



MECHANICAL CONTRACTORS

Safety Manual

Revision 3.6

Christian Schwartzhoff

10/3/2019

SAFETY COMMITMENT POLICY

STATEMENT OF SAFETY POLICY

It is the policy of B.G. Brecke, Inc., to strive for the highest safety standards on our projects. Safety does not occur by chance. It is the result of careful attention to all company operations by those who are directly and indirectly involved. Employees at all levels shall work diligently to execute the company's policy of maintaining safety and occupational health.

Our safety program has been developed to assure compliance with Federal, State and Local regulations with particular emphasis on the Occupational Safety and Health Act of 1970 (OSHA), and the OSHA requirements that apply to our construction operations. It is the obligation of all employees to be knowledgeable of the standards established by these agencies and to implement the rules and regulations contained therein on projects under their direction.

Regard for the safety of the general public, our own employees and the employees of our subcontractors is a supreme responsibility of all levels of our organization. We intend to prevent any human suffering. All accidents, even minor ones, cause pain, both physical and mental. Prevention of injury and illness is a goal well worthy of our achieving.

A safe operation is organized, clean and efficient. If every employee views accidents in the same way we consider all other aspects of our operations, we will be in a better position not only to control accidents but also to improve the total performance of our company. It is therefore of utmost importance that all aspects of our safety program be strictly adhered to and that the intent of this program be followed to the letter. Any recommendations to improve our safety program are encouraged.

Sincerely,

Robert Brecke
President
B.G. Brecke, Inc.

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Summary Of Changes

Version 3.4 (12/20/17) to Version 3.6 (10/3/19)

This summary is not considered policy but for informational purposes only. Items changed for grammatical or editorial purposes are not included in this summary.

Wording *Changed* throughout document to align with new job titles.

Added Summary Of Changes Section.

2.2.B *New* If you are unsure how to do something safely it is your responsibility to ask. Do not assume someone else is taking care of your safety.

2.2.K Tobacco use shall only be allowed in designated areas & not in company vehicles.

2.3.D Working alone procedures no longer exclude service.

2.3.E *New* PJHAs must be reviewed and signed by all individuals and any others who are directly affected by the hazards. Must be able to identify employee by signature.

2.3.F *New* Changes to PJHAs are required: *(Including items 1-3)*

2.5.C *Changed* to requiring full work release (no restrictions).

3.1.A.6 *Changed* will to may.

3.6.C *Changed* FR to SE (Self-Extinguishing).

3.7.A.4.b. *Changed* guardrail to fall protection system and removed distance exception.

3.7.A.4.c. *Added* per OSHA standard.

3.8.A.6 *New* Fresh Air System is to be used only to provide fresh air and not respiratory relief.

3.8.A.7 *Added* prior to check-in.

3.11.A *Added* & controlled by the Safety Team.

6.7 *Changed* All accidents to All vehicle incidents, injuries.

6.7.A.8 *New* Any Employee taken for medical care shall be accompanied by a B.G. Brecke representative.

6.7.B *New* Vehicle/Property Incident *(including items 1-2)*

13.3.D *Added* fresh air system as an option for confined space welding, when applicable.

19.3.D&F *Changed* Allegro System to Fresh air system.

19.3.F *Added* if no prior atmospheric hazards are present.

Chapter 23 Drug & Alcohol *Highlights below. Review Entire Policy.*

23.2.A.1 Marijuana use is prohibited.

23.2.A.6 Electronic Smoking Devices (i.e. vape pens) are prohibited.

23.2.A.10 Employee who is accepts legal reprimand related to drugs/alcohol would be subject to disciplinary action.

23.4.A.1 Clarified 10-Panel Screen

23.4.A.2 Pre-Employment screen is required within 90 Days, or as required by DOT, unless one is provided that meets our requirements.

23.4.B.1 Employees shall submit to post-accident drug and alcohol screen/tests.

23.4.B.2 Clarifies when a vehicle post-accident screen/test completed for DOT regulation and when done for all employees.

23.4.B.3 Clarifies when Workplace Post Accident/Incident/Injury is required.

23.4.C Jobsite/Customer Required drug and alcohol screen/tests will be completed as required.

23.4.D.3 DOT Employees will also be required to submit to random alcohol testing.

23.4.E.3 Reasonable Suspicion employees must be transported by 2 Brecke employees.

23.4.F.6 Clarifies when Return to Duty screen/test is required.

23.5 *Added* a section discussing Assistance referring to rehab or treatment programs.

23.7 *Added* entire section What happens if employee refuses.

23.8.B Results are confidential.

23.9 *Added* FMCSA Clearinghouse information

Added Certified SAP Providers in CR area.

Appendix B & C *Updated* to most recent versions.

Chapter 1 Safety Team

1.1. Team Leader Safety Team

The Team Leader Safety Team is Christian Schwartzhoff. The Team Leader Safety Team will manage and oversee the Safety Team. The Team Leader Safety Team has been delegated the authority to develop and is the administrator for Brecke's health and safety program.

1.2. Duties

The Team Leader Safety Team will provide technical guidance and services of health and safety as needed by Brecke management and employees. The Team Leader Safety Team will be the program administrator for safety policies, procedures and programs. The Safety Team will design and conduct trainings for management and employees. The Safety Team will assist all management levels in enforcement and compliance of all safety policies, rules, and regulations as established by Brecke, MCAI, customers, and local, state and federal laws.

