

# 2003 MTW Health, Safety & Regulatory Affairs Overview



#### Specialty Materials Fluorine Products

- 4-26-03 Scheduled Maintenance Outage until 5-13-03
- 5-08-03 HF Valve leak
- 6-02-03 Fire Line Leak I (Hammered System)
- 6-02-03 FMB shut down until
- 7-14-03 HF Release Vaporizer GS weld failure
- 7-14-03 FMB shut down until 7-24-03 Temporary HF Line Start-Up
- 7-23-03 Fire Line Break II
- 7-23-03 FMB shut down until 7-26-03
- 8-19-03 Fire Line Break III
- 8-19-03 FMB shut down until 8-21-03
- 9-9-03 FMB shut down for HF New Line Installation until
- \*9-9-03 HF Burn Maintenance Person
- 9-9-03 FMB Shutdown until **present**
- \*9-12-03 SbF5 Release
- \*9-30-03 UF6 Pigtail Flexible Hose leak (1 min.)

### **Specialty Materials** Fluorine Products

## 9-09-03 Root Cause:

# HF Burn to Maintenance Person (South Vaporizer)

Failure to recognize **MOC** and properly document. (**Training**) Special Work Permit not completed for specific job (Training).

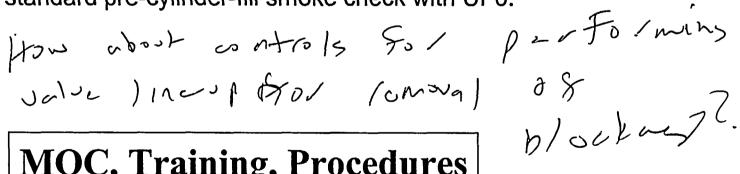
50,000 Ft. View Honeywell

#### 9-12-03 SbF5 Release (Taking a Product Sample) Root Cause: **Training** of Operator (Breaker/Relief Operator new this job).

# 9-30-03 Root Cause:

# **UF6** Pigtail Flexible Hose leak

No procedure in place to leak test the pigtail connection prior to standard pre-cylinder-fill smoke check with UF6.



# **MOC**, Training, Procedures

Specialty Materials <u>"Big-Picture" Short Term Corrective Actions</u> Honeywe

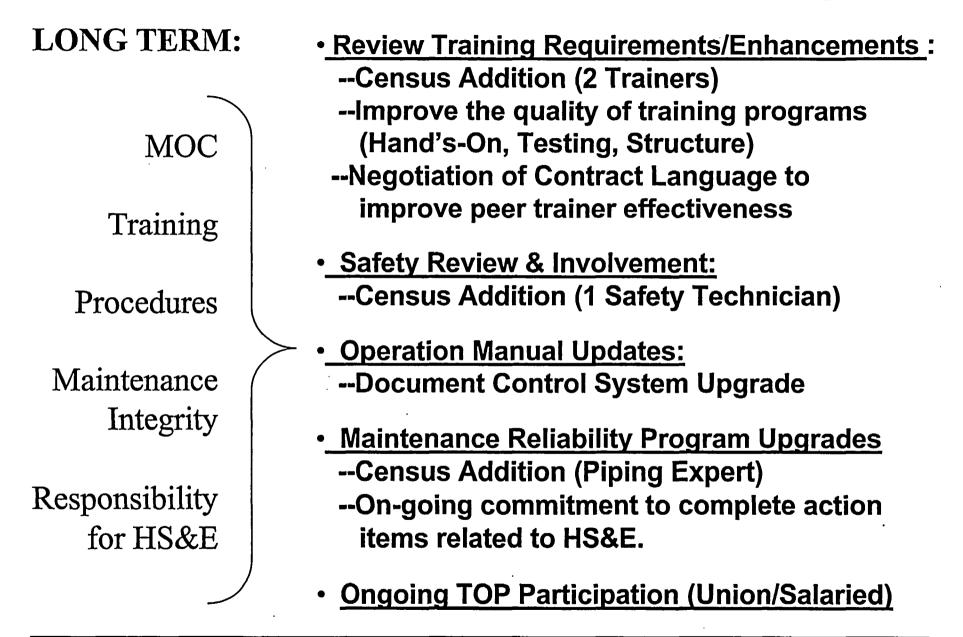
SHORT TERM:	<ul> <li>System Process Hazard Analysis Reviews (PHA) for all areas:</li> </ul>
	Completed 9/15/03, Corporate Involvement-On-Site
	<ul> <li>Review Training Requirements/Enhancements :</li> </ul>
	Completion of deficiencies found required prior to start-up
	<ul> <li>Procedures Review/ Manual Updates for all areas:</li> </ul>
MOC	Involving operators, supervisors & engineers.
	Procedure book updates currently in process.
	Management of Change Review
Training	In process by Process Engineers & Procedure Reviewers
	MOC/PT-101 Training for Supervisors & Leadership
	Completion of maintenance action items
Procedures	Critical Items to be completed prior to start-up.
	Start-Up List of Required Items To Repair HSE/Essential Equipment
	Critical Piping Checks
	Failure Mode Effects Analysis for PSM piping: Completed 10/01/03
Maintenance	~Corporate & Baton Rouge Plant Involvement On-Site (Experts)
	Welding Procedure Enhancement (Corporate Involvement)
Integrity	Welder Training & Certification Renewal
	<ul> <li>HS&amp;E Review of System Breach/Line openings</li> </ul>
	Special Work Permit Review
Demonsthility	Pre-job Hazard Assessment Review
Responsibility	System Configuration Lock out Tag Out Review
for HS&E	PPE Upgrades for line breaks with potential hazard for splash/etc.
	<ul> <li>Organizational Changes involving supervisory involvement.</li> </ul>
	<ul> <li>Plant Manager Town Hall Meetings with Employees</li> </ul>
	Importance of following procedures and making safety the priority
	Corporate Involvement On-Site & Joint Venture President On-Site
	<ul> <li>Plant Stand-Down for Several Weeks to complete these activities</li> </ul>

