

Communication Tower Best Practices
The Occupational Safety and Health Administration
and
The Federal Communications Commission



Best practices in Communication Tower Safety, gathered from industry stakeholders and participants in the DOL/FCC Joint Workshop on Tower Climber Safety on October 14, 2014.

TABLE OF CONTENTS

- I. Introduction
- II. General Topics
- III. Tower Climbers and Ground Crew Workers
- IV. Carriers and Tower Owners
- V. Turfing Vendors
- VI. Tower Construction and Maintenance Contractors

This document is advisory in nature and informational in content. It is not a standard or regulation, and it neither creates new legal obligations nor alters existing obligations created by OSHA standards or the Occupational Safety and Health Act. Pursuant to the OSH Act, employers must comply with safety and health standards and regulations issued and enforced either by OSHA or by an OSHA-approved State Plan. In addition, the Act's General Duty Clause, Section 5(a)(1), requires employers to provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm.

I. Introduction and Background

The Occupational Safety and Health Administration and the Federal Communications Commission are concerned about the risks posed to workers in the communication tower industry. Workers climb communication towers to perform construction and maintenance activities and face numerous hazards, including fall hazards, hazards associated with structural collapses, improper rigging and hoisting practices, and "struck-by" hazards.

The business structure of the communication tower industry presents additional challenges to ensuring worker safety. When carriers own their own towers and directly employ the workers who build and maintain towers and the equipment on them, carriers have the immediate ability and incentive to ensure safe practices. Typically, however, the relationship between carriers and tower workers is more complicated. For example,

- Towers are often owned by separate corporations (not carriers, generally), and are built by contractors.
- Carriers often contract with "turfing vendors" for installation and maintenance of equipment on towers.
- Turfing vendors, in turn, may hire other contractors to perform work, and
- These contractors may sub-contract tower work to still smaller employers.

As a result, carriers and tower owners may not know who is performing work for them, or when work is being performed. Thus, responsibility for worker safety is fractured into many layers. Instead of a single

company having control and responsibility for worker safety and tower integrity, employer responsibilities can be spread over hundreds of small employers. Additionally, communication tower work waxes and wanes with waves of new technology. The work is physically demanding with long periods away from home; hence, job tenure is short and turnover is high. In light of these circumstances, employee safety requires accountability and diligence throughout the contracting process all the way from the carrier to the individual employee performing work on towers.

Recognizing the risks that tower workers face, OSHA and the FCC organized a workshop on communication tower worker safety on October 14, 2014. During this workshop, industry stakeholders, along with worker safety advocates and the families of communication tower workers who had been killed on the job, gathered to discuss the issues surrounding communication tower worker safety.

This document is a collection of the best practices gathered from that workshop and from the discussions that continued beyond the one-day event. These best practices are focused on the ways in which each level in the contracting chain can build a positive culture of safety and accountability. This broader cultural change is a critical first step in creating a safer environment for all workers in the industry. Some communication tower industry stakeholders have begun to take major steps towards instituting this broader shift in policies, practices, and attitudes. OSHA and the FCC are committed to supporting these efforts in the future.

Section II presents best practice bullets that identify generally applicable approaches to improving communication tower worker safety. Section III covers recommendations targeted at tower climbers and ground crew workers, Section IV is applicable to carriers and tower owners, Section V is geared towards turfing vendors, and the recommendations in Section V are focused on best practices for tower construction and maintenance contractors.

II. General Topics

• **Safety and health management systems**

- All entities should establish a comprehensive safety and health management system. This system should address all of the hazards associated with communication tower work, and all companies should ensure that their safety and health management system is compatible with those requirements imposed by other companies in the contract chain.
- The core elements of a comprehensive safety and health management system include¹:
 - Management leadership: Managers at all levels continually demonstrate their commitment to improved safety and health. Accountability and diligence is maintained at every level of the organization.
 - Worker participation: Workers are involved in all aspects of the system and understand their roles and responsibilities under the system and what they need to do to carry them out effectively.
 - Hazard identification and assessment: Procedures are put in place to continually identify workplace hazards and evaluate risks, both job-specific and systemic.

