

Turnaround's

A NOVA Chemicals Joffre Perspective

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Turnaround Team Leader

NOVA Chemicals, Joffre Site

NOVA Chemicals – Quick Stats

- **NOVA Chemicals**
 - Focused on commodity plastics and chemicals through:
 - Olefins/Polyolefins/Styrenics
 - 18 facilities – Canada, United States, France, United Kingdom, Netherlands
- **NOVA Chemicals (OPOL)**
 - Ethylene (#6 in NA – 6.4B #'s)
 - Polyethylene (#5 in NA – 3.4B #'s)

NOVA Chemicals – Quick Stats (Cont'd)

- **Joffre Alberta**

- 6 plants on one site

- 3 Ethylene (4.9B #'s)
- 2 Polyethylene (2.1B #'s)
- 1 Hydrogen Compression
- T/A frequency varies from 2 to 6 years

- Also have shared infrastructure with

- Co-generation facility, Innovene LAO

Quality

2

Schedule

3

Safety

1

H

Cost

Getting Your Head in the Game

Time limited	Keeping score	Salary Cap	Injury list
Key Players	Team work	Preparation	Systems
Role Players	Emotions	Monday Morning Quarter Backs	Professionals
Coaching Staff	Play Position	Protective Equipment	Fun & Hard Work
Rules	Special Teams	Benched	Celebration!

Turnaround! Grand Slam

Quality

Schedule

Safety

3

1

H

Cost

Why Have a Turnaround?

- Re-establish plant capacity
- Perform Regulatory Inspections
- Complete Corrective/Preventive Maintenance and Project work that can only be completed when the plant is off-line

Quality

2

Schedule

Safety

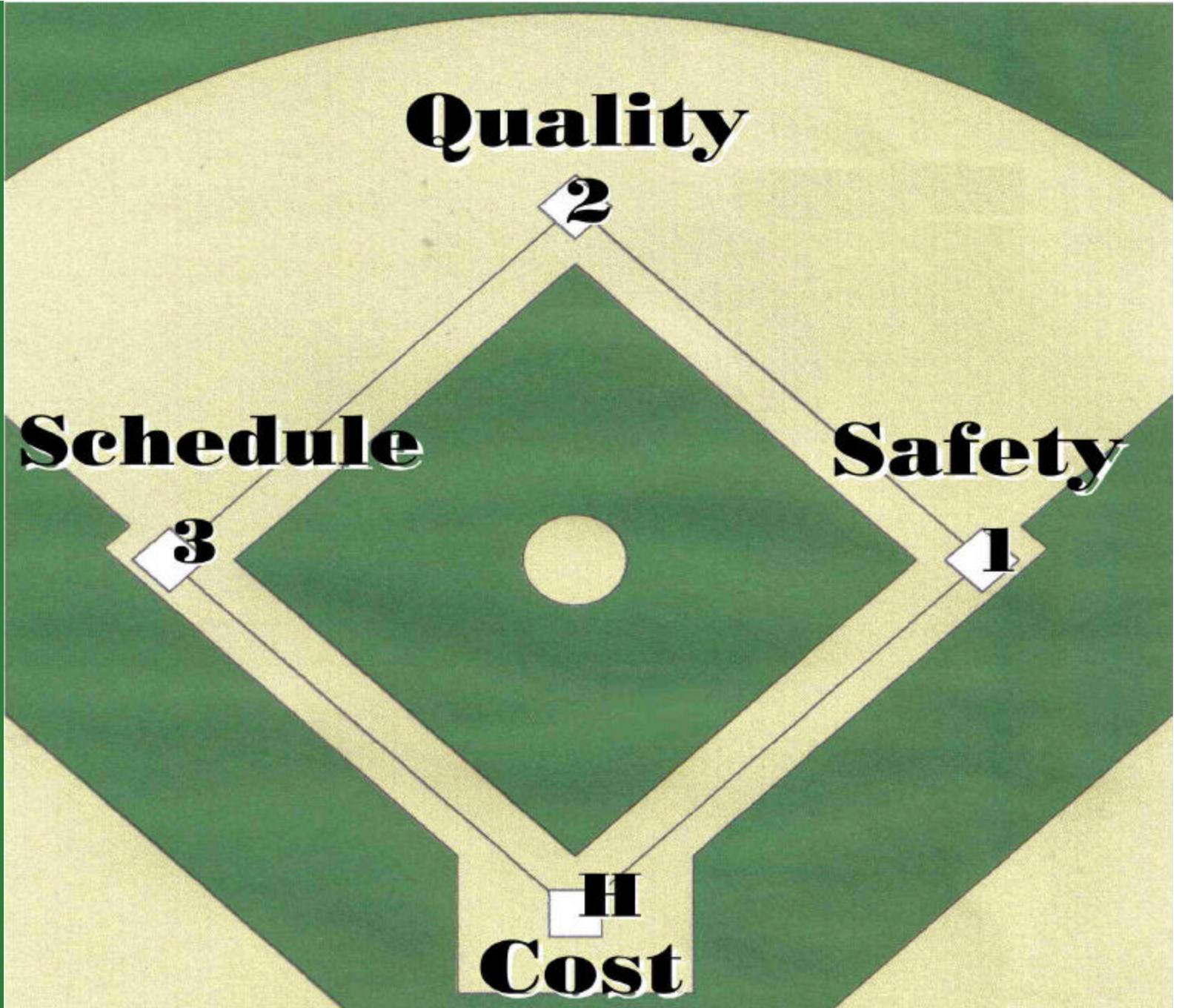
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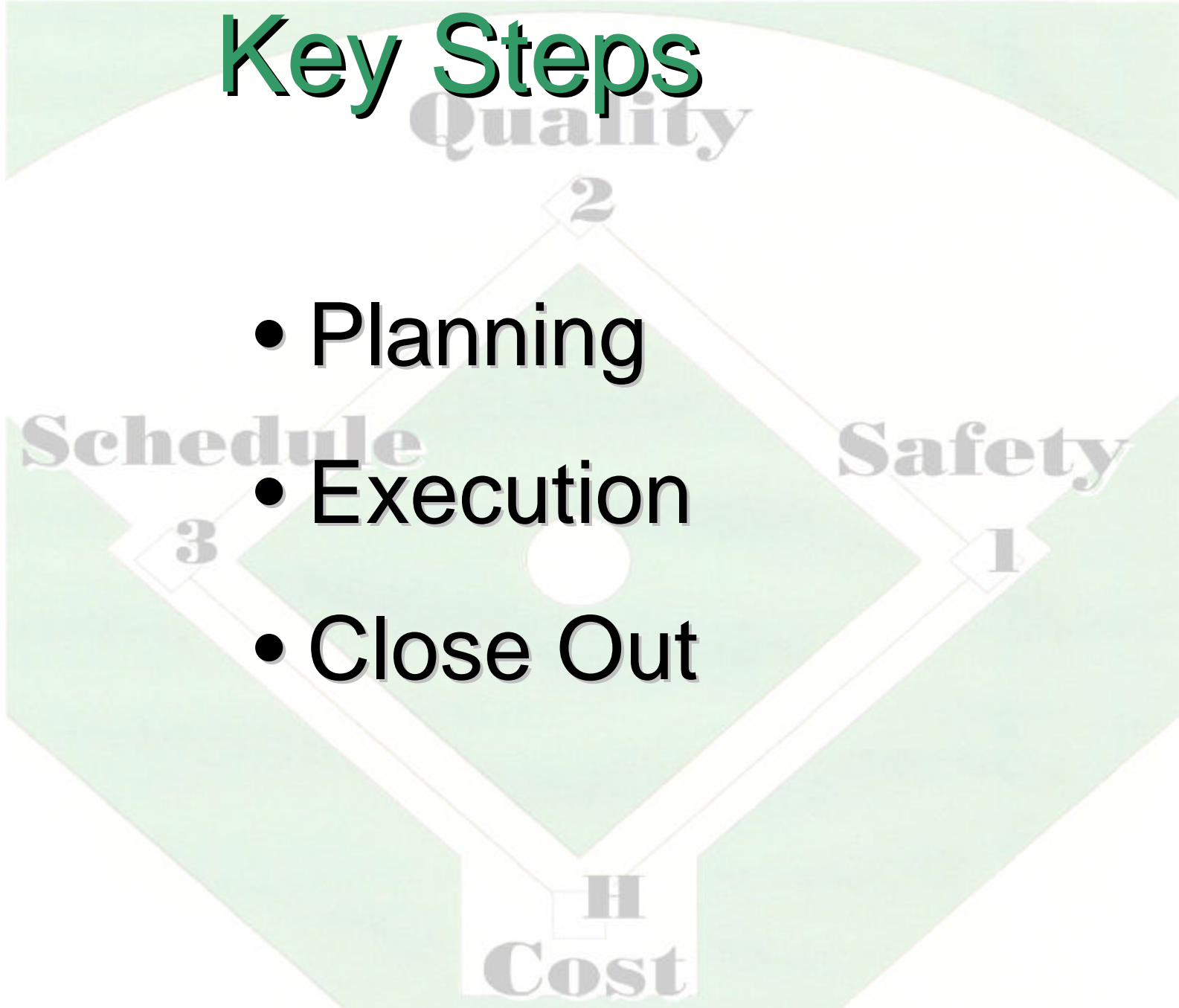
Cost

