

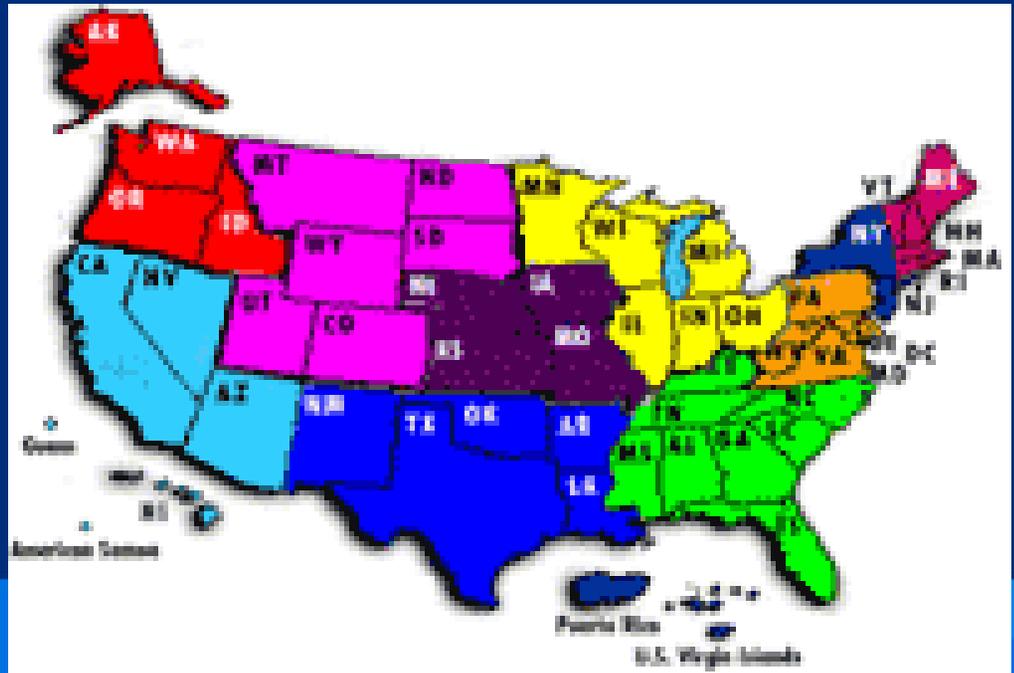
OSHA Update

Health Outcome Initiative

Dean R. Lillquist, PhD, CIH
Director, Salt Lake Technical Center
Occupational Safety and Health Administration

2005 NASA Occupational Health Conference

Objectives:



- OSHA's management plan to impact Occupational Health outcomes.
- Review OSHA's seven "high hazard" industries and its Strategic Management Plan (SMP).
- Industry partners and alliances.

OSHA's Mission

Assure so far as possible every working man and woman in the nation safe and healthful working conditions.



OSHA's Vision

Every employer and employee in the nation recognizes that occupational safety and health add value to American businesses, workplaces, and workers' lives.



Workers



Warehouse



Nursing Home

OSHA's Strategic Direction

- Focus on areas providing maximum return-on-investment
- Create culture that values safe and healthful workplaces
- Ensure OSHA has capabilities and expertise to provide leadership



Poultry Processing Workers

OSHA's Strategic Management Plan

Goal 3.2 – Improve OSHA's Impact on Occupational Health Outcomes.

- I. Emphasize the importance of industrial hygiene**
- II. Improve quality of IH services**
- III. Improve the IH targeting process**
- IV. Improve OSHA health outcomes measurement**

Improved Targeting of Occupational Illness

“The information on occupational illness is much more limited. Occupational illnesses with long latency periods are much more difficult to identify and track. Some conditions do not surface until many years after exposure occurs. In addition, many conditions can result from both occupational and non-occupational exposures. As a result of inherent data limitations related to occupational illnesses, OSHA has had difficulty in identifying emerging health issues and designing effective strategies.”

Strengthening OSHA’s Strategic Surveillance and Analytical Capabilities Report.

Emphasize importance of IH

- **Develop a definition of an IH inspection**
 - **Develop a performance metric for conducting IH inspection**
- **Update and implement the Industrial Hygiene Field Operations Manual.**
- **Improve field staff's knowledge, skill and abilities.**

Improve Quality of IH Services

- **OSHA Technical Institute (OTI) classes on topical IH subjects**

Health updates

Mathematical modeling

Advanced ventilation

etc.

