &quot;warning&quot;. Per TFC-ESHQ-S_SAF-C-02 &quot;warnings&quot; are not applicable for GHA documents and this procedure has been categorized as a GHA document.</td>
<td>Pages 3 and 6 deleting &quot;warning&quot;.</td>
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<tr>
<td>B-1</td>
<td>11/20/2014</td>
<td>CHAMPS Removal</td>
<td>Removed reference to CHAMPS, updated records statements and removed next periodic review date.</td>
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<tr>
<td>B-0</td>
<td>03/27/2012</td>
<td>Periodic Review</td>
<td>Revised procedure in accordance with procedures formatting/standards, and added inconsequential wording changes for clarity. Removed “vague phrases” (e.g., “as necessary”, “as applicable”).</td>
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1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure provides instructions for a safe, uniform method to perform maintenance, verification, and calibration of Platform Scale.

1.2 Scope

This procedure involves calibration of Rice Lake Weighing Systems IQ Plus® 355 Platform Scale located at the 616 facility and other locations.

2.0 INFORMATION

2.1 General Information

The space between the platform side and pit frame, and the surface beneath the platform must be cleaned periodically to prevent debris build-up, which may cause erroneous readings.

3.0 PRECAUTIONS AND LIMITATIONS

3.1 Radiation and Contamination Control

Work in radiological areas will be performed using a Radiological Work Permit following review by Radiological Control per ALARA work planning procedure TFC-ESHQ-RP_RWP-C-03.
4.0 PREREQUISITES

4.1 Special Tools, Equipment and Supplies

The following supplies may be needed to perform this procedure:

- Weight set, ranged per Data Sheet, accuracy per National Institute of Science and Technology (NIST) Class F
- Medium Straight Blade Screwdriver
- Other tools, equipment, and supplies as identified by Shift Manager/OE/FWS/User.

4.2 Performance Documents

The following documents may be needed to perform this procedure:

- Rice Lake Weighing System IQ Plus® 355 Digital Weight Indicator Version 1.1
- Rice Lake Weighing System Rough Deck Low-Profile Floor Scale 66662.

4.3 Field Preparation

4.3.1 OBTAIN M&TE weights per Data Sheet instructions.
5.0  PROCEDURE

5.1  Check Scale Linearity

5.1.1  REFER to Figure 1 and Figure 2 as necessary.

5.1.2  IF power cord is frayed or damaged, REPLACE power cord.

5.1.3  ALLOW Scale and weights to reach thermal equilibrium and to warm up for at least 30 minutes.

5.1.4  CLEAN the Scale of any articles that might affect its operation (e.g. tools, sand, debris, etc.).

5.1.5  USING a spirit level, CHECK whether platform is within ± ¼” of level AND RECORD the results on Comments section of Data Sheet.

5.1.6  IF Scale Platform is within ± ¼” of level and is stable, GO TO Step 5.1.11.

5.1.7  IF Scale Platform is not level and/or stable, “N/A” As-Found values on Data Sheet AND DOCUMENT the condition/results in Comments section of Data Sheet.

5.1.8  LEVEL Scale Platform as follows:

5.1.8.1  PLACE a spirit level on the deck.

5.1.8.2  ADJUST the screw-feet as necessary to bring Platform within ± ¼” of level.

5.1.9  RECORD Platform leveling results in Comments section of Data Sheet.

5.1.10  GO TO Section 5.2, Calibration.
5.1 Check Scale Linearity (Cont.)

5.1.11 USING proper lifting techniques, PLACE each listed standard per Data Sheet symmetrically on the Scale.

5.1.12 ALLOW each reading to stabilize AND RECORD each As-Found value on Data Sheet.

5.1.13 IF any readings are found out of tolerance, ADJUST Scale per Section 5.2, Calibration

OR

IF readings are within tolerance per Data Sheet, RECORD in As-Left column of Data Sheet AND

GO TO Section 5.3, Restoration.
5.2 Calibration

Front Panel Calibration

5.2.1 REFER to Figure 1 and Figure 2 as necessary.

NOTE - To perform Calibration, the Scale must be placed in the “Setup Mode”.

5.2.2 REMOVE the large slotted-head screw from the enclosure back-plate to enter the “Setup Mode”.

5.2.3 INSERT a screwdriver or similar tool into the access hole AND PRESS the setup switch once.

5.2.4 CHECK the indicator display changes to show the word “CONFIG”.

5.2.5 REPLACE the large slotted-head screw removed in Step 5.2.2.

5.2.6 PRESS ▲ key until the display reads “CALIBR”.

5.2.7 PRESS ▼ key to go to zero calibration (WZERO).

NOTE - The ◎ key is the “Tare” key in normal operations. However, when the Scale controller is placed in the “Setup Mode” for calibrations, the ◎ key functions as the “Enter” key during Calibration or Configuration.

