



SAFETY 101



Top Ten Signs Your OSHA Inspection is Going Poorly

- OSHA sets up temporary housing in your parking lot.
- The Compliance Officer mutters, "This is unbelievable" each time he or she enters a different part of the building.
- OSHA calls in a professional film crew to document conditions in the plant. A reporter from "60 Minutes" tags along.
- The Compliance Officer insists on wearing a moon suit supplied with a SCBA, while your employees work in jeans and tennis shoes.
- The Congressman you called for help won't return your call, but he does return your campaign contribution.
- The Compliance Officer begins the opening conference with the following: "You have the right to remain silent..."
- The Compliance Officer asks you a specific question about a report in your files, but you haven't turned over any files.
- The Compliance Officer knows each of your employees by their first name.
- The Compliance Officer is a former employee that you fired.
- The current OSHA Secretary conducts the closing conference.





Safety for the Environmental Professional



John Malone, EHSCP

Safety Can be Defined as:

- The prevention of accidents and reduction of unnecessary risks by adopting **safe attitudes**, choosing **safe behaviors** and creating **safe environments**.



Controls/Drivers

- Attitudes – Management Commitment, Effective Communication, Employee Buy-in, Culture
- Behaviors - Training & Observation Programs
- Environments – Inspections/Audits

Priorities of Safety Programs Based on:

- Compliance with Laws
- Financial Concerns
- Further narrowed based on Risk



LAWS - OSHA

- Companies must provide a safe work place.
- Employers must train their employees to work safely.
- All employers must maintain accurate records of training and accident/illness issues.
- All employees are required to comply with the Company Safety Policies.
- OSHA is authorized to enter and inspect workplaces.
- Individual states are allowed to establish their own OSHA plans if they meet or exceed Federal standards.
- Companies must have an accident prevention program (I2P2) that is enforced (not required by OSHA....yet.)



Financial Concerns

- Loss of Productivity
- Overtime
- Medical
- Lost Opportunities
- Indirect Costs



Severe losses have bankrupted many small companies



Priority/Focus Based on Risk

- When wearing many hats, must prioritize.
- Prioritize on Risk
- Risk is calculated by multiplying:
 1. The likelihood of something happening
 2. The severity of such if it does happen



Risk

- What's the riskiest job undertaken in a communications company daily?
- What are some other risky jobs?
 - High severity



Risks - Low Occurrence & High Severity

- Driving/vehicle accidents (can be high occurrence low severity depending on crash)
- Underground Operations
 - Manholes and vaults
 - Trenches
 - Electrocution
 - Falls



Risks - High Occurrence & Low Severity

- Musculoskeletal disorders (MSDs)
- First aid cuts, bruises, etc.
- May have enough frequency that they become important; MSDs for example.



Safety Management System

- An organized and systematic approach to managing risks (the identification, control, and elimination of hazards).
- An effective safety management system is a decisive factor in reducing the frequency and severity of work-related injuries and illnesses.
- I2P2 is a written description of how your Safety Management System will operate.



Safety 101 – OSHA Regs Most Applicable to Communications Industry

The following is an overview of 29 CFR 1910, the federal Occupational Health and Safety Standards, with which your company needs to comply.



This is just an overview and you should familiarize yourself with all federal, state and local regulations which apply to your business.

Please note that local and state regulations can only be more stringent than federal – they cannot lessen compliance responsibilities.

OSHA

The Occupational Health and Safety Administration (OSHA) defines the elements of an effective safety program as including training, documentation, observation and enforcement. Records of safety training, observations and disciplinary action must be maintained for each employee.



General Duty Clause

29 USC 654 Sec. 5 (a)(1)

Each employer — shall furnish to each of his employees employment and a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.



The General Duty Clause is an opened ended statement and was purposely designed as such. OSHA will use the clause in situations where no standard exists yet they believe the potential for injury may exist.

Telecommunications Standard

OSHA's Telecommunications Standard,
29 CFR [1910.268 \(c\)](#)

- Known as VERTICAL standard
- Most standards are HORIZONTAL, meaning they cover a particular subject over a wide variety of industries
- A VERTICAL standard covers a wide variety of subjects over a particular industry.
- Vertical standards typically OVERRIDE horizontal standards (manhole entry procedures)



Telecommunications Standard

applies to the work conditions, practices, means, methods, operations, installations and processes performed at telecommunications centers and at telecommunications field installations, which are located outdoors or in building spaces used for such field installations

Telecommunications Standard

- Buildings containing telecommunications centers
- Battery handling
- Approach distances to exposed energized overhead power lines and parts
- Training
- Employee protection in public work areas
- Rubber insulating equipment
- Climbing equipment - belts & climbers
- Ladders
- Eye protection
- Bucket trucks
- Fault testing
- Grounding
- Overhead lines
- Underground Lines – manholes, etc.

