

# Diamonds & Specialty Products Queensland Fertilizer Operations

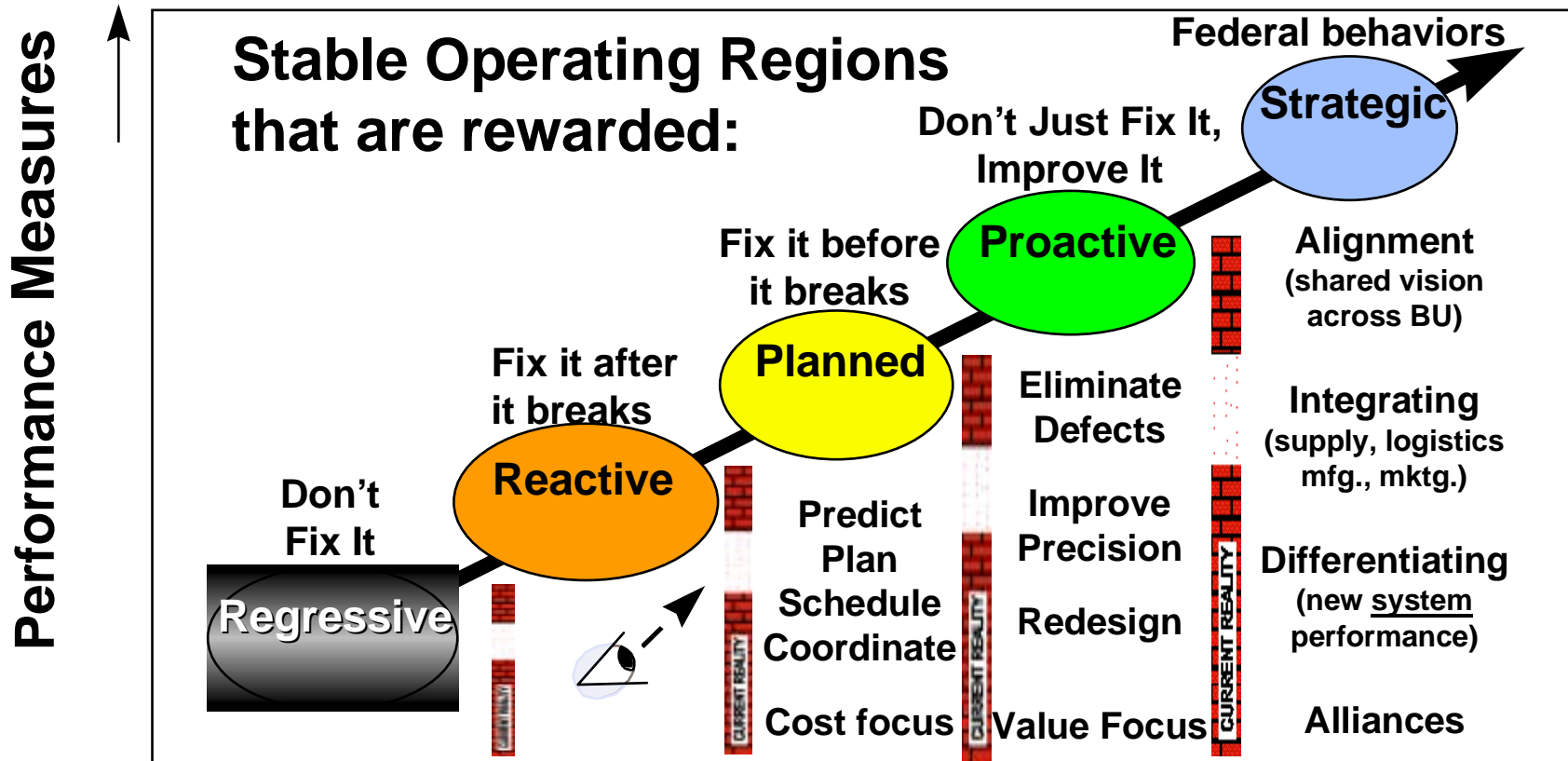
## Maintenance Philosophy and Focus

# Maintenance Philosophy

- Zero harm to our personnel is achievable
- Our people are our most important asset. We will develop knowledge and experience of core team (including alliance partners) to achieve our goal.
- Use proactive maintenance strategies to improve plant reliability to achieve budget fertilizer production at lowest possible cost
- Focus engineering support in bottlenecked plants
- Minimise risk through focus on controls and mitigating actions for high exposure risks as identified by IORM
- Reduce our costs through elimination of reactive maintenance
- Develop the capability of our plant through incremental improvements

