

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. CERTIFICATE/QUALITY ASSURANCE PROGRAM (QAP) HOLDER:

Century Industries
196 Beacon Road
Bristol, VA, 24201

2. NRC/REGIONAL OFFICE

Headquarters
U. S. Nuclear Regulatory Commission
Mail Stop EBB-3-D-02M
Washington, DC 20555-0001

REPORT NUMBER(S) 71-0947/2013-201

3. CERTIFICATE/QAP DOCKET NUMBER(S)

71-0947 (QA)
71-9342 (CoC)

4. INSPECTION LOCATION

196 Beacon Road
Bristol, VA, 24201

5. DATE(S) OF INSPECTION

01/29-30/2013

CERTIFICATE/QUALITY ASSURANCE PROGRAM HOLDER:

The inspection was an examination of the activities conducted under your QAP as they relate to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your QAP Approval and/or Certificate(s) of Compliance. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- ☐ 1. Based on the inspection findings, no violations were identified.
- ☐ 2. Previous violation(s) closed.
- ☐ 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.

Non-cited violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

- ☒ 4. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited in accordance with NRC Enforcement Policy. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

(Violations and Corrective Actions)

10 CFR 71.111, "Instructions, procedures, and drawings," states, in part, that "the certificate holder shall prescribe activities affecting quality by documented instructions or procedures, of a type appropriate to the circumstances and shall require that these instructions or procedures be followed." Contrary to this requirement, during an NRC inspection conducted 01/29-30/2013 at Century Industries (CI), the following examples were noted whereby CI did not properly prescribe activities affecting quality in documented instructions or procedures or whereby CI personnel did not follow instructions or procedures for activities affecting quality:

- 1. CI weld inspector determined undersized welds on Vers-Pak Serial No. 10889 which had been provided for

Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the Inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

TITLE	PRINTED NAME	SIGNATURE	DATE
CERTIFICATE/QAP REPRESENTATIVE	Heather Little	<i>Heather N. Little</i>	2/15/13
NRC INSPECTOR	Jim Pearson	<i>Jim Pearson</i>	2/13/13
BRANCH CHIEF	Eric Benner	<i>Eric Benner</i>	2/21/13

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NRC INSPECTOR	Jim Pearson	<i>Jim Pearson</i>	2/13/13
BRANCH CHIEF	Eric Benner		

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(Continued)

QA inspection. The Versa-Pac was returned to the welder to correct the undersized welds without documenting a nonconformance according to CI procedure Standard Operating Procedure (SOP) 9.1, Revision 5, "Nonconforming Items and Corrective Action, Section 4.1, Steps b and d.

2. Nonconformance Report (NR) 0015 was signed off as complete; however, one of the actions for the approved disposition had not been implemented.

3. The 0 to 32,000 gram table balance scale (equipment number CH1101129) was listed as being out of calibration yet it did not have an "Out of Calibration" sticker placed on it as required by step 6.4 of SOP 8.0, "Calibration and Verification of Measuring and Test Equipment."

4. SOP 8.0 did not properly prescribe actions to be taken by CI for placing operational limits on measurement and test equipment whose calibration is not conducted over their full range. A scale and a torque wrench were not calibrated over their full range yet operational restrictions were not put in place to prevent their use in the non-calibrated regions.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, CI is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to Eric Benner, Chief, Rules, Inspections, and Operations Branch, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS),

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6. INSPECTION PROCEDURES USED

86001

7. INSPECTION FOCUS AREAS

Corrective Actions & Fabrication

SUPPLEMENTAL INSPECTION INFORMATION

1. CERTIFICATE/QAP HOLDER CONTACT

Heather Little

2. TELEPHONE NUMBER

(276) 644-4866

PROGRAM SCOPE

(Findings Continued)

<http://www.nrc.gov/reading-rm/adams.html>, (the Public Electronic Reading Room) to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/readingrm/adams.html>, (the Public Electronic Reading Room). If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 13th day of February, 2013.