- **WEB based IH information sharing**
- **Technical Conferences**
- **GAP assessments for outdated PELs**
- **IH Subject experts**
- **Wipe sampling**

OSHA Website

- Among the first to use internet to distribute information 24/7
- Repository of OSHA information
 - Offices and contacts
 - Documents
 - Inspection data & statistics
- 2 million users/month (.8M to technical info)

The screenshot shows the OSHA website homepage. At the top, it features the U.S. Department of Labor logo and the text "U.S. Department of Labor Occupational Safety & Health Administration" with the website address "www.osha.gov". A search bar is located to the right of the header. Below the header, the date "March 27, 2003" and a "Site Index" with letters A-Z are displayed. The main content area is divided into several sections: "In Focus" with a graphic of a person using a wheelchair and text about ergonomics guidelines; "OSHA News" with a list of recent announcements; "About OSHA" with a list of links for Mission, OSHA Saves Lives, OSHA Facts, Events, Publications/Posters, State Partners, and Job Openings; "What's New"; "Audiences" with links for En Español, Small Business, Workers, and Teen Workers; and a "QuickTakes" subscription form. On the right side, there is a vertical navigation menu with categories like "Find It! in DOL", "Compliance Assistance", "Laws & Regulations", "Cooperative Programs", "State Programs", and "Newsroom".

U.S. Department of Labor
Occupational Safety & Health Administration
www.osha.gov

Search GO Advanced Search | A-Z Index

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OSHA
Safety & Health Add Value
To Your Business. To Your Workplace. To Your Life.

What's New

About OSHA

- [Mission](#)
- [OSHA Saves Lives](#)
- [OSHA Facts](#)
- [Events](#)
- [Publications/Posters](#)
- [State Partners](#)
- [Job Openings](#)

OSHA QuickTakes
Subscribe Email address: GO
Biweekly E-News Memo

Audiences

- [En Español](#)
- [Small Business](#)
- [Workers](#)
- [Teen Workers](#)

In Focus

 OSHA announces final [ergonomics guidelines for nursing homes](#) - practical recommendations to help nursing home operators reduce injuries among workers.

OSHA News

- [OSHA Assistant Secretary Announces Appointment of Special Assistant for Emergency Preparedness](#)
- [American College of Occupational and Environmental Medicine Aligns With OSHA](#)
- [Grain Industry Safer Under OSHA Standard](#)
- [OSHA Offers Health Hazard Information on Crystalline Silica](#)
- [International Mass Retail Association Forms Alliance with OSHA](#)

[more OSHA News >>>](#)

Find It! in DOL
Department of Labor

Compliance Assistance

- [Consultation](#)
- [eTools](#)
- [Grants](#)
- [Posters](#)
- [Recordkeeping](#)
- [Training](#)

Laws & Regulations

- [Standards](#)
- [Interpretations](#)
- [Federal Registers](#)
- [Directives](#)
- [Dockets & E-Comments](#)

Cooperative Programs

- [Alliances](#)
- [Strategic Partnerships](#)
- [VPP](#)

State Programs

Newsroom

- [News Releases](#)
- [Publications](#)

Improved Targeting:

- Request for Information on health issues OSHA should focus on.
- Alliance/Partnership/VPP
- National Emphasis Program (NEP)
- Local Emphasis Programs (LEP)
 - Silica
 - Lead
 - Occupational asthma (develop)

OSHA's Cooperative Programs

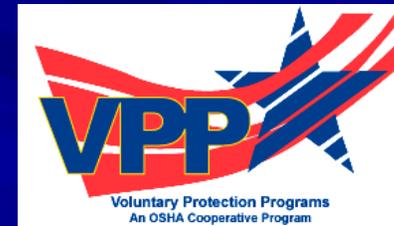
- Alliance Program



- OSHA Strategic Partnership Program



- Voluntary Protection Programs



- Consultation Program & SHARP



Benefits of Participating in the Alliance Program

- Build a cooperative and trusting relationship with OSHA
- Network with other organizations committed to workplace safety and health
- Leverage resources to maximize worker protection
- Gain recognition as proactive leaders in safety and health



Alliance Program Goals

OSHA and the participating organizations must define, implement, and meet a set of short- and long-term goals that fall into three categories:

- Training and education
- Outreach and communication
- Promoting the national dialogue on workplace safety and health



Alliance Program Web Page

September 1, 2004

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What Is OSHA's Alliance Program?