# The Journey to Reliable Operations

Continuous Improvement and Discontinuous Jumps

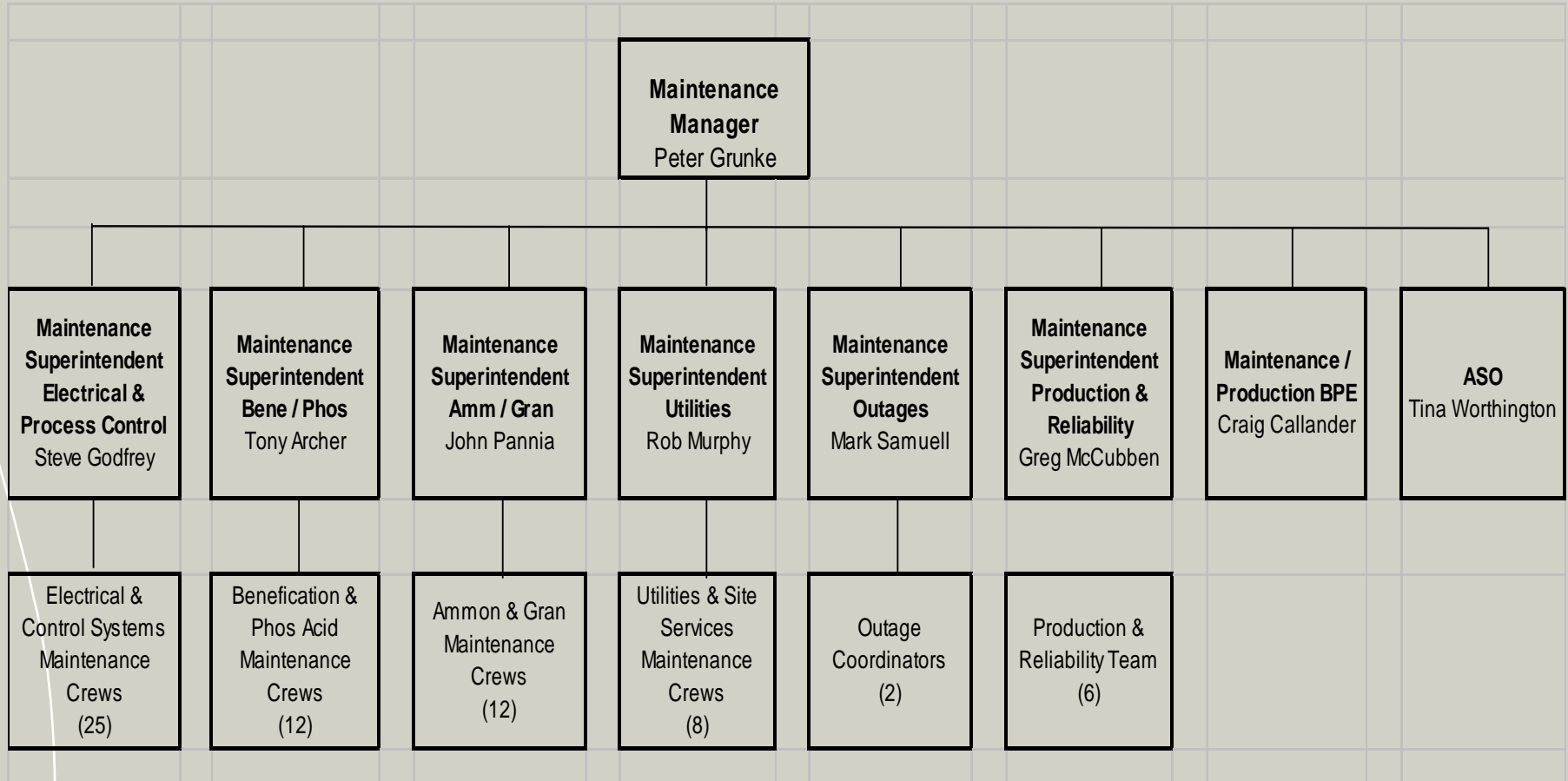


<b>Rewards:</b>	Staged Decay Short term savings	Overtime Heroes	No Surprises Competitive	Competitive Advantage	Best in Class
<b>Motivator:</b>	Meet Budget	Breakdowns	Avoid Failures	Uptime	Growth
<b>Behavior:</b>	Decaying	Responding	Planning	Org. Discipline	Org. Learning

## Where are we now?

- Steadily improving plant reliability
- Plant availabilities are consistently above 90% in all plants
- Dealing with Mt Isa design issues
- Phosphoric Acid Plant high wear/corrosion rates and scaling issues being attacked
- Integrated Operational Risk Management (IORM) system implemented and high level risks are being addressed
- RCM and RCA is now a part of the way we do business

# Organisational Chart



# Key Initiatives

- **Reliability Centred Maintenance**
  - Integration of operational checks with maintenance inspections
  - Improved focus on critical equipment
  - Active challenging of the maintenance performed by Technicians
- **Root Cause Analysis**
  - Focus on proactive elimination of unplanned failures
- **Integrated Operational Risk Management**
  - Major risk scenarios identified and quantified
  - Critical controls identified and being implemented
- **Productivity Improvement**
  - Manage 8/6 roster changes
  - Quality Improvement
  - Tighter contractor management
- **Major Outage**
  - Greater in house involvement in planning and execution

# Key Initiatives

- **Minor Shutdown Execution**
  - Tighter control and better co-ordination to reduce planned downtime
  - Better measurement of outcomes
  - Continuous improvement focus
- **Reduction in Plant Alarms**
  - Reducing the chances of operator errors by properly categorising alarms and dealing with spurious alarms
- **Hazardous Area Compliance**
  - Classification
  - Competency
  - Procedures
  - Documentation
- **Functional Safety Management**
  - Ammonia Plant integrity level review and verification
- **Condition Monitoring**
  - Using a combination of manual and on-line measuring

# Alliances

## **Maintenance Alliance with UnitedKG**

- Prime source for Riggers, Scaffolders, Crane Drivers
- Supplemental labour for Fitters and Boilermakers
- Performance based risk reward model
- Joint KPI's

## **Engineering Alliance with Worley Maunsell JV**

- Prime source for delivery of capital projects including construction
- Support for calculations, drawings, investigations, reports
- Assistance with large overhaul or rebuild work
- Performance based risk reward model
- Joint KPI's

## Maintenance Focus into 2006

- Identify and manage safety risks better
- Optimising and achieving results from RCM
- Failure analysis – improve frequency and quality
- Improve the quality of all work completed
- 2006 major outage
- Minor outage improvements
- Multi-skill further between plant areas
- Building depth into professional ranks
- Development of a key suite of reliability measures
- Manage the change of ownership