



Client: **Shell Oil Canada—Scotford Manufacturing Centre**  
 Industry: **Oil and Gas Downstream**  
 Project: **Onsite Turnaround**  
 Location: **Alberta, Canada**  
 JMJ Service: **Incident and Injury-Free™ (IIF™) Safety Approach Integrated with Shell's Goal Zero**

## Shell Scotford Achieved Extraordinary Turnaround Success With the Creation of a Safety Culture in the Planned 60 Days

- Successfully completed all works in the planned 60 day Turnaround
- Created a core Safety culture for over 1800 people
- One minor incident at the beginning of the project, the rest of the turnaround was completed safely without incident
- Awarded the Dwight Bowhay Memorial Health and Safety Innovation Award from the Alberta Petro-chemical Safety Council
- A reduction in the absenteeism rate of 70%



### Client Background

Located 40 km northeast of Edmonton, Alberta, Scotford consists of an upgrader, refinery and chemicals facility. It is one of North America's most efficient, modern and integrated hydrocarbon processing sites, converting oil sands derived bitumen into finished products via upgrading, refining, and chemical products.

### Business Challenges

At the beginning of 2013, Scotford had a scheduled 60-day turnaround of their upgrader facility for maintenance and equipment replacement, including cleanings, window replacements, furnace inspections and decoking, and repairs of control valves. To do this, the facility, including a hydroconversion unity and gas turbine generator, required a temporary shutdown.



“

*Safety became a core value and was clearly visible in the Leaderships Commitment to address and solve safety critical issues in 24 hours. In contrast to previous turnaround projects the reduction in the number of incidents was outstanding.*

”

**David Hedden**  
Upgrader Turnaround Manager

Approximately 1800 people were onsite for the turnaround. Many of these were transient workers working for only 30 to 40 days together—a short amount of time to get alignment, deployment and execution. This meant high pressure days with little time to develop a working culture and little room for error. The combination of a transient work force and short project duration posed a particular challenge for safety on the site. There is a notoriously high risk tolerance among much of the Alberta labor force, and these workers are exposed to many different safety cultures on sites throughout the region.



Meanwhile, the existing safety approach at the Scotford site was a rigid, systems and procedures-based approach towards safety management. While there was a strong emphasis on following these procedures, site safety records had been recorded as inconsistent and, at times, poor. Creating a working, effective safety environment on the turnaround required an adjustment to the site's existing safety approach along with fast alignment among this diverse population.

### Client Goals

- Execute facility turnaround on schedule
- Improved productivity and efficiency
- Improved Total Recordable Incident (TRI) frequency
- **Everyone goes home safe every day with no exception**
- Create a caring, collaborative environment—changing the existing work culture

### Scotford and the JMJ Approach

The Scotford site's Goal Zero Leadership Team absorbed JMJ's *Incident and Injury-Free™ (IIF™)* approach into their safety program, and invited their four primary contractors to join the Leadership Team. With JMJ's support, the team redesigned their site orientation to become more experiential with a focus on dialogue rather than slides and procedures. Ten orientation leaders were trained to deliver this redesigned orientation over a tight and well defined schedule, reaching nearly 1800 people in around 60 days.

The Team also held two Commitment Workshops—alignment workshops designed to allow management from Shell, contractors, and subcontractors to establish a relationship with each other and a shared safety commitment. Along with site wide assessments, additional supervisor workshops, and a thorough, redesigned communications structure and protocol, these combined efforts began to break down mistrust that existed among the varying parties. Management became clear of the expectations between teams, and the ways to meet accountabilities were made more transparent.

These improved communication structures included built in feedback loops from the field and field coaching walks led by both JMJ and the Goal Zero Leadership Team. The aligned commitment to safety meant that any safety-critical items raised by anyone on-site would be addressed and solved within 24-hours.



“

*It was the focus on this caring approach and a collaborative approach that was the initial step change.*

”

**Frank Engli**  
Upgrader Turnaround Manager

## Results

First and foremost, these actions resulted in a noticeable cultural shift away from the approach that more processes and procedures were the answer. Using JMJ's Integral Approach, the leadership teams of Shell, the contractors and the subcontractors began to see that safety needed to be addressed from the internal, often unexamined intentions, beliefs and cultural norms held by management teams and varied workforces. This initiated the shift into a culture of care and concern.

“It was the focus on this caring approach and a collaborative approach that was the initial step change,” said Frank Engli, Upgrader Turnaround Manager.

Communication barriers were removed through a comprehensive communications plan that included a more inclusive Goal Zero Leadership Team, contractor safety meetings, daily safety briefings, newsletters, toolbox talk materials and the field feedback loops. Relationships among management and field level workers were noticeably improved. Throughout the 60 days, there was a positive atmosphere and level of cooperation unprecedented for the site.

“People felt valued and experienced being listened to and this created a positive atmosphere and enabled the team to work effectively together,” said David Hedden, Upgrader Turnaround Manager.

As a result of this more open environment, near miss reporting increased significantly even in the first two weeks as people learned that it was okay to speak up. Follow ups on any reported safety issues had a 99% closure rate. The absentee rate which may normally have been 10% went down to 2 or 3%. On a project during this period of high risk when thousands of separate procedures are performed, **there had been one minor incident at the beginning of the project, the rest of the turnaround was completed safely without incident.** Shell Scotford was recognized for its Goal Zero programme, and was awarded the Dwight Bowhay Memorial Health and Safety Innovation Award from the Alberta Petro-chemical Safety Council.

“Safety became a core value and was clearly visible in the leadership's commitment to address and solve safety critical issues in 24 hours. In contrast to previous turnaround projects the reduction in the number of incidents was outstanding,” said David Hedden, Upgrader Turnaround Manager.

## Who we are

JMJ is an international consultancy with nearly 30 years of experience serving the energy, manufacturing, mining and construction industries. JMJ partners with top-tier industrial companies to see new possibilities, reach new goals, and operate at new, higher levels of performance in safety, productivity, reliability, efficiency and quality. JMJ addresses the intangibles of leadership, culture, relationships and trust to bring tangible business results. JMJ has a proven track record in enabling profound, sustainable project and organisational culture transformations that deliver extraordinary business results for our clients.

[www.JMJ.com](http://www.JMJ.com)

## Contact Us

If you would like to set up a meeting to discuss the *Incident and Injury-Free* approach further, please email [info@JMJ.com](mailto:info@JMJ.com)