INSPECTOR NOTES COVER SHEET

Licensee/Certificate Holder (name and address)	Century Industries 196 Beacon Road Bristol, VA, 24201
Licensee/Certificate Holder contact and phone number	Ms. Heather Little 276-644-4866
Docket No.	71-0947
Inspection Report No.	71-0947/2013-201
Inspection Date(s)	January 28-31, 2013
Inspection Location(s)	Century Industries, 196 Beacon Road, Bristol, VA, 24201
Inspectors	Jim Pearson (Lead), & Rob Temps
Summary of Findings and Actions	<p>The purpose of the inspection was to re-inspect Century Industries' ability to comply with 10 CFR Parts 21 and 71. In addition, the inspection focused on Corrective actions taken to the observations identified during the April 2011 inspection and additional efforts occurred to evaluate continuing actions taken in response to Corrective Action Letter (CAL) No. 2010-001 as well as examination of any ongoing fabrication process.</p> <p>Century Industries was found to have violated 10 CFR 71.111, "Instructions, procedures, and drawings," which states, in part, that "the certificate holder shall prescribe activities affecting quality by documented instructions or procedures, of a type appropriate to the circumstances and shall require that these instructions or procedures be followed." Contrary to this requirement, during an NRC inspection conducted 01/29-30/2013 at Century Industries (CI), the following examples were noted whereby CI did not properly prescribe activities affecting quality in documented instructions or procedures or whereby CI personnel did not follow instructions or procedures for activities affecting quality:</p> <ol style="list-style-type: none">1. CI weld inspector determined undersized welds on Versa-Pac Serial No. 10889 which had been provided for QA inspection. The Versa-Pac was returned to the welder to correct the undersized welds without documenting a nonconformance according to CI procedure Standard Operating Procedure (SOP) 9.1, Revision 5, "Nonconforming Items and Corrective Action, Section 4.1, Steps b and d.2. Nonconformance Report (NR) 0015 was signed off as complete; however, one of the actions for the approved

	<p>disposition had not been implemented.</p> <p>3. The 0 to 32,000 gram table balance scale (equipment number CH1101129) was listed as being out of calibration yet it did not have an "Out of Calibration" sticker placed on it as required by step 6.4 of SOP 8.0, "Calibration and Verification of Measuring and Test Equipment."</p> <p>4. SOP 8.0 did not properly prescribe actions to be taken by CI for placing operational limits on measurement and test equipment whose calibration is not conducted over their full range. A scale and a torque wrench were not calibrated over their full range yet operational restrictions were not put in place to prevent their use in the non-calibrated regions.</p> <p>The above four examples are a Severity Level IV violation (Supplement VI).</p>
Lead Inspector Signature/Date	Jim Pearson <i>Jim Pearson</i> 2/21/13
Inspector Notes Approval Section Chief Signature/Date	Eric Benner <i>Eric Benner</i> 2/21/13

INSPECTOR NOTES: While IP 86001 was used as a guide for this inspection, the emphasis of the inspection was focused on the corrective actions performed since the previous inspection. Inspection results are documented below and on the attached NRC FORM 591:

02.02 Verify that the Certificate of Compliance (CoC) holder's activities related to transportation packagings are being conducted in accordance with the CoC, as well as the NRC-Approved Quality Assurance (QA) Program (reference Regulatory Guide 7.10), and that implementing procedures are in place and effective.

The activities are generally occurring according to QA program and the CoC however, deviations identified during the inspection are identified on the associated NRC 591 FORM.

02.03 Verify that provisions are in place for reporting defects which could cause a substantial safety hazard, as required by 10 CFR Part 21.

The team did review the provisions for reporting defects and did not determine any instance where 10 CFR Part 21 was violated.

02.04 Interview selected personnel and review selected design documentation to determine that adequate design controls are implemented.

As mentioned above design control was not a major part of this inspection (only as it occurred in association to corrective actions) however, the team did not determine any violation of design control criteria during the inspection.

02.05 Review selected drawings, procedures and records, and observe selected activities

being performed to determine that the fabrication, test, and maintenance activities meet SARP design commitments and requirements documented in the CoC.

During the inspection the team witnessed fabrication and test activities and documented deficiencies on the NRC 591 FORM attached. No maintenance activities were performed or inspected.

