

# **Honeywell Metropolis Works Licensee Performance Review**

**April 29, 2010**

**Honeywell**

# Introduction

**Brett Able**

**Vice-President, Integrated Supply Chain**

**Honeywell Specialty Materials**

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# Honeywell Has a Major Role in the Future of Nuclear

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- Senior Management is Committed to Nuclear Safety
  - Working with NRC and DHS to ensure protection of public, facilities, processes, and licensed material.
  - Driving Accountability
    - Integrated Supply Chain Management Oversight
    - Consistent Expectation of Continuous Improvement at Plant Level
- Committed to Continual Improvement at MTW
  - Increasing Capital Investment and Operating Budget
  - Improving Facility Infrastructure and the Integrated Improvement Plan
  - Development of new Integrated Safety Analysis
- Prepared to Meet Future Regulatory Challenges

**Continued Safe Operation is Key For MTW**

# Overview from Honeywell

**Dave Cope**

Director, Integrated Supply Chain

Fluorine Products, Honeywell Specialty Materials

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# Honeywell Commitment to the Nuclear Industry

- Recognize Need for a Strong Nuclear Safety Culture
  - Protection of public health and safety, and U.S. energy security
- Engaged in Nuclear Industry
  - Nuclear Energy Institute (NEI)
  - Institute of Nuclear Power Operations (INPO)
  - Regular meetings with Commissioners and NRC Senior Management
  - Actively participating in regulatory process (*e.g.*, comments on proposed rules, Conversion Workshop, etc.)
- Active Role in the Future of Nuclear Energy
  - Sole U.S. supplier of conversion services
  - Key link to U.S. energy security objectives
    - Working with Department of Homeland Security
    - Ensuring fuel supply for power reactors

**Honeywell Embracing Role in Nuclear Industry**

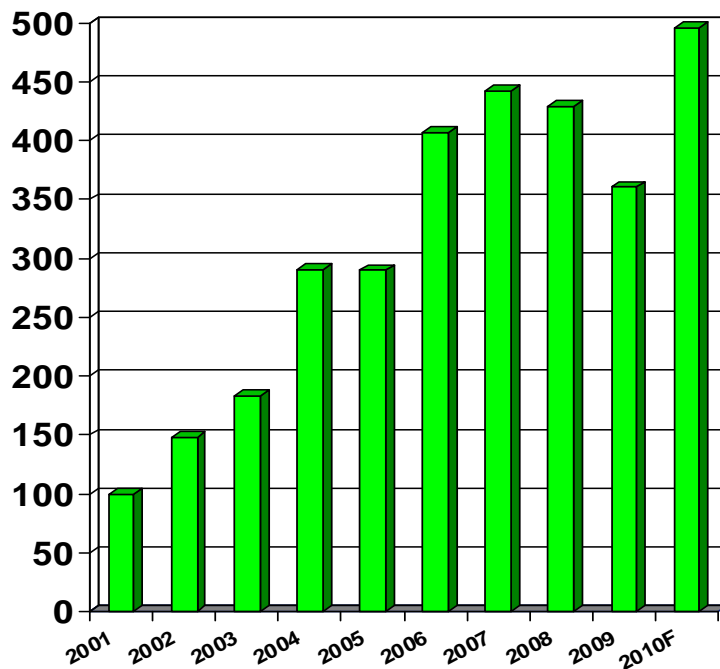
# Demonstrated Commitment to MTW

- Improved Waste Management
- Project Scoping Performed to Improve Plant Performance and Reliability
- Assembling a Dedicated Team
  - Experienced Plant Manager and Operations Manager with long-term commitment
  - Continue filling key positions in the areas of Reg. Affairs, Production, Maintenance, Engineering, Health Physics, and HS&E
- Safety/Production
  - Continuing to emphasize worker safety
  - Actions being taken to address trend in minor injuries
  - Implementing Maintenance Excellence and development of the Mechanical Integrity program
  - Facility upgrades and capital improvements