General Industry Standards Applicable to ALL Industries

- Housekeeping
- Cleanliness (facilities)
- Walking/ Working Surfaces
- Forklifts/Highlifts
- Hazardous Materials
(O², CG, AC, NO, LPG, NH³)
- HAZWOPER
- PPE
- PRCS
- LO/TO
- Machinery/Guarding
- Hand Tools
- Welding/Cutting
- Electrical
- Z or 1000 series – Toxic and Hazardous Substances
- Key programs – next slides



Recordkeeping

Beginning on January 1, 2002 you should have started documenting illnesses and injuries on the new OSHA 300 series recordkeeping forms:

- OSHA 300 Log of Work Related Injuries and Illnesses
- OSHA 301 Injury and Illness Incident Report
- OSHA 300A Summary of Work related Injuries and Illnesses



Multiple Business Establishments – keep a separate OSHA 300 log for each location that will be in operation for a year or longer.

The recordkeeping logs must be maintained for five years following the end of the calendar year that the illnesses/injuries occur and are recorded.

For more information go to the OSHA website at www.osha.gov or call your local OSHA office.

Hazard Communication (HAZCOM)

Specific training must be provided on the proper use, handling, storage, disposal, health effects, and personal protective equipment required to work safely with hazardous substances.



The HAZCOM standard also requires workplace inventories for all facilities where hazardous chemicals are used or stored.

Employers must have an effective HAZCOM program where required.

Fire Safety

Fire Safety training is required annually for all employees and it must be documented.

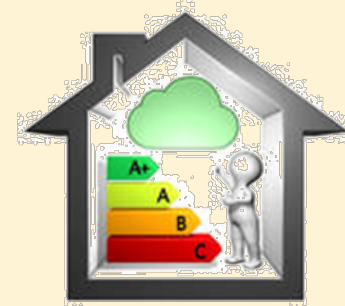
Training must include:

- Fire Exit locations
- Emergency evacuation procedures
- Fire reporting procedures
- Fire prevention



Industrial Hygiene Issues

- Radio Frequency (RF)
- Lead
- Asbestos
- Indoor Air Quality (IAQ)
- Noise
- Hazardous Atmospheres



Employee Access to Exposure and Medical Records

OSHA requires that employees have access to records dealing with occupational health exposure.

Additionally, all monitoring results of conditions in a workplace must be made available to those employees.

Awareness training on these employee rights must be given annually.



Radio Frequency (RF) Safety

With the explosion of communication towers throughout the US Radio Frequency safety compliance is becoming a major issue. RF Compliance is covered by OSHA, the FCC and can also be impacted by environmental regulations.



OSHA www.osha.gov/SLTC/radiofrequencyradiation/index.html

1910.268, Telecommunications.

1910.97, Nonionizing Radiation. The exposure limit in this standard (10 mW/sq.cm.) is expressed in voluntary language and has been ruled unenforceable for Federal OSHA enforcement. However, some states with their own OSHA-type programs are enforcing this or other RF exposure limits. The standard does specify the design of an RF warning sign.

1926.54(l), Construction. Limits worker exposure to 10 mW/sq.cm. for construction work (including the painting of towers).

FCC www.fcc.gov/oet/rfsafety

Bulletin 56 - *Questions and Answers about Biological Effects and Potential Hazards of Radiofrequency Electromagnetic Fields*

Bulletin 65 - *Evaluating Compliance With FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*

Benefits of Safety Compliance

95% of business executives report that workplace safety has a positive impact on a company's financial performance, according to the findings of The Executive Survey of Workplace Safety done by the Liberty Mutual Group.

Survey Highlights Include:

- 86% of respondents feel workplace safety provides a return on investment.
- 61% feel that \$3 or more is saved for each \$1 invested.
- 13% report \$10 is returned for each \$1 invested.
- 93% report a close relationship between the direct and indirect costs associated with a workplace accident.
- 90% feel that between \$3 and \$5 dollars of indirect costs exist for each \$1 of direct costs.
- The median response was that \$3 of indirect costs exist for each \$1 of direct costs.
- 98% feel that direct employee participation is necessary for effective workplace safety.
- 69% believe it's critical.



