CONTRACTOR'S SAFETY INFORMATION HANDBOOK

(FOR ALL CONTRACTORS OF MIDAMERICAN ENERGY)

MIDAMERICAN ENERGY COMPANY
Obsessively, Relentlessly At Your Service™

Report all outages, incidents, property damage and personnel injuries and spills to your MidAmerican Energy contact:

Your MidAmerican Contact: _____

Phone Number: _____

Safety Helpline: **866.681.7233**
Gas Emergency Line: **800.595.5325**
Transmission Operations **West/Northwest – 515.252.6467** (Sioux City/Council Bluffs/Fort Dodge/Carroll) **Central/East – 515.252.6465** (Des Moines/Quad Cities/Waterloo)
Distribution Operations **Distribution Control – 515.252.6422** **Distribution Switching – 515.252.6418**

From President and CEO Kelcey Brown

At MidAmerican Energy, excellence in safety begins with a shared goal to achieve Target Zero – zero incidents and zero accidents. Our ability to work safely is critical to the success of our business. But, more importantly, reaching Target Zero is the only way to ensure every one of us returns home safely at the end of the day. It is that simple.

Reaching Target Zero will require each of us to do our part. We are personally responsible for:

- Following all appropriate and required safety protocols – every task, every time.
- Using the human performance tools and techniques that help us forecast and prevent errors.
- Identify improvements to safety processes, procedures, and reporting tasks to MidAmerican management.
- Respecting the risks involved in our work and wearing the PPE designed to protect us from harm – no matter what.

If you ever have reason to question your safety or if you are unsure how to manage a potential hazard, **stop**. Confirm the appropriate next steps with a team member or supervisor and ensure it is safe before moving forward.

This is who we are. It is how we operate. It is reflected in our vision to be the best, our core principles and our culture of personal responsibility. It is what gets us home safe. It is non-negotiable and fundamental to working on behalf of this company.

We can achieve Target Zero. Thank you for doing your part to make this happen.

Sincerely,



Kelcey Brown

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CONTRACTOR'S SAFETY INFORMATION HANDBOOK

I. PREFACE

It is MIDAMERICAN ENERGY ("MidAmerican") and its affiliated and subsidiary companies' desire to avoid any event that results in a personal injury, service disruption, or facility damage at MidAmerican facilities. This Handbook is applicable to work performed at MidAmerican. To prevent personal injuries, service disruptions, or facility damage, MidAmerican has developed this safety information to coordinate safety and health administration and information for its contractors. It is our expectation that contractors follow all applicable codes and regulations including U.S. Department of Transportation ("DOT"), U.S. Pipeline and Hazardous Materials Safety Administration (" PHMSA"), and Occupational Safety and Health Administration ("OSHA") requirements and consensus standards.

Since you will be having your employees work at our facilities, we expect you, the contractor, to take all steps necessary to prevent occurrence of these damaging events. Unless otherwise specified by MidAmerican programs, you are responsible for initiating, maintaining, and supervising all safety measures in connection with performance of the work. We expect you to fully inform your employees, agents, and subcontractors of safe work practices which are required to be followed. You, your agents, and subcontractors will, at all times, undertake and perform the work subject to the provisions of all applicable federal, state, and local laws, rules, and regulations.

This Handbook shall be used for informational and reference purposes only. It is not intended to be a full and complete statement of the law or the contractor's duties and responsibilities when engaging in the work. This Handbook is subject to occasional revision and change. Check with your local MidAmerican contract administrator for the latest revision of this Handbook. Specific reference shall be made to this Handbook for general knowledge and not as a substitute for professional advice or your own directives and procedures in specific situations.

We expect that you will share this information with your employees and utilize it in conjunction with your safety rules and procedures.

IF YOU FEEL THAT ANY GUIDELINE WILL PUT YOUR EMPLOYEES OR OTHERS AT RISK WE ASK THAT YOU NOTIFY US OF YOUR CONCERN AND OF THE IMPROVED PRACTICE YOU WILL USE IMMEDIATELY.

II. GENERAL INFORMATION

A Job Safety Analysis ("JSA") is a systematic process to identify hazards and establish control measures for a specific job to reduce the risk of injury. OSHA uses JSAs to help ensure workplace safety and compliance, especially for jobs requiring Personal Protective Equipment (PPE). The basic steps involve choosing a job, breaking it down into key tasks, identifying potential hazards in each task, and developing preventative measures for each hazard. Contractors may use their own familiar form for their JSAs, however, copies of the MidAmerican Energy blank form can be provided if needed. A copy of the contractor's JSA may be requested at any time by the MidAmerican Energy contact or safety personnel.

The contractor and contractor's employees performing maintenance or repair, turnaround, major renovation, or specialty work on any piece of equipment or article within the facility boundaries are expected to follow contractor established safety rules, applicable MidAmerican site-specific programs and policies, federal, state, and local regulatory standards. Any deficiencies found may result in work stoppage or termination of contract.

A. All construction performed must comply with applicable National Electrical Safety Code (NESC): NESC provides requirements for the separation between gas lines and electrical facilities, typically a minimum of 12 inches for direct-buried lines, and emphasizes that gas lines are considered a "potential hazard" that must be avoided to protect electrical equipment and personnel; Federal Energy Regulatory Commission (FERC), Department of Transportation (DOT), Department of Energy (DOE), Environmental Protection Agency (EPA). Other codes, such as the National Fuel Gas Code (NFPA 54) address specific gas line safety, including bonding requirements. All construction performed must comply with applicable MidAmerican construction standards provided. When construction standards are not provided, conformance with industry standards are required. MidAmerican reserves the right to inspect completed work. Examples include but are not limited to:
    a. NESC Guying requirements (including grounding/insulating and markers)
    b. NESC Clearances as mentioned above.
    c. Required signage and above-ground markers
    d. Climbing aides which could provide un-intended access to gas vault facilities
    e. Right of Way and Transmission encroachment violations

B. The contractor and contractor's employees will confine themselves to their designated worksite. In all circumstances, contractors and contractors' employees shall NOT be on a designated worksite for which they are not

qualified, competent or able to assess and mitigate the risks of hazards to which they may be exposed.

C. The contractor may be required to ensure and demonstrate that the contractor's employees possess the necessary training and qualifications to work in areas that require employees be qualified such as, but not limited to, gas operator qualification ("OQ"), electric substations, electric and gas transmission and distribution systems, electric generation facilities, and gas compression facilities.

D. Contracted employees may be assigned a MidAmerican facility security access card to enter buildings and shall wear their MidAmerican photo ID facility security access cards in a visible manner while at work. When the contracted work is ended, the contracted employee must immediately turn in the MidAmerican photo ID facility security access card to a MidAmerican supervisor. The contractor is also required to notify the MidAmerican contract administrator each time an employee is hired or terminated to ensure access cards are updated.

Security Guidelines for MidAmerican photo ID facility security access cards are as follows:

a. Be responsible for security and safekeeping of the photo ID facility security access card.
b. Report a lost or damaged card immediately to the assigned supervisor at MidAmerican, who will immediately report it to MidAmerican security personnel.
c. Do not write or attach any information onto the card that identifies it with a specific MidAmerican location.
d. Do not allow access to a facility to any unknown person.
e. It is unlikely the gas contractor will be working inside or around a MidAmerican substation. However, it is required of all persons to "call-in" and "call out" to the MidAmerican, Control Center-Central Dispatch, when entering and leaving a substation.

Contracted employees must obtain the permission of a MidAmerican supervisor to bring visitors into a MidAmerican facility. All visitors are required to stop at the building's front desk to check in and provide identification. A visitor must do the following:

- Check in and provide photo identification.
- Receive and wear (in a visible location) a visitor name badge.
- Wait for the employee he/she is visiting to come to the lobby to escort him/her.
- Check out and turn in the visitor badge when leaving the building.

A contracted employee who is not known to MidAmerican personnel must present his/her company identification card upon request.

E. If requested, the contractor must provide copies of all safety programs (Lockout/Tagout, Hazard Communication, Confined Space, etc.), copies of the contractor's current OSHA Form 300 Log of Work-Related Injuries and Illnesses and logs for the previous five years to the MidAmerican contract administrator for review before any work begins.

F. The contractor will not start work until a purchase order and/or contract has been executed with MidAmerican. The contractor shall comply with, and will be the primary enforcer of, all safety and health practices required by OSHA and other regulatory agencies. Every contractor will ensure a place of employment which is free from recognized hazards that will cause, or are likely to cause, death or serious physical harm.

G. MidAmerican may periodically audit jobs and expect the contractor to enforce compliance with safe work practices. If a contractor's employee or others are in imminent danger, or to be causing imminent danger to others, MidAmerican personnel may notify contractor supervision or take immediate action. The contractor's supervision will be notified to ensure proper corrective action is taken.

H. If MidAmerican notifies the contractor of any non-compliance with Contract Documents, the contractor must make all reasonable efforts to correct the problem. If the problem is not corrected promptly, MidAmerican may stop all or any part of the work until the contractor has achieved compliance.

I. Non-compliance with applicable laws, rules or regulations shall be considered cause for MidAmerican's termination of the contract. The contractor's safety record will be considered in the evaluation of the contractor's performance.

J. The contractor is responsible for providing copies of the contractor's rules to contractor employees and effectively communicating the contents of this Handbook. The contractor shall ensure that all contracted employees are trained on the contractor's established safety programs and rules. Where the contractor's employees are required by site-specific policy to follow MidAmerican programs, the contractor shall ensure their employees are properly trained on those programs by MidAmerican.

K. The contractor shall designate one person to be responsible for compliance with the contractor's safety program and communications relating to the provisions of this Handbook.

L. The contractor shall ensure that all employees, agents, and subcontractors are properly informed of and comply with the contractor's safety program, and MidAmerican work, project or location specific programs and policies.

M. The contractor is responsible for providing an English-speaking contract employee to escort and communicate the contractor's safety rules, MidAmerican safety requirements, danger, caution, and safety instruction signage, or other instructions or requirements to non-English speaking contractor employees.

N. The contractor shall maintain an OSHA Form 300 – Log of Work-Related Injuries and Illnesses while performing work for MidAmerican. At the end of each job, a copy of the contractor's OSHA Form 300 Log may be requested to be submitted to the MidAmerican contract administrator or local safety personnel.

O. The contractor shall report all work-related incidents that result in personal injury, illness, death, facility damage, first aid, near-miss events, fire, motor vehicle accidents, security breaches, or regulatory interventions or inspections.

Injury and Illness Reporting:

1) Contractors shall immediately notify the MidAmerican contract administrator of any injury, illness, and any loss of or damage to MidAmerican property, including injury and illness to, or damage by, all subcontractors and material suppliers under control or direction of the contractor.
2) Contractors shall provide the MidAmerican contract administrator with a copy of the completed Employer's First Report of Injury or Illness (or such other similar report required by federal, state, county and municipal or local safety laws) for each job-related injury or illness to an employee. These reports must be provided as soon as possible after the occurrence of an incident.

P. The contractor shall advise MidAmerican's contract administrator or safety personnel of unsafe or hazardous conditions.

Q. The contractor must remove all waste and scrap material from the work area every day. Housekeeping during any work activity must be a priority of the contractor; untidy and unkempt areas may result in work stoppage.

R. Temporary wiring and hoses, as appropriate, shall be installed as such, to not to present a trip or other hazard.

III. MIDAMERICAN CONTRACTOR'S GENERAL SAFETY AND HEALTH INFORMATION

A. PROHIBITED ACTIVITIES

Any violation of the following may result in work stoppage, and the contractor and/or contractor's employees may be removed from the facility and be denied entry to all other MidAmerican facilities.

1. Smoking is not allowed, except in designated areas.

2. The use, being under the influence of, manufacturing, distributing, selling, purchasing, transferring, dispensing, or possessing illegal drugs, drug paraphernalia, or alcohol is prohibited.

3. Horseplay, fighting, or throwing of any objects is strictly forbidden.

4. Gambling or lottery solicitation is prohibited.

5. Access to MidAmerican fire protection system alarms, portable fire extinguishers, or other firefighting equipment shall not be blocked or impeded at any time.

6. Tampering, disabling, or using fire protection and firefighting systems for purposes other than firefighting shall be prohibited.

7. Connections to any type of facility systems such as compressed air, water, process equipment, fire protection, compressed gases, etc. without prior approval of a MidAmerican designated representative shall be prohibited. (Exception: In the case of an emergency, certain systems may be accessed without MidAmerican approval as determined by the contract administrator.)

8. The Contractor commits that prior to the commencement of work for MidAmerican, it will advise all of its employees, in writing, that no person shall be subjected to unsolicited and unwelcome sexual actions of any type, and that any behavior (verbal or physical) that intimidates, discriminates against or harasses others in the workplace is strictly prohibited and will not be tolerated. Prohibited activity includes any form of victimization, harassment, bullying, verbal abuse, or discrimination. Any instances of harassment, abuse or discrimination shall be immediately reported by the contractor to MidAmerican and be formally addressed under the provisions of the signed contractual agreements with MidAmerican. Individuals who engage in such prohibited activity are subject to immediate removal from the property.

B. SAFETY AND HEALTH PROVISIONS

1. Only necessary vehicles will be allowed on MidAmerican property. The MidAmerican contract administrator will review with contractor the number of vehicles contractor requires on MidAmerican property.

2. Contractors, subcontractors, contractor vendor and agent vehicles or equipment:
   a. May be required to have vehicle identification visible at all times where work sites have specific security provisions.
   b. Must have proper insurance coverage.
   c. Will have proper operator's permits or licenses.
   d. Will not exceed posted speed limits.
   e. Will adhere to all posted traffic signage (stop, yield, etc.).
   f. While not in use, it will be turned off and secured.
   g. Will have exhaust systems adequately maintained.
   h. Will display appropriate parking pass (if provided) in the left-hand corner of the front windshield.
   i. Will not enter; pass through or around any barricaded or blocked areas without prior authorization of MidAmerican.
   j. Shall yield right of way to pedestrians.
   k. Shall not block or impede emergency access routes or means of egress.
   l. The number of personnel riding in a vehicle shall be limited to the number suggested by the manufacturer of the vehicle.
   m. Personnel shall only be allowed to ride in the back of a pickup truck or other truck that is specifically designed or designated to do so safely.

3. Some operating areas have potential flammable vapor releases. These areas are identified with signs such as no parking, no open flame, no sparks, and no smoking areas. Instructions on the signs will be strictly observed.

4. All work shall be performed in a manner that will protect all personnel and equipment. Safety equipment will be used properly. Potentially unsafe conditions such as obstructions in walkways, improper electrical connections, unstable piles of materials, loose overhead material, and tripping hazards must be avoided to maintain a safe work zone at all times.

5. Fire and emergency lanes are no parking areas. Aisles to firefighting are to be left unobstructed.

6. The contractor shall familiarize themselves with the MidAmerican location's emergency plan and establish emergency reporting protocols prior to the commencement of any work activities.

7. Lunch and other breaks are at the discretion of the contractor; however, breaks and lunches are permitted only in authorized areas.

8. Spills of any hazardous chemicals must be managed in accordance with applicable laws and regulations and immediately reported to the MidAmerican contract administrator.

9. The contractor shall be responsible for the development of a fire protection program that shall include providing appropriate fire protection equipment, proper location of equipment and their employees' use of firefighting equipment as warranted by the job.

10. Areas where potential overhead hazards or other unsafe conditions exist will be properly delineated and protected with barricades & other appropriate contractor warnings.

11. Appropriate state and local underground facility/utility locate statutes must be followed. Unless otherwise advised, the contractor is responsible for determining all utility locations at its own expense prior to undertaking any work.

12. If, during the work, the contractor observes the existence of asbestos containing materials, presumed asbestos containing materials, polychlorinated biphenyls or any other material or substance, the presence of which could result in exposures above OSHA permissible exposure limits, the contractor shall immediately suspend further work in the area of the materials and notify the MidAmerican contractor administrator or other designated representative of the condition.

13. The contractor is responsible for ensuring that safety data sheets ("SDS") for all hazardous chemicals its employees are working with are available at the worksite. The contractor shall ensure that all contractor employees have been informed of hazardous chemicals. The contractor must provide SDSs and/or material safety data sheets ("MSDS") to the MidAmerican contract administrator before hazardous chemicals are brought onto the worksite. MidAmerican will provide SDS and/or MSDS for all hazardous chemicals used by MidAmerican where contractor employees may be exposed.

14. All hazardous chemicals shall have appropriate warning labels affixed to the containers.

C. SAFETY ORIENTATION

1. To ensure that all applicable policies and practices are recognized and followed, before physical work begins, representatives from the contractor including the site foreman shall meet with MidAmerican representative to discuss job, location, and equipment specific hazards. In some cases, additional information or training may be provided during this orientation. Contractors shall abide by all rules and procedures set forth within this orientation.

2. If a safety violation occurs, work will stop until a safety stand down is completed with all employees on the job site along with their supervisor (and a MidAmerican representative).

D. PERSONAL PROTECTIVE EQUIPMENT ("PPE")

1. All PPE, such as hardhats, safety glasses, fall protection, harnesses, supplied air respirators ("SAR"), air purifying respirators ("APR"), self-contained breathing apparatus ("SCBA"), safety footwear, flame resistant clothing, and hearing protection, shall be of an approved type as indicated by the task to be performed and will be provided by the contractor. Approved shall mean that all such equipment will conform to appropriate and applicable standards.

2. Safety footwear and safety glasses meeting the applicable standards are mandatory when performing work where foot or eye hazards potentially exist.

3. The contractor is responsible for ensuring their employees are trained in the proper use of PPE.

4. Anytime devices or procedures that produce injurious light radiation are used, the contractor shall ensure that each affected employee uses equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation. All filter lenses and plates shall meet the test for transmission of radiant energy prescribed in American National Standards Institute ("ANSI") Z87.1 - 2003, American National Standard Practice for Occupational and Educational Eye and Face Protection.

5. Contractors shall use approved spoggle-type full-seal safety eyewear or other eye and face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acidic or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.
    a. Goggles may be used in lieu of spoggles or in addition to spectacles (safety or otherwise) for corrective lenses.
    b. Full-face respirators can also provide full-seal eye protection. However, full-face respirators cannot be worn over regular spectacles that utilize temple pieces or other devices that interfere with the proper seal of the respirator. Spectacle kits for the respirator will be required if corrective lenses are needed by the wearer.
    c. Where spoggle-type full-seal safety eyewear is determined to present a hazard greater than the protection it is intended to provide, other safety eyewear shall be donned. Each such case requires supervisor approval, shall be assessed independently and documented on the JSA where two or more employees are working together. The hazards and alternatives shall be discussed during the job brief.

E. OCCUPATIONAL NOISE EXPOSURE

1. Appropriate hearing protection is required and shall be worn by all personnel where minimum noise levels exceed the hearing protection level or where hearing protection required is posted.

2. Contractors are responsible for providing hearing protection to their employees and must ensure it is properly fitted and correct for the noise level exposure.

F. MEDICAL SERVICES AND FIRST AID

1. Contractors will make available to their employees first aid and medical emergency items such as bandages, aspirin, ointments, etc. All contractors shall comply with OSHA's Bloodborne Pathogens regulation and other applicable regulations when dealing with work-related exposure to body fluids, including proper disposal of potentially contaminated materials.

G. RESPIRATORY PROTECTION

1. When employees use respirators on a voluntary basis the contractor shall ensure that their employees "have received the OSHA precautionary warning," and understand the manufacturer's use, maintenance, and limitation instructions of the respirator.

2. The contractor shall provide respirators to protect the health of their employees.

3. Where respirators are necessary protection for employees, a copy of the contractor's respiratory program shall be made available to the MidAmerican contract administrator upon request.

4. The contractor shall ensure that employees required to use a respirator are medically evaluated to determine the employee's ability to use a respirator and have been instructed and trained in the proper use of the selected respirators, their limitations, inspections, and cleaning requirements.

H. EMERGENCY ALARMS AND SITE EVACUATIONS

1. The contractor shall be responsible for understanding their obligation to act in accordance with and recognize the provisions of the MidAmerican location site's emergency action plan. The contract administrator shall provide the contractor with the local emergency plan, as appropriate.

2. The contractor shall inform their employees of the existence and type of emergency notification alarms

3. The contractor shall familiarize their employees with their responsibilities in the event of an emergency.

4. The contractor's equipment or materials shall not block access to emergency exits or evacuation assembly areas.

5. The contractor will coordinate with MidAmerican for the count of all personnel.

6. The contractor's employees shall not use man-lifts, cargo elevators or other powered elevating or descending devices in the event of an emergency. Designated emergency routes, stairways and exits shall be used as identified in the location's emergency plan

I. SIGNS, SIGNALS, AND BARRICADES

1. The contractor shall erect and maintain all safeguards, including notices, danger signs and other warnings against hazards existing at the site during the performance of the work when necessary to protect all persons and property. When working in public streets or rights-of-way, at a minimum, all signing and barricading shall conform to the requirements of the governmental body having jurisdiction of such streets and rights-of-way. In

the absence of any such requirements, the minimum requirements for such signing and barricading shall be the Manual of Uniform Traffic Control Devices Part VI published by the U.S. Department of Transportation Federal Highway Administration.

J. MATERIAL HANDLING, STORAGE, USE, AND DISPOSAL

1. Where mechanical equipment is used, sufficient safe clearance shall be allowed for aisles, at loading docks, through doorways and wherever turns or passages must be made. All aisles, doorways and passageways shall be kept clear.

2. Storage of materials or equipment shall not exceed posted live load floor rating capacities as determined by a registered professional engineer.

3. Non-compatible materials shall be segregated while in storage; like-items are kept together.

4. Storage of materials or equipment shall not be allowed where overhead exposed electrical hazards are present or where spills or placement of materials can cause detrimental environmental impact. Storage of materials or equipment shall not be caused by placing contractor or MidAmerican employees at an increased risk of injury or exposure. Storage of flammable or combustible materials exceeding 50 gallons will be stored in a yellow cabinet designed for flammables and combustibles and has correct labeling.

5. Proper rigging for material lifting must be practiced.

6. Personnel operating material handling equipment must be trained and qualified for; the equipment being used, proper setup, inspections, rigging and lifting operations.

7. A JSA will be reviewed before loading or unloading pipe, rods, drums, tanks, reels, poles, or any other lading that has potential to roll.

8. All loads shall be tier loaded, never pyramid loaded.

9. Pipe, pole and rod shipments inbound and outbound from all MidAmerican locations must be stacked or tiered with 4-inch-by-4-inch wood dunnage material of the type, thickness and width necessary to maintain sufficient spacing to allow forks from a lift underneath the cylindrical material during loading and unloading. Trailer stakes will be used where applicable, to prevent roll-off.

10. Dunnage cannot be stacked between tiers.

11. Dunnage material must have supports or chocks sufficiently fastened at each end to prevent movement of the cylindrical material.

12. Shipments that do not satisfy these criteria or standards must, at the discretion of MidAmerican, be rejected or made subject to special unloading requirements at the expense of the shipper or supplier.

13. When unloading cylindrical materials, only the tier being unloaded will have the tie down straps removed.

14. Pipe, poles, bar stock, or other cylindrical materials not placed in a rack shall be stacked and blocked to prevent rolling, spreading, or tilting.

15. Special regulations and instructions governing the loading and unloading of poles, pipes and other materials shall be strictly observed in every case.

16. Always inspect cylindrical loads and stand clear of the load prior to removing the tie downs or straps. Check for "Line of Fire" hazards and mitigate them.

17. Standing on or near cylindrical loads while bands or tie down devices are being released is prohibited.

18. Control of loads will be maintained at all times.

K. TOOLS AND EQUIPMENT USE

1. Contractors may not remove or utilize any tools, materials, machines, or supplies belonging to MidAmerican without prior authorization. Tools and job boxes are subject to routine inspection by authorized MidAmerican personnel.

2. When refueling equipment with internal combustion engines, such as welding machines, small engines, compressors, cars, trucks, etc., the motor must be turned off. No smoking will be allowed while refueling. Only approved safety cans or the equivalent portable container may be used to store fuel. Proper bonding or grounding shall be used when transferring flammable liquids from tanks or barrels to portable containers.

3. Before operating any equipment with an internal combustion engine which

may exhaust fumes or other toxics inside a building or enclosed area, a survey of the potentially affected area shall be made and evaluated by the contractor to ensure that adequate ventilation is available for employee health. Work shall not commence in any area that is determined not to have adequate ventilation. If the contractor discovers that adequate ventilation is not available in any area where work is being conducted, the contractor shall immediately suspend work activities and notify a MidAmerican representative immediately.

L. RIGGING, HOISTING, AND CRITICAL LIFTS

1. Use smooth, controlled movements and avoid shock loading, side loading, dragging or uncontrolled rotation. Do not leave a suspended load unattended unless specifically permitted and controlled by an approved plan and procedure. Anyone may give an emergency stop signal or exercise stop-work authority when they identify an unsafe condition.

2. Perform a controlled trial lift when required to verify load balance, brake function, proper rigging, clearances and load control. If instability, shifting, binding, an overload indication or another unexpected condition occurs, safely lower or stabilize the load and correct the condition before continuing.

3. Use an agreed upon hand-signal or radio protocol. Stop the lift immediately if communication is lost, signals conflict, personnel enter the exclusion zone, the load shifts or rotates unexpectedly, rigging is damaged or improperly seated, capacity is uncertain or site or weather conditions differ from the approved plan.

4. Barricade or otherwise control the drop zone and swing radius. Do not allow personnel beneath suspended loads. Keep personnel clear of pinch points, crush zones and line-of-fire exposures. Use tag lines only when appropriate and while positioned outside the hazard zone.

5. Verify crane configuration, load chart, radius, boom length, counterweight, setup level, ground bearing or floor capacity, underground structures, outrigger loading, mats or cribbing, overhead hazards and required electrical clearances throughout the full lift path.

6. Inspect slings, chains, wire rope, hooks, latches, shackles, eyebolts, lifting beams and attachments before use and as conditions warrant. Immediately remove damaged, questionable, unidentifiable or improperly rated

equipment from service. Do not use makeshift or improvised rigging components.

7. For mobile crane operations, verify the operator holds a current certification applicable to the crane type and verify the certification is available for review before operation when required by the controlling program or other applicable requirements.

8. The lift plan must address applicable requirements, including verified load weight and dimensions, center of gravity, approved lifting points, total suspended weight, crane or lifting method and configuration, working radius, capacity verification, sling angles, rigging arrangement, lift path, clearances, ground or floor capacity, environmental limits, exclusion-zone controls, communications, hold points and emergency actions.

9. Before rigging or hoisting begins, complete and document the applicable pre-job briefing. For critical, non-routine, complex, engineered or high-consequence lifts, complete a written lift plan reviewed by responsible lift personnel and conduct a pre-lift briefing with the lift crew.

10. Use trained and qualified personnel for crane operation, rigging, signaling, lift direction and spotting. Information in this handbook does not qualify a person to perform any of these roles.

M. WELDING AND CUTTING – HOTWORK

1. Before any hot work is started, a written hot work permit must be obtained from the MidAmerican contract administrator. Hot work is any operation that can produce a source of ignition in a hazardous atmosphere or around flammable and combustible materials. These may include:
   a. Welding
   b. Soldering
   c. Melting of metals
   d. Use of electric or pneumatic tools where impact or hammering may produce sparks
   e. Oxyacetylene torch use

2. Cutting, welding, brazing, or burning will be done only by qualified personnel.

3. Whenever cutting, welding, brazing, or burning is to be done, proper shielding must be used to protect other personnel from eye injury. Any time welding is to be done in an operating area, fire blankets, drapes, and fire

stops or their equivalent are required. Hot work, flames, and arc producing devices are not to be used while ultraviolet or infrared detection systems are active.

4. A 35-foot surrounding area around where the hot work is to be performed will be cleared of any combustible items. If the items cannot be cleared they will be covered or blocked by fire resistant cover e.g.: tarp, blankets, etc.

5. All precautions to prevent fires and damage from falling sparks due to welding and cutting operations must be taken before a hot work permit will be issued.

6. All acetylene and oxygen cylinders must be properly supported and secured. When hoses, valves and regulators are removed from cylinders, the cylinders' protective caps must be installed, whether empty or full.

7. Acetylene and oxygen, when in storage, are to be stored an appropriate distance apart pursuant to the current regulations.

8. Move all combustible and flammable material the minimum distance away from the work area pursuant to the current regulations. Remove all fishnet wrap from all cylinders as it is considered a combustible item.

9. Acetylene and oxygen cylinders shall not be allowed into a confined space. A leaking oxygen cylinder can create an oxygen-rich, potentially explosive, environment. A leaking acetylene cylinder can displace oxygen creating an oxygen-deficient environment.

10. Contractors must assign their own stand-by fire watch with the appropriate fire protection prior to any hot work. The Firewatch must stay observant for 30 minutes after the work ceases.

N. ELECTRICAL

1. All electrical equipment must be approved by Underwriter's Laboratory ("UL"), or other nationally recognized testing laboratory, and must be grounded or have double insulation that requires no grounding.

2. Electrical tools carried into, and used in hazardous locations, must be rated for the hazard classification. (NESC Class, Division and Group).

3. Ground fault circuit interrupters ("GFCI") shall be used on electrical

circuits pursuant to current standards or regulations. This includes "pigtail-type." All pigtail-type GFCI shall be first plugged in to the main power sources or outlet, then to any extension cord. Pigtail-type GFCI will not be placed between two extension cords.

4. Only qualified personnel will work on electrical equipment or perform repairs to tools/equipment within the facility. Appropriate PPE must be worn and utilized when working on high voltage electrical equipment. If a gas contractor encounters an electrical line they must call their MidAmerican contact to dispatch an electric crew to assess the line to determine if abandoned. If not abandoned the electric crew will neutralize the power so the area around it may be worked in safely.

5. Non-qualified personnel will maintain appropriate clearance from energized conductors as outlined by OSHA 1910 General Industry or applicable OSHA 1926 standards. This includes any mobile or construction equipment encroaching on energized conductor areas eg: boring rigs, backhoe, etc.

O. GENERAL SAFETY WITH SWITCHING

1. All switching shall be completed as outlined in MidAmerican's General switching procedures for transmission and distribution.

2. Seven steps of switching shall be followed:
    1) Plan for safety/ wear appropriate PPE.
    2) Use Switch sheet as checklist/guide.
    3) Touch/point to equipment identifier.
    4) Anticipate device operation and statuses.
    5) Verify desired device position before operation.
    6) Operate equipment when instructed.
    7) Verify desired device position after operation; Lock, tag/verify close.

3. Three-way communication shall be followed.

4. Use of Phonetic Alphabet shall be used in identifying equipment.

(Phonetic alphabet located on page 22)

A	ALPHA	J	JULIET	S	SIERRA
B	BRAVO	K	KILO	T	TANGO
C	CHARLIE	L	LIMA	U	UNIFORM
D	DELTA	M	MIKE	V	VICTOR
E	ECHO	N	NOVEMBER	W	WHISKEY
F	FOXTROT	O	OSCAR	X	X-RAY
G	GOLF	P	PAPA	Y	YANKEE
H	HOTEL	Q	QUEBEC	Z	ZULU
I	INDIA	R	ROMEO		

P. GAS OPERATOR QUALIFICATION ("OQ")

A "gas OQ certification" is not a single certificate but a requirement for OQ programs mandated by the U.S. DOT for the natural gas and hazardous liquid pipeline industries. Individuals must be trained and evaluated to demonstrate the knowledge, skills, and ability to perform specific "covered tasks" safely and to recognize and respond to abnormal operating conditions. The process involves an operator developing a written OQ program and a list of covered tasks, then ensuring their employees and contractors are trained and certified for those tasks.

PHMSA: https://www.phmsa.dot.gov/pipeline/operator-qualifications/operator-qualification-overview

Key aspects of Gas OQ:

- **Federal regulation** – The requirement is mandated by the DOT's PHMSA and is detailed in federal regulations (49 CFR Part 192, Subpart N and 49 CFR Part 195, Subpart G).
- **Operator's responsibility** – Each pipeline operator is responsible for creating their own OQ program, which includes a list of "covered tasks" applicable to their specific system.
- **Covered tasks** – These are any operations or maintenance tasks on a pipeline facility that could affect the pipeline's operation or integrity.
- **Training and evaluation** – Workers must be trained and then evaluated to ensure they can perform their assigned covered tasks and recognize and react to AOCs.
- **"Certification"** – the term "certification" in this context refers to the successful completion of this evaluation process, which is verified and documented by the operator. This is not a single industry-wide certificate, but rather an individual's qualified status for specific tasks as defined by their employer's OQ plan.

- **Documentation** – Operators must maintain records of all training, evaluations, and re-evaluations for inspection by federal and state authorities. Successful completion of MidAmerican written and hands-on testing is required prior to work being performed.

Q. ABNORMAL OPERATING CONDITIONS (AOC)

1. The OQ Rule:
   a. Federally mandated program that is intended to provide an additional level of safety when performing tasks on a gas pipeline system by ensuring individuals can perform a task correctly through hands on and written evaluations.
   b. OQ requires pipeline operators to develop a qualification program to evaluate an individual's ability to perform covered tasks and to recognize and react to AOCs that may occur while performing covered tasks.

2. Defining an AOC:
   a. A condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may:
      - Indicate a condition exceeding design limit
      - Result in a hazard(s) to persons, property, or the environment.
   b. NOTE: A deviation from normal operation does not necessarily mean an abnormal operating condition exists as long as conditions are within the parameter identified by the Company.

3. The Two Ways that AOCs Are Identified:
   a. First, several AOCs are associated with the actual performance of an OQ Task, (Task Specific AOCs).
      - These are included as knowledge questions and skills checklist steps within the OQ evaluations for that task.
      - Second, there are other Generic AOCs that an individual could encounter while performing an OQ Covered Task, but which are not directly related to that task.

4. Recognizing and Reacting:
   a. Recognizing – Ability to identify a situation or event on the pipeline that is out of the ordinary and could become a hazard to the public or environment if not promptly corrected.
   b. Reacting – Ability to respond to a hazard appropriately and promptly. This could include actions such as notifying a supervisor or taking the correct action to mitigate the hazard. The "correct" actions depend on the AOC.

5. The Nine Generic AOCs – Require Immediate Action:
   1. Unplanned escape of natural gas from a pipeline
   2. Fire or explosion
   3. Pipeline damage

4. Activation of a safety device
5. Under-odorization
6. Unplanned pressure deviation
7. Unplanned flow rate deviation
8. Unplanned change in pipeline operation
9. Communication device failure

R. CONTROL OF HAZARDOUS ENERGY – LOCKOUT/TAGOUT ("LOTO")

1. Current OSHA standards require notification of certain and specific rules and practices. To help maintain safe work zones for contractor's employees and MidAmerican employees, MidAmerican will provide, when appropriate, copies of specific procedures for contractors that will be utilized in conjunction with contractor's own safety rules, applicable OSHA or other rules and usual industry safety practices. When performing any type of installation, servicing or maintenance work, any type of cleaning on a piece of equipment or any jam removal on a piece of equipment, LOTO procedures must be followed.

2. A copy of the contractor's LOTO program shall be made available to the MidAmerican contract administrator upon request or before initiating hazardous energy controls on any MidAmerican-owned equipment. Contractor's employees must be familiar with their respective LOTO program and be knowledgeable of the location of individual equipment LOTO procedures as they apply to MidAmerican. Some MidAmerican facilities may require contractors to follow a site-specific LOTO program. If this is not required, the contractor will follow the contractor's LOTO program.

3. Unless otherwise specified, all contractors shall supply their own locking devices for LOTO purposes and provide the locks and hasps to MidAmerican safety department for review before job site work begins. Tags must be used with the contractor's LOTO program and will individually identify the owner of the tag.

4. The contractor shall instruct their employees that all MidAmerican LOTO devices and tags shall not be removed, altered or defeated, for any reason, until a MidAmerican representative can verify the purpose and need for removal; and only after following the procedures identified in the MidAmerican program and the contractor's program for removal or alteration of such devices or tags.

5. Failure of the contractor to LOTO a piece of equipment during construction or maintenance activities may result in work stoppage.

6. Specific LOTO procedures may be developed and available for certain pieces of equipment. The contractor is expected to follow these procedures as provided.

S. CONFINED SPACE ENTRY

1. An entry permit is required when entering any vessel, tank, vault, pit, etc. that is posted as a permit-required confined space at or near the point of entry into the space.

2. Prior to entry into any permit-required confined space, atmospheric monitoring is required and verification that a rescue team is available must be performed before a permit may be issued. The contractor will provide all permit-required confined space entry equipment and PPE. Personnel entering the permit-required confined space, the attendant and entry supervisor, or person-in-charge ("PIC") of entry must be trained in the proper use of equipment and entry procedures. Personnel assigned to a confined space rescue team must have received permit-required confined space training, be adequately trained in First Aid and CPR and be verified as being capable of conducting confined space rescues. Contractors and contractor's employees shall coordinate entry activities with MidAmerican designated persons to verify that all LOTO procedures and other safety precautions are implemented appropriately to make the space safe prior to entry.
3. A copy of the contractor's written program may be requested and must be made available to the MidAmerican contract administrator or local safety personnel before any work in confined spaces is initiated. Copies of all canceled permits must be provided promptly to the contract administrator.

4. Contractors shall follow their own permit requirements before entering a confined space. The contractor's permit program must meet or exceed that of applicable rules and regulations. Some MidAmerican locations require the contractor and their employees and subcontractors and their employees to follow the MidAmerican confined space entry program.
   For these locations, MidAmerican shall provide training on the confined space entry program, safe entry procedures, and MidAmerican employee and contractor employee requirements and responsibilities. The MidAmerican contract administrator shall advise the contractor and subcontractor of these requirements when necessary.

T. SCAFFOLDS AND ELEVATED WORK PLATFORMS

1. Contractors shall ensure that all ladders, scaffolding, hoisting equipment, and fork-lifts cages used as personnel lifts conform to the manufacturer requirements and OSHA regulations.

2. Scaffolds shall be properly constructed and always maintained. A competent scaffold person shall inspect all scaffolds erected by the contractor and be able to provide proof of scheduled pre-use inspections.

3. Persons working on a scaffold or erecting scaffolding shall be protected from falling by means of a fall protection system such as guardrails or personal fall protection. Where personal fall protection systems are used, all scaffold users shall be trained in its use and are required to properly use the system as instructed, and provisions must be in place to affect prompt rescue of a suspended employee.

4. Materials, tools and equipment are not to be thrown or dropped from scaffolds, ladders or other overhead platforms. Areas below scaffolds, ladders or other overhead platforms where persons are working above shall be barricaded so that persons cannot enter the hazard area.

5. Metallic ladders are not to be used while working on or around exposed electrical facilities.

6. All ladder use shall comply with current regulations and may need to be secured at the top, and if necessary, at the bottom or elsewhere depending on the type of ladder used, the conditions the ladder is being used in and the employee access. The contractor shall determine this at the beginning of the work activity.

7. Vertical belt-type manlifts are not to be used as work platforms. Such equipment is considered access systems that provide limited or no fall protection while free climbing or riding.

8. When working from elevated surfaces, platforms or aerial lifts at heights of 48 inches or greater, a means of fall protection complying with the OSHA requirements shall be employed. The use of tethering or restraint system that also includes wearing a full-body harness and lanyard attached to the boom or basket may be required.

U. CHANGING CONDITIONS – Expect the Unexpected

1. A common factor in many injuries is changing conditions. A change in condition could result from a change in work assignment, personnel, broken or malfunctioning equipment or operating environment. Changing conditions shall be taken seriously and addressed. If there is a change in your work, take the time to review the situation with your MidAmerican representative. If a change involves job scope, work assignment, personnel, equipment, or operating environment, on site foreman shall reassess the hazards associated with the task, equipment, or work location. This may require a change in boundaries, equipment, qualifications of personnel, PPE, or mitigation techniques. If your clearance boundaries need to change contact the MidAmerican representative to review the safe zone established. Immediately report injuries, or any condition that poses as a risk to the health and safety of employees or the public. Contractors should emphasize to their employees maintain their situational awareness and to speak up if they suspect a potential hazard.

V. FLAME RESISTANT ("FR") REQUIREMENTS

1. Where FR or other protective clothing is required, the contractor will ensure that it is utilized.

2. Personnel shall comply with OSHA 29CFR1910.269(l)(6)(iii).

3. The minimum arc flash FR clothing system must have an effective protection level of 8 cal/cm2. Additional FR protection may be required as part of site, task or equipment requirements as determined by the local MidAmerican representatives, environment, or the contractor.

4. Non-electrically qualified personnel such as delivery personnel, lawn and yard care technicians, civil contractors, meter readers, etc. that do not breach the 20 feet required distance from exposed energized conductors are not required to wear FR clothing in energized MidAmerican facilities.

5. All non-electrically qualified personnel shall be under the direct supervision of electrically qualified personnel within energized MidAmerican locations.

6. All qualified non-electrical workers within energized substations must successfully complete the qualified non-electrical work training. The need for an outside gas contractor to work within a MidAmerican substation is extremely rare, however, not impossible.

W. SUBSTATION SAFETY

1. When working within an energized substation, work areas within shall be clearly identified using high visible marking equipment, including tape, flags, cones or barricades. If the work location involves aerial work, additional consideration shall be given to making a three-dimensional work location. Hazards to be considered when identifying work zones include:
    - Electrical hazardous, including back feed and buried UG sources
    - Stored energy
    - Excavations including open trenches
    - Suspended loads
    - Equipment abnormal
    - Fall/Trip/Slip hazards
    - Toxic/Corrosive materials
    - Pinch points, crushing hazards
    - Workgroup work demarcation
    - Traffic control

X. LOCATING UNDERGROUND (UG) FACILITIES WITHIN SUBSTATIONS

1. Locating underground facilities within electrical substations is a requirement prior to any excavation work within a substation. A MidAmerican employee (representative) must be present during the locating process.

2. With the exception of substation grounding systems, upon exposure of an unmarked or unidentified underground (UG) conductor, a qualified electrical worker shall remediate damage before work continues.

Y. EXCAVATIONS

1. No excavation shall be initiated without first obtaining the locations of all possible underground utilities and structures. If the local or state underground locating service phone number is unavailable, call 8-1-1

2. According to the OSHA Standards, a trench is referred to as a narrow excavation in which the depth is greater than the width and the width is not greater than 15 feet. An excavation is any man-made cavity or depression in the earth's surface.

3. The determination and design of the supporting system shall be based on

careful consideration of the following: depth of the cut; anticipated changes in the soil due to air, sun, freezing temperature, water, ground movement caused by vehicle vibration and earth pressures (not only the angle of repose).

4. When employees are required to be in trenches that are four feet or greater in depth, adequate means of exit, such as ladders or steps, shall be provided and located to require no more than 25 feet of lateral travel. Ladders will be in good condition, extend from the floor of the trench to three feet above the top of the excavation, and be secured at the top by some means to ensure stability.

5. Requirements are that all trenches and excavations over five feet deep be sloped, shored, braced, or otherwise supported. When soil conditions are unstable, excavations less than 5 feet shall be sloped, supported, or shored. Benching is prohibited for Type C soil.

6. Contractors also may use a trench box-a prefabricated, movable trench shield composed of steel plates welded to a heavy steel frame. The protection is equal to or greater than the protection provided by the appropriate shoring.

7. All materials used for shoring shall be in good condition, free of defects, and of the required size.

8. One method of ensuring the safety of workers in a trench or excavation is to slope the sides of the cut. When an excavation has water conditions, silty material, or loose boulders, or where erosion, deep frost, or slide planes are apparent, the angle of repose will be flattened.

9. Inspections are required after rainstorms or any other change in conditions that can increase the possibility of a cave-in or slide. If dangerous ground movements are apparent, such as tension cracking, all work in the excavation shall be stopped until the problem has been corrected.

Z. REJECT POLE IDENTIFICATION

MidAmerican Energy has established a standard for how long poles are tagged in the field after being tested. Pole tagging provides a visual means for a person that works on a pole or works on facilities attached to a pole to determine the general condition of the pole at the groundline. The following is MidAmerican Energy's pole standard tagging convention:

Two red tags – Poles with two red tags are reject poles that are considered danger/priority reject poles. A danger pole has two thirds or more deterioration of a pole's original circumference below the groundline.

One red tag and one yellow tag – Poles with one red and one yellow tag are reject poles that can potentially be trussed. A reject pole has between one third and two thirds deterioration of the pole's original circumference below the groundline and is a potential candidate for trussing as indicated by a pole testing company. These poles may require further evaluation to determine if the pole with be trussed, replaced, or left as is. The pole should be near plumb and free of any other defects prior to trussing. All poles identified to be trussed will be treated at the groundline prior to trussing.

One red tag – Poles with one red tag are reject poles that are not candidates to be trussed. A reject pole has between one third and two thirds deterioration below the groundline and may require further evaluation to determine if the pole should be replaced or remain. Reject poles are not considered to be trussable for many of the following reasons: 40 years in age or older, split top, lighting damage, burnt pole, insect/woodpecker damage, mechanical damage, etc.

One silver tag – Poles with a silver tag only have passed inspection and have no deterioration to one third of deterioration of the pole's original circumference below the groundline.

AA. ENVIRONMENTAL CONSIDERATIONS

To ensure MidAmerican Energy's facilities and operations meet or exceed all applicable environmental laws and regulations, contractors must proactively adhere to applicable environmental requirements set forth by contract documents and prevent environmental incidents and accidents. This includes air quality, land, and storm water controls, water and solid wastes, tank management, asbestos removal, hazardous waste removal/disposal, spill prevention (secondary containment), cleanup, and bulk liquid transfers. Please contact your contract administrator regarding specific project or location requirements

BB. SITE ACCESS, BADGING AND TAILGATING

Consistent use of facility access controls protects employees, contractors, vendors and visitors and helps prevent unauthorized entry to MidAmerican facilities. These requirements apply to all MidAmerican-owned or -operated facilities and supplement Section II, Items D and E.

1. Contractor employees, subcontractors, vendors and visitors shall badge in each time they enter a MidAmerican facility, whether entering through a door or a gate. Only one access credential is required per vehicle unless the facility requires each occupant to badge in.

2. Each person shall use their assigned access credential without exception, even when:
   a. The door or gate is already open.
   b. Another person is entering at the same time.
   c. Entry is brief or badging in may seem unnecessary or inconvenient.

3. Tailgating is prohibited. Tailgating occurs when a person gains access to a restricted area by closely following an authorized individual without badging in. Contractor employees shall not hold doors or gates open for others or allow anyone to enter without badging in.

4. If a contractor employee observes someone tailgating, the contractor employee shall politely ask the person to scan their badge and verify the person is authorized to access to the area.

5. Contractor employees shall immediately report any unknown or unauthorized individual to their MidAmerican contact, facility management or Corporate Security & Resiliency at 515-242-4097.

6. Contractor supervisors shall reinforce these requirements with their employees, ensure the requirements are understood and followed and address noncompliance promptly and consistently.

CC. KNIVES AND CUTTING TOOLS

These requirements apply to all contractor employees who use manual cutting or wire stripping tools while performing work on behalf of MidAmerican. The requirements are intended to prevent lacerations, puncture injuries and other incidents related to improper knife handling.

1. Safer tools shall be used first. Manual cutting tools such as specialized cable-skinning devices, pliers, scissors, shears and metal snips shall be used before using a knife.

2. An approved knife may be used only as a last resort when a safer tool cannot safely or effectively perform the task. When a knife is necessary, the precautions outlined in this section shall be followed.

3. Use of knives or cutting tools that do not meet these requirements is prohibited. Approved knives shall not be modified, including reshaping the blade profile or altering the cutting-edge length.

4. Body positioning:
   a. Keep hands, other parts of the body and bystanders out of the blade path.
   b. Maintain stable footing and a balanced body position while cutting.
   c. Secure the material before cutting when practicable.
   d. Make slow, controlled cuts. Do not force the blade.
   e. Cut away from the body.

5. Tool selection and condition:
   a. Use only approved knives.
   b. Inspect the knife before use. Do not use a knife with a damaged, loose or dull blade.
   c. Replace dull or damaged blades. Dull blades increase the force needed to make a cut.
   d. Extend the blade only to the minimum length needed for the task.

6. Hand protection:
   a. Use appropriate PPE, including cut-resistant gloves, when required for the work being performed.
   b. Keep fingers behind the knife's guard at all times.

DD. CONTRACTOR INCIDENT EXECUTIVE REVIEW

Significant contractor safety events receive the same level of leadership attention as significant MidAmerican events. Executive reviews help leaders understand the event, assess the contractor's response, identify systemic concerns and verify the completion and effectiveness of corrective actions. Contractors are expected to fully support the review process and associated follow-up.

1. Qualifying contractor incidents include:
   a. OSHA-recordable injuries or illnesses, including fatalities, inpatient hospitalizations, amputations and loss of an eye.
   b. Near misses or incidents with serious injury or fatality (SIF) potential.
   c. Significant trends or repeat occurrences that indicate elevated risk, reveal systemic concerns or warrant executive review.

2. MidAmerican will generally conduct the review within five business days after sufficient facts are available. An immediate review may occur before the investigation is complete when warranted by the severity of the event. Additional follow-up will occur once the investigation is complete.

3. The contractor shall provide the incident report, investigation report and supporting event review materials to the MidAmerican construction project specialist or contractor oversight lead as soon as the materials are available for inclusion in the review.

4. Corrective actions shall address root causes and reduce the risk of recurrence through sustainable improvements. Retraining alone shall not be considered sufficient when systemic issues exist.

5. Incidents remain open until corrective actions are assigned, completed, verified and demonstrated to be effective. When requested, the contractor shall provide MidAmerican evidence demonstrating the completion and effectiveness of corrective actions.

EE. WORK ZONE DELINEATION

Delineation is the intentional use of visual controls, physical barriers, markings, tags, signs, cones, flags and barricades to clearly separate safe work areas from hazardous areas. Delineation creates a shared understanding of what is energized or de-energized, what hazards are present, where the work zone is located, where workers, equipment and the public are permitted and which boundaries must not be crossed without additional controls or authorization. This section supplements Section I. Signs, Signals and Barricades and Section T. Substation Safety.

1. General expectations for all work zones:
    a. Barriers and visual controls shall be in place before work begins and remain in place until all work activities are complete and the hazards no longer exist.
    b. Work zone boundaries and associated hazards shall be discussed during the job briefing.
    c. Warning signs shall be clearly visible from all directions of approach.
    d. Only authorized personnel shall be permitted within the designated work area.
    e. Barricades and markers shall be inspected regularly, kept in good condition and adjusted as site conditions change.

2. Substation work zones
   Magnetic barriers, cones, flags, snow fencing or other approved barricades shall be used during switching, electrical testing, the application or removal of grounds, work involving exposed energized equipment or any task requiring a controlled work zone around electrical hazards.

3. Control building work zones
   When performing relay, metering or protection work, troubleshooting control circuits, testing or commissioning equipment or working in cabinets or panels with multiple energized components:
    a. Install work method covers or equivalent visual barriers over adjacent equipment outside the scope of work, when practical, before work begins.
    b. Verify the correct component before work begins and before operating, testing or modifying equipment.
    c. Leave covers in place until work is complete and keep the work area clean and organized.

4. Electric line work zones
   When working under a clearance, installing personal protective grounds, performing maintenance on transmission or distribution facilities or working across multiple structures:
   a. Install clearance tags, ground tags, rider poles or rider structures as applicable before work begins.
   b. Ground tags shall be clearly visible and associated with the corresponding installed grounds.
   c. Rider poles or structures shall be positioned where they are easily identified by the work group.
   d. Verify equipment status before beginning work.

5. Gas and excavation work zones

When working near the public or vehicle traffic, performing excavation, construction or maintenance work or protecting gas facilities from damage, use an appropriate combination of cones, tape and snow fence to define the work zone. Use goal posts to identify overhead hazards when operating large excavation equipment.

FF. VEHICLE MOVEMENT, BACKING AND SPOTTERS

Backing and low-speed maneuvering incidents are preventable. These requirements apply to contractor vehicles and equipment operated on MidAmerican property or MidAmerican jobsites.

1. Circle of inspection
   Complete a circle of inspection immediately before moving or backing a vehicle or equipment, including after leaving and returning to the vehicle after any delay.
   a. Walk 360 degrees around the vehicle.
   b. Check vehicle condition, cargo and nearby obstacles.
   c. Review the planned path of travel and remove hazards when possible.
   d. Use cones, select a clear route or use a spotter when needed.

2. Backing
   Avoid backing whenever possible. When backing is required:
   a. If another employee is present, the second employee shall act as a spotter and direct the driver.
   b. If no spotter is available, stop and check the path of travel before continuing.
   c. Use cones or other appropriate work area protection to identify hazards when needed.

d. Back slowly and only for short distances.
e. Lower windows to hear warnings. Activate four-way flashers and sound the horn before backing.

3. Spotters
   A spotter shall be used when the operator cannot clearly see the full path of travel, when backing or parking with limited visibility and when pedestrians or hazards are nearby. When a spotter is used:
   a. Use one spotter to direct the operator whenever practical.
   b. Agree on hand signals before movement and use established spotter hand signals. Use voice or radio communication as needed.
   c. Maintain eye contact and continuous communication. Stop vehicle movement immediately if communication is lost.
   d. The spotter shall stop the driver and reposition as needed to check clearances or hazards that are not visible from the current position.

4. Parking
   Pull-through parking is preferred whenever available. Park the vehicle in a safe position and maintain safe clearance from moving vehicles and equipment.

5. Blind spots
   Drivers shall be familiar with blind spots before operating a new or unfamiliar vehicle and account for changes in equipment or vehicle configuration that affect visibility.

GG. WHEEL CHOCKS AND TRAILER SECUREMENT

Unintended vehicle or trailer movement can cause serious incidents. Wheel chocks provide an additional layer of protection against unintended movement.

1. Vehicles and separated towed equipment shall be parked in a safe position with appropriate parking controls engaged.

2. Wheel chocks or blocking shall be used:
   a. When towed equipment is parked and separated from the towing vehicle.
   b. Before loading or unloading equipment from a trailer when there is potential for unintended movement.
   c. When performing work activities that could create trailer movement.

d. Whenever there is potential for a vehicle or trailer to roll or shift.

3. Verify that the trailer is secure and wheel chocks or blocking are properly placed before beginning work. Do not rely on assumptions.

HH. DESIGNATED SPOTTER NEAR ENERGIZED LINES

Equipment operating near energized lines presents a significant electrical hazard. When a designated spotter is required to maintain clearance from energized lines, the following requirements apply.

1. A designated spotter monitors clearance between equipment and energized lines and provides timely warning to maintain the required minimum approach distance (MAD) or other applicable clearance.

2. The designated spotter shall:
   a. Be assigned for the operation.
   b. Be familiar with the applicable clearance requirements, approved hand signals and work being performed.
   c. Understand the electrical hazards present.
   d. Be positioned to clearly observe the equipment, energized lines and required clearance.
   e. Perform no other duties that could distract from continuous monitoring.

3. The designated spotter shall be positioned to continuously monitor the required clearance and shall not perform work that interferes with that responsibility.

4. When another employee serves as the designated spotter, that employee shall meet the requirements of this section.

5. Signals to the operator shall be given by one designated person. The operator shall obey a “Stop” signal given by anyone.

6. If the spotter leaves the assigned position or can no longer effectively monitor the required clearance, work shall stop until a designated spotter is in position.

II. HAND PROTECTION

Hand injuries can occur during routine work involving tools, materials, pinch points and other hand hazards.

1. Contractors shall provide gloves suitable for the type of work being performed. Hand protection shall be used when handling rough or sharp-edged materials, winch lines or performing other work that presents hazards to the hands.

2. Use appropriate cutting tools and work practices to control the hazard first. Cut-resistant gloves shall be worn as the last line of defense when using a knife or cutting tool.

3. Keep hands out of the line of fire and away from pinch points.

4. Do not use equipment, tools or PPE that does not meet minimum requirements.

JJ.HOUSEKEEPING

Good housekeeping is a safety control, not just a cleanup task. Clutter can create trip hazards, block access and slow work.

1. Keep work areas clean, orderly and free of unnecessary debris to prevent slips, trips and blocked access.

2. Maintain an orderly work area throughout the workday. Remove debris and restore the work area as work progresses.

3. Store tools and materials in designated or appropriate locations and keep walkways, access routes and work zones clear.

4. Remove excess materials and other items that could create a hazard or interfere with the work.

5. Correct housekeeping hazards when it is safe to do so or report them promptly to the appropriate person.

6. Contractors are encouraged to use 5S or another systematic housekeeping method to support an orderly work area. The 5S method includes sort, straighten, shine, standardize and sustain.

KK. CONTRACTOR INCIDENT NOTIFICATION TIMELINE

Prompt reporting supports a timely response, helps address hazards and allows incident information to be documented promptly.

1. When an incident occurs, the contractor shall:
    a. Address immediate hazards when it is safe to do so and obtain emergency assistance when needed.
    b. Notify the MidAmerican representative immediately and no later than one hour after the incident. Provide available incident details and photos, when appropriate.
    c. Submit the contractor's investigation findings to the MidAmerican representative within 24 hours of the incident.

2. The MidAmerican representative will notify the Safety Helpline, submit the Contractor Incident Report and provide the contractor's investigation findings as required.

3. The Safety Helpline at 866-681-7233 is available 24 hours a day.

IV. SAFETY CHECKLIST FOR ALL PROJECTS

FOR ALL PROJECTS

□ Working under an active purchase order or contract.
□ Give notice and comply with all applicable laws, ordinances, rules and regulations and lawful permits of public authorities.
□ Receive, review and acknowledge receipt of Contractor's Safety Information Handbook (form 40-19). Completed by contractor's on-site person in charge.
□ Signed acknowledgment page retained by local work group or contract administrator.
□ Complete an on-Site Job safety analysis before work commences.

HIGH VOLTAGE PROJECTS

□ Use appropriate signs, barricades conforming with requirements of the governmental body having jurisdiction of streets, highways and right ways

SUBSTATION PROJECTS

□ View substation Safety video (Updated July 2009)
□ All non- electrically qualified contractors working within an energized station must complete Qualified Non-Electrical Worker. (Updated July 2009) Completed quiz should be reviewed and retained by local work group through project duration.
□ Conduct an on-site orientation regarding site specific hazards, procedures and precautions with a MEC employee/designee.
□ If contractors need access to control buildings at CIP designated substation(s) or will be granted access to the electronic security perimeter for covered cyber assets within the substation(s), they must be have proper CIP security approval or be escorted by a MEC CIP authorized employee

SUPPLY PROJECTS

□ Review Energy Isolation and Control procedures for work for work that is being completed
□ Review Hot work Permit procedures for work for work that is being completed
□ Confirm which entry program will be followed for any confined space entry projects.

FORESTRY PROJECTS

□ Comply with ANSI Safety Requirements for Arboricultural Operations.
□ Document that employees applying pesticides hold required licenses for jurisdiction(s) they are working within.
□ Comply with notification requirements for work in substations and

Working under an active purchase order or contract the contractor must give notice and comply with all applicable laws, ordinances, rules and regulations and lawful permits of public authorities.

All contractors will receive, review, and acknowledge receipt of the Contractor's Safety Information Handbook (form 40-19).

Completed by contractor's on-site person-in-charge.

Signed acknowledgment page(s) will be retained by local work group or contract administrator.

All contractors will complete an on-site JSA before work begins.

V. CONTRACTOR ACKNOWLEDGEMENT

(Tear out this page, complete and return to the contract administrator)

I acknowledge that I have received a copy of the MidAmerican Contractor's Safety Information Handbook and understand that my company is solely responsible for initiating, maintaining, and supervising all safety measures and programs in connection with performance of the work.

I will fully inform our employees, agents and subcontractors of safe work practices which are required to be followed and will always ensure that the work is undertaken and performed subject to the provisions of all applicable federal, state, and local laws, rules, and regulations. In case of a conflict or inconsistency between the Contractor's Safety Information Handbook and the contract documents, the contract documents shall govern.

Contractor Company Name: _____

Accepted By: _____

Name Printed: _____

Title: _____

Date: _____

Signature By: _____
Name Printed: _____

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VI. CONTRACTOR EMPLOYEE, AGENT, OR SUBCONTRACTOR ACKNOWLEDGEMENT

(Tear out this page, complete and return to contract administrator)

The undersigned acknowledges and agrees:

1. I am aware that the Contractor's Safety Information Handbook for Contractors of MidAmerican ("Handbook") has been provided to my employer with respect to services and work being performed for MidAmerican or its affiliated or subsidiary companies.
2. I have been fully informed by my employer of the contents of the Handbook and the safe work practices which are required to be followed in connection with performance of the services and work for MidAmerican.

In consideration of MidAmerican allowing me access to MidAmerican facilities and equipment, and for the protection of MidAmerican, I personally agree with all the provisions and terms of the Handbook, incorporated herein by this reference, and to follow all applicable federal, state, and local laws, rules, and regulations. My agreement is evidenced by my signature below.

I HAVE READ THE FOREGOING AGREEMENT, UNDERSTAND ITS TERMS AND FREELY AND VOLUNTARILY SIGN THE SAME.

Agreed to this_____day of_____20_____.

Signature By: _____
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MIDAMERICAN
ENERGY COMPANY
Obsessively, Relentlessly At Your Service™