¹ For more information on safety and health management systems, see OSHA's new Draft Safety and Health Program Management Guidelines at <http://www.osha.gov/shpmguidelines/>

- Hazard prevention and control: A plan is developed to ensure that hazard controls are implemented, to track progress, and to verify the effectiveness of controls once they are implemented.
 - Education and training: All supervisors and workers are trained to understand how the system works and how to carry out the responsibilities assigned to them under the system.
 - System evaluation and improvement: Processes are established to monitor system performance, to verify system implementation, to identify system deficiencies and opportunities for improvement, and to take actions necessary to improve the system and overall safety and health performance.
 - Communication on multiemployer workplaces: Host and contract employers coordinate on work planning and scheduling to identify and resolve any conflicts that could impact safety or health.
- Verification of subcontractors: All entities should require all lower-level subcontractors to have a comprehensive safety and health management system in place, including identification of the sub-contractor's Chief Safety Officer and written verification of the safety and health management system. The verification process should include:
 - Establishment of clear criteria for vetting and approving all contractors and subcontractors.
 - Written approval for any subcontracting.
 - Verification that all subcontractors are subject to the same vetting criteria as the hiring contractors.
 - On-going monitoring and evaluation of contractor safety records, including OSHA records, and those safety records should be an important consideration in the awarding of future contracts.
- Stop work authority: All safety and health management systems should include the ability and obligation for any person at any level in the contracting chain to stop work on a project if unsafe conditions are discovered.

III. Tower Climbers and Ground Crew Workers

- All work crews must be provided with and must use proper safety equipment at all times.
 - If proper safety equipment is unavailable or not functioning, no work at heights should be done.
- All workers should annually certify their commitment to "100 percent tie off."
 - For every level in the contracting chain, however, "100 percent tie off" cannot simply be a written policy. All entities and individuals involved, particularly job site supervisors and individual workers, must have a firm commitment to enforcing 100 percent tie off at every worksite at all times when workers are climbing.
- All climbing work should include comprehensive safety planning, including Job Hazard Analysis (JHA) and Emergency Action Plan (EAP), for every job site.
- All work crews should not work at heights when weather conditions raise safety risks.

- All work crews should continually seek to enhance their safety skills and awareness through regular trainings and stand-downs.
- Particular attention should be paid to inspections, including equipment inspections and PPE inspections.
- Contractors must ensure that there is a competent person on site at all times. This person should monitor the mental and physical wellbeing of climbers on their team. The competent person has the responsibility and obligation to remove an unfit worker from climbing duty for any reason.

IV. Carriers and Tower Owners

- **Carrier and tower owner general topics:**
 - **Safety and health management systems:**
 - Carriers and tower owners should establish a comprehensive safety and health management system for all employees, contractors, and subcontractors.
 - To maximize effectiveness, safety and health management systems should be managed by a designated person (for example, a Chief Safety Officer) to ensure clear lines of responsibility and accountability.
 - The manager of the system should have the authority and responsibility to stop work on any project at any time for any safety or health-related reason. Elements of this program should include, at least: training, inspections, audits, education about personal protective equipment, and individual work practices.
 - The system should clearly delineate the roles and responsibilities of each party in the contracting chain in regards to safety and health.
 - Abiding by these roles and responsibilities should be a condition of awarding the contract.
 - The safety and health management system should establish concrete consequences that accompany noncompliance, up to and including termination of the contract for violations of a serious nature.
 - Carriers and tower owners should require all contractors to have a written safety and health management system of their own.
 - It is strongly recommended that carriers and tower owners review contractor safety and health management systems on at least an annual basis to ensure that the programs are adequately protective.
 - Carriers and tower owners should create a standard protocol to ensure that all employees, contractors, and sub-contractors report unsafe conditions on tower worksites to the carrier and tower owner.
 - All reports of unsafe towers should be managed from a central location, where a repair/maintenance request would be generated, prioritized and tracked until the unsafe condition is corrected.