# Organizational Changes related to 9/9/03 Injury:

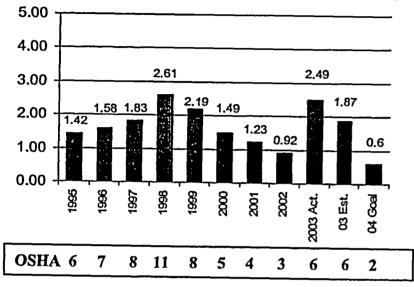
Fluorine Products Manger Removed From Duty Fluorine Products Supervisor Removed From Duty

Nuclear Fuel Services Manager assigned to oversight (Interim) Experienced Engineer assigned to oversee daily activities (Interim)

# Specialty Materials "Big-Picture" Long Term Corrective Actions Honeywell



# **OSHA Recordable Incident Rate (TCIR)**



### **Training/Procedures**

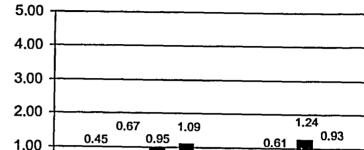
Metropolis

- Update all operating procedures
- Create a Training Department
- Require stricter standards be met before qualifying operators
- Establish formal training process for new supervisors, especially around process safety (line breaks, confined space, etc)

Retrain Operations and Maintenance on safety and MOC procedures Modify PPE requirements for all jobs around PSM chemicals Require HSE sign off on Maintenance Line breaks (Temporary)

#### **Piping**

Review piping specs and construction standards for legacy systems Repair or replace piping that does not pass thickness checks Evaluate current certification program for adequacy for welders



1999

4

8661

# <u>PHA Review</u>

0.00

**LWCA** 

Review current PHA re-validations

2

Implement a process to make P&ID s current with ISA standards Conduct PHA on SF6 process

## **Mechanical Integrity**

0.24

8

1

966

66

3 4

Implement a robust reliability program

- Bring all inspections up to date
- Complete all required repairs due to inspections
- Upgrade reliability test equipment (vibration, alignment, etc) Implement a standard work permit process across the site Fix the stores inventory process (shortages, SLOB, expedites, etc)

# Lost Work Day Rate (LWDCAIR)

0.31

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2002

2

03 Est.

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2003 Act

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**Safety Summary**