

TEMPORARY CHANGE REQUEST

TCR NO. **TCR-QA-004,R1-001**

(e.g., TCR-ENG-021,R1-001)

The Temporary Change Request (TCR) Form is to be used to process urgent or minor changes for PPPL Policies, Organization/Mission Statements and Procedures. The TCR should be used when changes are:
1) urgent, and can not wait the 2-4 week period for Department Head review/comment, or
2) minor, and do not warrant Department Head review.

Person Requesting Change: Judy Malsbury

Department Name: ES&H/IS

Phone Ext: 2415

Document Number: QA-004 **Revision No.:** 1

Document Title: PPPL Site Inspection Program

Reason for change:

Several minor changes resulting from 3-year review.

Change description: (Summarize and attach changed pages, with changes clearly indicated)

The changes include: revising the organizational name from "Quality Control" to "Quality Assurance", rewording the Applicability to clarify that the procedure applies to QA Inspections (as opposed to all inspections performed at PPPL), and to remove reference to receiving inspections by QA.
Replace QA-004 Revision 1 with TCR-QA-004,R1-001.
Extend the effective date through April 2005.

1. Does this TCR significantly alter the intent or scope of the document? **YES:**___ **NO:** X

2. Does this TCR significantly impact **ES&H**? **YES:**___ **NO:** X

If 1 or 2 is **YES**, Explain why the changes should not be routed for Department Head review:

Judy Malsbury
Department/Division Head Approval

4/12/02
Date

J.W. Anderson
Head, ES&H and Infrastructure Support/designee

4/12/02
Date

Release/Effective date of this TCR: April 12, 2002

Incorporate this TCR into next revision of this document? **Yes** X **No** ___

PPPL	PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No. QA-004 Rev 2 page 1 of 2
	Subject: QA Site Inspection Program		Effective Date: Initiated by: Head, Quality Assurance Supersedes: QA-004, R0 Approved: Director

Applicability

P-071, Inspection and Acceptance Testing, describes the requirements of inspections or acceptance testing at PPPL. As stated in the policy, each person is responsible for the reviews and inspections of the quality of his or her own work. Quality Assurance (QA) is available to support this effort. This procedure describes the inspection program managed by QA.

Introduction

Inspections by QA are performed at the request of the cognizant individual assigned responsibility for specific jobs or when required by codes or procedures. This activity verifies conformance to the requirements and acceptance criteria defined by the cognizant individuals in various work documents. These inspections are performed in the field for work performed by either PPPL or on-site contractors. Attachment 1 contains the list of inspections that may be performed and the information needed for each type.

Reference Documents

- P-052, Special Processes
- P-071, Inspection and Acceptance Testing
- QA-005, Assurance of Nonconformances
- QA-008, Procurement Quality Assurance

Procedure

This procedure is divided into two major sections.

- Section A. Inspections by Quality Assurance
- Section B. Satellite Quality Inspectors

A. Inspections by Quality Assurance

Responsibility

Action

- | | |
|----------------------|---|
| Cognizant Individual | <ol style="list-style-type: none"> 1. Develops Specifications, Statements of Work, Installation Procedures, Shop Work Requests, Drawings, etc. for items to be procured, fabricated, and/or installed. Assures that these documents contain appropriate inspection requirements and acceptance criteria. Identifies any hold points where verification by Quality Assurance is required before continuing with the activity. 2. Provides, whenever inspection is requested, a copy of the these documents to Quality Assurance. |
|----------------------|---|

- | | |
|----------------------|---|
| Quality Assurance | <ul style="list-style-type: none"> 3. Develops a Risk Assessment Plan (RAP) specifying the inspections that will be performed and any hold points. A sample RAP is attached. Acceptance criteria must be clearly identified within the job documents. 4. Distributes the RAP to the Cognizant Individual, the Cognizant Individual's Supervisor, and the PPPL Shop responsible for the work, as applicable. |
| Cognizant Individual | <ul style="list-style-type: none"> 5. Reviews the RAP to assure that all hold points and test requirements have been incorporated. NOTE: Comments and/or changes must be transmitted back to Quality Assurance within 5 working days. 6. Notifies Quality Assurance prior to start of work and at each hold point listed in the work documents. |
| Quality Assurance | <ul style="list-style-type: none"> 7. Performs inspection and witnesses activities as described on the RAP and/or work documents. 8. Issues Nonconformance Reports, if required, in accordance with procedure QA-005. |