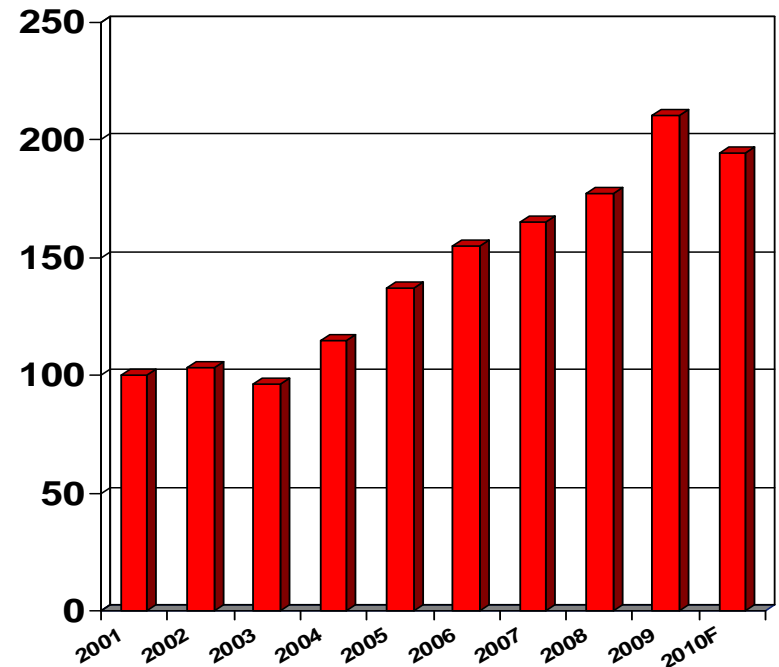
**Making Long-Term Investments in MTW**

# Honeywell Corporate Involvement

- Financial Commitment to Metropolis Works Facility
  - Conversion is a growing strategic segment of business
  - Committing substantial resources



**Capital Expenditures  
Indexed to 2001**



**Annual Operating Expenses  
Indexed to 2001**

# Licensee Performance Review

**Michael Greeno**

Regulatory Affairs Manager

Metropolis Works Facility

Honeywell Specialty Materials

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# Major Activities in 2008 and 2009

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- Supported NRC Inspections
  - 2008 – 12
  - 2009 – 14
- Developed site Integrated Improvement Plan
- Performed GAP Analysis for key program areas
  - Currently 23 of 213 actions completed
  - Actions tracked in Corrective Action Program
- Initiated development of new Integrated Safety Analysis
  - Currently on schedule at 12% completion
  - Regular reporting and metrics review of project with Sr. Mgmt
- Submittal of Decommissioning Cost Estimate and site characterization
- Conducted Internal Audits
  - 2008 – 25; 2009 – 18
- Performed Self-Assessments
  - 2008 – 31; 2009 – 47

**Many Accomplishments, More to Come**

# Major Activities in 2008 and 2009

- Significant Improvements Made to Key Site Procedures:
  - Management of Change
  - Incident Investigation
  - Internal Audits, Self-Assessments, and Inspections
  - Development of Plant Technical Procedures
  - Management of PFAPs
  - Responding to Credible Airborne Threats
  - Hazard Recognition
  - Task Hazard Analysis
  - Job Safety Analysis

**Many Accomplishments, More to Come**

# NRC Performance Review Results

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- “Honeywell continued to conduct its activities safely and securely; protecting public health and the environment.”
- NRC Requested Additional Analysis:
  - Evaluate Common Causes For Violations Listed
  - Review Effectiveness of Corrective Actions
  - Understand Reasons for Changes in Dose and Effluents
- Acceptable Performance in Safeguards, Facility Support, and Special Topics Functional Areas
- Improvement Needed in Two Functional Areas:
  - Radiological Controls
  - Safety Operations

**Bringing The Team Together To Improve Performance**

# Common Cause Analysis

## Conclusions

- Team Determined 14 Causes for the 9 Violations.
- Common Cause Across Both Functional Areas
  - Inadequate Program Detail/Technical Basis (4 of 14)
- Next Leading Causes
  - Inadequate Program Monitoring/Management (2 of 14)
  - Lack of Procedural Detail (2 of 14)
  - *Does Not Establish Commonality Among Causes Evaluated*
- Cause Was Addressed for the Specific Violations

Analysis Identified Common Cause

# Common Cause Analysis Actions

- Common Cause: Inadequate Program Detail/Technical Basis
- Actions to Address Common Cause
  - Increase Program Ownership (e.g. EP, Fire Protection, Mechanical Integrity)
  - Fill Key Positions Identified in Resource Analysis and GAP Analysis
    - Recruiting/interviews for selection process underway
  - Complete GAP Analysis Actions (23 of 213 completed)
- Address Extent of Cause in Other Functional Areas
  - Perform Self-Assessments to Target Additional Improvements Needed Across Other Programs

