INDUSTRIAL HYGIENE
Site Programs

By Christine Poupard – Motorola
Chris Bundrum – Intel

SESHA Academic Lecture Tour
on September 27 and 28, 2001
Discussion Overview

- Industrial Hygiene Role
  - What is the function of an IH?

- Industrial Hygiene Programs
  - What are IH Programs?

- Program Components

- Questions
  - Ask at any time
Industrial Hygienist Role

• Program Management
  - Implementation
  - Compliance
  - Guideline development
  - Continuous Improvement
  - Documentation
  - Indicators
  - Working Groups
  - Program Health /Audits
  - Roadmap Development

• Customer Service
  - Support factory ramps
  - Equipment sign off
  - Incident investigation
  - Risk communication
  - Teaching / coaching
  - Technical resource
  - QL/QN assessments
Industrial Hygienist Role

• E-Business
  – WBT Development
  – Web Page Development
  – Automated systems
  – Customer Service Interface
  – Explore new ways to do business

• EHS Training
  – Content Development
  – Content Revision
  – Delivery
  – Recruiting Instructors
  – TTT Sessions
Industrial Hygiene Programs

- HazCom
- Chemical Approval
- Ionizing Radiation
- Lasers
- Lead

- PPE
- Ventilation
- Hearing Conservation
- Respiratory Protection
- Non-Ionizing Radiation
Industrial Hygiene Programs Cont.

- Lab Safety
- Inert Gas
- Arsenic
- Heat Stress
- IAQ
- Exposure Assessment
- Legionella
- Ergonomics
- Asbestos
- Program Audits
- Indicators
- Technology Transfer
Hazard Communication Program

Key Components

• Written HazCom Program
• Availability of MSDS’s
• Master Chemical Inventory
• Chemical Labeling Program
• Employee Information and Training
• Chemical Approval
Exposure Assessment Program

Key Components

• Identify similar exposure groups
• Identify all job tasks w/potential for exposure
• Evaluate risk of exposure
  – Task Frequency, Toxicity, Dispersion, Controls, PPE, etc.
• Establish solid baseline monitoring data
• Organize the data electronically
• Communicate results to employees
• Identify tasks for routine follow-up
• TAKE EXCELLENT FIELD NOTES!
Respiratory Protection Program

Key Components

- Programs for APR, Airline, SCBA
- Annual Training
- Annual Fit Testing
- Medical Monitoring
- Cleaning and Maintenance Program
- Cartridge Changeout schedules
- Re-certification system
Hearing Conservation Program

Key Components

- Annual Training Program
- Annual Audiometric Testing
- Required use of Hearing Protection
- Signage and Labeling
- Routine Monitoring Program
  - Dosimetry
  - Area Sound Level Meter Surveys
Laser Safety Program

Key Components

- Medical monitoring (baseline eye exams)
- Submit laser inventory for all Class 3b and 4 lasers to the Arizona Radiation Regulatory Agency (ARRA)
- Bi-annual qualitative assessments of lasers (ARRA requirement)
  - Procedures
  - Training
  - Engineering Controls
  - PPE
RF/MW Radiation Program

Key Components

• Register industrial RF & Microwave tools with the ARRA and update with annual inventories
• Conduct baseline leakage surveys with a calibrated survey meter
• Follow-up assessments following as needed (i.e. maintenance, etc.)
• Validate effective equipment controls (interlocks, etc)
• Training
Ionizing Radiation Program

Key components

• Annual leakage surveys
• Interlock inspections / Utilization log
• Employee Information and Training
• Consider employee monitoring badges
• Define program for addressing pregnant employees
• Control sources entering and leaving the site
Ergonomics Program

Key Components

• Written Ergonomic Program
• Workplace analysis documentation
  – Assessments and job reviews
• Prevention and control of injuries
• Medical management
• Education and awareness
  – Training for Manufacturing and Office
  – Focus on behaviors
• Indicators and Trend analysis