Improving Safety Culture and Systems at Americas Ports

Improving Safety – Plan for the Future

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Meeting Topics

- Safety Contact
- About DuPont and DuPont Sustainable Solutions (DSS)
- DuPont’s View of a World Class Safety Culture
Safety Contact

Safety

After more than two centuries

It’s still our first thought.
DuPont Today - 14 Business Groups

- Pioneer Hi-Bred
- Crop Protection
- Nutrition & Health
- Protection Technologies
- Building Innovations
- Sustainable Solutions
- Applied BioSciences
- DuPont Danisco
- Electronics & Communications
- Performance Polymers
- Packaging & Industrial Polymers
- Titanium Technologies
- Chemicals & Fluoroproducts
- Performance Coatings

- 67,000 employees
- > 210 global sites
- > 70 countries
- Hundreds of thousands of DuPont products and customers
- $33 Billion in sales (2010)
The DuPont Safety Culture

- Powder mill operation began in 1802
- First safety rules established in 1811
  
  "Safety is a line management responsibility.

  "No employee may enter a new or rebuilt mill until a member of top management has personally operated it."

  – E. I. du Pont

- Safety statistics began in 1912
- Belief that all injuries are preventable developed in the 1940s
- Off-the-job safety program began in the 1950s
About DuPont and DuPont Sustainable Solutions (DSS)
DuPont Sustainable Solutions

“A Catalyst for Transformation”

Vision
Leading the transformation of work places and work cultures to become safer, more efficient, and environmentally sustainable. That is our vision; that is our passion.

Mission
Delivering long-lasting solutions by applying our deep knowledge, unmatched experience, and science-driven innovation leading to safer workplaces, greater operational efficiencies, and reduced environmental footprints.

Strategic Businesses and Offerings

Safety Resources
Proven consulting methodologies, expertise and best practices in employee, contractor and process safety management to help transform workplace culture, develop employee skills, reduce incidents and injuries, and improve operational performance

Sustainable Operations
Real-world experience and approaches proven in DuPont facilities to help improve energy efficiency, asset productivity and reliability, and capital effectiveness, and reduce environmental footprint, leading to a sustainable return on operations and assets

Training Solutions
Blended learning solutions that integrate eLearning technologies, instructor-led courses, and traditional media tools to help develop employee skills, reinforce desired behaviors and, sustain the transfer of learning

Clean Technologies
Best-in-class technologies, equipment and services combined with strong technical and engineering capabilities, and solution design to help improve productivity, reduce air emissions and produce cleaner fuels
DuPont’s View of a World-Class Safety Culture
World-class Safety – Essential Elements

Visible Management Commitment

- Integrated Organization Structure
- Policies & Principles
- Line Mgmt Accountability & Responsibility
- Goals, Objectives & Plans
- Motivation & Awareness
- Procedures & Performance Standards
- Effective Communication
- Audits & Observations
- Training & Development
- Safety Personnel
- Incident Investigation
- Visible Management Commitment
Relative Culture Strength (RCS) – correlates SPS results to trailing metric.

Relative Culture Strength = \( \frac{\text{Site Average Score} - \text{Benchmark Worst}}{\text{Benchmark Best} - \text{Benchmark Worst}} \times 100 \)

- Score of 0-100%
- ‘Benchmark Best’ Companies
  - TRR < 1 over a 5-year period
  - No fatalities
  - Lost Workday Frequency Rate < 0.25 over a 5-year period
  - No single year Lost Workday Frequency Rate > 0.5 in a 5-year period
  - Site population > 200 employees
The RCS is a benchmark against industry peers and a predictor of future safety performance.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Avg RCS</th>
<th>Avg TRR *</th>
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<tbody>
<tr>
<td>Chemical Manufacturing</td>
<td>64</td>
<td>3.1</td>
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<tr>
<td>Mining (except Oil and Gas)</td>
<td>61</td>
<td>3.7</td>
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<tr>
<td>Nonmetallic Mineral Product Manufacturing</td>
<td>55</td>
<td>6.5</td>
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<tr>
<td>Merchant Wholesalers, Nondurable Goods</td>
<td>55</td>
<td>5.1</td>
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<tr>
<td>Oil and Gas Extraction</td>
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<tr>
<td>Utilities</td>
<td>52</td>
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<tr>
<td>Ports</td>
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</tbody>
</table>

*TRR based on 200,000 hours.
Typical DuPont Methodology to Improve your Safety Culture

- Executive Safety Committee (ESC)
- Incident & Injury Investigations
- Return to Work
- Rules and Procedures
- Activities and Involvement
- Safety Conversations
- Performance Management

- Fatal
- Lost Work Day Cases
- Recordable Injuries
- Near-Misses or First Aid
  - Hazards
    - Unsafe Acts
    - Unsafe Conditions

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