5.2.8 WITH WZERO displayed, PRESS ◎ key to calibrate zero.

5.2.8.1 CHECK that the indicator displays “CAL”, to ensure calibration is in progress.

5.2.8.2 WHEN complete, CHECK that the count for “Zero” calibration is displayed.

5.2.8.3 PRESS ◎ key again to save the “Zero” calibration value and to proceed to the next prompt (WVAL).

5.2.9 WITH “WVAL” displayed, PLACE “Span” test weight(s) [750 lbs] on the Scale per Data Sheet AND PRESS ◎ key to show test weight value.
5.2 Calibration (Cont.)

5.2.10 USE the following process to enter actual test weight value (750 lbs) per Data Sheet:

NOTE - Figure 2 illustrates the “Editing Process for Numeric values.”

5.2.10.1 PRESS ◀ or ▶ key to change the digit selected when editing the numeric value.

5.2.10.2 PRESS ▲ or ▼ key to increment or decrement the value of the selected digit.

5.2.11 PRESS ◼ key to save the value entered and to proceed to the “Span” Calibration (WSPAN).

5.2.12 WITH WSPAN displayed, PRESS ◼ key to Calibrate Span.

5.2.12.1 CHECK that the indicator displays “CAL”, to ensure calibration is in progress.

5.2.12.2 WHEN complete, CHECK that the count for “Span” calibration is displayed AND

NOTE “Span” value.

NOTE - Step 5.2.12.3 saves the Span Cal and shifts to the next prompt (REZERO). The REZERO function is used to remove a calibration offset when hooks or chains are used to hang the test weight(s); the function is not applicable to this Calibration.

5.2.12.3 PRESS ◼ key again to save the “Span” calibration value (this also shifts to the next prompt [REZERO]).

5.2.13 REMOVE the test weight(s).
5.2 Calibration (Cont.)

5.2.14 IF the Span value is not within tolerance per Data Sheet, **PERFORM** the following:

5.2.14.1 **PRESS** ▲ key to return to “CALIBR” menu.

5.2.14.2 **PRESS** ▼ key to go to zero calibration (WZERO).

5.2.14.3 IF recalibration is desired, **REPEAT** Steps 5.2.8 thru 5.2.14.

5.2.15 IF the Span value is within tolerance per Data Sheet, **RECORD** in As-Left Section of Data Sheet.

5.2.16 **PRESS** ▲ key to return to the “CALIBR” menu.

5.2.17 **PRESS** ▼ key UNTIL the display reads “CONFIG”.

5.2.18 **PRESS** ▲ key to exit Setup Mode.
5.3 Restoration

5.3.1 IF any problems were encountered with calibration, INFORM FWS.

5.3.2 RECORD the Test Equipment information and calibration status on Data Sheet as applicable.

5.3.3 SECURE test weight(s).

5.3.4 NOTIFY contact on Data Sheet and have weights returned to storage.

5.4 Acceptance Criteria

Acceptance Criteria has been met when steps in this procedure have been satisfactorily performed and As-Left values meet the specifications and tolerance(s) per the Data Sheet.

5.5 Review

5.5.1 INFORM FWS test is complete.

5.5.2 FWS REVIEW AND ENSURE the following:

- Completed Data Sheets meet the acceptance criteria.
- Comments sections are filled out appropriately.
- Work requests needed as a result of this procedure are identified and generated.
- Work request number(s) of any work documents generated as a result of this procedure, are recorded in the Comments/Remarks section of the Data Sheet, as applicable.

5.6 Records

The performance of this procedure generates no records. However, PM Data Sheets associated with the procedure, are records and are maintained in the work package as record material.

The record custodian identified in the company-level Records Inventory and Disposition Schedule (RIDS) is responsible for record retention in accordance with TFC-BSM-IRM_DC-C-02.
Figure 1 - Normal Mode Key Functions Displayed

- **Gross**: Set gross weight to zero
- **Net**: Switch between gross and net weight display
- **TARE**: Acquire tare
- **UNITS**: Switch between primary and secondary units
- **PRINT**: Send data to serial port

**DIGITAL WEIGHT INDICATOR**
When editing numeric values, press ▼ or ▲ to change the digit selected. Press ▼ or ▲ to increment or decrement the value of the selected digit. Press ◆ to save the value entered and return to the level above.