

Procurement and Supply Chain In a Work Face Planning Environment



COAA Workface Planning Forum
Calgary, Alberta December 1 2010

Presented by: Bill Somerville



Overview

- Scope of Discussion
- Owners and Contractors Expectations
- Key Themes / Focus Areas
- Questions
- Wrap-up

Survey : who is here? Owner, Construction contractor, EP contractor

Table of Contents

Scope of Discussion – An Owner's perspective

- Procurement (Owner and Delegated)
- Materials Management
- Logistics and Transportation
- Contracting

NB: It should be noted and re-emphasized, all the required project disciplines have requirements to support Work Face Planning, especially Project Management, Construction Management, Project Controls (Cost estimating and Control, planning and scheduling) , HSE, Quality Management, Document Management.

Successful set up for Workface planning in the Supply Chain areas of responsibilities **WILL** fail if the other requirements are not met

Table of Contents

Some examples of Other WFP requirements

Project Management	<ul style="list-style-type: none"> • Early Project Decision to implement WFP • Project Philosophy of Design to Start-up – to construct • EWP’s production to support CWP requirements • project organization design to support WFP
Construction Management	<ul style="list-style-type: none"> • construction sequencing driving schedule of CWP production which drives EWP production
Project Controls – Planning Scheduling	<ul style="list-style-type: none"> • appropriate scheduling to ensure engineering deliverables meets cwp’s • appropriate scheduling level of detail to measure progress
Project Controls – Cost Estimating, Control Productivity Calculations	<ul style="list-style-type: none"> • appropriate WBS and CBS to divide Project scope into CWP’s, FIWP’s • standard rules of credit to grant progress

Table of Contents

Some examples of Other WFP requirements

Quality Management, HSE, Document Management	<ul style="list-style-type: none"> • clear requirements for all CWP's
Engineering Design	<ul style="list-style-type: none"> • ability to sub divide areas of plant into CWP's
Quality Management, HSE, Document Management, Other project disciplines	<ul style="list-style-type: none"> • clear requirements for all CWP's what is required to start work, what is required to claim completion

Owners and Contractors Expectations

- Clear unambiguous description of expectations – requirements, standards, procedures, responsibilities, roles and position descriptions
 - i.e. the requirements of any good contract!
- From this morning, ensuring the conversations which drives common understanding
- From this morning's session ,survey showed two highest valued areas to focus on are roles and responsibilities of all parties and clear expectations / minimum standards for Work \Face Planning

Key Themes / Focus Areas - Procurement

Owners

- Clear description of requirements regarding the identification, procurement of materials and equipment, esp.. tagging to CWP's
- Complete materials responsibility matrix – conveying responsibility for all phases of procurement : ID material requirements, specify, purchase, expedite, transport, receive, manage, issue, surplus management & asset recovery
- Requirement for procurement registers to support provision of materials at work location and/or for engineering design to support engineering schedule -> which is aligned to construction schedule / CWP's

Contractors

- Clear understanding of procurement responsibilities
- IT application to be used, any interface requirements to Owner Systems, procedures, standards and organization to deliver delegated procurement responsibility

Key Themes / Focus Areas – Materials Management

- Owner must clearly define to contractor process for reserving and accessing material for work packages.
- Clear understanding and implementation across all contractors re: materials master codes to be used/ conversion tables if required
- Material status information and reports must be made available to contractors and construction management. The information must be current.
- Minimum of notice required for first allocation of material by work package (8 weeks at Nexen).
- 2 week notice required to hard reserve material for work package
- Bag & Tag completed and any deficiencies reported to all within 1 week of requirement.
- Module status and ROS dates must be defined and kept current
- Module received at site dates must be reported immediately
- Module punch list items must follow from mod yard to site.

Key Themes / Focus Areas – Materials Management

- Owner must clearly define material storage / warehouse/ lay down areas on site to contractor ; location of various commodities / equipment
- Materials Management organization, procedures, processes, standards and IT application in place that support MM and packaging for FIWP's (Owner or contractor managed).
- Early set up of Materials Management database structured to support CWP's, FIWP's
- Agreement between Construction and Materials Management vis. expectations on required on site storage / letdown for "back log"

Key Themes / Focus Areas - Contracts

Owners

- Clear description of requirements regarding **owner and contractor** responsibility re WFP, any owner standards in contracts – ALL project disciplines
- Effective contractor prequalification wrt capability to implement WFP, any gaps assessed, plans to close in place -> this will drive finalizing execution / contracting strategy
- Construction contractor front end involvement , but with specific tasks, requirements, deliverables for both owner and contractor
- Inclusion of specific WFP minimum requirements and focus on performance / functional specification approach, not descriptive – The On site general contractor should own the process / organization/ applications for Construction work face planning, whoever that is
- Inclusion of Materials responsibility matrix, owner minimum requirements for Work Face Planning
- Description of IT applications to be used, interfaces and data transfer requirements, esp. EP modeling, to Pipe Fab/Module assembly, to site construction planning

Key Themes / Focus Areas – Logistics and Transportation

- Transportation providers arranged to support material and equipment transfers (marshalling / warehouse facility to Pipe fabricator, or to Module Assembly, or to Site)
- Clear work processes and responsibilities for requesting, managing, reporting on transportation, especially owner, contractor responsibilities (responsibility should be described in MRM)

Survey Questions