Turnaround Grand Slam!



Key Steps

- Planning
- Execution
- Close Out



Planning

- Timing (approx. 20 months prior to FO)
- Strategy Development
 - Duration, Cost or Schedule driven, Hierarchy of decision making, identified asset owner, high level scope, milestones etc.
- Integration of expense, capital and operations
- Packages (detail, integration etc)
- Vendor selection and materials selection
- Team building
- Contractor strategy and selection
- Preparedness Audits

Execution

- A 'play book'
- Scope Management (Added and as-found)
- Orientations – Management, plant personnel, contractors
- OH&S (Responsible Care) re-enforcement plan
- Share how success will be measured
- Measure progress – isolate to work center level
- Systems must be developed to allow flexibility
- Carefully plan the electrical outages – must be executed flawlessly

Close Out

- **Complete Evaluations**
 - Vendors
 - Services
 - Discipline leadership
- **Hold a Captured Learnings Session**
 - Implement the most important
- **Develop the Scope for the Next T/A**
 - Equipment inspections etc.
- **Celebrate**

Quality

Schedule

Safety

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Vendor Expectations / Adding Value

- **Focus on Safety**
 - From the delivery driver, to the worker in the field, to management
 - Ensure everyone knows the expectations of client and yourself
- **Weather**
 - Prepare for the worst, hope for the best

Vendor Expectations/Adding Value

(cont...)

- **Materials/Rentals**
 - Double check accuracy of PO
 - Ask questions
 - Deliver on time
 - Know your equipment, be available to support
 - Ensure it is reliable
 - Ensure the integrity of the equipment - share bad news early
 - Be connected to upstream & downstream vendors

Vendor Expectations/Adding Value

(cont...)

- Services on Site
 - Ask for packages
 - Read the packages
 - Question inconsistencies or things that don't make sense
 - Provide realistic estimates (time and materials)
 - Know the difference between a budgetary estimate and a quote - ask

Schedule

Safety

Cost

- **Questions?**

