

2004 ARMA Meeting Presentation by

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GAF Materials Corporation (Environmental), Health & Safety Management System

The Beginnings of a Structured,
Methodical, Business-like
Approach to Risk Management
Decision Making!



EHS Management System Theme (Basic Premise & Core Values)

• EHS is Equal

- EHS should be valued as being equal to the other aspects of our business and be managed in the same manner
- The "Safety 1st Slogan is not reality, rather, the "EHS Equality" Slogan is and can be achieved!
 - Safety
 - Quality
 - Service
 - Cost



The EHS Management System

- The Objectives...
 - Define core values related to EHS
 - Write a prescription for Success
 - Dose-specific for each location
 - Provide Turn-Key Deliverables
 - Define strategic initiatives and develop business plans
 - annually and over a 3 to5 year planning cycle



The EHS Management System (The Game Plan)

- Management Leadership & Commitment
- Performance Management & Recognition
- Management Assessments & Assurances
- EHS Business Planning
- Special Emphasis Programs
- Hazard Management (Identification, Evaluation & Control)
- Integration of EHS into day to day business activities
- Best Methods & Benchmarking
- Communication, Education & Training
- Crisis and Failure Management
- EHS Resources & Professional Development
- Legislative & Regulatory Compliance



Management Leadership & Commitment

- Objective...
 - Mgmt. Involvement
- How...
 - -State the company's Core Values
 - -Identify the corporate infra-structure
 - Corporate EHS Steering Committee
 - Corporate EHS Roundtable
 - -Identify the facility infra-structure
 - Facility EHS Leadership Team



GAF EHS Vision Statement

To Finish Each and Every Day Injury and Incident Free



EHS Performance Management & Recognition

- Objectives...
 - Define Metrics
 - Reward performance
- How...
 - Leading and lagging indicators
 - Tier I, II, III Metrics
 - Create Linkage
 - Facilitate recognition and celebration
 - Electronic, automated shared data management system



Tier I Metrics - Executive Leadership & Company-wide Performance Measures

- Total Case Rate (TCR)
 - total OSHA Recordable Cases per 100 workers
- Lost Time Case Rate (LTCR)
 - total Lost Time Injury Cases per 100 workers
- Worker's Compensation Costs/\$100 payroll
 - total W/C Costs per \$100 payroll costs
- Notices of Violations (NOV's)
 - total number of violations issued from any EHS agency for noncompliance

Tier II Metrics - Corporate EHS Department

Leading Indicators

- Facility EHS Business Plan
 - (% complete of plan)
- Facility EHS Training Plan Adherence
 - (% complete of plan)
- EHS Assessments (% of completed findings)
- Best Methods Execution
 - (% identified/implemented)
- Lockout/Tagout
 - % of completed findings
- Loss Control (Fire & Property Protection)
 - % of completed findings

Lagging Indicators

- Injury/Illness Frequency & Severity Indicators
 - TCR
 - LTCR & LWDR
 - RACR & RWDR
 - FACR
 - Near Misses
- Experience Modification Rate (EMR)
 - annually
- ARMA Rankings
 - quarterly
- W/C Cost/\$100 payroll (%)
- W/C Total Cost (\$)
- NOV's
- Permit Exceedences (# of occurrences)

Tier III Metrics - Facility Management (Includes Tier I & II Metrics Plus...)

- Preventive Maintenance Schedule
 - (% adherence to plan)
- Corrective Action Tracking
 - (% complete)
- Departmental Housekeeping Inspections
 - (# completed)
- Departmental EHS Meetings
 - (# of meetings held)
- Safe Behavior Observations
 - # completed

- Machine Guarding Plan
 Adherence
 - (% complete of plan)
- Ergonomics Plan Adherence
 - (% complete of plan)
- Injury/Illness Pareto Analysis
- Overtime Hours
- Absenteeism Rate (%)
- Turn-over
- # of Manpower Moves
- # of Employees Involved in Teams

EHS Recognition

- Corporate Recognition Activities
- Facility-specific Recognition Activities for associates and teams
- ARMA Awards & Recognition
- On the Horizon
 - OSHA VPP

Assessments & Assurances

- Objective...
 - Provide assurances to management
- How...
 - Define an EHS assessment protocol, rating system and tracking system
 - Perform comprehensive, baseline assessments
 - Capture & Prioritize Risk
 - Qualitative
 - Quantitative
 - Involve senior management personnel



EHS Business Plans & Budget

- Objective...
 - Proactive Planning
- How...
 - Develop EHS Business Plans
 - Develop EHS Training Implementation Plans
 - Quantify and manage the actual expenditures



Facility-Specific EHS Business Plan

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		ACCOUNTABILITY	(1	TIMING (TARGET COMPLETION DATES)										S)		COST
	ACTION PLAN OR ACTIVITY	RESPONSIBILITY	7	F	Μ	Α	Μ	7	J	Α	_S	0	N	D	IDENTIFIABLE RISKS	(\$\$\$)
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Special Emphasis Programs