02.06 Observe activities affecting safety aspects of the packaging (such as fabrication, assembly, and testing) to verify that they are performed in accordance with approved methods, procedures, and specifications.

The team witnessed welding, assembly, and test activities and documented deficiencies on the NRC 591 FORM attached.

02.07 Review selected drawings and records, and interview selected personnel, to verify that the procurement specifications for materials, equipment, and services received by the QA Program holder meet the design requirements.

Procurement activities were not a major part of this inspection (only as they applied to corrective actions taken by CI.). The team did not determine any violation of procurement control criteria during the inspection.

02.08 Review selected records and interview selected personnel to verify that a nonconformance control program is effectively implemented, and that corrective actions for identified deficiencies are technically sound and completed in a timely manner.

Deficiencies for this section are documented in the inspector notes below and on the attached NRC 591 FORM.

02.09 Review selected records and procedures, interview selected personnel, and observe selected activities affecting the safety aspects of the packaging to verify that individuals performing activities affecting quality are properly trained and qualified, and to verify that management and QA staff are cognizant and provide appropriate oversight.

The team inspected this area and the results are documented in the attached inspector's notes below.

02.10 Verify that audits of the QA Program and activities affecting the safety aspects of the packaging are scheduled, have been performed as scheduled, and that identified deficiencies have been satisfactorily resolved in a timely manner.

This area was inspected and the results are documented in the attached inspector's notes below.

Corrective Actions

The team reviewed CI's corrective actions taken for the NOV issued during the previous NRC inspection in April 2011. The team confirmed that the non-conformances identified in the Notice of Violation (NOV) had all been entered into Corrective Actions Reports (CARs) or Nonconformance Records (NRs) in accordance with CI's corrective action program procedures.

The team verified through review of records that the corrective actions described in CI's

response to the NOV had been taken. The following findings and observations were noted by the team with regard to the CARs and NRs for the NOV as well as other CARs and NR issued by CI since the April 2011 inspection:

1. CAR 0024 was issued to address the issue that a scale used to weigh packagings was found out of calibration. In the CAR, a statement was made that the scale had been sent for calibration and that no adjustment was performed. However, a review of the calibration record identified that the scale had required a minor adjustment of minus one pound at the 1000 pound reading. CI corrected the CAR to reflect that an adjustment had been made; however, the value where adjustment was required did not affect packagings weighed to date as they all weigh approximately 500 pounds. Additional issues were identified in the calibration record and are discussed further in these inspector notes under the Measurement and Test Equipment section.
2. NR 0015 was issued to address the issue of welding machine voltages deviating from the WPS. Corrective actions included procedure changes and a commitment to issue a memorandum discussing the issue and the NR was closed. CI was unable to locate the promised memorandum when a copy of it was requested by the team. CI could not definitively determine whether the memorandum had ever been issued. This is a violation of CI Standard Operating Procedure (SOP) 9.1, "Nonconforming Items and Corrective Action," Form D21 (Nonconformance Report) in that the "Implementation Completed" section was signed yet one of the actions for the approved disposition had not been implemented. This finding is one of the examples cited in the NOV issued with the Form 591 attached with these inspector notes. The team noted that the welding voltage issue discussed in the NR had been included, and continues to be included, in periodic QA training provided to CI production staff.

Measurement and Test Equipment

The team reviewed SOP 8.0, "Calibration and Verification of Measuring and Test Equipment," and also reviewed the calibration log, calibration binder and selected calibration records. The team identified the following finding. In reviewing corrective actions for CAR 0024 (discussed earlier in these inspector notes) the team reviewed the most recent calibration records and noted that the 0 to 5,000 pound platform scale was only being calibrated at the 500 pound reading; however, the scale reads up to 5,000 pounds. CI had not placed any restriction on use of the scale for weights greater than 500 pounds. CI stated that it was their intent to have the scale calibrated at 500 pound intervals, not just at the 500 pound reading, but this had not been clearly communicated to the calibration lab nor had CI questioned the calibration records when they came back showing that the scale had only been calibrated at the 500 pound reading. A similar issue was identified with regard to torque wrench serial number 4030966343 in that it has a range of 20 to 150 ft-lb yet it was only being checked at the 20, 30 and 40 ft-lb readings by the calibration lab. CI had not placed any restrictions on use of the torque wrench for values greater than 40 ft-lb. The team determined that SOP 8.0 did not properly prescribe actions to be taken by CI for placing operational limits on measurement and test equipment whose calibration is not conducted over their full range. This finding is one of the examples cited in the NOV issued with the Form 591 attached with these inspector notes.