OSHA's new program, Alliances, enables organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses in the workplace. OSHA and its allies work together to reach out to, educate, and lead the nation's employers and their employees in improving and advancing workplace safety and health. Alliances may be established by OSHA's National, Regional and Area offices, or by State Plan States.

Why Participate in an Alliance?

There are many benefits to participating in an Alliance with OSHA. Through this program, organizations will:

- Build trusting, cooperative relationships with the Agency.
- Network with others committed to workplace safety and health.
- Leverage resources to maximize worker safety and health protection.

Who Can Participate in an Alliance?



The Modular Building Institute signs national Alliance July 28, 2004

What's New

- OSHA and the Joint Commission on Accreditation of Healthcare Organizations and Joint Commission Resources, Inc. sign Alliance July 27, 2004
- Ammonia Refrigeration eTool
- OSHA and APA develop OSHA Assistance for the Pyrotechnics Industry
- Alliance Directive
- Alliance Program Annual Report February 24, 2004
- "What is the Alliance Program?" A PowerPoint Presentation [PPT - 1.9 MB]
- Alliance Milestones and Successes
- Alliance-Related News Releases

Screen shot of the Alliance Program Web page

OSHA Strategic Partnership Program Benefits

Possible benefits include:

- Building a cooperative relationship with OSHA
- Developing practical skills to identify and abate hazards
- Reducing injury and illness rates as well as workers' compensation and other costs
- Receiving limited scope inspections and possible penalty reductions



Partnership Program

December 14, 2004

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What Is OSHA's Strategic Partnership Program?

OSHA's mission is to send America's workers home whole and healthy every day. Traditionally, the agency's strategy has been to promulgate and enforce workplace safety and health standards. With only 1,200 compliance officers and more than seven million workplaces, the challenge is significant.

In contrast, the OSHA Strategic Partnership Program (OSPP) moves away from traditional enforcement methods and embraces collaborative agreements. Through OSPP, OSHA and its partners agree to work cooperatively to address critical safety and health issues. This very different approach is proving to be an effective tool for reducing fatalities, injuries, and illnesses in the workplace.

How Do Partnerships Work?



OSHA Signs Strategic Partnership Concrete Applied Technologies Corporation DBA November 2, 2004

What's New

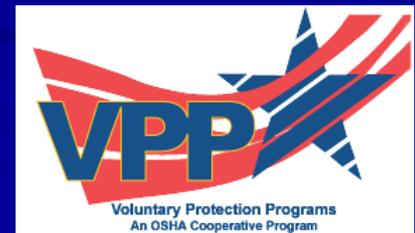
- **NEW!** Success Stories
- OSHA Signs Strategic Partnership with the Department of the Army
 - [OSHA News Release](#)
 - [Strategic Partnership](#)
- OSHA Signs Strategic Partnership with Electrical Contractors, Labor, Industry Associations
 - [OSHA News Release](#)
 - [Strategic Partnership](#)
- **NEW!** Partnership Signings
 - [List of Current Partnerships](#)



Screen capture of the Partnership Program Web Page

Voluntary Protection Programs (VPP)

- Promotes effective worksite-based safety and health
- Moves beyond compliance and calls for continuous improvement
- Supports cooperative relationship with management, labor, and OSHA
- Recognizes exemplary occupational safety and health efforts



VPP Program



U.S. Department of Labor
Occupational Safety & Health Administration

www.osha.gov

MyOSHA

Search



Advanced S



December 14, 2004

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What is VPP?

The Voluntary Protection Programs (VPP) promote effective worksite-based safety and health. In the VPP, management, labor, and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health.

What Is the Authority for VPP?