Continuous Improvement Is The Goal

# Effectiveness Review

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Violation	Cause(s)	Effectiveness Determination
PERFORMANCE AREA: SAFETY OPERATIONS		
VIO 2007-007-01	Lack of Procedural Detail	Effective
VIO 2008-001-01	Inadequate Training/Qualification of Personnel	Effective
	Inattention to Detail	
	Inadequate Program Detail/Technical Basis	
VIO 2008-006-01	Inadequate Communication of Management Standards/Expectations	Effective
	Inadequate Program Monitoring/Management	
VIO 2009-005-05	Inadequate Training/Qualification of Personnel	Ineffective
VIO 2009-004-01	Inadequate Hazard Recognition	Effective
	Lack of Procedural Detail	
PERFORMANCE AREA: RADIOLOGICAL CONTROLS		
VIO 2008-004-01	Inadequate Program Monitoring/Management	Effective
VIO 2008-005-01	Inadequate Program Detail/Technical Basis	Effective
VIO 2009-002-01	Inadequate Program Detail/Technical Basis	Ineffective
VIO 2009-004-02	Inadequate Interfaces Within the Organization	Ineffective
	Inadequate Program Detail/Technical Basis	

**Taking A Closer Look**

# Effectiveness Review Actions

- Actions to Address Effectiveness Review of Corrective Actions for Violations:
  - Identify Issue in Corrective Actions Program
  - Perform Additional Analysis to Understand Why Actions Were Ineffective
  - Revise Corrective Actions Program to Require Effectiveness Review for Actions Associated With Root Cause Analysis or Regulatory Violations
  - Assign Follow-up Actions to Owners and Track in the Corrective Actions Program

Enabling Better Corrective Actions

# Understanding Increased Collective Occupational Dose and Liquid/Gaseous Effluent Releases

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- Major Operational Challenges Addressed in 2009
  - Green Salt
    - Train reliability
    - Green salt filter decontamination
  - Dust Collectors
    - Ash vacuum cleaner replaced filter media and refurbishment of unit
    - Green salt dust collector replaced filter media
  - Annual Shut Down
    - Installed larger vacuum lines for green salt blender
    - Reworked ore dryer burner system
- Disposal of Waste
  - Approximately 6 million pounds of legacy drums and other radioactive waste was disposed of during cleanup activities
  - Repackaged degraded drums

Making Progress, Improving Reliability



# Accepting Challenges: Actions to Improve

## Recognizing and Responding to Conditions that May Degrade Safety

- Proactive use of Corrective Action Program
- Strengthened reviews, safety justification, and documentation in eMOC.
- Disciplined approach in performance of audits and self-assessments.
- Implementing trending and analysis of Corrective Actions Program data
  - Work with Leadership Team to identify necessary actions.
- Effective use of Operating Experience

Focus on Key Aspects of Nuclear Safety Culture

# Accepting Challenges: Actions to Improve

## Prevention and Control of Leaks and Spills

- Emphasize Procedure Compliance
  - Safe, Consistent Operations
  - Prompt Reporting and Directed Clean-up Effort
- Improve Equipment Reliability/Upgrade Technology
  - Reduce Need for System Entry
  - Reduce Frequency of Process Upsets
  - Improved Planning and ALARA Focus

Focus on Key Aspects of Nuclear Safety Culture

# Accepting Challenges: Actions to Improve

## Responding to Radiological Conditions

- Improved Performance of Dust Collection Systems
  - Significant Reduction in Airborne Events
  - Expected Reduction in Personnel Dose
- Prompt Identification and Reporting
- Aggressive Tracking and Follow-up Monitoring of Airborne Conditions
- Surface and Equipment Contamination Surveys Are More Comprehensive
  - Use of More Sensitive Survey Techniques
  - Use of Administrative Limit to Trigger Decontamination Efforts
  - Performance of Follow-up Surveys
    - Health Physics Tracks to Completion

Focus On Key Aspects of Nuclear Safety Culture

# Future of Metropolis

**Larry Smith**

**Plant Manager**

**Metropolis Works Facility**

**Honeywell Specialty Materials**

**Honeywell**

# Moving Forward: Focus Areas for 2010

- Strengthen Safety Culture – Nuclear
  - Nuclear safety is first priority
  - Integrate new managers into nuclear safety culture
  - Strong corporate and plant leadership to reinforce expectations and
  - Drive individual accountability and ownership
- Reduction in Plant Recordable Injury Rate
- Foster Environment of Continuous Improvement
- Continue to Improve Procedure Quality and Adherence; Increase discipline in control of work and conduct of operations
- Rigorously Apply Management of Change Process

**Maintain Focus on Safety Culture in 2010**

# Consolidating Progress & Enhancing Safety in 2010

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- Clear Standards and Expectations
  - Accountability at All Levels
- Identify and Resolve Issues Using Corrective Actions Program
  - Unsafe Conditions
  - Near Misses
  - Procedure Non-Compliance
  - Improvement Opportunities
- Thorough Application of Audits and Self-Assessments
- Use of GAP Analysis and Root Cause Analysis Actions to Strengthen Program
  - Clear Program Ownership
  - Sustainable Actions
- End Result – *Improved Safe and Reliable Operations*

Core Philosophy of Continual Improvement

# End of Presentation

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