- Carriers and tower owners can foster a culture where everyone is encouraged to report safety issues by making it easy to report unsafe towers to a telephone hotline, or via a mobile phone application.
 - A crucial part of building this culture includes removing any fears of retaliation or negative consequences for reporting.
- **Contractor selection and vetting:**
 - Carriers and tower owners should have clear criteria for selecting and vetting all contractors and subcontractors.
 - The criteria used to vet contractors should include data from safety records, injury and illness reports, and insurance information.
 - Carriers and tower owners should require contractors to obtain the applicable carrier's written approval before hiring subcontractors, and they should subject subcontractors to the same vetting requirements as prime contractors.
 - Whenever approval is given for a subcontractor to be hired, carriers should require written proof that vetting was done.
 - Carriers and tower owners should know the identities of the contractors performing work on their projects at all times.
 - Maintaining records of projects and the contractors working on them will prevent un-vetted contractors from entering worksites.
 - If a contractor is found on site without prior approval (or if their approval has been revoked due to safety violations), they should be immediately removed from the site.
- **Incident reporting:**
 - Carriers should establish an incident reporting system that has a clearly defined, automatic process for responding to incidents in a timely manner.
 - Carriers and tower owners should stop work immediately when any serious safety issue is reported on a work project.
 - Work should not be restarted until the carrier or tower owner has received proof that the unsafe condition has been eliminated.
 - Carriers and tower owners should automatically launch an investigation into all serious injuries and fatalities to establish the cause of the incident.
 - Any findings that indicate a contractor's inadequate compliance with the carrier's safety and health requirements should automatically be flagged for action.
 - The findings of these investigations should become part of a contractor's safety record with the carrier, and should be factored into annual reviews and future contracting opportunities.
- **Auditing:**
 - Carriers and tower owners should perform random audits on projects to ensure compliance with safety and health requirements.

- Among other things, carriers and tower owners should establish clearly defined consequences when employees, contractors, or subcontractors fail to comply with safety requirements, and that they track and audit the application of these consequences.
 - Independent third-parties should perform these audits to ensure neutrality, and findings of significant noncompliance should be grounds for termination.
 - In addition to random on-site audits, carriers and tower owners should perform regular, scheduled reviews of contractors/subcontractors and their safety records.
 - These reviews should focus in particular on past safety issue reports and the measures taken to address them.
- **Training:**
 - Carriers and tower owners should support the establishment of industry-wide, recognized training standards.
 - Carriers and tower owners should require their contractors and subcontractors to comply with those industry-recognized training standards.
 - When vetting contractor training programs, carriers and tower owners should ensure that there is adequate oversight of “train the trainer” programs, to confirm that workers at all levels are receiving adequate training.
 - It is strongly recommended that carriers and tower owners verify the training and certifications carried by the employees of contractors.
 - This is primarily to ensure that all contractors working on a carrier or tower owner’s project have obtained a minimum level of training and certification.
- **Recordkeeping and communication:**
 - Carriers and tower owners should maintain a comprehensive electronic inventory system of all towers and antennas.
 - This system should include detailed information on each of the company’s assets, including antennas, equipment and/or towers., This information should include as-built drawings, project/work history, a listing of reported unsafe conditions along with confirmation of repairs.
 - This information should be available to all parties working on a particular project because it is critically important in completing work in an effective, timely and safe manner.
 - The information contained in these systems should be audited and updated on a regular basis to ensure accuracy.
 - All information pertaining to work on communication towers, including structural information, work history, needed repairs, etc., should be freely shared.
 - Carriers should ensure that any critical information that they have is shared down the contract chain, and they should also ensure that important information is being shared up the contracting chain.

- Carriers should make every effort to ensure that they receive timely information about safety-related issues on their projects from the work crews on site.
- **Carriers:**
 - **Project timelines:**
 - Currently, many carriers calculate project schedules based on historical data, which may not allow enough time for a contractor to complete the work due to factors associated with a particular job.
 - Accordingly, carriers should ensure that they take into account all of the factors of each individual project when creating project schedules.
 - These factors can include tower worksite location, tower type, scope and complexity of work to be completed, environmental and weather-related factors, travel time, and equipment delivery schedules.
 - This will ensure that contractors/subcontractors have enough time to complete work in a safe manner.
 - Additionally, it is typical to have delays or unanticipated conditions on every work site.
 - Planning for flexibility in project deadlines can help protect against safety lapses that result from hasty work.
 - Carriers should take proactive steps to guard against worker fatigue.
 - The hazards presented by worker fatigue can be greatly reduced by, among other measures, minimizing long drives to and from work sites.
 - Due to the remote location of many communication tower work sites, carriers should give special consideration to travel time when setting project schedules.
 - Setting limits on drive times and “high time” (or, time spent on the tower) can promote climber safety and also demonstrate to contractors/subcontractors that minimizing worker fatigue is a high priority.
- **Tower Owners:**
 - **Tower inspection and maintenance:**
 - Tower owners should ensure that their towers are maintained properly, and that structural inspections are conducted on a regular basis. All towers should have the means for safe access, including having unobstructed ladders that are in good repair, methods for managing radio frequency hazards, and should be regularly inspected for structural soundness. Tower owners are strongly encouraged to have a properly installed, maintained and functioning safety climb system.
 - Tower owners should meet or exceed the standards established in recognized consensus standards governing the construction and maintenance of communication towers, including TIA-222-G, Structural Standard for Antenna Supporting Structures and Antennas.