The legislative underpinning for VPP is Section (2) (b)(1) of the Occupational Safety and Health Act of 1970, which declares the Congress's intent "to assure so far as possible every working man and



OSHA awards Hamilton Sundstrand's Mechanical Operations in Grand Junction, Colo. Voluntary Protection Program "Star" status

What's New

- **NEW!** Special Government Employee (SGE) Webpage
- **NEW!** Celebration to Launch OSHA Challenge and VPP Corporate Pilots
- **NEW!** OSHA VPP Fact Sheets
 - OSHA Challenge [PDF - 354]
 - OSHA Corporate Pilot [PDF - 354K]
 - The Three C's of VPP [PDF - 355K]
 - Voluntary Protection

O1

Maybe cooperative program website pictures could be removed and the url's could be added on a resources slide at the end of the presentation

OSHA_User, 12/17/2004

Safety Health and Achievement Recognition Program (SHARP)

- Recognizes small employers who operate an exemplary safety and health management system
- Singles out organizations as a model for worksite safety and health
- Exempt from programmed inspections during the period that SHARP certification is valid



Strategic Management Plan - Industry

Landscape/Horticultural Services

Oil and Gas Field Services

Fruits, Vegetables and Food Specialties

Concrete and Concrete Products

Primary Metals and Basic Steel Products

Public Warehousing and Storage

Ship and Boat Building/Repair

SMP - Hazards

Amputations

Lead

Silica

Construction

Improve Health Outcome Measures

- **Explore use of biological monitoring data**
- **Tabulate Z table before and after exposure records**
- **Separate health and safety PPE citation**

Safety and Health Add Value

- **To Your Business**
- **To Your Workplace**
- **To Your Life**

Hispanic Outreach

Electronic Assistance

- OSHA en Espanol
- Hispanic Employers and Workers Compliance Assistance Web Page
- Hispanic Outreach Module of Quick Start
- Regional Showcase Articles
- Success Stories

Publications

- Hispanic Outreach Fact Sheet
- Heat and Cold Stress cards in Spanish

Additional Resources

- Alliance Program
- Hispanic/ESL Coordinators
- OSHA Hotline (with Spanish-language option)
- National Hispanic Summit – July 2004
- Dictionaries
- Regional/Area Office Activities



Hispanic Employers and Workers Compliance Assistance



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GO Advanced S



May 10, 2005

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Compliance Assistance: Hispanic Employers and Workers

Welcome! From this site you can access OSHA's compliance assistance resources for Hispanic employers and workers. While this site includes links to Spanish-language resources, it is intended primarily for English-speaking and bilingual users. For OSHA's Spanish-language site, please visit [OSHA en Español](#).



[Spanish-Language Compliance Assistance Resources](#)



[Hispanic/English-As-Second-Language Coordinators](#)



[Employer and Employee Rights and Responsibilities](#)



[OSHA Cooperative Programs](#)



[Success Stories](#)

Highlights

- [OSHA Hispanic Outreach Fact Sheet \[PDF - 24KB\]](#)
- [What's New](#)
- [Hispanic Outreach Quick Start](#)
- [Hispanic Summit](#)
- [Spanish-Language Publications](#)
- [Dictionaries](#)
- [Teen Summer Jobs \(Spanish version\)](#)
- [Oregon OSHA PESO Training Program](#)

Quick Links

- [OSHA en Español](#)
- [Puerto Rico State Plan Standards in Spanish](#)
- [Consultation Programs](#)
- [State Plan Spanish-Language Publications](#)

[Other Federal Agencies](#)

OSHA en Español



www.osha.gov

MyOSHA

Buscar



Buscar Avanzado | Índice

El 2 de Abril de 2004

OSHA en Español



Sobre OSHA

[La misión de OSHA](#) | [Secretario Adjunto Henshaw](#) | [30 años de OSHA](#) | [Preguntas más frecuentes](#) | [Datos de OSHA](#)



Derechos y Responsabilidades del Empleado

[Derechos](#) | [Responsabilidades](#)



Responsabilidades del Empleador

[mas...](#)



Problemas en el Trabajo

[Peligro inminente](#) | [Negarse a trabajar](#) | [Discriminación por presentar quejas](#)



Quejas del Empleado

[Cómo presentar una queja](#) | [Proceso de Manejo de Quejas](#) | [Protección de querellantes](#)



Recursos

en Inglés: [Oficinas de OSHA](#) | [Oficinas de Consulta](#) | [Coordinadores Hispánicos](#)
en Español: [Publicaciones](#) | [Oficinas Estatales](#) | [NIOSH](#)



eTools en Español

[mas...](#)



