

Subject: Quality Assurance Program Review of TJNAF, Causal Analyses for P2 findings

Objective: Complete causal analyses for QA Assessment items P2-001 through P2-004. Use these causal analyses to develop a Corrective Action Plan (CAP) and their subsequent CATS items.

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Methodology: The causal analysis effort was conducted in two 1.5 hour events. The facilitator hoped to maximize the teams' time together, thus the appropriate OSHA and CFR documents were provided, with relevant sections called out.

Findings and Causal Analyses:

P2-001 – The JSA Training Program is not compliant in some areas with the requirements of the TJNAF Quality Assurance Plan.

DOE Assessment Report text:

The JSA Training Program is not compliant in some areas with the requirements of the TJNAF Quality Assurance Program. **(FIND-TRNG-P2-001)** Based upon documents reviewed and interviews conducted, the following concerns were identified with JSA's personnel training and qualifications:

1. A training plan that is required by the QAP has not been prepared.
2. The Training Manager does not perform management self-assessments, as required, nor does the Training Manager's Skills Requirement List contain QA requirements.
3. Receipt inspectors' qualifications are not documented in the training database.
4. The current training policy does not address the requirement that each employee have an SRL.

Causal Analysis Determination:

Why was the training program not compliant?

Because it did not meet QAP requirements

Why did it not meet QAP requirements?

Because the training manager was unaware of QAP requirements.

Why was the training manager unaware of the requirements?

Because the requirements were not communicated to him by his management.

Why were the requirements not communicated to his management?

Because there was a change in management and the item was missed in the turnover.

Why was the item missed in the turnover?

Because there is no formal EJTA system requiring OAP familiarization. Nor are there any QA Awareness materials.

P2-002 – Corrective actions for DOE external assessment findings are not being adequately tracked and closed.

DOE Assessment Report text:

For example, corrective action MOA-2007-38-01 was a corrective action identified by JSA for an external DOE assessment. The significance level of this corrective action was downgraded from a Level 2 to a Level 1 action, without DOE notification or concurrence. The Laboratory ultimately closed the original corrective action and another corrective action was opened, again without DOE notification. Since the findings were generated by the Site Office, and the Laboratory's original corrective actions were transmitted to the Site Office under letter, these commitments are not subject to change without consent. (FIND-QUAL-P2-002)

Another discrepancy example was identified with Independent Assessment (IA)-2009-03. This assessment was completed and approved by Lab Management on March 11, 2009, and identified one finding; however, at the time of this review, no corrective action for the finding had yet been documented in JSA's Corrective Action Tracking System.

It was also determined in the review that verification of corrective action closures with significant Levels 0, 1, or 2 cannot necessarily be performed since documentation for closure of these specific items is not required and/or maintained by JLab for these levels.

Causal Analysis Determination:

Why are corrective actions for DOE external assessment findings not being adequately tracked and closed?

Because communication between JLab and DOE personnel was unclear on what constitutes "adequate tracking and closure"

Why was communication between JLab and DOE personnel unclear on what constitutes "adequate tracking and closure"?

Because there were no mechanisms or DOE visibility in JLab tools to communicate or provide feedback

Why were there no mechanism or DOE visibility in JLab tools to communicate or provide feedback?

Because the need for a feedback process for DOE, i.e., JLab's Issues Management Procedure, nor DOE visibility into a JLab tool, i.e., CATS, had not been anticipated for DOE external assessment findings.

P2-003 – Documents and records management is not compliant, in some areas, with the requirements of the TJNAF Quality Assurance Plan for some JSA organizations.

DOE Assessment Report text:

Interviews were conducted with personnel in several JSA organizations as to implementing the Document and Records criterion. From the interviews and documents reviewed, it is evident that this criterion is not

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April 2009

fully implemented. Since an overall concern by the team is that the document and records criterion has not been fully implemented, a P2 finding has been identified. Based on document and records reviewed and interviews conducted, this assessment confirmed that JSA management needs to give attention to improving the implementation of documents and records. (**FIND-DOC-P2-003**)

Causal Analysis Determination:

Why are documents and records management not compliant, in some areas, with the requirements of the TJNAF QAP for some JSA organizations?

Because guidance detailing which records to maintain, or how to maintain/control them, is not adequately called out in the QAP.

Why is guidance detailing which records to maintain, or how to maintain/control them, not adequately called out in the QAP?

Because the procedures called out in the QAP, which specify and thus implement this guidance, do not provide guidance on which records to maintain or how to maintain/control them. Additionally, training and communication on the requirements has not been adequately planned nor conducted.

P2-004 – Pressure systems record management is not compliant with Environment, Safety and Health Manual Chapter 6151 and does not satisfactorily ensure the control between design specifications, pressure testing and final installation.

DOE Assessment Report text:

Field verification of the fabricated items confirmed that two of the three items in design package PS-CRY-08-008 were labeled with the maximum pressure as specified in the design drawings. The third item (3-1/8" bayonet pressure test sleeve) appeared to be labeled inconsistent with the design specifications; however, upon further review, it appears the 3-1/8" bayonet test can located in the field was fabricated under a different design project (PS-CRY-08-012) and drawing (75900-0116). Upon reviewing the DocuShare records associated with design project PS-CRY-08-012, only three of the four drawings in this package had a corresponding pressure test record (missing was the pressure test record for drawing 75900-0116). Differences were also found in how the information was collected in the pressure test records, as one project used handwritten entries on the form for each drawing, while another appears to have been transcribed into a single page form. In design package PS-CRY-08-008, the Design Authority concurrence form included engineering calculations and design criteria content in the signed form. In contrast, the engineering calculations for design package PS-CRY-08-012 were maintained as a stand-alone Excel file, with no signature or means of configuration control. At the conclusion of the discussions with Laboratory staff on the aforementioned records and articles identified in the field, it was uncertain if the 3-1/8" pressure test can identified in drawing number 71400-0051 was ever fabricated. This draws into question the rigor in which the travel records are being scrutinized and the rigor or accuracy of the signed form entitled Design Authority Project Completion Statement for PS-CRY-08-008. (FIND-DES-P2-004)

Causal Analysis Determination:

Why was the incorrect design document in the PS-CRY-08-008 package?

It was misfiled by the design authority. It should have been filed in PS-CRY-08-012.

Why was it misfiled by the design authority?

The design authority did not perform a document by document check when filing the records.

Why did the design authority not perform a document by document check when filing records?

Human error. Additionally, while ES&H Manual Chapter 6151 and Appendix T1 provide guidance on documenting pressure systems, detailed instructions for many processes are still lacking. In development is an "Engineering Conduct of Operations" document to provide processes for document and record control, document standardization and document change as just a few examples.