The team inspected equipment that was listed as being out of calibration on the Measurement and Test Equipment Log. A finding was identified in that the 0 to 32,000 gram table balance scale (equipment number CH1101129) was listed as being out of calibration yet it did not have an "Out of Calibration" sticker placed on it as required by step 6.4 of SOP 8.0. This finding is

one of the examples cited in the NOV issued with the Form 591 attached with these inspector notes.

Audits

The team reviewed the internal audit schedule, the vendor audit schedule, and the approved vendor listing (AVL) all for 2013.

The team also reviewed the May 22, 2012 audit report for the vendor audit of the General Steel Drum Company. The audit was completed without and resulting findings or observations. In addition, the team reviewed the October 22, 2012 audit report for the vendor audit of the Volunteer Drum Company. The audit was completed with only casual observations. The team also verified that both suppliers were properly list on the CI AVL.

The team reviewed the internal audit No. WC11-0601-1 dated Jun 14, 2011 of Century Industries, performed by Watts Consulting from June 6-8, 2011.

The team noted that the Century Industries SOP 3.0, Revision 4, "Vendor Selection and Approval," step 5.2.1.a, implied that recognition of an NRC approved Quality Assurance (QA) program by itself would be an acceptable basis for acceptance of a vendor for the Approved Vendors Listing. The team advised Century industries that while an entity with an NRC approved QA program could be found acceptable as a vendor, the NRC's approval does not in itself provide a basis for proper implementation for the QA program holder which would better support vendor approval.

Fabrication and Testing

The team witnessed a portion of the welding which was occurring as part of the Versa-Pac 55 fabrication process for both Versa-Pac serial numbers 10888 and 10889, as well as a portion of the cleaning and weld inspection of both units through the use of the magnetic particle method. The team witnessed the CI weld inspector determine undersized welds on Versa-Pac Serial No. 10889 which had been provided for QA inspection. The Versa-Pac was returned to the welder to correct the undersized welds without documenting a nonconformance according to CI procedure Standard Operating Procedure (SOP) 9.1, Revision 5, "Nonconforming Items and Corrective Action, Section 4.1, Steps b and d. This finding is one of the examples cited in the NOV issued with the Form 591 attached with these inspector notes.

Procurement

The team also reviewed documentation packages for Versa-Pac 55 units serialized as 10801 through 10840 and 10841 through 10880 which included more specifically the following piece marked items under Job # 12-0005: FB (Ht. # 2215059), FA (Ht. # 2212112), and PE (Ht.# 1210732). The team also verified that the supplier (K. Beckner Metals) was properly identified and approved on the CI AVL. In addition the team reviewed chemical and metallurgical test reports, associated VP-55 route sheets (work travelers), and the NDT Magnetic Particle Test Reports # 815 through 825 and 835 through 846.

Qualification, Certification and Training

The team reviewed the experience and certifications (MT and AWS) for CI's Level III NDE examiner, including visual acuity, QC Receiving Practical Level II Test, CI Receiving Inspection Training Outline, and CIs Certification Summary Record (D-65) as well as CI's SOP 1-1, Revision 3, "Indoctrination and Training (including Indoctrination and Training Session Outline, D-52, Attachment 7.4)," SOP 7.0, Revision 4, "Qualification and Certification of Nondestructive Testing Personnel," SOP 7.5, Revision 2, "Magnetic Particle Examination in Accordance with AWS D1.1 and finally SOP 7.15, Revision 3, ' Visual Examination in Accordance with AWS D.1.1 Structural Welding Code.