- Ensure that there is a clear procedure for reporting unsafe conditions on towers and that all reported conditions are tracked until the hazardous conditions have been fixed.
- Inspections: A number of companies have begun using drones for tower inspection. This technology has the potential to reduce unnecessary climbing, and avoids putting workers at risk.
- Tower owners are strongly encouraged to require contractors to send photos of completed work to their central command centers. The command centers can then immediately approve the work before the worker even descends the tower. This can reduce unnecessary climbing for re-work.

V. Turfing Vendors

- **Safety and health management systems:**

- Establish a comprehensive safety & health program, and require all contractors and subcontractors to have written safety and health programs that are in alignment with the turfing vendor's requirements. There should be uniformity in safety and health requirements across all levels in the contracting chain.
- Ensure that at least one position within the company is dedicated to the management of the safety and health program, and give that person the authority to stop work and extend schedules on projects if unsafe conditions are discovered. It is critical that there is internal support within the company for work stoppage when unsafe conditions are discovered. Ensure that no employee or vendor experiences any negative consequences or retaliation for stopping work when an unsafe condition is reported.
- Distribute the health and safety program as an attachment to all contracts and require compliance with all safety requirements contained in the program. Require any subcontractors to comply with all requirements. Maintain records of all contractor and subcontractor agreement with the terms and conditions of the safety and health program.
 - In addition to requiring contractor compliance with the turfing vendor's safety and health program, turfing vendors should require all contractors and sub-contractors to have their own written safety and health program. It is strongly recommended that turfing vendors review these programs on at least an annual basis to ensure that the programs are adequately protective, and share the results of those reviews with carriers.
 - Turfing vendors should create a system of escalating consequences for repeated safety violations by contractors and subcontractors, including financial penalties if violations aren't corrected within the appropriate timeframe. Potential penalties should include the termination of the contract for violations that are of a serious nature.
 - Establish a command center staffed with subject matter experts who are equipped to immediately respond to inquiries and assist with troubleshooting issues from the field. This can facilitate safe work practices - for example, a tower crew can take

photos of a tower's rigging set up prior to lifting, and an expert in the command center can approve the rigging plans and actual set up before lifting commences. Crews can also take photos of completed work, send them to the command center and have the work approved immediately. This type of quality control can minimize unnecessary climbing for re-work.

- Turfing vendors should ensure an open flow of communication between carriers, tower owners and contractors. It is vital that contractors have all relevant information to safely complete work activities. Often contractors encounter safety issues on sites that tower owners and carriers are not aware of, and the responsible parties need to be made aware of these situations. Turfing vendors can ensure that the relevant parties in the contracting chain are exchanging necessary information.
- Ensure that procedures are set in place for reporting unsafe conditions on tower worksites. These procedures should be as straightforward and simple as possible to encourage timely reporting of unsafe conditions. When the reporting procedure is not transparent or responsive, it discourages reporting.
- **Vendor contracting and vetting:**
 - Turfing vendors should vet all contractors and subcontractors. Approval of contractors should be based on data from a variety of sources, including historical OSHA data, injury and fatality numbers, workers compensation data, vendor insurance, as well as a review of written safety and health programs, and employee training and certifications.
 - Turfing vendors should require all contractors to obtain written approval for any subcontracting, and all subcontractors should be subject to the same vetting requirements as primary contractors. Institute policies and procedures for ensuring that all work performed on site is completed by the contractors named in the contract.
- **Training:**
 - Require all field supervisors and crew members (of contractors and subcontractors) to be adequately trained for their assigned work activities. Require all training to be documented.
 - In addition to job-specific training, require all supervisors and crew members to complete an orientation prior to beginning work. This orientation should cover knowledge of all company-mandated safety and health requirements, including the crew members' work tasks, the safety and health hazards associated with those tasks, and the appropriate measures to be taken to mitigate those hazards.
 - When vetting contractor training programs, carriers should ensure that there is adequate oversight of "train the trainer" programs, in order to confirm that workers at all levels are receiving adequate training
 - One purpose of training is to set expectations. Turfing vendors should set the expectation with all contractors that they place the highest priority on safe work practices and that there is no reason for a contractor to ever take shortcuts on safe practices. Establishing an expectation of zero tolerance towards unsafe practices is critical to changing safety culture.

- **Auditing and incident reporting and investigation:**
 - Turfing vendors should perform random safety audits on projects to ensure compliance with safety and health requirements. Ensure that there are specific consequences for noncompliance.
 - Have a company representative on site while work activities are being performed to ensure that safe practices are followed. At a minimum, if a representative cannot visit every site, turfing vendors should have representatives perform periodic, random site visits to ensure compliance with safety and health requirements.
 - When a near miss, injury or fatality is reported on a work site, the turfing vendor should immediately stop all work and begin an investigation into the causes of the incident.
- **Work site safety practices:**
 - Turfing vendors should require a Job Hazard Analysis (JHA) to be completed by all contractors and subcontractors. The JHA should be required on-site documentation for all work activities.
 - The JHA should provide an overview of the location of the work site, the type of tower, and an overview of the work to be done. It should include the precise location of the work site, the location and contact information for all local emergency services including the nearest hospital or medical center. The JHA should also provide a detailed analysis of each individual job task to be completed, the hazards associated with that task, as well as the preventative measures to avoid those hazards. A job hazard analysis should also include an overview of general hazards on the work site and hazard control measures, including applicable personal protective equipment. Finally the JHA should include a list of all personnel working on site, along with information regarding the training and certifications held by each individual.
 - Turfing vendors should establish a strict, zero-tolerance policy on free climbing.

VI. Tower Construction and Maintenance Contractors

- **Safety and health management systems:**
 - Contractors should have a written, comprehensive health and safety management system that is implemented on all worksites. To maximize effectiveness, the contractor should ensure that one position is given the responsibility for managing the system at the company level. This position should have the authority to stop work on any project for any safety or health-related reason.
 - Elements of this system should include, at least, training, inspections, audits, personal protective equipment, and individual work practices. The system should clearly delineate the roles and responsibilities of each employee on the work site in regards to safety and health. Abiding by these roles and responsibilities should be a condition of employment. For individual employee noncompliance with safety and health requirements, the system should establish specific consequences that accompany noncompliance. Consequences for unsafe work practices can include re-training

employees in safe work practices when appropriate, and should include dismissing employees for repeated violations or violations of a serious nature.

- Contracts with turfing vendors, tower owners and carriers should all include certain safety and health requirements. Contractors should regularly review those contractually-obligated requirements to ensure that their safety and health management systems are in compliance.
- Contractors should ensure that all employees are aware of existing consensus standards governing communication tower work and are familiar with the requirements that apply to their work activities. Make compliance with consensus standards a non-negotiable element of the safety and health management system.
- Encourage all employees to report unsafe conditions at work sites to company management, as well as to relevant parties up the contracting chain.
- Ensure adequate supervision of employees during work activities. Make sure that all employees follow safe work practices like 100 percent tie off.
- Keep track of employee work schedules, including travel and driving time, to ensure that employees are not climbing while fatigued.
- When starting work for the day, foremen should conduct a toolbox meeting where the Job Hazard Analysis (JHA) is discussed. Part of the JHA review should also include a mental and physical check-in with climbers. Do they feel mentally and physically ready to climb safely that day? If there are any situations or conditions that may prevent them from being focused on climbing safely, the foreman has a responsibility to remove that climber from the climbing team.
- In an industry where employee turnover rates are high, contractors should take special care when training new employees and ensure that each new employee is working alongside experienced workers at all times.
- **Auditing and incident investigations:**
 - Whenever an injury or fatality occurs on a work site, contractors must first notify all appropriate authorities, including local emergency services and OSHA. Then contractors should follow their own internal policies as well as the policies of the turfing vendor, tower owner and carrier for reporting incidents.
 - Contractors should have internal policies for investigating incidents that take place on work sites in order to determine the root cause of the incident. There should also be policies on what to do with the results of these investigations, to ensure that lessons learned from the root causes are applied to work practices in order to make them safer.
 - If the incident is due to an individual bad actor, then the contractor should re-examine internal policies for employee training, re-training the individual and all employees if needed. If the cause of the incident is due to a deficiency in the contractor's safety and health program, the contractor should immediately audit their safety and health program and correct any deficiencies that are found.
- **Work site safety practices:**
 - All contractors should require supervisors to conduct a tailgate meeting at the beginning of each work day. The purpose of these meetings is to highlight the most important

safety issues for the day. In addition to covering issues such as the location of rescue equipment, other topics to address include possible hazards specific to the jobsite, the need for hard hats and eye protection at all times, the need to be aware of overhead hazards, especially during lifts, and keeping clear of the load. Other critical topics include the location of the nearest hospital, and how to direct someone to call 911 in an emergency.

- Job hazard analysis: Before any worker sets foot on a job site, the contractor should complete a comprehensive Job hazard analysis (JHA). The JHA should be required on-site documentation for all work activities. The JHA should provide an overview of the location of the work site, the type of tower, and an overview of the work to be done. It should include the precise location of the work site, the location and contact information for all local emergency services including the nearest hospital or medical center. It should provide a detailed analysis of each individual job task to be completed, the hazards associated with that task, as well as the preventative measures to avoid those hazards, including applicable personal protective equipment. Finally the JHA should include a list of all personnel working on site, along with information regarding the training and certifications held by each individual.
- For work sites where personnel will be working at heights and/or where hoisting personnel or materials will be performed, a more detailed JHA should be required, and should include specific hazard control measures unique to the work activities being performed on that job site.
- Contractors should institute work policies and procedures that guarantee that safe work practices will always be followed on site. For example, when contractors begin every single work day with a tailgate meeting discussing the day's work, and then immediately follow the meeting with daily equipment inspections, critical safety practices are less likely to be overlooked.
- Zero-tolerance policy to unsafe work practices: It is quickly becoming a recognized best practice in the industry to institute a zero-tolerance policy regarding unsafe practices, in particular towards free climbing. Contractors with exceptional safety programs institute policies that mandate 100 percent tie off, and any individual employee who is found to be violating that rule is immediately disciplined, with penalties ranging from mandated re-training to dismissal depending on the individual circumstances. Contractors should also take similar approaches to other unsafe practices, including drug use, unsafe driving, and other serious violations of safe work requirements.
- **Sub-contractor vetting:**
 - Where further subcontracting is permitted, contractors should take precautions to ensure that any potential sub-contractors have effective safety and health programs in place, and have a history of safe work practices on site. In addition, contractors may need to obtain written approval for subcontractors from the turfing vendor and other entities in the contracting chain.
- **Recordkeeping and communication:**

- Contractors should keep comprehensive records of all employee training and certifications, and should make those records available to carriers, tower owners, and turfing vendors on an as-needed basis.
- Contractors should obtain necessary technical and engineering specifications from tower owners and turf vendors. It is critical to obtain recent and accurate information as part of the contracting process to enable work to be completed in a timely and safe manner.
- **Training:**
 - Contractors should ensure that all employees who climb communication towers are trained for the tasks that they will be expected to perform.
 - Contractors should ensure that employees new to tower climbing undergo comprehensive training as authorized climbers. After training, new climbers should be paired with an experienced climber as an apprentice until they have enough experience and climbing hours to undertake the competent climber training. New employees who have climbing experience should be closely monitored until their skill levels are known.
 - Employees who will be expected to perform rigging or hoisting activities should have specialized training to ensure that they can safely perform these tasks. Contractors should not expect “on the job training” to adequately prepare employees to perform these tasks.
 - Contractors should ensure that employees are re-trained at appropriate intervals, as well as on an as-needed basis. Failure to comply with safe climbing practices is one example of an indication that re-training is needed.
 - Records of all employee training and certifications should be kept by the employer and should be shared with contracting entities as needed.
 - When making use of “train the trainer” programs, ensure that the employee who will be performing training is adequately prepared to train all employees. Additionally, contractors should perform regular audits of internal training programs to ensure that the training is sufficiently rigorous.

For additional information, please see OSHA’s Communication Tower Website:

<http://www.osha.gov/doc/topics/communicationtower/index.html>, or contact OSHA’s Directorate of Construction at 202-693-2020.