Comunicado de Prensa

- ▶ 17 Marzo 2004
- ▶ 7 Octubre 2002
- ▶ 26 Septiembre 2002
- ▶ 22 Mayo 2002
- ▶ 26 Abril 2002
- ▶ 5 Marzo 2002
- ▶ 25 Febrero 2002
- ▶ 14 Agosto 2001
- ▶ 5 Enero 2001

World Class Technical Resource Center

SLTC Impact on Worker Safety and Health



Technical Resource Center

Discussion Topics



Capabilities

- IH Chemistry
- Industrial hygiene
- Engineering
- Health Physics
- E-Product Development (safety and health topics)
- Information Dissemination

SLTC Staff

- Service - 20+ years average
- Scientists – 40% graduate degrees
- Industrial Hygienists – 100% professional certification
- Engineers – 5 distinct disciplines
- Computer Tech Personnel – programming, web-development, graphic design, and information technology

Respond Rapidly to Changing Issues

World Trade Center

Anthrax

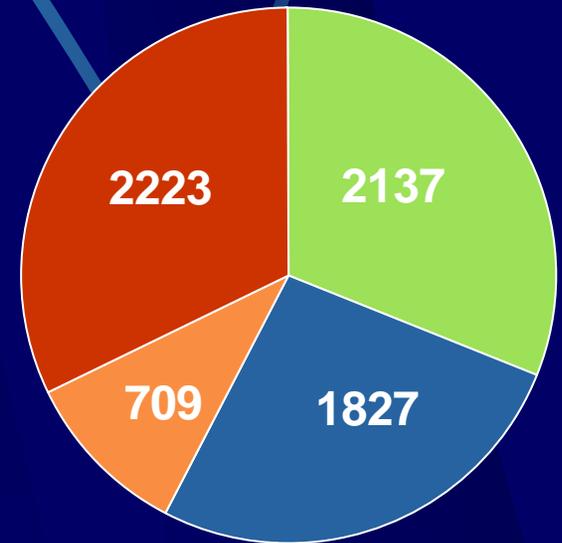


World Trade Center

- IHC Lab 7900 samples 1.5 day TAT



Samples Released



■ Asbestos ■ Metal
■ Organic ■ Silica

Anthrax

● HRT Response

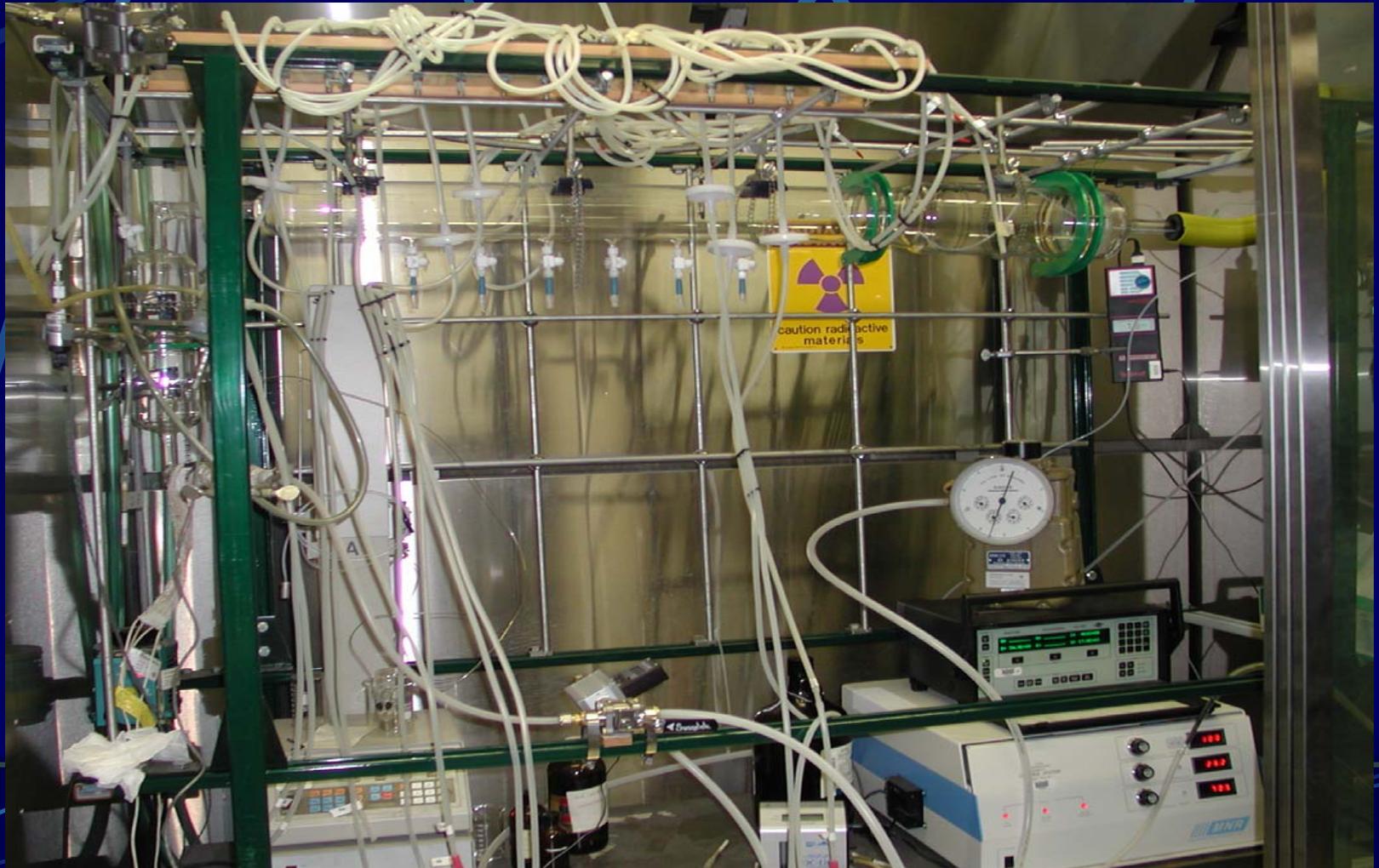
- AMI Facility
- Brentwood PO
- Morgan PO
- Trenton PO
- Wallingford PO