B. Satellite Quality Inspectors

Responsibility

Action

- | | |
|-----------------------------------|--|
| Shop Supervisor/Quality Assurance | 1. Determines the need for a Satellite Quality Inspector in a shop. |
| Shop Supervisor | 2. Identifies a qualified individual. |
| Quality Assurance | 3. Provides training to Satellite Quality Inspector candidate. |
| Satellite Quality Inspector | 4. Performs inspections, documents results, and issues NCR's, as required, per QA-005. |

Attachments

- 1. Inspection Capability of Quality Assurance
- 2. Sample Quality Inspection Plan

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	Inspection Capabilities of Quality Assurance		Page 1 of 1

The following typical inspection services are provided by Quality Assurance. Individuals should contact Quality Assurance if additional unspecified services are desired.

On-site Installations and Fabrications

Type of Inspection Service	Possible Inspections	Information Required
Electrical	In process inspection of raceways, wiring, panel boards, lighting, motors, grounding, terminations, devices, security, and fire detection installations. Witnessing tests such as cable ring out, meggar, hi-pot.	Drawings and/or specifications indicating desired inspections and acceptance criteria. List of applicable codes, standards, or other requirements.
Electronics	In process visual & dimensional inspection of cabinets, printed circuit boards, grounding, soldering, and terminations.	Drawings and/or specifications indicating desired inspections and acceptance criteria. List of applicable codes, standards, or other requirements.
Mechanical	In process visual & dimensional inspection of piping, hoses, valves, fittings, instruments, expansion joints, supports, process tubing, mounting & setting of equipment, studs/anchor bolts, and ground isolation. Witness of torquing, pressure, and vacuum testing.	Drawings and/or specifications indicating desired inspections and acceptance criteria. List of applicable codes, standards, or other requirements.
Non-Destructive Examinations	AWS Certified visual inspections of welding and brazing, dye penetrant testing (information purposes only), visual examination of cadwelds and explosive welding.	Drawings and/or specifications indicating desired inspections and acceptance criteria. List of applicable codes, standards, or other requirements.

Upon request, Quality Assurance can also help establish special programs for specific tasks.

Finally, in addition to the above requested inspections, Quality Assurance staff, in their normal duties in the field, inspect the work conditions to assure that codes and standards are being implemented.

**PRINCETON PLASMA PHYSICS LABORATORY
QUALITY INSPECTION PLAN**

RAP No: 3035

Status : OPEN

Job Type : IP

Issued: 2/14/02

Rap Author: Boscoe J

Job Doc #: D-IP-NSTX-2719

Cost Center:

DCA/WP#:

Vendor:

Department: ENGRG AND TECHN IS

Division: ELECTRICAL ENGINEERING

Cog Person: T. Stevenson

Inspector: Murphy/Boscoe

QC RAP Title or Material Description:

Neutral Beam Clean Room HVAC Upgrade

Inspection Plan Description (include drawing #'s, procedures, etc. if applicable):

Attend pre-job brief
Verify Lock out - Tag out safing per steps 4.4, 4.7, 4.11, 4.14 of IP
Verify cabling, raceways and equipt. are installed per NEC, Lab, IP and drawing requirements
Verify grounding is installed per NEC, Lab and drawing requirements
Verify labeling per Lab requirements
Witness functional testing per step 4.14 of IP
Perform final inspection-walkdown with Cog or designee

RAP Completed:

Inspector/PQA: _____

Date: 00/00/00

QA Manager: _____

Date: 00/00/00

Distribution:

T. Stevenson
Murphy/Boscoe
Proj. Doc Control (when closed)
QC Files
Malbury J
B. McCormack

Cog Comments: