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HEALTH & SAFETY
MANAGEMENT
SYSTEM

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Company Background

E. C. Fennell, Inc. (ECF Engineering Consultants) is a multi-faceted engineering corporation headquartered in West Palm Beach, Florida. Founded by Everett C. Fennell, P.E., CEO/Managing Principal, the company began with a small support team and has grown into a trusted leader in providing technical solutions to the Energy Markets, as well as public and private sector clients requiring electrical, mechanical, and public health systems engineering.

ECF has built its reputation on delivering innovative, cost-effective, and sustainable engineering solutions. We support clients across a wide range of projects—offering consultation on technology utilization, design of electrical and mechanical systems, system upgrades, equipment procurement, construction management, and commissioning services. With deep familiarity in national and state regulations, local utility standards, and industry-specific practices, ECF is positioned to deliver projects that not only meet compliance requirements but also exceed expectations in quality, safety, and performance.

Our project teams include experienced engineers, project managers, designers, and technical professionals who collaborate seamlessly to integrate multiple disciplines under one roof. Each client is supported by a dedicated Project Manager who serves as the primary point of contact, ensuring clear communication, coordinated workflows, and timely delivery. This collaborative approach enables us to deliver solutions that are efficient, reliable, and safety-driven, aligning with our vision of being recognized as a global leader in engineering solutions

At the core of our mission is a commitment to quality, integrity, and collaboration. We pride ourselves on providing exceptional engineering services that are both innovative and affordable, helping clients achieve their financial, technical, and scheduling goals without compromise. Our ability to adapt to evolving industry challenges, while prioritizing health, safety, and environmental responsibility, forms the foundation of ECF's operations. As we continue to grow, we remain dedicated to shaping a safer, smarter, and more resilient future for the industries and communities we serve

Chapter 1

Introduction to ECF's Health & Safety Commitment

1.1 - Purpose of the Handbook

The purpose of this Health & Safety Management System (HSMS) Handbook is to promote and maintain a safe and healthy environment for all employees of ECF Consultants—whether in the office, on project sites, or traveling between locations. This handbook outlines our expectations, procedures, and standards to protect staff, clients, contractors, and the public.

Our goal is to empower every team member to proactively identify hazards, take corrective action, and contribute to a culture where safety is a shared responsibility. Safety is not an add-on to the job—it is part of how we work.

1.2 - Scope

This handbook applies to all ECF Consultants personnel—including full-time, part-time, temporary, and contract workers—across all divisions and job sites. Whether based in an office environment (e.g., West Palm Beach, Plantation, Atlanta), traveling between client locations, or working in live substations or field installations, each employee is responsible for following the policies and practices outlined herein. This scope also includes remote workers, vehicle operators, engineers, and subcontractors under ECF supervision. The manual is intended to serve as a unifying guide that ensures consistent safety expectations regardless of where or how the work is performed.

1.3 - ECF's Commitment to Safety

ECF Consultants prioritizes safety as a core business value, not merely a compliance requirement. Leadership actively promotes a safety-first culture by providing clear guidance, enforcing safety accountability, and integrating preventive thinking into all levels of operation. Each employee—regardless of role—is empowered to recognize hazards, report unsafe conditions, and stop work when necessary to protect life and property.

We believe that accidents are preventable and that safety performance is a direct reflection of our professional integrity. Our policy is to eliminate or minimize hazards through training, supervision, engineering controls, and personal protective equipment (PPE). This philosophy is embedded in ECF's culture and reinforced through leadership support, hands-on safety demonstrations, and regular field reviews. Our goal is to ensure that every employee returns home safe and healthy at the end of each day.

1.4 - How to Use This Handbook

This manual serves as a living document—available as a reference tool during onboarding, fieldwork, training, audits, or emergency situations. Employees are encouraged to use this handbook to:

- Clarify their personal safety responsibilities
- Prepare for job tasks involving high-risk procedures or environments
- Understand how to respond to injuries, near-misses, or environmental hazards
- Access reporting tools, checklists, and communication protocols
- Review emergency actions such as evacuation, first aid, and fire procedures

The handbook is organized by topic for easy navigation and is available digitally via the company intranet and TalentLMS. A printed version may be requested from HR. Safety forms referenced in the manual (such as Job Hazard Analyses, incident reports, and PPE checklists) are available from the Learning & Development department.

Supervisors are responsible for reinforcing the use of this handbook during pre-job briefings, site visits, and team safety meetings.

Updates and Distribution

The HSMS Handbook will be reviewed annually by the Safety Committee and updated as needed to reflect operational changes, updated laws, new technologies, or lessons learned from incidents and audits. All employees will be notified of revisions through company-wide emails, safety meetings, or intranet announcements.

Any changes in regulatory standards—such as updates to OSHA guidelines or NESC codes—will be incorporated promptly. In situations where ECF policy conflicts with local or federal law, the more stringent requirement will apply. Supervisors are responsible for ensuring that their team members review and acknowledge significant updates. Employees are expected to remain familiar with the latest version of the handbook and seek clarification when questions arise.

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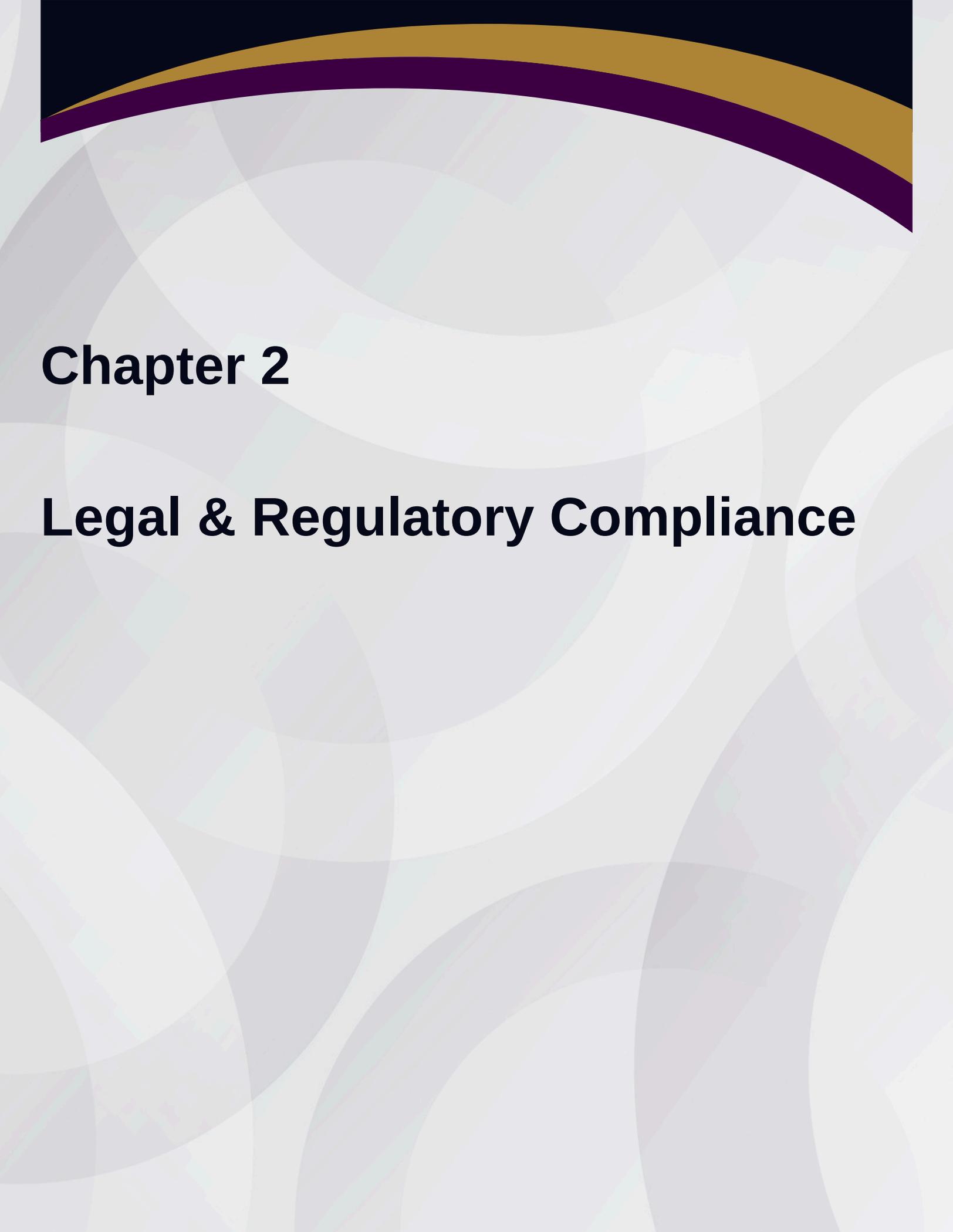
Chapter 2

Legal & Regulatory Compliance

2.1 - Statement of Intent

ECF Consultants is committed to fostering a safety-first culture that protects the health and well-being of every employee, contractor, and visitor who interacts with our company. This commitment extends to all operational environments—whether in our offices, out in the field, or at client project sites. Our safety policy is guided by the belief that **all workplace injuries and incidents are preventable.** Therefore, safety is not treated as a checkbox—it is embedded in every decision, project, and task.

The primary intent of this policy is to prevent accidents, injuries, and unsafe conditions by holding each employee accountable for acting responsibly, recognizing hazards, and following established procedures. ECF recognizes that safety must begin with leadership and be practiced at every level to be effective. Compliance with this policy is mandatory and is considered a condition of employment.

2.2 - Regulatory Compliance

All safety practices and procedures at ECF are designed to comply with the **Occupational Safety and Health Administration (OSHA)** standards and, when applicable, the **National Electrical Safety Code (NESC)**. Additional state and local safety requirements are also observed, with the understanding that in the event of conflicting guidelines, the **most stringent regulation shall apply.**

This handbook reflects guidance and references found in the 2025 Safety Manual, including rules adapted from 29 CFR 1910 (OSHA General Industry Standards), **29 CFR 1926** (Construction Standards), and applicable sections regarding Lockout/Tagout, fall protection, confined space entry, hazardous materials, and PPE. Our policies are also influenced by best practices from industry leaders and internal learnings from past incidents and near-misses.

Every employee has a duty not only to comply with these laws and standards, but also to report unsafe conditions and participate in ongoing safety improvements. ECF will continue to evaluate compliance through regular audits, inspections, and training reviews.

2.3 - Alignment with ECF Mission & Core Values

At ECF, our mission is centered on **engineering excellence, customer satisfaction, and ethical business practices.** Safety supports this mission by protecting our greatest asset—our people—and preserving the trust we've earned with clients. Each of our core values—from doing the right thing, to anticipating problems and communicating with honesty—reinforces the behaviors necessary for a safe and effective workplace.

Safety is not a separate initiative; it is woven into our design, our planning, and our communication. It is part of our culture of continuous improvement and excellence in delivery. By maintaining high standards in safety, we reduce downtime, enhance client confidence, and improve team morale.

2.4 - Zero Tolerance for Unsafe Behavior

ECF maintains a **zero-tolerance policy** for behavior that recklessly endangers the health or safety of others. This includes, but is not limited to:

- Performing unsafe acts or "taking chances"
- Ignoring established protocols
- Being under the influence of drugs or alcohol at work
- Disabling safety guards or removing PPE
- Failing to report incidents or hazards

As referenced in the legacy safety manual, "Under no circumstances shall safety be sacrificed for speed." Employees engaging in practical jokes or unsafe shortcuts not only violate ECF policy, but also jeopardize lives and careers. Supervisors are expected to immediately address unsafe behavior and escalate concerns to HR or the Safety Officer as needed.

Disciplinary action for violations may include verbal or written warnings, retraining, suspension, or termination, depending on the severity and frequency of the offense.

2.5 - Continuous Improvement

ECF's safety program is not static. It evolves through employee feedback, incident reviews, audits, and industry changes. Every injury, near-miss, or concern presents an opportunity to improve processes, communication, and design. We encourage all employees to actively participate in this improvement cycle by reporting issues, suggesting corrective actions, and supporting team safety initiatives.

Supervisors and project leads are responsible for implementing corrective actions and documenting them as part of ECF's improvement tracking. Safety meetings, LMS modules, toolbox talks, and annual reviews help reinforce a forward-thinking safety mindset.

From routine office ergonomics to complex substation entry protocols, ECF remains committed to strengthening our systems and culture for the benefit of everyone we serve and employ.
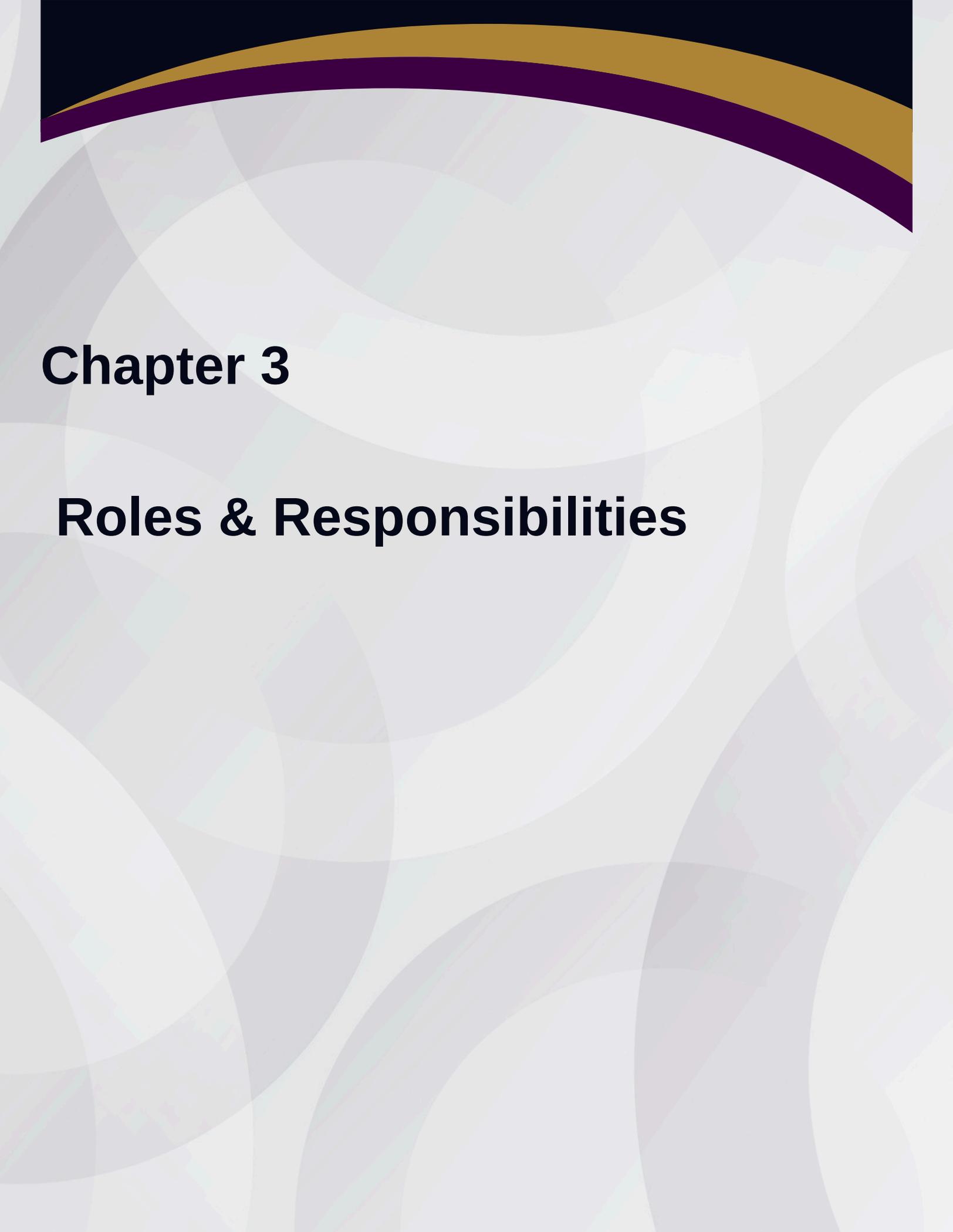
Chapter 3

Roles & Responsibilities

3.1 - Executive Leadership & Safety Officer

Leadership at ECF Consultants holds the primary responsibility for setting the tone and direction of our safety culture. The Managing Principal and executive team are accountable for providing the necessary resources—training, equipment, tools, and personnel—to implement the policies outlined in this manual. Their visible support reinforces the message that safety is a strategic priority, not a regulatory obligation.

The designated **Safety Officer** (or equivalent appointee) serves as the primary coordinator of ECF's safety program. This individual is responsible for maintaining the HSMS, updating procedures, conducting or overseeing audits, analyzing incidents, and ensuring compliance with federal and state laws. The Safety Officer also facilitates internal safety committees, reviews risk assessments, and advises leadership on corrective actions when safety gaps are identified.

3.2 - Department Managers & Supervisors

Supervisors and managers are responsible not only for their own safety, but for the safety performance and behavior of the employees they oversee. According to the 2025 Safety Manual, a supervisor must ensure that employees "thoroughly understand the work to be done, their part in the work, and the safety rules that apply." This includes explaining job expectations, leading pre-task briefings, reviewing hazards, and verifying that PPE is available and worn properly.

Supervisors must stop any job that poses an immediate risk to personnel or property and ensure corrective actions are taken. They are expected to:

- Monitor compliance with safety protocols during field visits and office walkthroughs
- Address unsafe behavior or conditions immediately
- Report injuries, near-misses, and hazard observations within established timeframes
- Support and enforce disciplinary measures when necessary
- Encourage employees to participate in safety improvement efforts

Supervisors also serve as mentors, modeling safe behaviors, supporting return-to-work plans, and ensuring all required training and certifications are current.

3.3 - Employees (Field and Office)

Every employee—regardless of role or work location—shares responsibility for safety. As outlined in the legacy manual, "each employee is responsible for their own safety, the safety of their fellow employees, and the safety of the general public." This means actively participating in hazard recognition, reporting unsafe conditions, wearing appropriate PPE, and following all procedures as instructed.

Before starting any task, employees must:

- Fully understand the assignment, the associated risks, and the controls in place

- Verify that tools, equipment, and materials are in safe working condition
- Speak up if something feels unsafe or unclear
- Participate in safety briefings, training, and drills
- Use good judgment and avoid "taking chances" for the sake of speed or convenience

Employees are not authorized to override safety controls or perform tasks they are not trained or certified to complete. They are also expected to maintain a clean and orderly work area—whether a field trailer, vehicle, substation, or desk—as part of basic housekeeping and hazard prevention.

3.4 - Subcontractors & Vendors

Subcontractors working under ECF supervision must comply with the safety policies outlined in this manual, in addition to any client-specific or site-specific requirements. They must be oriented on ECF's expectations before work begins and must supply their own PPE, equipment, and training documentation unless otherwise arranged.

Vendors delivering equipment, providing field services, or entering ECF-managed sites must do so safely and in accordance with posted signage, designated access routes, and escort requirements. Any incident involving a subcontractor or vendor must be reported and investigated following the same procedures as ECF employee incidents.

Supervisors are responsible for monitoring third-party safety behavior and halting any contractor work that presents an immediate hazard.

3.5 - Visitors & Site Access Requirements

Visitors, including clients, inspectors, and non-ECF personnel, must be escorted at all times while on field job sites or in restricted office areas. **All visitors must comply with posted safety signage and may be required to wear basic PPE, such as hard hats, safety vests, or safety glasses, depending on location and scope of the visit.**

Unescorted visitors are not permitted in active work zones. It is the responsibility of the hosting employee to brief visitors on potential site hazards and to ensure they are accounted for in the event of an emergency evacuation.

Chapter 4

Business Continuity & Emergency Management

4.1 - Purpose & Scope

The purpose of ECF Consultants' Business Continuity program is to ensure that essential operations can continue or be quickly restored following any unplanned disruption. This includes events such as natural disasters, cyber incidents, facility damage, or prolonged power outages. The plan protects employees, clients, and company assets by providing a structured process for preparedness, response, and recovery.

This section applies to all ECF locations and personnel, including field operations, office-based staff, and remote employees. Whether working on a transmission site or in an administrative office, all employees play a role in ensuring continuity of service and communication during an emergency.

4.2 - Responsibilities

Executive Management oversees companywide continuity efforts, ensuring appropriate resources and approvals for plan implementation. **Department Heads and Supervisors** are responsible for maintaining department-specific continuity procedures, including contact lists, essential functions, and remote-work capabilities. **IT and Systems personnel** safeguard data, manage backups, and maintain access to secure systems that support business recovery. All **employees** are responsible for understanding emergency communication procedures, maintaining current contact information, and following instructions during activation of this plan.

4.3 - Preparedness and Risk Assessment

ECF conducts regular risk assessments to identify potential threats to daily operations. These include natural hazards such as hurricanes, flooding, and severe weather, as well as technological risks like data loss, cyberattacks, or communication system failures. Each assessment helps determine which functions are most critical and establishes backup measures to ensure continuity. Preventive actions may include establishing remote system access, conducting data recovery tests, and confirming vendor and client contact protocols. Physical worksites, such as substations or field trailers, must have designated secure storage for essential equipment and documentation to prevent loss during storms or emergencies.

4.4 - Emergency Response and Communication

When a disruptive event occurs, employee safety is the top priority. Once personnel are accounted for, the designated Continuity Lead activates the response plan. Communication will be coordinated through approved company channels such as text alerts, email, or internal messaging platforms. Employees will receive instructions regarding office closures, alternate worksites, or remote-work activation.

Supervisors are responsible for confirming the status of their teams and relaying updates to department heads. The IT team will support employees with secure remote access to systems if facilities are temporarily unavailable. Maintaining open communication ensures that employees, clients, and stakeholders remain informed throughout the event.

4.5 - Continuity of Operations

Each department must maintain a list of essential business functions and their corresponding recovery procedures. These may include project delivery timelines, client communications, financial operations, and system access requirements. Managers will identify alternate methods for completing critical work, whether through remote platforms, backup servers, or temporary workspace arrangements.

Field teams must also prepare continuity procedures for suspended operations, including equipment inspections, securing hazardous materials, and verifying site conditions before returning to work. The goal is to resume essential business activities within 24–48 hours whenever possible, minimizing disruption to client projects and internal processes.

4.6 - Recovery and Restoration

Once immediate risks have been controlled, the recovery phase begins. This includes restoring systems, verifying data integrity, and evaluating the condition of office or field facilities. Department heads will prioritize which services resume first and coordinate resources to ensure operations are restored safely and efficiently. IT will confirm that network security and file access have been fully reestablished before normal workflows resume.

4.7 - Review and Continuous Improvement

Following any activation of the Business Continuity Plan, ECF will conduct a post-incident review. The review documents what worked effectively, identifies improvement opportunities, and ensures that lessons learned are incorporated into future training and updates. Departments will participate in at least one annual continuity drill to reinforce readiness and confirm that procedures remain practical and effective.

Business continuity is not a one-time effort—it's an ongoing process that depends on awareness, coordination, and continuous improvement. By maintaining strong recovery strategies, ECF ensures that our commitment to clients and employee safety continues, even under the most challenging circumstances.

Chapter 5

Hazard Identification & Risk Assessment

5.1 - Types of Hazards (Environmental, Electrical, Ergonomic, etc.)

Hazards in the workplace exist in many forms and can affect employees in vastly different ways depending on their role and work environment. At ECF Consultants, it is essential that employees—whether in the office or the field—can identify and respond appropriately to the types of hazards they may encounter.

Physical hazards are perhaps the most visible. These include slip and trip hazards, unguarded edges, excessive noise, or vibration from tools and machinery. In field environments, these hazards can include moving vehicles, heavy equipment, or uneven terrain. Electrical hazards are also significant, particularly for those working near live equipment, substations, or buried lines. Even in office environments, damaged cords or overloaded outlets can pose electrical risks.

Chemical hazards may arise from the use of fuels, cleaning solvents, or other materials stored or used on-site. These hazards may be accompanied by flammable vapors, corrosive effects on skin or equipment, or potential respiratory exposure. Biological hazards, while less common, are still relevant and include exposure to bloodborne pathogens during first aid situations or mold in damp environments.
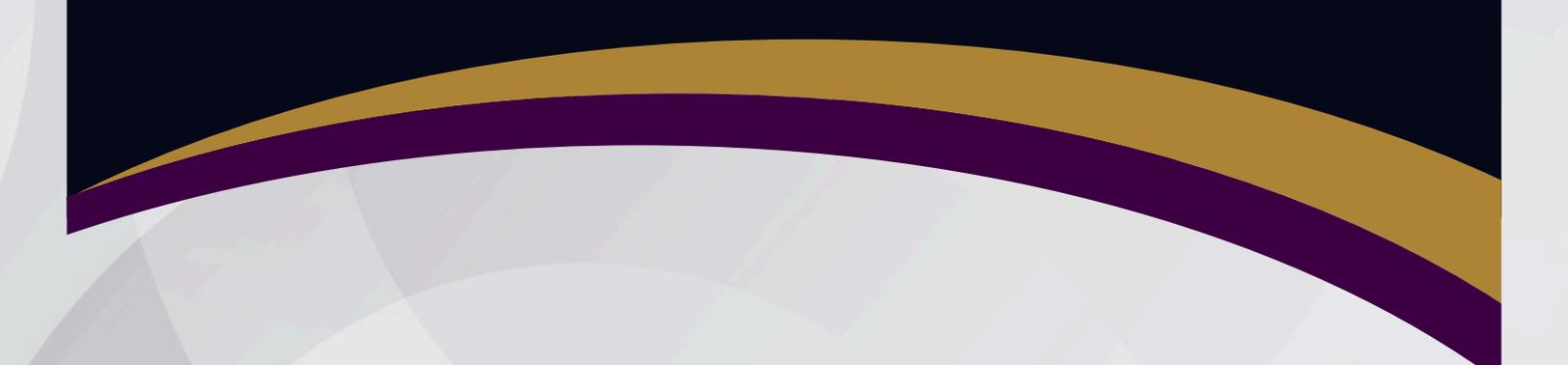
Ergonomic hazards are especially relevant to design professionals and office staff. Improper workstation setup, poor posture, repetitive motions, or inadequate breaks can lead to long-term musculoskeletal strain. Finally, environmental hazards such as extreme heat, poor lighting, animal or insect presence, or severe weather events can affect field workers and must be factored into planning and execution.

Recognizing that most incidents **result from a combination of unsafe acts and unsafe conditions**, ECF emphasizes that every employee must maintain situational awareness and speak up when a hazard is observed—before it leads to an incident.

5.2 - Job Hazard Analysis (JHA) & Pre-Job Briefings

Before any job begins—whether it's in the field, at a client site, or at a workstation in one of our offices—an assessment of potential hazards must be conducted. This process is formalized through the use of a **Job Hazard Analysis (JHA)**, which breaks down a task into specific steps, identifies potential risks at each step, and outlines mitigation strategies to prevent injury or damage.

The JHA process is not limited to construction or fieldwork. Even tasks in the office, such as lifting heavy boxes or using new tools or equipment, benefit from a quick review of associated risks. The supervisor or project lead is responsible for facilitating the JHA process and ensuring it is completed thoroughly and shared with all members of the team.

Pre-job briefings are held prior to the start of any workday involving new or evolving tasks. During these meetings, employees review the JHA, clarify their responsibilities, confirm required PPE, and discuss the environment they will be working in. These briefings are also an opportunity to review emergency response procedures, contact details, and expectations for behavior or equipment use. If conditions change—such as weather, crew composition, or equipment availability—a new briefing must be conducted and documented before work resumes.

This proactive approach reinforces ECF's commitment to preventive thinking. It ensures that every person on a job understands not only what they are doing, but how they can do it safely and what to do if something goes wrong.

5.3 - Field Inspections & Observations

Regular inspections are one of the most important tools in preventing injuries and maintaining safe operations. These inspections must be performed not only by designated safety personnel, but also by supervisors and workers who are engaged in the job. At ECF, safety is not delegated to a single individual—it is a shared responsibility.

(Create image Diagram for this) **Routine field inspections are required to maintain a safe and compliant job site. These inspections, often performed by supervisors, project leads, or safety officers, focus on verifying that:**

- Work areas are clean, organized, and free of hazards
- Equipment is functioning correctly and inspected before use
- Traffic control or signage is visible and properly placed
- PPE is worn appropriately
- Temporary structures or ladders are secure
- Hazards are being controlled through the hierarchy of controls (elimination, substitution, engineering, administrative, PPE)

Field inspections involve a close review of the worksite, tools, equipment, and environmental factors. **Inspectors look for hazards such as poor housekeeping, missing signage, damaged equipment, exposed wires, or inadequate lighting**. They also evaluate whether PPE is being used properly and if temporary structures such as ladders or scaffolding are secure. For projects involving traffic control, inspectors ensure barriers and flagging are properly placed.

Observation-based safety is another layer of protection. Supervisors or experienced employees may observe a task being performed and identify unsafe behaviors, incorrect lifting techniques, distractions, or skipped steps. These observations are intended to be constructive, allowing for coaching and immediate correction without disciplinary action unless a repeated or serious violation occurs.

The results of inspections and observations are documented, and any required corrective actions are assigned with clear deadlines. This ensures hazards are not only identified—but resolved.

5.4 - Near Miss Reporting

Near misses—events that did not cause injury or damage, but could have—must be reported with the same urgency and seriousness as actual incidents. These close calls offer valuable insight into weak points in a process, communication breakdowns, or gaps in training that might otherwise go unnoticed until an injury occurs.

For example, if a worker trips over an unsecured cable but catches themselves without falling, that cable remains a hazard for the next person. If a crane swings too wide but doesn't strike nearby equipment, the issue may still be a matter of poor coordination or equipment malfunction. Reporting these moments gives the organization a chance to fix the problem while the cost is still zero.

ECF encourages a no-blame culture when it comes to near miss reporting. Employees should feel safe and supported in speaking up, even if they were the one who made the mistake or oversight. Supervisors must acknowledge and thank employees who report near misses, investigate the contributing factors, and share lessons learned with the wider team to prevent recurrence.

5.5 - Risk Ratings & Corrective Actions

Once a hazard has been identified—either through a JHA, inspection, or near miss—it must be evaluated to determine the level of risk it presents. At ECF, hazards are analyzed based on **two criteria: how severe the consequences could be if the hazard causes harm, and how likely that harm is to occur under current conditions.**

ECF uses a basic risk matrix to classify risks as
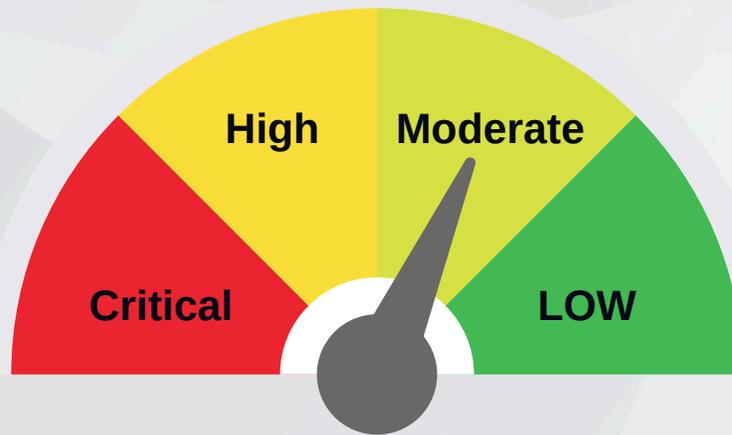
- **Low** – Acceptable with standard precautions
- **Moderate** – Requires control measures and supervisor review
- **High** – Requires immediate correction, possibly job shutdown
- **Critical** – Work must not proceed until hazard is eliminated or fully controlled

This evaluation results in a risk rating: low, moderate, high, or critical. **Low-risk** issues may be addressed with general awareness and standard controls. **Moderate risks** require more deliberate mitigation strategies, such as adjusting work practices, using barriers, or implementing temporary administrative controls. **High and critical risks** require immediate action—potentially halting work until the hazard is fully addressed.

Corrective actions must:

Implemented as Soon as Possible

Communicated to all affected personnel

Verified for Effectiveness by the Supervisor or Safety Officer

Documented and Filed for Compliance and Reference

Corrective actions are not suggestions; they require interventions to reduce risk to an acceptable level. These actions must be assigned to a responsible individual, completed promptly, and verified by a supervisor or safety officer. In some cases, corrective actions may involve redesigning workflows, retraining employees, or upgrading equipment.

All actions taken must be documented, and follow-up reviews should confirm the hazard has been resolved effectively. Through this process, ECF ensures that safety is not just reactive—but actively managed through continuous risk reduction.

Chapter 6

Incident Reporting & Investigation

6.1 - What Constitutes an Incident or Near Miss

At ECF Consultants, an incident is defined as any unplanned event that results in injury, illness, property damage, environmental harm, or disruption to operations. This includes even minor injuries such as small cuts, sprains, or equipment damage, as these events provide critical learning opportunities. A near miss is an event that did not result in harm but had the potential to do so under slightly different circumstances.

The 2025 Safety Manual emphasizes that incidents and near misses share the same root causes—unsafe acts, unsafe conditions, or both. For this reason, both must be treated with the same seriousness and urgency. Ignoring small events increases the risk of larger, more severe incidents occurring in the future.

6.2 Steps for Reporting (Verbal & Written)

All incidents and near misses must be reported immediately to a supervisor, regardless of their severity. The first step is a verbal report made as soon as the situation is under control. This ensures the supervisor can initiate immediate response measures, secure the area, and prevent further harm.

Following the verbal report, employees must complete a written incident report within 24 hours of the event. This report should include:

- Date, time, and location of the incident
- Description of the event and conditions present
- Names of individuals involved or witnesses
- Equipment, materials, or environmental factors related to the incident
- Actions taken at the time of occurrence

Incident report forms are available through the company intranet, Safety Officer, or supervisor. Completed forms must be submitted to the Safety Officer for review and entry into ECF's incident tracking system.

6.3 - Immediate Medical Response

If an incident results in injury, **medical attention is the first priority**. Employees trained in first aid or CPR may provide immediate assistance within the limits of their training until professional medical help arrives.

For minor injuries, the employee should be referred to an approved medical provider for evaluation. For serious or life-threatening injuries, emergency services must be contacted immediately by calling 911. If the incident occurs in the field, the crew leader must ensure the injured employee is transported or evacuated according to the site-specific emergency plan.

Supervisors must ensure that injured employees are not left unattended and that all medical treatments are documented. If hospitalization or OSHA-reportable injuries occur, the Safety Officer and Human Resources must be notified without delay.

6.4 - Root Cause Investigation Protocol

Once the immediate response is complete, ECF conducts a root cause investigation to determine the underlying reasons the incident occurred. The goal is not to assign blame but to identify what went wrong, why it happened, and how it can be prevented in the future.

Investigations are led by the Safety Officer or a designated supervisor and may involve:

- Interviewing employees and witnesses
- Examining the location, tools, and equipment involved
- Reviewing training records and procedures
- Checking maintenance logs, inspection reports, or permits
- Analyzing environmental conditions or work sequencing

The investigation should focus on systemic causes—such as inadequate training, missing safeguards, or poor communication—rather than solely on individual actions. Findings are documented in a formal report, which includes both immediate corrective measures and long-term preventive recommendations.

6.5 - Follow-Up & Documentation (OSHA 300, 301)

All incidents, including those that do not result in lost time, are recorded and maintained in ECF's safety documentation system. For OSHA recordable incidents, details are entered into the OSHA 300 Log and supported by an OSHA 301 Incident Report form, as required by law.

Follow-up actions are tracked to ensure corrective measures are implemented and verified for effectiveness. If new procedures, equipment, or training result from the investigation, these updates must be communicated to all affected personnel and incorporated into the **HSMS**.

The Safety Officer will review incident trends quarterly to identify recurring hazards or patterns, sharing the analysis with leadership and safety committees. This information is also used during annual safety program reviews to drive continuous improvement.

6.6 - Confidentiality and No-Retaliation Policy

Employees who report incidents or near misses will not face retaliation, discipline, or discrimination. ECF's priority is ensuring that all events are reported accurately and promptly so that hazards can be addressed. Reports are handled with discretion, and personal information is shared only as necessary to meet legal, medical, or investigative requirements.

Incident reporting is the backbone of an effective safety program. By documenting every event—no matter how small—we not only protect our employees but also strengthen our systems and culture to prevent future harm. At ECF, every report is a chance to improve, and every improvement brings us closer to our goal of zero incidents.

Chapter 7

Emergency Preparedness

7.1 - Emergency Planning Overview

Emergencies can happen without warning, and the best way to minimize harm is through preparation. ECF Consultants maintains a comprehensive emergency preparedness plan designed to protect employees, clients, and visitors in both office and field environments. This plan outlines the procedures to follow for various emergencies, including fires, medical incidents, severe weather, hazardous material releases, and security threats.

The 2025 Safety Manual emphasizes that preparedness begins with awareness. Every employee must know their role in an emergency, where to go, and how to communicate. These procedures are not optional; they are essential for ensuring a coordinated and effective response.

7.2 - Office and Field Evacuation Plans

Each ECF location—whether a corporate office or a temporary field site—has a specific evacuation plan. Office-based plans include clearly marked exit routes, posted evacuation maps, and designated assembly points where headcounts will be taken. Field-based plans may be adapted to site-specific conditions, such as open land, restricted-access areas, or locations with multiple hazards present.

During an evacuation, employees are expected to stop work immediately, secure any hazardous equipment if it can be done safely, and proceed quickly but calmly to the nearest safe exit. Elevators are not to be used during fire or power outages. Once outside, employees must remain at the assembly point until the "all clear" is given by the designated emergency coordinator or public safety officials.

Supervisors are responsible for confirming that all employees and visitors have evacuated and for reporting missing persons to emergency responders.

7.3 - Medical Emergencies

When a medical emergency occurs, the first priority is the safety and health of the affected individual. Employees should immediately **call 911** and provide clear information about the location, nature of the emergency, and any hazards present. Those trained in first aid or CPR may provide assistance within the limits of their training until professional responders arrive.

In the office, **first aid kits and Automated External Defibrillators (AEDs)** are strategically located and marked. In the field, crews must have a stocked first aid kit in their vehicle or job trailer and must know the fastest route to the nearest medical facility. All injuries, regardless of severity, must be reported to a supervisor after emergency care has been provided.

7.4 - Fire and Hazardous Material Response

In the event of a fire, employees should activate the nearest alarm pull station (if available), alert others, and evacuate the building or site immediately. Only trained personnel may attempt to use fire extinguishers, and only if the fire is small, contained, and there is a clear exit path.

For hazardous material spills or releases, the priority is to prevent exposure. Employees should evacuate the area, secure it if possible, and contact the supervisor or Safety Officer. If the substance is unknown or potentially dangerous, it should be treated as hazardous until confirmed otherwise. Specialized cleanup is handled by trained responders, not untrained employees.

7.5 - Severe Weather & Natural Disasters

Field and office operations may be impacted by severe weather events, including lightning, high winds, flooding, hurricanes, and tornadoes. For office locations, employees should follow posted shelter-in-place instructions or move to designated safe rooms when severe weather warnings are issued. Field crews must monitor weather conditions closely and suspend work when lightning is detected within a dangerous range, or when winds or precipitation make conditions unsafe.

Hurricane preparedness includes securing job sites, protecting critical records and equipment, and following company-issued closure and return-to-work procedures. Employees should ensure they have up-to-date contact information in the company system to receive emergency notifications.

7.6 - Security Threats

Security-related emergencies include intruders, threats of violence, or active shooter situations. In such cases, employees should follow the **Run, Hide, Fight** protocol:

- **Run** to safety if there is a clear escape path.
- **Hide** if escape is not possible, securing doors and silencing devices.
- **Fight** only as a last resort to protect yourself.

Supervisors must ensure that employees understand local security procedures and how to communicate with law enforcement or building security during a crisis.

7.7 - Training and Drills

Emergency preparedness is reinforced through regular drills, including fire evacuations, severe weather shelter-in-place exercises, and medical response simulations. Field crews may also conduct site-specific emergency practice sessions. These drills test readiness, identify gaps, and give employees the confidence to act quickly under pressure.

Drill participation is mandatory, and feedback from each drill is reviewed by the Safety Officer to make procedural improvements.

Chapter 8

Personal Protective Equipment (PPE)

8.1 - Purpose and Importance of PPE

Personal Protective Equipment (PPE) serves as the final line of defense against workplace hazards. While ECF Consultants prioritizes eliminating or controlling hazards through engineering and administrative measures, certain risks cannot be entirely removed. In these cases, PPE is essential for safeguarding employees from injury or illness.

The 2025 Safety Manual notes that "PPE should never be viewed as a substitute for safe work practices, but as a necessary complement to them." This principle applies across all work environments, from engineering offices to active field job sites. Whether it's a hard hat on a construction site or ergonomic wrist supports at a workstation, PPE plays a critical role in protecting health and preventing injuries.

8.2 - PPE Requirements by Work Environment

PPE requirements vary depending on the work setting and task being performed.

For **office environments**, PPE may be minimal but can include ergonomic aids (such as wrist rests or monitor risers), blue-light filtering glasses, and hearing protection for equipment-heavy areas like print rooms. Employees conducting site visits must still comply with the PPE standards for that site.

For field environments, PPE is more extensive and may include:

- **Hard hats** to protect against falling objects or overhead hazards
- **Safety glasses or goggles** to protect against flying debris, dust, and chemical splashes
- **High-visibility vests or clothing** to increase visibility in high-traffic or low-light areas
- **Safety footwear** (steel-toe or composite) to protect against crush injuries and punctures
- **Gloves** selected for the specific hazard, such as cut resistance, chemical protection, or thermal insulation
- **Hearing protection** (earplugs or earmuffs) when noise levels exceed permissible exposure limits
- **Fall protection gear** such as harnesses and lanyards when working at height
-

The type of PPE required for a given job will be specified in the Job Hazard Analysis (JHA) or pre-job briefing.

8.3 - Selection and Fit of PPE

PPE must be selected based on the specific hazards identified during risk assessments. Ill-fitting or inappropriate PPE can be just as dangerous as not wearing any at all. Employees must ensure that PPE fits comfortably and securely, allowing for full range of motion and clear vision or hearing where applicable.

Supervisors are responsible for ensuring that PPE meets industry standards, including ANSI, ASTM, or OSHA specifications. The Safety Officer will periodically review PPE inventory to confirm compliance with evolving safety requirements.

8.4 - Employee Responsibilities

Employees are responsible for wearing PPE as required and for inspecting it before each use. Damaged, worn, or defective PPE must be reported immediately and replaced before the task continues. Employees must also store PPE properly to prevent damage and contamination.

Refusal to wear assigned PPE is a violation of company policy and may result in disciplinary action, as it puts both the individual and their co-workers at risk. All employees, regardless of seniority, are expected to model proper PPE use.

8.5 - Maintenance, Cleaning, and Replacement

Proper care and maintenance of PPE extends its life and ensures its effectiveness. PPE must be cleaned according to the manufacturer's instructions, using approved cleaning agents that do not degrade protective qualities. For example, safety glasses should be wiped with non-abrasive cloths, and harnesses should be inspected for fraying, corrosion, or deformation.

Replacement intervals vary depending on the type of PPE and the conditions of use. For instance, hard hats should be replaced immediately if they sustain an impact, even if no visible damage is present, and at least every five years under normal conditions. Safety footwear should be replaced if the sole is worn or the protective toe is compromised. The Safety Officer will assist in tracking replacement schedules.

8.6 - Training on PPE Use

Training is a key component of PPE compliance. ECF provides employees with instructions on when PPE is required, how to properly wear and remove it, how to maintain it, and how to recognize when it is no longer effective. This training is incorporated into onboarding for new hires and is reinforced during refresher courses and field safety meetings.

Practical demonstrations and hands-on practice are encouraged to ensure employees are comfortable using specialized equipment such as respirators or fall arrest systems. Only trained and authorized personnel may use PPE designed for high-risk operations.

8.7 - Enforcement and Accountability

PPE compliance is monitored through routine inspections, field observations, and supervisor oversight. If an employee is found without required PPE, the supervisor will take immediate corrective action, which may include stopping work until PPE is obtained. Repeat violations will be addressed under ECF's progressive discipline policy. Accountability applies equally to all employees—from new hires to executive leadership—reinforcing that safety is a shared responsibility.

Chapter 9

Training & Competency

9.1 - Purpose of Safety Training

Safety training at ECF Consultants is a core component of our commitment to maintaining a safe, compliant, and high-performing workplace. The purpose of our training program is to ensure that every employee, whether based in an office, working remotely, or assigned to a field project—has the skills, knowledge, and confidence to identify hazards, follow established procedures, and make sound safety decisions without hesitation.

The 2025 Safety Manual stresses that safety is most effective when it becomes second nature. That means our training isn't designed to simply "check the box" for compliance; it is structured to create a culture of awareness, accountability, and preparedness. By the time an employee begins any job task, they must be fully aware of the hazards involved, know the safe methods to perform the task, and understand what to do if conditions change.

This program also ensures ECF meets or exceeds all OSHA, state, and client-specific safety requirements, protecting our employees, our reputation, and our ability to serve clients effectively.

9.2 - New Hire Orientation

Every new employee participates in ECF's New Hire Safety Orientation before they are authorized to perform work. This orientation introduces our safety philosophy, explains employee rights and responsibilities under safety laws, and walks through the procedures and expectations that apply to their role.

Topics covered in the orientation include:

- ECF's Health and Safety Management System overview
- General hazard recognition, including physical, chemical, ergonomic, and environmental hazards
- PPE requirements, selection, and correct usage
- Emergency response procedures for office and field situations
- Incident and near miss reporting processes
- Safe driving policies for those who operate vehicles as part of their job
- Office-specific safety (ergonomics, electrical safety, housekeeping)
- Field-specific safety (traffic control, heavy equipment awareness, fall protection basics)

The orientation also includes a review of site-specific rules if the employee will be assigned to a client location. For high-hazard positions, new hires may receive additional task-specific training before beginning work.

Completion of this orientation is documented, and employees sign an acknowledgment form confirming that they understand ECF's policies and will comply with them.

9.3 - Job-Specific & Task-Based Training

Beyond general orientation, employees receive training tailored to the tasks they will perform. This **job-specific and task-based training** ensures that employees are prepared for the actual hazards and procedures they will encounter.

Examples include:

- Electrical hazard awareness and lockout/tagout (LOTO) procedures for staff working near energized systems
- Fall protection equipment use and anchor point selection for employees working at heights
- Hazard Communication (HazCom) training for anyone who handles or works near hazardous substances
- Confined space entry and attendant procedures for qualified employees
- Equipment-specific training (forklifts, aerial lifts, cranes) for certified operators
- Ergonomic best practices for employees whose work involves repetitive movements or prolonged computer use

This training is provided before the task is performed, with competency verified through observation, demonstration, or testing. Supervisors ensure no employee begins high-risk work without proper training and authorization.

9.4 - Refresher Training & Continuing Education

Safety skills fade over time without reinforcement, and procedures evolve as technology and regulations change. ECF requires periodic refresher training to keep knowledge current and prevent complacency.

Refresher training is provided:

- At predetermined intervals (e.g., annual, biennial) for certain high-risk activities
- When regulations or company policies change
- Following incidents or near misses where additional training is necessary
- When introducing new tools, equipment, or processes

In addition to compliance refreshers, ECF promotes continuing education in areas like leadership safety, emerging risk awareness, and new industry best practices. Employees are encouraged to pursue additional safety-related courses and certifications relevant to their roles.

9.5 Competency Assessments

Competency is not assumed—it must be demonstrated. ECF uses a combination of written tests, verbal questioning, and practical demonstrations to confirm that employees understand safety requirements and can perform their duties safely without direct supervision.

An employee is considered competent when they:
- Understand the hazards associated with the task
- Know the safe methods for completing the task
- Can select and properly use required PPE and tools
- Can recognize when conditions change and adapt accordingly

For certain high-hazard tasks—such as crane operation, confined space work, or energized electrical work—formal competency certification is required and renewed at set intervals. Supervisors and the Safety Officer track these certifications to ensure no one performs work with expired credentials.

9.6 - Recordkeeping & Tracking

All training is documented in ECF's **Learning Management System (LMS)** and supplemented with hardcopy records when required. Each record includes:
- Employee name and role
- Course or session name
- Date and duration of training
- Instructor or trainer's name
- Assessment results (if applicable)

This centralized recordkeeping system allows supervisors to quickly verify an employee's qualifications before assigning work. It also enables ECF to identify trends, track upcoming refresher deadlines, and maintain compliance with OSHA and client documentation requirements.

9.7 - Roles & Responsibilities in Training

Training and competency are a shared responsibility:
- Leadership provides the resources, time, and support necessary to deliver quality training.
- Supervisors identify training needs, schedule sessions, and confirm that employees are competent before assigning tasks.
- Employees actively participate in training, ask questions when unsure, and apply safe practices consistently.
- The Safety Officer develops and updates training programs, delivers instruction, and audits training records for accuracy and compliance.

By engaging every level of the organization in the training process, ECF ensures that safety knowledge is not only taught but applied in every job, every day.

Chapter 10

Workplace Safety Rules & Expectations

10.1 - Purpose of Workplace Safety Rules

Workplace safety rules exist to create a predictable and controlled environment where hazards are minimized, and people can focus on their work without unnecessary risk. At ECF Consultants, these rules are not arbitrary—they are based on regulatory requirements, industry best practices, and lessons learned from real incidents across the engineering and construction sectors.

A well-defined set of rules helps ensure that everyone is working with the same understanding of acceptable and unacceptable behavior, regardless of whether they are in an air-conditioned office or standing on a job site in the summer heat. For example, an engineer performing CAD design work in the office needs to follow ergonomic guidelines and electrical safety practices, while a field inspector must adhere to PPE and fall protection requirements. Both roles are equally important to our safety culture, and the rules apply consistently across all job types.

Rules also protect the company's reputation. Clients trust ECF because of our professionalism and ability to deliver projects without avoidable delays caused by accidents or unsafe work practices. A single safety violation in front of a client or regulatory inspector can damage that trust and lead to costly consequences.

10.2 - General Conduct and Expectations

Employees are expected to conduct themselves in a way that prioritizes safety in every action they take. This means being aware of your surroundings, planning your work before starting, and avoiding shortcuts that could compromise safety. In practice, this could be as simple as an office employee keeping walkways free from trip hazards like loose cables, or a field crew ensuring that ladders are set up on stable ground before climbing.

Another core expectation is open communication about safety concerns. If you see something unsafe—whether it's an overloaded electrical outlet in the office break room or a missing guardrail on a job site—report it immediately to your supervisor or the Safety Officer. We would rather hear about a potential hazard a hundred times than deal with a preventable injury.

Professional conduct also extends to interactions with co-workers and clients. **Aggressive, distracting, or reckless behavior has no place in the workplace.** A moment of "horseplay" on a job site could lead to a serious injury if someone loses balance near heavy equipment or a ledge. In the office, rushing through tasks without reviewing safety protocols can result in equipment damage or personal injury.

10.3 - Prohibited Acts

Certain actions are strictly prohibited because they present a clear risk to health, safety, or compliance. This includes ignoring PPE requirements, bypassing machine guards, tampering with safety devices, or operating equipment without proper authorization.

For example, removing the safety guard on a power tool to "get the job done faster" is not only a violation of ECF policy but also an OSHA violation that could result in serious injury. In the office, disabling a surge protector's safety features to plug in more devices is just as dangerous—it could overload circuits and cause a fire.

Other prohibited acts include working under the influence of alcohol, drugs, or any substance that impairs judgment. Even over-the-counter medication that causes drowsiness should be disclosed to your supervisor if it could impact your ability to work safely. These rules exist to protect both the individual and their co-workers.

10.4 - Housekeeping and Work Area Organization

A clean, organized workspace is essential for preventing accidents. This applies equally to a drafting station in the office and a staging area at a construction site. Cluttered work areas increase the risk of trips, slips, and falls, while improperly stored materials can cause injury or block emergency exits.

In the office, good housekeeping means keeping walkways clear, storing materials in designated areas, and promptly cleaning up spills. In one real-life example, a coffee spill in a hallway went unreported, leading to an employee slipping and injuring their wrist. Had the spill been cleaned or reported immediately, the injury could have been avoided.

In the field, it means properly stacking materials, securing tools when not in use, and ensuring waste is placed in appropriate containers. A poorly stored extension cord lying across a walkway could cause a trip, while debris left near an active work zone could obstruct a quick evacuation during an emergency.

10.5 - Use of Tools, Equipment, and Machinery

Only trained and authorized employees may operate tools, equipment, or machinery. This policy applies whether the tool is a desktop computer or a piece of heavy machinery. Misuse or unauthorized use increases the risk of accidents and can damage expensive company or client property.

For example, a field technician using a hydraulic lift without proper training might position it incorrectly, risking a tip-over. In the office, an employee who tries to "repair" their computer by removing its casing could expose themselves to electrical hazards. The correct action in both cases is to request assistance from trained personnel.

Employees are also expected to inspect equipment before use, report defects immediately, and never attempt makeshift repairs. Tools with damaged cords, cracked handles, or missing safety features must be taken out of service until repaired or replaced.

10.6 - Enforcement of Safety Rules

Safety rules are only effective if they are consistently enforced. Supervisors are responsible for addressing violations promptly and fairly, while employees are responsible for following the rules without exception. Enforcement may include verbal warnings, written notices, retraining, or—in severe or repeated cases—termination.

The goal of enforcement is not to punish, but to correct unsafe behavior before it leads to an incident. For example, if a field employee is observed not wearing a hard hat in a designated area, the immediate response may be to stop work, remind them of the policy, and ensure compliance before resuming work.
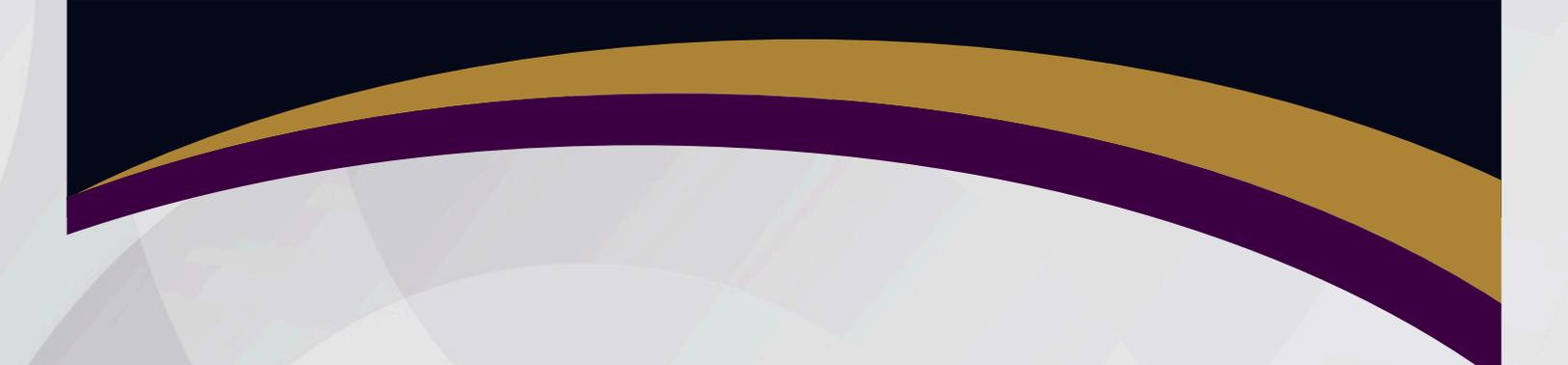
Repeated violations, however, indicate a disregard for safety and will be escalated according to ECF's disciplinary procedures. This shared accountability ensures that every employee understands their role in maintaining a safe, compliant workplace.

Chapter 11

Hazard Communication (HazCom)

11.1 - Purpose of Hazard Communication

The **Hazard Communication** (HazCom) program exists to ensure that all employees understand the risks associated with hazardous chemicals they may encounter in the workplace and know how to protect themselves. OSHA's Hazard Communication Standard—often referred to as the "Right to Know" law—requires that employers provide clear, accessible information about chemical hazards.

At ECF Consultants, this means that every chemical container must be properly labeled, every employee must have access to up-to-date **Safety Data Sheets** (SDS), and all staff must be trained on safe handling procedures. This applies equally in the office and in the field. While an office environment might have fewer obvious hazards, even common items like cleaning agents, printer toner, or compressed air can be dangerous if mishandled. In the field, employees may encounter solvents, fuels, adhesives, paints, or industrial cleaners that carry far greater risks.

The purpose of our HazCom program is not only compliance—it is about preventing harm. A single misstep, such as mixing incompatible chemicals or failing to wear gloves when handling solvents, can lead to injury or illness that could have been avoided with proper awareness.

11.2 - Identifying Hazardous Chemicals

Hazardous chemicals are present in more workplaces than most people realize. In the office, examples include toner cartridges that can cause respiratory irritation if broken, cleaning products that may cause skin burns, and spray adhesives that release flammable vapors. In the field, workers may handle fuels, lubricants, or sealants that can cause serious health effects if inhaled or absorbed through the skin.

Employees are expected to check labels and SDS before using any unfamiliar chemical. For example, if a field technician is preparing to use an industrial adhesive, the label and SDS will provide critical information such as the need for ventilation, recommended gloves, and how to respond if the adhesive contacts skin. Even a simple can of spray paint has hazards that must be respected—without ventilation, it can cause dizziness or headaches, and the vapors are flammable

11.3 - Labeling Requirements

Every hazardous chemical at ECF must have a clear, legible label that meets OSHA's **Globally Harmonized System (GHS)** requirements. These labels include:

- **Product identifier** (name of the chemical)
- **Signal word** ("Danger" or "Warning")
- **Hazard statements** (describing the nature and degree of risk)
- **Pictograms** (symbols representing hazard categories)
- **Precautionary statements** (how to safely handle and store the chemical)
- **Manufacturer information**

For example, a degreasing solvent in the field may have a "Flame" pictogram to indicate flammability, along with a "Health Hazard" pictogram warning of potential long-term effects. An unlabeled container is unacceptable under ECF policy. If you find one, stop using it immediately and notify your supervisor so it can be properly labeled or disposed of.

11.4 - Safety Data Sheets (SDS)

Safety Data Sheets are the backbone of chemical safety. They provide detailed information about each chemical's hazards, safe handling, storage requirements, and emergency response measures.

At ECF, SDSs are maintained in both physical and digital formats so that they are available at all times—whether in an office supply closet or on a remote project site. Employees must review the SDS before using any chemical for the first time. For instance, an SDS for a concrete curing compound may specify that it should not be used without eye protection and that spills must be contained with absorbent material to prevent environmental contamination.

11.5 Safe Handling and Storage Practices

Safe handling begins with reading the label and SDS. Employees must always use the recommended PPE, such as **gloves, goggles, or respirators,** when handling chemicals. Storage areas <u>must be organized so that incompatible chemicals—like acids and bases—are kept separate to prevent dangerous reactions.</u>

For example, a maintenance technician in the office should never store bleach next to ammonia-based cleaners. Mixing them creates a toxic gas that can cause serious respiratory injury. Similarly, in the field, fuel containers should be stored away from ignition sources and in a well-ventilated area.

11.6 Spill and Exposure Response

When a chemical spill occurs, the priority is to protect people first, then contain the hazard. For small, low-risk spills (like a minor coffee machine descaler leak in the office), employees who are trained may clean it using PPE and spill kits. For larger or more dangerous spills, such as a fuel leak in the field, employees must evacuate the area and alert trained responders.

Exposure incidents must be reported immediately. If a chemical contacts the skin, flush with water for at **least 15 minutes** and seek medical attention if irritation persists. Inhalation exposures require moving to fresh air and possibly medical evaluation, depending on the chemical involved.

11.7 Employee Responsibilities Under HazCom

Every employee plays a role in chemical safety. This includes:

- Reading and following all label and SDS instructions
- Using recommended PPE
- Reporting damaged or missing labels
- Never transferring chemicals to unmarked containers
- Reporting spills, leaks, or exposures immediately

Failure to follow HazCom requirements can result in disciplinary action, as it puts everyone at risk. More importantly, ignoring these rules can lead to preventable injuries and illnesses.

Hazard Communication at ECF is about more than meeting OSHA standards—it's about creating a culture where no one works with a chemical they don't understand. Whether you're changing toner in a printer or applying an industrial sealant on-site, the rule is the same: **Know what you're working with, respect the hazards, and protect yourself and those around you.**

Chapter 12

Incident Reporting & Investigation

12.1 - Purpose of Incident Reporting

Incident reporting is essential to identifying hazards, preventing recurrence, and maintaining a transparent safety culture. At ECF Consultants, reporting is not about assigning blame—it is about capturing accurate information so that we can take corrective action and protect our people, our projects, and our reputation.

An "incident" includes any **unplanned event that results in injury, illness, property damage, environmental harm, or a "near miss" where no harm occurred but had the potential to cause damage.** For example, a field employee tripping over a poorly stored extension cord but catching themselves before falling is still an incident that needs reporting. Similarly, if a coffee machine in the office overheats and nearly causes a fire, that is an incident worth documenting so preventative measures can be taken.

Prompt and accurate reporting allows ECF to respond quickly, address hazards, and ensure compliance with OSHA and client reporting requirements.

12.2 - Employee Responsibility to Report

All employees—regardless of position—are required to report incidents immediately to their supervisor, the Safety Officer, or HR. This includes injuries, illnesses, property damage, equipment malfunctions, environmental spills, and near misses.

Reports should be made as soon as it is safe to do so, ideally before the end of the work shift. Delayed reporting can lead to missing or inaccurate details, which makes it harder to identify the root cause. For example, a field engineer who delays reporting a cut from rebar may later be unable to recall whether they were wearing gloves, making it more difficult to address PPE compliance in the investigation.

Failure to report incidents promptly can result in disciplinary action, not because the injury occurred, but because withholding information prevents ECF from fixing hazards that could harm others.

12.3 - The Incident Reporting Process

When an incident occurs:

1. **Ensure Immediate Safety** – Stop work, address any urgent hazards, and provide first aid or call emergency responders as needed.
2. **Notify Your Supervisor** – This should be done verbally right away, even before completing written forms.
3. **Complete the Incident Report Form** – Include the date, time, location, description of the incident, people involved, witnesses, and any contributing factors.
4. **Submit the Report to Safety or HR** – The Safety Officer will log the report and initiate an investigation if necessary.

In a real example, if a field crew member drops a piece of equipment from scaffolding but no one is injured, the process still applies. The incident will be documented, the cause will be analyzed (such as improper securing of tools), and corrective measures (like using tethered tool lanyards) will be put in place.

12.4 - Investigation and Root Cause Analysis

An incident investigation begins as soon as possible after the report is received. The purpose is to determine what happened, why it happened, and how to prevent it from happening again. This is done without making assumptions or placing blame.

Investigations may include:
- Interviewing employees and witnesses
- Reviewing physical evidence (equipment, work area conditions, PPE)
- Checking training records and work procedures
- Examining environmental or weather factors

For example, if a surveyor suffers heat exhaustion in the field, the investigation may reveal that they had insufficient breaks, inadequate water supply, or heavy PPE not suited for the weather. The corrective action might involve adjusting schedules for extreme temperatures and providing cooling gear.

12.5 - Corrective and Preventive Actions

Once the root cause is identified, corrective actions are taken to address the hazard. This could involve retraining, equipment repair or replacement, process changes, or physical modifications to the worksite. Preventive actions are then implemented to ensure the same type of incident does not occur again.

For example, if an office employee trips over a loose floor mat, the corrective action may be to secure or replace the mat. The preventive action may involve inspecting all floor coverings in the building weekly to prevent recurrence.

12.6 - Reporting to External Agencies

Certain incidents—such as fatalities, hospitalizations, amputations, or loss of an eye—must be reported to OSHA within specific timeframes. Environmental spills may require notification to regulatory agencies. The Safety Officer is responsible for ensuring all such reporting is completed promptly and accurately.

While employees do not contact regulatory agencies directly, their role in providing timely and accurate information is critical to meeting these legal obligations.

12.7 - Confidentiality and Non-Retaliation

ECF strictly prohibits retaliation against any employee who reports an incident in good faith. Retaliation undermines our safety culture and is a violation of both company policy and federal law. Reports will be treated confidentially to the extent possible, with details shared only with those who need to know for the purposes of investigation and corrective action.

Employees are encouraged to report without fear—whether the incident involves themselves, a co-worker, or even a supervisor.

Chapter 13

Emergency Preparedness & Response

13.1 - Purpose of Emergency Preparedness

Emergencies happen without warning, and the only way to respond effectively is to be prepared before they occur. At ECF Consultants, emergency preparedness is about having the systems, training, and resources in place to protect lives, minimize property damage, and ensure business continuity.

Preparedness is not limited to high-risk job sites—emergencies can and do occur in office settings as well. For example, an office fire caused by an overloaded outlet can spread rapidly if employees don't know evacuation routes. In the field, a sudden severe storm could put crews at risk of lightning strikes or structural collapse if there is no established shelter plan.

Our goal is simple: when an emergency happens, every employee should know exactly what to do, where to go, and who to contact—without hesitation.

13.2 - Types of Emergencies Covered

ECF's emergency preparedness program covers a broad range of possible events, including but not limited to:

- Fires or explosions
- Medical emergencies
- Severe weather events (hurricanes, tornadoes, lightning)
- Hazardous material spills or releases
- Workplace violence or active threat situations
- Structural failures or equipment collapses

Each of these emergencies requires a different response, but the foundation is the same—remain calm, follow established procedures, and prioritize human safety over property or schedules.

13.3 - Roles and Responsibilities

Effective emergency response depends on clearly defined roles:

Employees must immediately follow instructions from supervisors or emergency personnel, assist co-workers when safe, and evacuate or shelter-in-place as directed.

Supervisors ensure their teams are familiar with emergency procedures, account for all personnel during evacuations, and coordinate with the Safety Officer during incidents.

The Safety Officer maintains the emergency response plan, organizes drills, ensures emergency supplies are stocked, and serves as the primary liaison with external responders (fire, EMS, law enforcement).

13.4 - Evacuation Procedures

Evacuations must be carried out quickly and in an orderly manner. Every employee should know at least two exit routes from their primary work area. Upon hearing a fire alarm or receiving evacuation instructions:

- Stop work immediately.
- Use the nearest safe exit.
- Do not use elevators during fire or power outages.
- Proceed to the designated assembly point.
- Wait for the "all clear" from the Safety Officer or emergency personnel before re-entering.

13.5 - Medical Emergencies

In the event of a medical emergency, employees must act quickly and decisively. The first priority is to contact **911 or local emergency** services without delay, providing clear information about the individual's condition, the type of emergency, and the exact location within the site or facility. This is particularly important in large or restricted environments such as substation yards or construction zones, where emergency responders may need precise access instructions.

Only individuals trained in first aid, CPR, or AED use should administer direct care. All others should focus on assisting emergency responders by clearing the area, retrieving first aid equipment, or guiding responders to the scene. AEDs and first aid kits must be used according to training and manufacturer guidance. After responders are on their way, supervisors or designated safety staff should secure the area and begin documenting the event to ensure proper follow-up and corrective measures.

13.6 - Severe Weather Procedures

Severe weather requires prompt action and awareness, as different events present different risks. In the case of **hurricanes or tropical storms**, advance notice is often available, allowing time for offices to close and for field crews to secure materials, tools, and equipment. Employees should follow company communication channels closely for closure announcements or updates, and supervisors must ensure all worksites are left in a safe condition before staff evacuate. During **tornado warnings**, employees should **immediately move to an interior space away from windows, glass, and overhead structures with limited support, such as large open rooms with trusses.** Relocating quickly to a sheltered location significantly reduces exposure to flying debris and structural collapse.

For **lightning and electrical storms**, all outdoor work must be suspended without exception. This includes climbing poles, working in substations, or operating heavy equipment in open areas. Employees should seek refuge in a fully enclosed building or vehicle and stay sheltered until conditions are clear. **Supervisors are responsible for monitoring weather alerts, initiating work stoppages, and confirming that employees are protected and accounted for during severe weather events.** By responding consistently and decisively, ECF reduces the risks posed by unpredictable natural hazards.

13.7 - Shelter-in-Place Procedures

Shelter-in-place procedures are activated when it is safer to remain indoors than to evacuate, such as during a chemical release, severe weather, or a nearby security threat. In these situations, employees should move promptly to **an interior room with minimal or no windows, close and secure doors, windows, and ventilation systems if possible, and remain away from exterior walls**. <u>Supervisors are responsible for ensuring staff are accounted for, maintaining communication, and keeping everyone in place until an official "all clear" is given by emergency authorities or company leadership.</u>

13.8 - Drills and Training

Emergency drills are not just a compliance requirement—they are an opportunity to practice and refine our response. ECF conducts regular fire drills, severe weather drills, and other scenario-based exercises in both office and field environments. These drills ensure employees are familiar with escape routes, understand alarm signals, and can execute their roles without confusion. Lessons learned from drills are documented and used to update the emergency plan.

13.9 - Post-Incident Actions

After any emergency, the Safety Officer and management team will debrief participants, assess the effectiveness of the response, and implement improvements where needed. This may involve updating evacuation maps, replacing emergency equipment, or revising shelter procedures.

Example: Following a fire drill, it was observed that one exit route in the Atlanta office was partially blocked by stored materials. Those items were removed immediately, and a reminder was issued to keep all exit paths clear at all times.

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Chapter 14

Personal Protective Equipment (PPE)

14.1 - Purpose of PPE

Personal Protective Equipment (PPE) is the last line of defense against workplace hazards when engineering controls and safe work practices are not enough to eliminate risks. At ECF Consultants, PPE requirements apply to all employees—whether in the office, in the field, or at a client site. While an office-based engineer may only need occasional PPE (such as safety glasses during a site visit), a field technician may need a full set of protective gear every day.

PPE is not optional—it's a requirement whenever job conditions demand it. A worker using a grinder without safety glasses is at risk of eye injury from flying debris, just as an office employee handling cleaning chemicals without gloves risks skin irritation or chemical burns. In both cases, PPE serves as a critical barrier that can prevent minor hazards from becoming major injuries.

Our policy is simple: if the hazard assessment for your job calls for PPE, it must be worn at all times while performing that task. Failing to do so puts both the individual and the company at risk.

14.2 - Selection of PPE

PPE is selected based on the specific hazards present. ECF follows OSHA guidelines and industry best practices to ensure the correct equipment is provided for the job. **Common PPE includes: safety glasses, face shields, hard hats, high-visibility vests, hearing protection, gloves, respirators, and fall protection harnesses.**

For example, during a substation inspection, a field engineer might require a hard hat, safety glasses, and steel-toed boots due to the potential for overhead hazards and heavy equipment movement. In the office, safety glasses and cut-resistant gloves might be issued temporarily to employees tasked with unpacking shipments containing sharp or breakable components.

Before each use, PPE must be inspected to ensure it is in good condition. A cracked hard hat or torn glove can compromise protection and must be replaced immediately.

14.3 - Proper Use and Care of PPE

PPE only works when used correctly. This means wearing it as intended—fastening chin straps on hard hats, ensuring safety glasses fully cover the eyes, and adjusting harnesses to fit securely. Improper use can render PPE ineffective, which is just as dangerous as not wearing it at all.

Employees are responsible for keeping their PPE clean and functional. For instance, dust or oil buildup on safety glasses can impair vision, while moisture inside hearing protection earmuffs can cause discomfort and reduced effectiveness. PPE should be stored in a clean, dry area when not in use, and damaged equipment must be reported immediately so it can be replaced.

14.4 - PPE Training and Accountability

Before using any PPE, employees must receive training on its proper use, limitations, and maintenance. This training ensures that employees understand how to protect themselves and why each piece of equipment is necessary.

For example, a field employee who uses a respirator must be trained not only on how to wear it correctly but also on when it should be replaced and how to check for a proper seal. Similarly, an office employee using nitrile gloves for handling solvents should understand that gloves must be changed if they become torn or contaminated.

Supervisors are responsible for enforcing PPE use and correcting noncompliance immediately. Repeated failure to wear required PPE will result in disciplinary action, as it demonstrates disregard for safety protocols.

14.5 - Field and Office PPE Expectations

While PPE is most often associated with fieldwork, certain office tasks also require protection. This includes wearing gloves when handling chemicals, safety glasses when using power tools in maintenance areas, and ergonomic supports to prevent strain injuries from prolonged computer use.

In the field, PPE expectations are strict—high-visibility clothing is worn near vehicle traffic, steel-toed boots are mandatory in construction zones, and fall protection harnesses are required when working at heights. These rules are in place because field conditions change rapidly, and hazards can appear without warning.

By applying PPE requirements consistently across office and field environments, ECF ensures that every employee is equally protected, no matter where they work.

Chapter 15

Field Safety Practices

15.1 - Purpose of Field Safety Practices

Fieldwork presents unique hazards that require a higher level of situational awareness and adherence to safety protocols. Unlike controlled office environments, field conditions can change rapidly due to weather, equipment movement, client operations, or unforeseen environmental hazards. At ECF Consultants, our field safety practices are designed to keep employees safe while maintaining productivity and professionalism on every job site.

Field safety is not just about wearing PPE—it's about anticipating hazards, planning work with safety in mind, and making smart decisions under pressure. For example, a survey crew working near heavy machinery must not only wear high-visibility clothing but also maintain safe distances, follow site traffic patterns, and remain in constant communication with equipment operators.

By following established field safety practices, we reduce the risk of accidents, maintain client trust, and ensure our work meets both regulatory and contractual safety requirements.

15.2 - Pre-Job Safety Planning

Every field assignment begins with pre-job safety planning, which includes reviewing the scope of work, identifying hazards, and implementing controls before the work starts. This process is often documented through a **Job Hazard Analysis (JHA) or a Pre-Task Plan (PTP).**

If a crew is assigned to inspect utility poles, the pre-job plan might address fall hazards, potential electrical contact, uneven terrain, and weather conditions. Controls could include the use of insulated gloves, fall protection harnesses, and maintaining a safe distance from live lines.

Pre-job meetings—often called "tailgate talks"—are a **non-negotiable part of ECF's safety culture**. These brief but focused sessions bring the crew together to review hazards, assign roles, discuss equipment needs, and agree on communication methods before work begins. By ensuring that all team members are on the same page, these meetings reduce the likelihood of miscommunication and help crews respond effectively to changing conditions throughout the day.

15.3 - Safe Equipment Operation

Field equipment — from bucket trucks and aerial lifts to handheld tools and specialized testing instruments — plays a central role in our work. However, with that comes the responsibility to operate each piece of equipment safely, efficiently, and in strict compliance with manufacturer instructions. At ECF, only trained and authorized employees are permitted to operate any type of equipment.

Misuse or carelessness can have serious consequences. For example, operating a skid-steer loader without properly securing the bucket could cause loose materials to spill unexpectedly, creating tripping hazards or striking nearby workers. Less obvious hazards can arise with smaller tools — such as using a handheld drill without clamping or securing the workpiece, which could result in the drill bit binding and the tool kicking back with enough force to cause injury.

To prevent incidents, operators must conduct a pre-use inspection to confirm that equipment is in good working order, safety devices are functional, and no damage is present. If any defect or unsafe condition is identified, the equipment must be removed from service immediately until repairs are made. Operators are also expected to stop work at the first sign of a potential equipment failure — no task is worth risking injury or damaging company property.

15.4 - Site Access and Traffic Safety

Work sites often present vehicle and foot traffic hazards, whether it's heavy equipment inside a substation, bucket trucks positioned along a roadside, or delivery vehicles moving in an office parking lot. All personnel must obey posted signs, barricades, and client site rules without exception.

In substation yards, controlled access is critical. Unauthorized entry can put untrained individuals dangerously close to energized components. Workers must enter only through designated gates, maintain safe clearance from equipment, and stay within established work zones. On roadside distribution work, staying inside traffic control zones and following the direction of flaggers prevents exposure to vehicle strikes.

Even in office settings, traffic safety applies — walking through a parking lot without watching for reversing vehicles, especially delivery trucks, can be just as hazardous. All ECF vehicle operators, whether driving to a remote transmission site or making an office supply run, must follow speed limits, wear seatbelts, and avoid distractions such as mobile device use.

15.5 - Weather and Environmental Hazards

Environmental hazards vary widely depending on the location and type of work being performed. In substations, rain can make gravel yards slippery, lightning can make outdoor work unsafe, and high winds can compromise ladder and lift stability. On poles, heat stress can affect concentration and increase the risk of mistakes near energized conductors, while cold weather can reduce dexterity when handling tools.
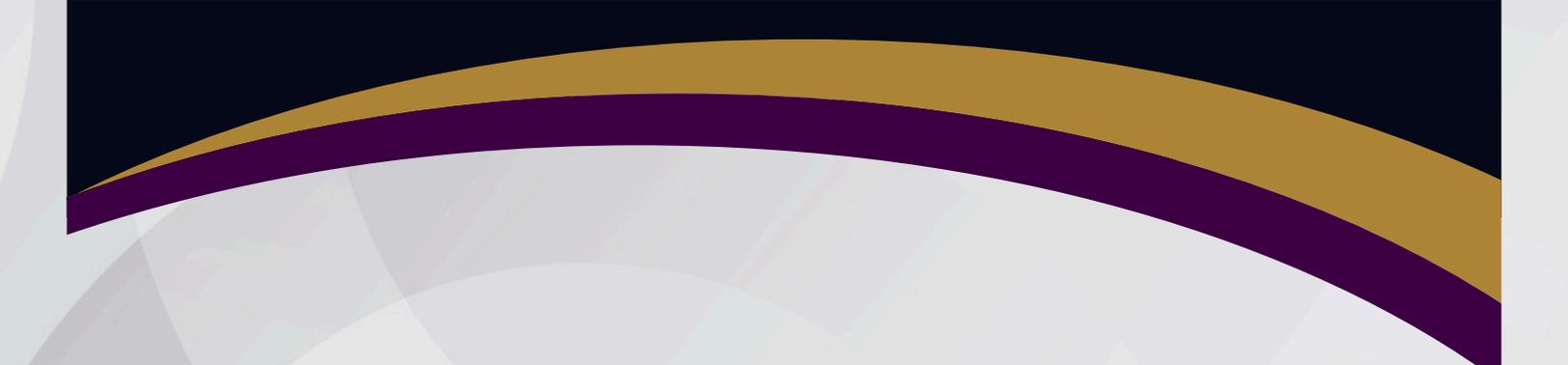
In Florida's summer heat, for example, a transmission crew may face the risk of heat stroke while working atop a pole. The correct action is to stop work, get the individual to shade, provide hydration, and seek medical attention if symptoms persist. Lightning within a 10-mile radius requires immediate suspension of all elevated or exposed work until conditions are clear.

For office workers, weather risks are less immediate but still important. Hurricanes, heavy rain, or flooding can create unsafe travel conditions, while poor indoor climate control can contribute to dehydration or illness. Monitoring forecasts, wearing or carrying appropriate gear, and pausing or rescheduling work when conditions become unsafe applies to every ECF role.

15.6 - Communication and Coordination

Clear communication is essential to safety in all ECF environments. In the field, it ensures that workers coordinate their actions around high-voltage hazards, moving equipment, and traffic control. In the office, it prevents misunderstandings that could compromise data security, lead to equipment misuse, or create scheduling conflicts that disrupt operations.

In a substation crane lift, the signal person must be in direct line of sight with the operator and use pre-agreed hand signals to prevent the load from swinging into live equipment. On a pole crew, a ground worker must alert the climber before sending tools up to avoid dropped-object hazards. In the office, a project lead might coordinate multiple staff working on sensitive client files to avoid overwriting or losing critical data.

All ECF employees — field and office alike — have both the authority and responsibility to speak up if something appears unsafe or unclear. Asking for clarification or halting a task for a safety check is not a disruption; it's a core element of our safety culture.
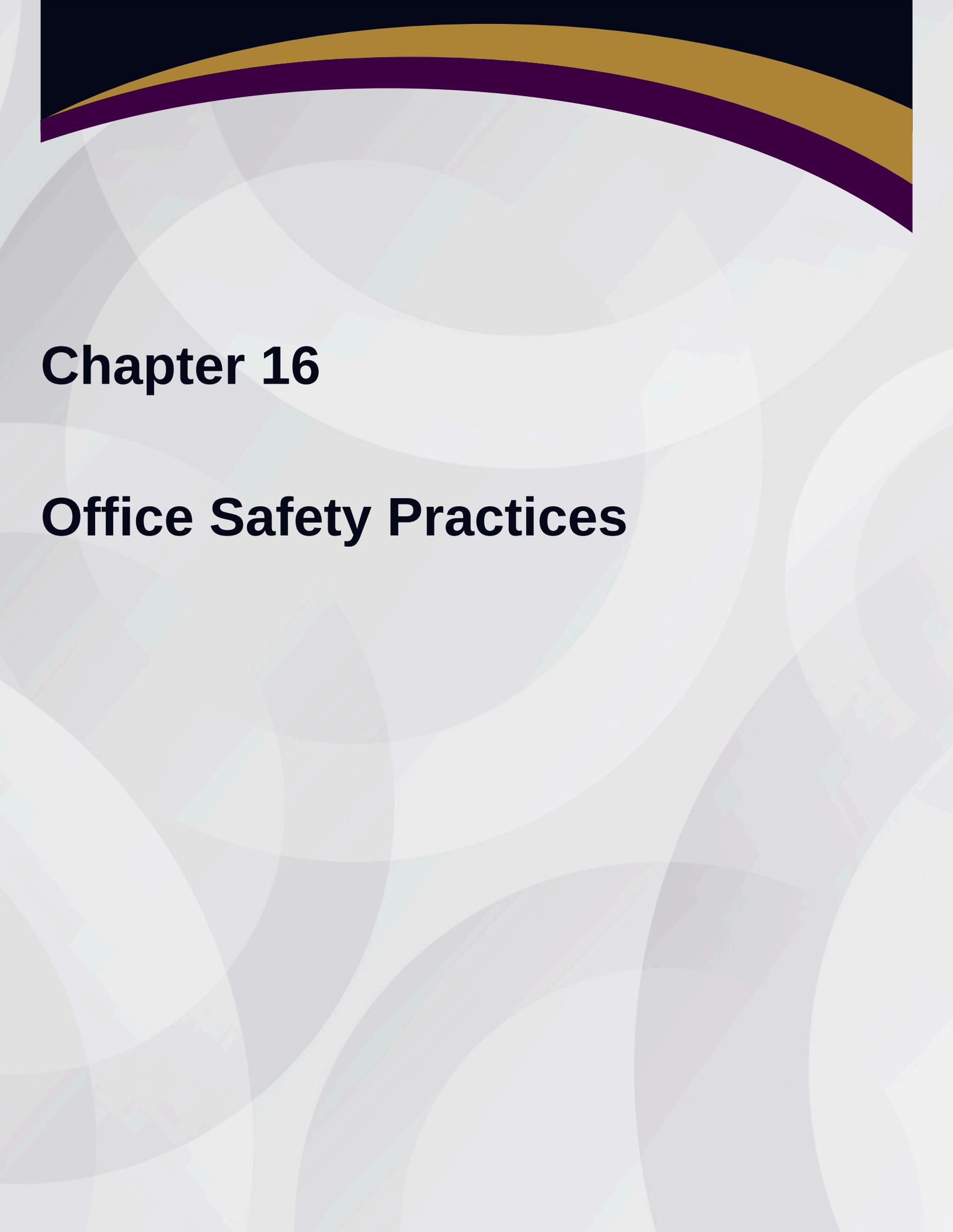
Chapter 16

Office Safety Practices

16.1 - Purpose of Office Safety Practices

Office environments may seem low-risk compared to field operations, but accidents and injuries still occur when hazards are overlooked. At ECF Consultants, office safety practices are designed to prevent common workplace injuries such as slips, trips, falls, ergonomic strain, and electrical hazards. These procedures protect not only our people but also the continuity of our operations and the security of our facilities.

A safe office is one where every employee actively participates in keeping their work area organized, identifying hazards early, and following safety rules. For example, a box left in a hallway could cause someone to trip, resulting in a sprained ankle and lost workdays. Similarly, overloaded electrical outlets can overheat, increasing the risk of a fire.

By treating office safety with the same seriousness as field safety, we create a consistent culture of protection across all ECF work environments.

16.2 - Preventing Slips, Trips, and Falls

One of the most common office hazards is slipping or tripping over obstacles. To prevent these incidents, walkways must be kept clear of cords, boxes, and clutter. Spills should be cleaned up immediately, and wet floor signs must be posted if surfaces are still damp.

For example, if a coffee spill occurs in the break room, it's not enough to step over it and keep walking—notify coworkers, clean it up promptly, and mark the area if it remains slippery. In winter months, entry mats should be secured to prevent edges from curling, which can catch a shoe and cause a fall.

Even short-term hazards, like a temporary cable across a walkway for a presentation, must be addressed with cable covers or rerouting to avoid creating tripping risks.

16.3 - Ergonomics and Workstation Setup

Ergonomic safety in the office is about preventing repetitive strain injuries and maintaining comfort during extended work periods. Employees should adjust their workstation to promote a neutral body posture — monitor at eye level, chair adjusted for proper lumbar support, and wrists in a neutral position when typing.

A common hazard is leaning forward for long periods to view a low-set monitor, which can lead to chronic neck and shoulder pain. A simple adjustment to monitor height and use of an ergonomic chair can prevent these issues. Similarly, keyboard trays and adjustable chairs can help keep joints aligned and reduce strain.

All employees should take short movement breaks each hour to stretch, walk, or shift position. These "micro-breaks" not only improve physical well-being but can also enhance concentration and reduce fatigue — a safety benefit that applies to both office and field planning roles.

16.4 - Electrical and Fire Safety

Electrical safety in the office involves using equipment responsibly to prevent overheating, short circuits, or fire hazards. Outlets should not be overloaded, cords must remain free of frays or exposed wiring, and only approved power strips should be used. Portable space heaters, if permitted, must have tip-over protection and automatic shut-off functions.

For instance, plugging a high-wattage space heater into the same outlet as a large printer can overload the circuit, creating a fire hazard. Employees must also know the location of fire extinguishers, smoke alarms, and evacuation routes.

Routine safety checks ensure that extinguishers are charged, smoke detectors function properly, and exit paths remain unobstructed. This preparedness mirrors field requirements, where knowing the location of emergency shutoffs and escape paths is standard procedure.

16.5 - Safe Material Handling in the Office

Improper lifting and carrying techniques can cause strains or back injuries, even in low-hazard environments like offices. When lifting boxes of files, printer paper, or equipment, employees should bend at the knees, keep the load close to their body, and avoid twisting motions.

For example, an employee bending from the waist to pick up a heavy box risks injuring their lower back. Using a cart or asking for help can reduce these risks. Heavy or bulky items should be stored between knee and shoulder height whenever possible to minimize awkward lifting.

These same lifting principles are also critical in field work — whether moving equipment in a warehouse or handling components in a control house. Consistency in safe handling techniques reduces injuries across all ECF operations.

16.6 - Workplace Conduct and Hazard Awareness

Maintaining safety in the office isn't only about hazards you can see — it's also about how employees conduct themselves. Unsafe actions like running in hallways, leaning too far back in chairs, or leaving drawers open create unnecessary risks.

Employees should remain alert and report hazards as soon as they are identified. A flickering light in a hallway may seem minor but could lead to reduced visibility and an increased risk of tripping or falling. Reporting it promptly ensures it can be fixed before an incident occurs.

This same proactive hazard recognition is a cornerstone of ECF's field safety culture. Whether in a substation or at a desk, identifying and correcting unsafe conditions is everyone's responsibility.

Chapter 17

Contractor & Visitor Safety

17.1 - Purpose of Contractor & Visitor Safety Protocols

Contractors and visitors may not be familiar with ECF Consultants' safety standards, yet their actions can directly affect the safety of our employees, the public, and the integrity of our projects. Our contractor and visitor safety protocols are designed to ensure that anyone entering our offices, substations, transmission or distribution sites, or client locations understands and follows the same safety expectations as our staff.

In field environments, this means educating them on the hazards specific to energized equipment, high-voltage areas, fall risks, and restricted clearances. In the office, it means ensuring they understand emergency exits, trip hazards, and secure areas. Whether they are a subcontractor installing electrical components in a substation or a visitor attending a design review meeting at our headquarters, the same culture of safety applies.

An unbriefed subcontractor could unknowingly enter an energized work zone, risking electrocution. Similarly, a visitor without proper footwear could trip over uneven surfaces in an active construction area. Our protocols exist to eliminate these preventable hazards before they have the chance to occur.

17.2 - Pre-Entry Requirements

Before entering any ECF-controlled area, all contractors and visitors must check in with a designated site representative or supervisor. This is more than just a formality—it is the first opportunity to identify potential risks and set expectations. The check-in process includes verifying the reason for the visit, ensuring they are authorized to be on-site, reviewing hazard areas, and issuing any required PPE.

In a substation yard, this might mean confirming that a contractor knows where the energized equipment is located and understands minimum approach distances. On a transmission pole site, it may involve designating a safe area to stand while work is being performed overhead. In the office, a vendor repairing lighting fixtures would be informed about ladder placement and ensuring the work area remains clear of foot traffic.

No contractor or visitor is permitted to begin work or move freely on-site until they have been briefed and approved. This process ensures that every person entering ECF workspaces is accounted for, aware of hazards, and prepared to follow our safety rules.

17.3 - Orientation and Safety Briefings

Every field contractor receives a site-specific safety orientation before work begins. This briefing addresses the unique risks of that location—whether it's energized transmission lines, confined spaces, heavy equipment operation, or hazardous weather patterns. It also covers emergency procedures, required PPE, safe access points, and the process for reporting hazards or incidents.

Visitors typically receive a shorter briefing that focuses on safety essentials, such as evacuation routes, prohibited areas, and the need to remain with an escort. Even if their visit is short, they still need to understand how to avoid unsafe areas and respond if an emergency occurs.

17.4 - PPE and Conduct Requirements

All contractors and visitors must comply with PPE requirements for the area they are entering—this can include **hard hats, safety glasses, flame-resistant clothing, high-visibility vests, steel-toed boots, and hearing protection.** In substations or pole work environments, PPE is essential for protecting against electrical hazards, falling objects, and environmental dangers.

PPE provided by ECF must be worn correctly at all times. This applies equally to visitors—if they are walking through an energized work area, they must wear the same protective gear as the employees. Failure to comply will result in work stoppage and may result in removal from the site.

Conduct requirements are equally important. Contractors and visitors must follow site rules, avoid unsafe shortcuts, and immediately report hazards. Examples of unsafe conduct include bypassing a barricade to take a "quicker" route through a restricted zone or using cell phones in an area where their use is prohibited.

17.5 - Monitoring and Enforcement

ECF supervisors and designated safety representatives actively monitor all contractors and visitors while on-site. This includes observing work habits, verifying PPE use, and ensuring they remain in authorized areas. Any unsafe behavior must be addressed immediately—corrective action may range from verbal reminders to removal from the site.

If violations persist, they can lead to termination of contracts or denial of future site access. For instance, if a contractor continues to ignore grounding procedures while working near energized equipment, they will be removed from the project for endangering themselves and others.

In the office, repeated failure to follow electrical safety rules—such as overloading outlets during equipment setup—will result in similar enforcement.

Consistent enforcement reinforces ECF's message that safety rules are not optional and apply to everyone without exception.

17.6 - Incident Response for Contractors & Visitors

If a contractor or visitor is injured or involved in an incident, the same reporting and emergency protocols used for ECF employees apply. The site supervisor or Safety Officer will coordinate first aid, contact emergency responders if needed, and ensure that the incident is documented in detail.

This includes securing the hazard area, notifying relevant parties (such as the contractor's employer), and initiating an investigation to determine the cause and corrective actions. If an injury occurs in a substation, work in that area may be halted until the hazard is addressed. In an office setting, a trip hazard that causes a visitor fall must be removed immediately to prevent recurrence.

By applying our safety protocols equally to employees, contractors, and visitors, we maintain consistent standards that protect everyone in every ECF environment.

Chapter 18

Substance Abuse & Fitness for Duty

18.1 - Purpose & Scope

The purpose of this policy is to protect the safety, health, and performance of all ECF Consultants employees by ensuring that every individual reporting for work is physically, mentally, and emotionally fit for duty. "**Fit for duty**" means **the ability to perform assigned tasks competently and safely without impairment from drugs, alcohol, or other substances that could affect judgment, coordination, or alertness.** Impairment can be as obvious as visible intoxication or as subtle as slowed reaction times caused by certain prescription medications.

This requirement applies to all employees, contractors, and temporary staff in every role—whether working in the office, in a substation yard, or on a distribution pole. For example, an engineer in our West Palm Beach office may not be physically climbing structures, but impaired judgment while drafting schematics could lead to costly and dangerous design errors. In contrast, a field lineworker impaired by medication that causes drowsiness could improperly secure climbing equipment or fail to notice a clearance hazard, placing themselves and others in jeopardy.

The scope of this policy also extends to business travel, use of company vehicles, and participation in off-site company events. Even in situations where alcohol is present, such as a networking mixer or client dinner, employees are expected to maintain full professional capacity. At no time should a worker's condition create a safety risk or harm ECF's reputation for professionalism and safety.

18.2 - Prohibited Substances & Behaviors

To maintain a safe workplace, ECF strictly prohibits the following:

- The use, possession, sale, or distribution of illegal drugs on company property, in company vehicles, or while performing company work.
- Reporting for duty or remaining on duty under the influence of alcohol, illegal drugs, or prescription/over-the-counter medications used improperly.
- Consumption of alcohol during work hours, including breaks and lunch, unless specifically authorized during a sanctioned company event.

For clarity, certain substances—such as marijuana—may be legal in some jurisdictions but remain prohibited in the workplace if their use results in impairment during work hours. Likewise, the misuse of legal prescription drugs (e.g., taking more than the prescribed dose of painkillers) can be just as dangerous as illegal substances, especially when operating vehicles, climbing poles, or working near energized equipment.

Behavioral indicators of impairment, such as aggressive outbursts, slurred speech, or poor motor coordination, are also prohibited, regardless of the cause. Supervisors and safety leads are trained to identify these warning signs and intervene before they escalate into an incident. Whether it's an office employee unable to focus during a client presentation or a substation crew member showing delayed responses to safety commands, these behaviors present unacceptable risk.

18.3 - Recognizing Signs of Impairment

In field environments, these signs can be more obvious—such as a crew member repeatedly fumbling with a safety harness they usually handle with ease, or a ground worker missing standard hand signals. In office settings, impairment might present more subtly, like repeated mistakes in project documentation, forgetting meeting details, or nodding off at a desk.

Recognizing impairment early is a critical prevention step. Signs may include:

- Slurred or incoherent speech
- Difficulty maintaining balance or walking steadily
- Bloodshot or glassy eyes
- Sudden mood swings, irritability, or inappropriate behavior
- Unusual drowsiness or slowed reaction times
- Odor of alcohol or drugs

Employees who notice these indicators in themselves or others should promptly inform a supervisor, safety representative, or HR. Timely reporting can prevent errors, equipment damage, or severe injuries—especially in high-risk electrical work where delayed reactions can be fatal.

18.4 - Testing & Enforcement

ECF maintains the right to conduct drug and alcohol testing to protect our workforce. Testing may occur in the following situations:

- **Pre-employment:** Screening candidates before they begin work.

- **Post-incident:** Following any workplace accident, near miss, vehicle collision, or safety violation.

- **Reasonable suspicion:** When a supervisor observes specific behaviors consistent with impairment.

- **Random testing**: As required by certain contracts, clients, or regulatory standards.

For example, if a bucket truck operator is involved in a collision while traveling between pole sites, post-incident testing may be required to confirm whether impairment played a role. A refusal to participate in testing will be treated as a policy violation and can result in disciplinary action up to and including termination.

Testing is conducted in compliance with all applicable laws and handled with discretion to maintain confidentiality. The goal is not punitive, but protective—ensuring no impaired worker is in a position to harm themselves, others, or company assets.

18.5 - Support & Rehabilitation Resources

ECF understands that substance abuse can be a medical issue requiring treatment. Through our **Employee Assistance Program** (**EAP**), employees have access to confidential counseling, rehabilitation referrals, and recovery support services. The program encourages workers to seek help before impairment impacts their safety or performance.

For example, an employee recognizing a growing dependency on alcohol can confidentially approach HR and begin an EAP-supported treatment plan before an incident occurs. This proactive approach can preserve their career while ensuring they are fit to return to duty.

Employees who complete an approved rehabilitation program and are medically cleared may be reinstated if business needs allow. This policy balances compassion with responsibility—prioritizing the well-being of our employees while upholding strict safety standards critical in both office and high-voltage work environments.

Chapter 19

Workplace Violence & Harassment Prevention

19.1 - Purpose & Commitment

ECF Consultants is committed to **providing a workplace that is safe, respectful, and free from violence, threats, intimidation, and harassment.** This includes both physical and psychological safety. Workplace violence can take many forms—from overt acts of physical harm to subtle but persistent verbal abuse—and none of these behaviors have a place in our organization.

This commitment applies equally across field and office environments. For example, a substation crew should never have to fear intimidation from contractors or members of the public while performing high-risk electrical work, just as office staff should never be subject to bullying or demeaning treatment during meetings. In either setting, unsafe interpersonal behavior can distract from the task at hand, increase error rates, and create unsafe conditions—whether that's someone losing focus while climbing a distribution pole or making mistakes in technical schematics.

This policy is grounded in ECF's values of professionalism, teamwork, and mutual respect. Our goal is to ensure that every interaction—whether in person, over the phone, or through email—reflects those values.

19.2 - Definitions

In the field, violence could take the form of aggressive behavior toward a crew at a remote site, such as threatening a lineworker during storm restoration. In the office, harassment might be repeated inappropriate comments toward a coworker under the guise of "just joking." Even emails containing veiled threats of retaliation for speaking up can constitute workplace violence under this policy.

To protect employees, clients, and visitors, ECF defines prohibited behaviors clearly:

- **Workplace Violence:** Physical acts intended to harm, such as hitting, shoving, pushing, or damaging property.
- **Threats:** Verbal, written, or non-verbal actions that imply harm to people or property.
- **Harassment:** Unwelcome conduct based on protected characteristics (race, gender, religion, age, disability, etc.).
- **Bullying:** Persistent mistreatment, humiliation, intimidation, or deliberate undermining of another's work.

By setting these definitions, ECF ensures employees can identify, report, and stop harmful behaviors before they escalate.

19.3 - Prevention Measures

Prevention starts with preparation. ECF uses a combination of physical, procedural, and cultural safeguards to deter and address workplace violence:

- **Access Control**: Badge systems, visitor sign-ins, and escort procedures at substations and offices.

- **Training**: Conflict de-escalation techniques, situational awareness, and recognizing early warning signs.

- **Team Culture**: Encouraging open communication to address disagreements early before they escalate.

For example, at a substation site, security fencing and restricted access keep unauthorized individuals from confronting crews during high-risk work. In the office, managers may use conflict-resolution techniques to defuse heated discussions during project deadlines. These proactive measures work best when all employees remain vigilant and take personal responsibility for maintaining a respectful environment.

19.4 - Reporting & Response Procedures

Any employee who witnesses or experiences threats, harassment, or violence should report it immediately. Reports can be made to a direct supervisor, HR, or a designated safety representative—multiple channels exist so employees can choose the most comfortable option.

Reports are always taken seriously and investigated promptly, with confidentiality maintained whenever possible. Employees who report in good faith will not face retaliation. For example, if an office employee overhears a team member make a comment suggesting they intend to "teach someone a lesson" physically, it must be reported—even if the speaker later claims they were joking.

Once an investigation is complete, corrective actions can range from mediation to termination, depending on severity. In client-facing situations, the safety of ECF employees always takes priority over project continuity.

19.5 - Active Threat Preparedness

While rare, active threat situations require immediate and decisive action. ECF follows the Run, Hide, Fight protocol:

- **Run:** Evacuate if a safe route exists.

- **Hide:** If evacuation is impossible, lock and barricade yourself in a secure location, silence devices, and remain still.

- **Fight:** As a last resort, use available objects to incapacitate the threat.

In a substation environment, "**Run**" may mean moving to a designated muster point outside the yard perimeter. In the office, "**Hide**" could involve securing a conference room with furniture against the door until help arrives. Training drills—both in-field and in-office—reinforce these skills so that employees respond automatically under stress.

19.6 - Maintaining a Respectful Workplace

The strongest defense against violence is a culture where respect is the default. Leaders at all levels must model **professional behavior**, address issues promptly, and reward positive teamwork.

For instance, a field supervisor noticing rising tension between crew members should step in to facilitate a resolution before that tension affects work at height or near energized conductors. In the office, managers should address dismissive or sarcastic remarks in meetings to prevent a hostile environment from developing. When respect is consistently demonstrated, it becomes the norm—reducing the likelihood of conflict and reinforcing ECF's reputation as a safe, professional workplace.

Chapter 20

Driving & Fleet Safety

20.1 - Purpose & Scope

Driving for work—whether operating a <u>company-owned vehicle, a rental, or a personal vehicle for company business</u>—comes with serious responsibility. Motor vehicle incidents remain one of the leading causes of work-related injuries and fatalities nationwide, and in our industry, the risks are even higher due to the environments and conditions in which we operate.

This policy ensures that all ECF Consultants employees operate vehicles in a safe, lawful, and professional manner to protect themselves, their passengers, the public, and our company's reputation. These rules apply whether you are **transporting tools to a substation yard, driving to inspect transmission poles, delivering equipment to a client site, or traveling from the office to a project meeting.**

An office employee driving to a design review meeting is held to the same safety standards as a lineworker hauling materials to a remote job site. Our consistent safety expectations ensure that no matter where you drive, **you represent ECF with professionalism and care.**

20.2 - Driver Qualifications

Only employees who possess a valid driver's license appropriate for the vehicle type—and who meet ECF's eligibility standards—are permitted to drive for work. Qualifications include:

- Maintaining a safe driving record, free from serious violations (DUI/DWI, reckless driving) within the past three years.
- Completing required defensive driving or fleet safety training.
- Passing any client-specific driver background checks when required.

For example, if a substation delivery requires towing a trailer, only employees trained in trailer safety and licensed for that class of vehicle will be authorized. Assigning an unqualified driver to that task could result in preventable accidents, costly damages, and safety violations. Supervisors are responsible for **verifying driver eligibility before assigning vehicle use.**

20.3 - Pre-Trip Inspections

Before starting a vehicle, drivers are expected to conduct a pre-trip inspection that goes beyond a quick glance. This means actively checking tire pressure, brake function, lights, mirrors, and windshield visibility. Cargo or tools should be secured to prevent shifting during travel, which can be particularly hazardous when transporting heavy equipment to a remote substation.

Consider a crew leader heading to a transmission project in wet conditions— spotting a cracked wiper blade before departure could prevent dangerously reduced visibility on a busy highway. Office employees are not exempt from this responsibility; a poorly maintained rental vehicle could compromise safety even on short trips.

- Checking **tire pressure, tread, and lug nuts.**
- Ensuring **brakes, lights, and turn signals are fully operational.**
- Confirming **windshield wipers and washer fluid are in working order.**
- Securing **all tools, materials, and load straps.**
- Checking **fuel, oil, coolant, and hydraulic fluid levels.**
- Looking for **fluid leaks or visible body damage.**

Field Example: A bucket truck operator notices a hydraulic fluid drip during inspection before a pole replacement job. By reporting it immediately, repairs can be made before the equipment fails mid-operation—preventing a dangerous work stoppage.

20.4 - Safe Driving Practices

Road safety begins with consistent adherence to traffic laws, but it also requires adjusting to conditions in real time. Weather, road surfaces, and visibility can change quickly, especially in Florida's climate where sudden storms are common. Drivers must maintain a safe following distance, avoid distractions, and always wear seat belts.

On a rural service road near a substation, slowing down to navigate uneven gravel can prevent a loss of control. Likewise, a project manager driving to a meeting during rush-hour traffic should remain patient rather than weaving between lanes to save a few minutes. Aggressive or distracted driving undermines both personal safety and the company's reputation.

20.5 - Fatigue & Impairment Prevention

Driving while overly tired, ill, or under the influence of impairing substances is unacceptable. Fatigue slows reaction times and can be just as dangerous as alcohol impairment. Employees must be rested and alert before taking the wheel, and they should communicate with supervisors if conditions prevent them from driving safely.

This means:

- Taking adequate rest breaks on long trips.
- Avoiding driving after extended shifts or late-night work.
- Never operating a vehicle after consuming alcohol, illegal drugs, or any medication that impairs alertness, reaction time, or coordination.

A substation maintenance crew returning from a long overnight outage should plan rest breaks or arrange relief drivers. Similarly, if an office employee is feeling lightheaded from prescribed medication, alternative travel arrangements must be made. Safety takes precedence over deadlines when the road is involved.

20.6 - Accident & Incident Reporting

All incidents, no matter how minor, must be reported immediately. This includes collisions, property damage, and near misses. Rapid reporting ensures proper documentation, insurance handling, and review of preventive measures.

Picture a driver reversing a bucket truck and grazing a fence at a client site—the damage may appear minimal, but reporting it ensures transparency and maintains trust with the client. The same applies to an office employee involved in a parking lot scrape while on company business.

20.7 - Vehicle Maintenance & Care

Drivers share responsibility for keeping vehicles clean, fueled, and mechanically sound. Reporting mechanical issues promptly helps prevent breakdowns and dangerous situations. A field technician noticing unusual brake resistance during a delivery should not delay repairs. Rental vehicles must be returned in good condition, ready for the next use.

20.8 - Professional Representation

Every action taken on the road reflects on ECF's brand. Courteous driving—yielding appropriately, using turn signals, and avoiding confrontations—signals professionalism. A positive interaction, such as allowing another driver to merge in heavy traffic, can reinforce the impression of ECF as a company that values respect and safety in every context.

Chapter 21

Special Operations & High-Risk Activities

21.1 - Purpose & Scope

Some tasks at ECF Consultants come with hazards that go beyond everyday work. Whether it's climbing a transmission pole, conducting energized testing inside a substation yard, or performing hot work in a client's facility, these activities require strict protocols. The risks include electrical shock, fire, toxic atmospheres, falls from height, and heavy equipment incidents.

This section exists to make sure all elevated-risk work is carried out with maximum safety in mind, meeting OSHA regulations, client-specific rules, and ECF's internal standards. The intention is to protect employees, contractors, and the public while still meeting project deadlines and quality expectations. Picture a team cutting steel supports in an area lined with combustible insulation—before a single spark is produced, a fire watch is stationed, heat shields are in place, and all ignition hazards have been addressed. Or think of a utility crew preparing for confined space entry in a manhole—without proper gas monitoring and ventilation, the atmosphere could be deadly.

21.2 - Permit-to-Work System

A high-risk task doesn't start until an official **Permit-to-Work (PTW)** is issued by an authorized individual such as a safety officer, supervisor, or client-appointed representative. This process confirms several conditions: hazards are identified and mitigated, PPE is ready and serviceable, safe work methods are in place, and only qualified personnel are assigned.

Imagine a crew preparing to weld a rooftop support structure. The PTW will ensure the roof area has been cleared of flammable debris, extinguishers are positioned within reach, and a fire watch is posted for the entire operation. The permit is kept on-site for inspection and must be formally closed after completion, ensuring the area is fully restored to a safe condition before it's released for normal use.

21.3 - Hazard Controls

Special operations rely on a layered defense—no single measure is enough. Engineering controls might mean installing guardrails at a substation platform edge or setting up fume extraction for indoor welding. **Administrative controls** could include scheduling crane lifts during low-traffic hours or assigning a trained spotter to guide vehicle movements. **PPE** is the last line of defense, from flame-resistant coveralls to insulated gloves for energized work.

During a tower climb over 60 feet, a fall arrest system anchored to an approved point is mandatory, and a written rescue plan must be in place before work starts. In office-based environments where contractors are performing hot work, portable fire barriers and restricted access zones protect staff who aren't directly involved. The goal is always to reduce risk through multiple, overlapping safeguards.

21.4 - Competency & Authorization

Only trained, proven, and authorized workers may take on these specialized tasks. Competency is confirmed through certifications, skills testing, and practical demonstrations—not just experience alone.

A qualified electrician performing energized testing must not only understand lockout/tagout procedures but also be able to identify arc flash boundaries without relying on signage. Allowing anyone less than fully qualified to carry out such work increases the risk of serious injury. Supervisors are responsible for verifying qualifications and ensuring refresher training is completed on schedule so no one's skills degrade over time.

21.5 - Communication & Coordination

High-risk activities often bring multiple teams into close proximity. Without precise coordination, one crew's work can create hazards for another. Morning safety briefings, coordination meetings, and physical indicators such as cones, signs, or tape help everyone stay aware of what's happening nearby.

Consider a case where a welding team is operating adjacent to a crew performing confined space entry. Without proper dialogue, welding fumes or sparks could drift into the confined area, creating a dangerous—and preventable—scenario. The same applies in office facilities: if ceiling maintenance is underway in a hallway, signage and rerouting prevent collisions between workers and staff moving through the space.

21.6 - Post-Work Procedures

When high-risk work wraps up, the site must be confirmed safe before it's reopened. This includes removing all temporary equipment, restoring ventilation and utility systems, and ensuring no hidden hazards remain.

Take the example of hot work in a mechanical room—once the welding is complete, the fire watch continues monitoring for any sign of ignition well past the final weld. In electrical projects, re-energizing circuits only occurs after testing and lockout/tagout clearance. For fall-protection setups, anchors and lifelines are removed so they don't become tripping hazards. Only after these steps is the site deemed ready for normal operations.

21.7 - Continuous Improvement in High-Risk Work

Safety in special operations isn't static—it evolves with each project. Workers are encouraged to share improvements learned in the field. These lessons are reviewed, documented, and integrated into standard operating procedures where applicable.

For instance, if a crew finds a modified rigging method that significantly improves load stability during a pole replacement, that technique can be adopted company-wide. By capturing both successes and near misses, ECF ensures each job benefits from the experience of the last, steadily raising the standard of safety performance.

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