OSHA IH Monitoring Program

- Maintain AIHA Laboratory Accreditation
 - Accredited since 1976
 - 3-yr renewal accomplished in FY03
- Sampling and Analytical Methods
 - 10 methods in FY04
- Sampling Media

Test Atmosphere Generation System



OSHA IH Monitoring Program

- IH Sample Analysis
 - 20,000 samples analyzed = 50,000 analyses
- Coordinate with Contract Labs
 - Biological samples
- Litigation Support
 - 4 OSHRC litigations



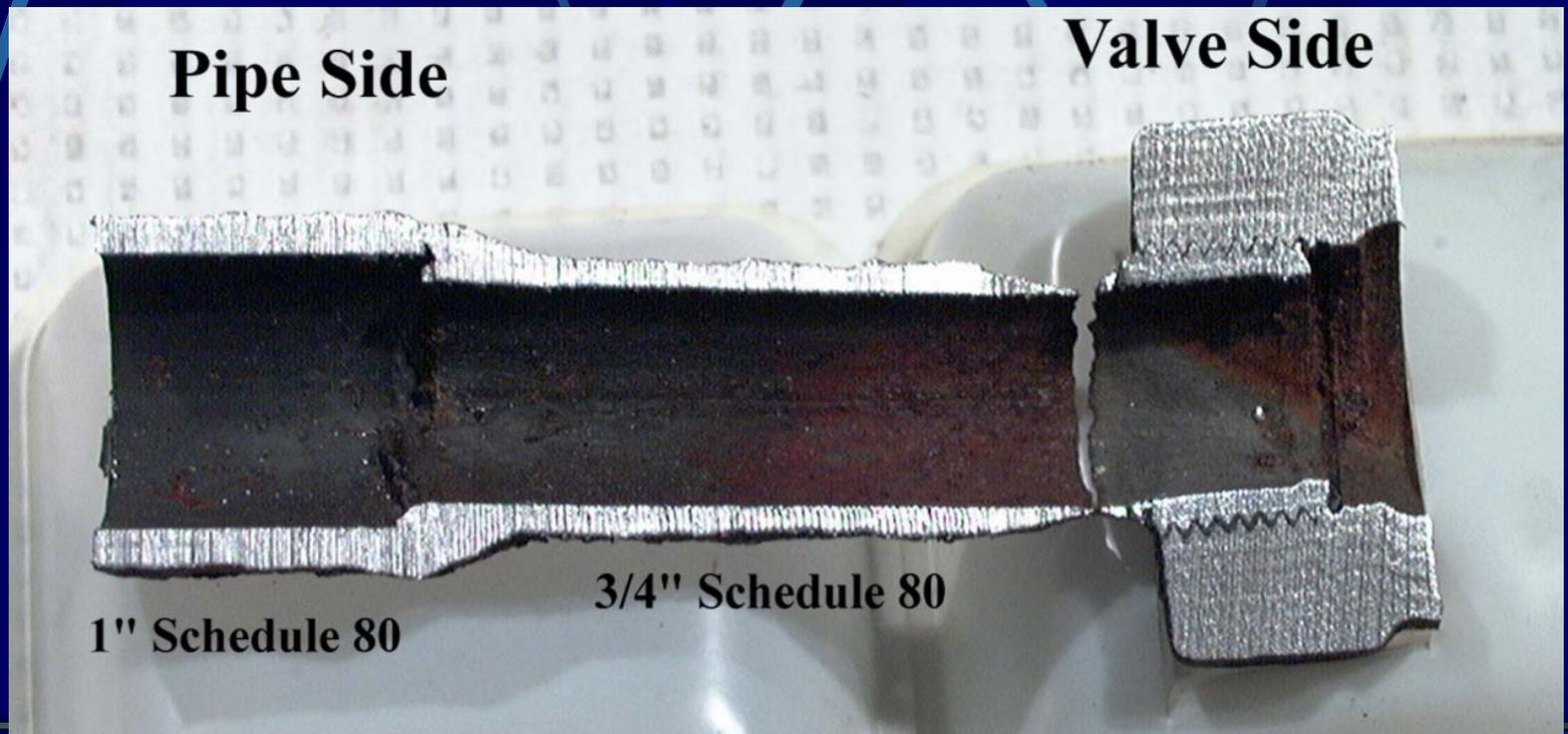
SLTC Assistance in Process Safety is Multi-Faceted

- Analytical Assistance
- Field Assistance
- Literature Searches

Specialized SLTC Analytical Support

- Dust Explosions
- Accelerated Rate Calorimetry (ARC)
- Mass Spectrometry
- Microscopy/Failure Analysis

Ammonia Fire at Fishpacking Operation in Alaska



Who, or What is the OSHA Health Response Team?

- Created in late 1970's to address need for rapid response to unusual or complex IH/Safety matters.
- Team is presently directed by Bob Curtis and includes nine team members.
- Specialized backgrounds in Chemistry, Engineering, Safety, and Ergonomics.

SLTC Field Assistance

- Engineering
- Chemistry
- Industrial Hygiene/Safety

Chemical Manufacturing Incidents

- Small and Large Industry Incidents Investigated
- Nature of These Incidents- Varies Widely

BPS Pesticide Warehouse Fire and Explosion

- Super sacks of pesticide (AZM) in storage underwent thermal decomposition.
- During subsequent fire an explosion occurred which killed three volunteer fire fighters.



Ethylene Oxide Explosion



Ammonium Perchlorate Explosion, PEPCON



New Approaches to Safety and Health Evaluations

- Can we use field instrumentation to evaluate hazards which will result in a more effective audit/inspection?
- Are there better ways to perform audits/inspections?
- Are there hazards in the workplace which have been overlooked in the past?

Skin and Dermal Exposure Assessment

- Majority of chemicals in workplace are readily absorbed through skin.
- Assessment of the extent of exposure is vital to recognition of the problem
- Measure surface exposure in “non-regulated areas”
- Measure efficacy of PPE

Skin Absorption Relative to Lung

- Methylene Dianiline (MDA): 132 times dose skin vs lungs for hand exposure (1% solution on hands vs 8 hr PEL exposure)
- Ethyl cellosolve (glycol ether): 68 times dose skin vs lungs for hand exposure (8hrs on hands vs 8 hrs at 5 ppm in air)

Skin and Dermal Exposure Assessment



Color Indicating
Patches for
Measuring
Chemical
Exposure

Specialty Response Teams

- Up-to-date with emergency response protocols
- Technical expertise with on-going training
- Up-to-date PPE, detection equipment, decontamination & sampling protocols
- Train and liaison with other emergency responders
- Respond – request, threshold, directed by A/S
- Coordinated by HRT