- Objective...
 - Identify projects with immediate impact
 - "Fix a Spot on the Floor"
- How...
 - Three Phase Approach
 - Phase I
 - Phase II
 - Phase III
 - Back to the Basics or Band Aid Initiatives



Hazard Management

- Objective...
 - -Identify, Evaluate & Control
- How...
 - Develop facility-specific written programs
 - Develop an IH Exposure Assessment& Sampling Plan

Hazard Management

- Machine Safeguarding
 - General
- Process Improvements
 - Ergonomics
- Job Safety Analyses
- Radiation Safety Program (RSO's)
- Industrial Hygiene Exposure Assessments & Sampling
- Asbestos Containing Materials Mgmt. Plan
- Hazard Communication Program
- Confined Space Entry Program
- Respiratory Protection Program
- Lockout/Tagout Program

- Formaldehyde Program
- Silicosis Prevention Program
- Asphalt Fumes Program
- Fiberglass H&S Program
- Personal Protective Equipment Program
- Stillyard Safety Program
- Bloodborne Pathogens Program
- Hearing Conservation Program
- Contractor Safety Program
- Thermal Stress Program
- Fall Protection Program
- Medical Monitoring and Health Surveillance Program

Hazard Management

- Targeted Department Safety Programs
- Hazardous Materials Management Program
- Compressed Gas Cylinder Handling Safety Program
- Flammable Materials Safety Program
- Indoor Air Quality Program
- Hot Work Permit Program
- Fleet Safety Program
- Bio-Safety Program
- Walking & Working Surface Safety Program
- Office Safety Program
- Travel Safety Program

- Electrical Safety Program
- Material Handling Safety Program
- Powered Industrial Vehicles Safety Program
- Hand Tool Safety Program
- Carcinogens, Teratogens, Mutagens and Reproductive Hazards Program
- Open Surface Tanks Safety Program
- Laboratory EHS Program
- Deviation Program
 - Conditionally exempt variances
- Risk Assessment Process
- Fire Protection Program
- Waste Minimization and Polimer Prevention Plans

EHS Integration into Business Operations

- Objective...
 - -EHS is Equal
- How...
 - -AFE Process
 - —Develop quantifiable risk management tool
 - –Utilize existing management syst GAF

Best Methods & Benchmarking

- Objectives...
 - -Maintain Best Methods Manual
 - -Share information across company
- How...
 - -Identify existing internal best methods
 - -Identify new best method opportunities



Best Methods

- LOTO
- JSA's
- Machine Safeguarding
- Engineering
 Design
 Specifications

- WIP
 - PIV's
 - Written CompliancePrograms
 - Respiratory Protection
 - Hazard Communication
 - Hearing Conservation
 - Confined Space Entry
 - Bloodborne Pathogens



Communication, Education & Training

- Objective...
 - Provide Meaningful, Quality Education & Training
- How...
 - Develop EHS Training Implementation Plans (EHSTIP)
 - EHS School 101
 - OSHA 30-Hour Course
 - RSO Training
 - Project Champion School
 - Standardized New Hire Orientation Program
 - Improve Internal/External Communications
 - EHS Alerts
 - SIR Process



EHS Training Implementation Plan

TIMING Target Completion Dates TRAINING TOPIC TRAINING TOPIC TARINING TOPIC TRAINING TOPIC TOTAL TOTAL Cost Training (\$\$\$) Coordinator									(G/	٩F	Materials	aterials Corporation								
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Crisis and Failure Management

- Objective...
 - Advanced Preparedness
- How...
 - Re-visit Business Continuity Plans
 - Aggressive Activity on Fire & Property
 Protection Plans
 - Enhance Incident Investigation Process
 - Roll-out of Worker's Compensation

 Management System



EHS Resource Utilization & Professional Development

- Objective...
 - Preferred Service Provider
- How...
 - Increase internal EHS ProfessionalsUtilization
 - Enhance existing talent base
 - Identify areas of in-house EHS expertise
 - Determine adequate EHS staffing levels



Resources

- Corporate Support Services
 - (1) Corporate Director, H&S
 - (4) Regional EHS Managers
 - Extremely hands-on
 - (1) Corporate Director, Env. Eng.
 - (1) Corporate Env. Eng.
- Corporate EHS Steering Committee
- Corporate EHS Roundtable
- Facility Support Services
 - EHS Leadership Team Members
 - Project Champions!!!
 - (4) FTE's Hourly Safety Coordinators
 - (18) PTE's Support Personnel
 - (Ranging from 10-50% of time)



Legislative and Regulatory Compliance

- Objective...
 - Achieve & Sustain compliance
- How
 - Stay abreast of regulatory climate
 - Proactive participation in legislative and regulatory issues
 - Define EHS recordkeeping and retention requirements

Take-Aways

- Infra-structure Creation
- Advanced Planning & Budgeting
- Enhanced Education & Training
- Comprehensive Mgmt. Assessments & Compliance Audits
- Best Methods Development & Sharing
- Turn-key Deliverables
- Everything gets tracked
- Increased Hands-on Support

