

# History of Workface Planning at Syncrude

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- **First piloted on Upgrader Expansion 1 (UE-1), 2000 – 2006 (multi-billion \$)**
  - Many learning's helped the formation of the COAA model in 2005
- **Used on Syncrude Emissions Reduction Project (SERP), 2006 – present (\$1B+)**
  - WFP not introduced until detailed engineering was 100% complete and construction 30% complete
- **2008 Prepared formal WFP Application Manual based on the COAA WFP model**
  - This document forms the basis for Contractor expectations
- **2008 – 2010, Some experience on 4 projects valued <\$500M each**
  - 2 projects have been completed and 2 are currently under construction
- **2010 hired a Construction Management Contractor to be a general contractor for a suite of Mining/Tailings projects**
  - WFP a requirement of the contractor
- **2010 Implemented a System for Managing (short interval management) for identifying barriers to executing the daily schedule**
  - SFM requires a daily plan from the Contractor, contractor identification of barriers that have arisen on the day, process for Owner representatives to work with the Contractor to break down barriers
  - WFP is the tool to remove barriers prior to field execution whereas SFM is the tool to collect and address barriers that come up daily

## Key Learning's

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- **Include Owner expectations for workface planning in contract documents**
  - Set specific expectations with detailed procedures
- **Involve the Construction Contractor in constructability and the path of construction during the Engineering and Procurement phase**
  - EWP's and CWP's constructed with consideration of FIWP's
  - Engineering 3D models support FIWP's
  - Procurement knows the requirements for WFP (electronic information and piece marking)
  - Fabricators required to follow requirements for electronic information and piece marking
- **The Project Management Team must manage to the procedures and take timely actions to correct deviations**
  - Owner PMT must understand the procedures, own the procedures and ensure alignment in the Owner team and the Contractor team
- **Construction contractor needs to drive the application of WFP**
  - Superintendents need to feel ownership for the FIWP's
  - Need to drive FIWP continuous improvement by ensuring field feedback to the planners
- **Manage the application of WFP to the right work – don't default to doing everything**
  - Civil/Earth and Pipeline work (single discipline with separation from other scope) may not require WFP
  - Earthworks does not require FIWP but rather needs daily equipment line up, standard packages for sand haul, sand placement, excavation
  - Consider WFP for mitigating the consequences of cost or schedule on critical scope

# Project Experience

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- **Expectations**
  - **8 weeks of signed off work packs on the shelf ready to go**
  - All aspects considered (safety, quality, RFI's, execution plan, materials, scaffold, cranes ...)
  - Reflect the execution schedule
  - Superintendent, GF and Foreman buy-in sought
- **Went Well**
  - **Planners initiate RFI's prior to execution**
  - **Minimize Foreman paperwork (helps with less experienced Foremen)**
  - Cross trade jurisdictional conflicts almost non existent
  - QC requirements identified early so issues can be resolved before work pack is in the field
  - QC validates FIWP at completion before progress is earned
  - Less rework than historical and shorter punch lists
  - Few scaffold delays
  - No waiting on materials
  - Safety considerations reflected
- **Things to Watch**
  - Superintendent buy in is critical for success
  - FIWP's initially dissected by foremen to cherry pick activities
  - Build in a feedback cycle from the field to the Planner to improve FIWP effectiveness
  - **Consider having a planned value for each FIWP for progressing**
  - Manage the squad check process for FIWP to avoid too many approvals (restrict to Safety, Quality and Superintendent)