



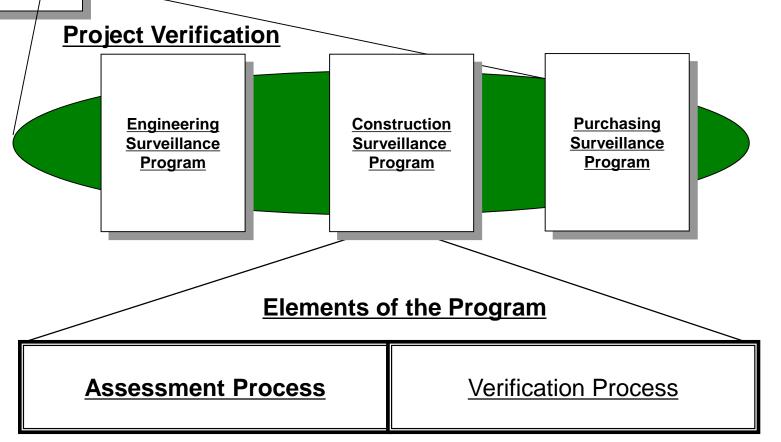
Project Surveillance Overview

Quality Plan

- 1. Audits
- 2. Project Verification
- 3. Mechanical Comp
- 4. Corrective Action
- Nonconformance

The Project Assessment Process is an essential component of Project Verification. A few of the benefits are:

- "Early Warning" of potential and existing quality problems
- Metrics to help focus attention on areas of concern
- Organized approach to surveillance

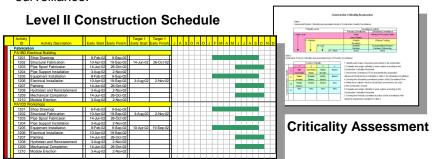




Project Surveillance Overview

Project Assessment Process

1. The Construction Criticality Assessment and Level II construction schedules are used to schedule the performance of surveillance.

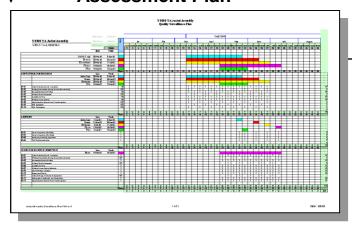


2. A Construction Assessment Plan is created using a template provided in the Quality Toolkit.

The plan lists:

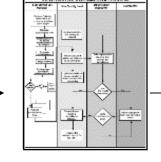
- · major components
- surveillance checklists
- planned frequencies for surveillance

Assessment Plan



Surveillance Database

4. Data from a completed checklist is added to the Construction Surveillance Database.



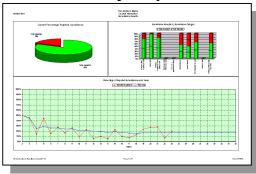
Surveillance Checklist

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3. Using specified checklists Field inspectors perform detailed surveillance of site activities.

5. The Site Quality Lead creates reports on the surveillance results for analysis.

Quality Reports



6. Reports are reviewed and corrective actions taken when needed.



Project Surveillance Overview

Checklists

Checklists:

- Help ensure that the surveillance is thorough
- Are simple
- Are intended to focus on the construction processes.

Standard checklists are available covering most processes and activities commonly found on constructions sites. If a checklist is not available, it will be developed.

General categories of checklists available include:

- Civil Work
- Structural Fabrication
- Painting
- Piping Fabrication
- Mechanical Installation
- Electrical Installation
- Instrumentation
- Tanks
- Insulation
- Passive Fire Protection
- Pipelines
- Piping Pressure Testing



Construction Quality Tools

Checklist No.: Activity:	Construction Surveillance Cl 12-02 Welding - Mainline	hecklist Revision: Discipline:	0 Pipeline
Report Number:	Component		
Date:	Equip/Material/Tag #		
Location:	System #		
Contractor:	Governing Code/Spec		
Sub-Contractor:	Drawing/P&ID		

			Acce	Accepted	
Action	Description	Results	Yes	N	
1	Are CPMT/WSJV welding staff qualified CWI				
2	Are approved procedures available at the work site for review			Г	
3	What surveillance is completed by CPMT over contractor welding Inspectors and how reported			Г	
4	What reviews and inspections are completed by the CPMT staff		\top	Г	
5	How is the frequency of welding Inspection determined by CPMT		\top	Г	
6	How often are welding parameter or pre-heat checks carried out are these witnessed by CPMT staff				
7	How do CPMT check that equipment used in measuring and monitoring during welding operations is correctly calibrated			Г	
8	How does the CPMT staff monitor pipeline welding consumable control			Г	
9	How many bevel cleaning, bevels, fit-ups, root bead, lowering off, does CPMT staff check per day			Г	
10	Are weld joint preparation and alignment checked by CPMT			Г	
11	How are surveillance and Inspections recorded by CPMT		\top	Г	
12	What is the most non conformance occurrence and what action does CPMT stuff take Cap undercut Mis-match or misalignment Unitidy shallow or excessive cap pass Are strike				
13	Are corrective action requests CAR issued by CPMT staff				
14	How are pipe markings checked by CPMT staff			Г	
15	What action is taken to close out the CAR				
16	Has additional NDT where required been completed and reported to CPMT		\top		
17	Are dimensional check records available for pups used in pipeline is the material traceable				

12-02 Welding - Mainline Page 1 of 2 Date: 12/13/03



Presentation Overview

Data reports and graphs are created for site management from the surveillance results.

Standard reports are developed and can be specifically tailored to meet needs on site.

Reports include surveillance results sorted by:

- Component
- Contractor / Subcontractor
- Work scope

Reports

