Course Name: RF Awareness

Course Overview:
The course covers radio site safety, planning, training and documentation regarding RF exposure levels as required by the FCC and OSHA. Also covered are FCC and OSHA regulations for employee safety, the protection of the public from hazards created by RF energy, posting of RF safety notices, cautions and warnings at radio sites.

Referenced Standards:

- OSHA 1910.1200 – Hazard Communication
- OSHA 1910.1201 – DOT Markings Placards and Labels
- OSHA 1910.144 – Marking Physical Hazards
- OSHA 1910.147 – Lock Out – Tag Out
- DOT 49 CFR – Hazmat Regulations

Course Length: 1 day

Who should attend?

- Tower Erectors and Construction Contractors
- RF Field Service Technicians
- RF Managers/Field Supervisors
- RF Field Engineers
- RF Installers

You will learn:

- OSHA Requirements,29 CFR 1910 & 1926
- Establish safety program, training and documentation
- Recommended signage for equipment sites
- What RF energy and fields are, how it affects the human body and how it can be detected
- 1910.268 highlights
- MPE time averages
- Signage – Notice, Caution, Warnings
- Lock Out – Tag Out

Prerequisites: None

Customizable Course: Yes

Course Content:

OSHA Requirements
- 29 CFR 1910 & 1926
- Requires safety and training programs for employees
- Requires posting at sites
- Protection of the public from hazards created by RF energy

RF Frequency Waves
- What is RF
- Why is RF dangerous
- How does RF cause injury
- Frequency and density specific

Restrictive Standards
- 2003, more restrictive standards
- Meeting SAR limits of new standards is often easier than meeting field limits
- New standards allow for spatial averaging
- OSHA state programs

OSHA Requirement 29CFR 1910.268(a)(1)
- Battery handling – 1910.268(b)(2)(i)
- Hazardous Materials – 1910.268(b)(4)
- Support Structures – 1910.268(b)(6)
- Approach distance – 1910.268(b)(7)
- Training – 1910.268(c)
- Grounding – 1910.268(m)

RF Fields
- Hazardous area
- Accessible areas
- microwave communication systems

Types of Radiation
- Ionizing radiation
- Non-Ionizing radiation
- Wavelength
- Current types
- Fields
- MPE laws

Signage
- Notice
- Caution
- Warning

Lock Out - Tag Out Program
- Must be included in all RF Safety Plans
- Procedure to isolate and minimize RF hazards
- Part of OSHA 29CFR 1910.147
- Requires employee training