The Safety Team will complete scheduled and random audits/inspections of job sites, equipment, evaluate work areas, & worker techniques to discover opportunities for improvement, injury potential, and to assist in the enforcement of the programs in accordance with Appendix A. The Safety Team will work with management to facilitate any needs that may be specific to a jobsite/customer beyond that is outside of the normal situation. The Safety Team will also be responsible for procuring proper safety equipment. The Safety Team will continue to investigate ways to reduce the chance of injury due to repetitive motion.

The Safety Team shall create weekly "Toolbox Talks". These toolbox talks shall be available in print or electronically. Team Leaders shall be responsible for providing Forman with these talks and returning signed talks to the Safety Team. Records shall be stored electronically.

1.3. Personnel

The Safety Team shall include the Team Leader Safety Team and any other persons whose responsibility is to act in the capacity of the responsible safety officer when they are acting in that capacity. This may include but is not limited to: other Supervisors, Team Leaders, Superintendents, Foremen, and sub-contractors (where needed).

1.4. Documentation

Training for all employees shall be logged into the Training Vault maintained by the MCAI. The Training Vault maintains these documents for the duration of the employee's employment unless otherwise required. This documentation includes employee name, date of training, content of training, trainer information and any other documentation required.

Other documentation as necessary shall be maintained in the employees file in payroll, with CJ Cooper, or with the Safety Team.

Chapter 2 General Safety

In the event that a Brecke Policy and a customer's policy do not agree, the stricter of the two shall supersede the other.

2.1. Orientation/New Employee

2.1.A. All employees shall go through an orientation as developed with MCAI prior to or when starting work for Brecke. This orientation shall include:

- 1) PPE
- 2) First Aid including cold and heat induced injuries/illnesses.

- 3) Fire Prevention & Emergency Procedures
 - 4) Tool Safety
 - 5) Special Hazards including asbestos, silica, lead and hexavalent chromium
 - 6) HazCom Standard & Binderworks
 - 7) Waste Disposal/Environmental Consciousness
 - 8) Energized Work & Lockout/Tagout
 - 9) Material Handling including Proper Lifting Techniques
 - a) Hazard assessment prior to lifting.
 - b) Findings from previous lifting accidents.
 - c) Team lifts or lifting equipment shall be used whenever possible.
 - d) Lifting equipment such as carts that are provided.
 - 10) Rigging
 - 11) Fall Protection (including recognition & elimination of fall hazards).
 - 12) Ladders/Lifts
 - 13) Scaffolding
 - 14) Excavation
 - 15) Confined Space
 - 16) Hot Work
- 2.1.B. Upon starting work with Brecke, all new employees shall go through a Brecke Orientation. This will include policies/procedures/hazards specific to Brecke including at least:
- 1) OSHA Rights & Training Vault
 - 2) PPE including Noise Awareness
 - 3) Emergency Action Plan
 - 4) Fall Protection
 - 5) Confined Space
 - 6) HazCom Specifics
 - 7) Safety Team
 - 8) Incident Reporting
 - 9) Risk/Hazard Identification including PJHA and stop work authority
 - 10) This manual
- 2.1.C. All formal training documentation shall be stored in the Training Vault including name, date, & signatures.
- 2.1.D. Prior to starting any new or unfamiliar task, the employee shall be trained in that specific task/procedure and the hazards that it presents.

2.2. General Safety Guidelines

- 2.2.A. Horseplay is not allowed! This includes: running, throwing tools, scuffling, practical jokes, etc.
- 2.2.B. If you are unsure how to do something safely it is your responsibility to ask. Do not assume someone else is taking care of your safety.
- 2.2.C. Seatbelts must be worn at all times in company vehicles/equipment.
- 2.2.D. Danger (Red) Tape can only be crossed after receiving permission from the person in charge of the work inside the barrier.
- 2.2.E. Caution Tape shall only be crossed after checking for hazards and deeming the area is safe to enter. You must understand the hazards prior to entering the area.
- 2.2.F. OSHA safety posters are posted in the breakroom area of each facility.
- 2.2.G. Brecke and its employees shall follow all applicable OSHA standards.
- 2.2.H. Brecke employees shall follow all customer safety policies/procedures. If these differ from Brecke policies/procedures, the more stringent shall take precedence.
- 2.2.I. Accidents/incidents/near misses need to be reported to supervisor immediately.

- 2.2.J. Any employee who is involved in an accident shall be required to go through any relative retraining. During the retraining the employee will receive the information again as well as evaluate the training to see where it can be improved.
- 2.2.K. Tobacco use shall be allowed only in designated areas & not in company vehicles.
- 2.2.L. Food shall not be kept or consumed in areas where there is a potential for chemical/health contamination.
- 2.2.M. Employees must be well groomed, long hair must be maintained to ensure it does not become a safety hazard.
- 2.2.N. Workplace violence including fighting, throwing objects, threatening, etc. will not be tolerated.
- 2.2.O. Do not remove, tamper or operate any tool/equipment without safety guards.
- 2.2.P. Observe and follow all Safety signage.
- 2.2.Q. No riding in or on any vehicle or equipment where there is not a seatbelt, or it is not intended for such use.
- 2.2.R. All equipment/vehicles shall be inspected prior to use each day. Any deficiencies shall be reported and corrected prior to use.
- 2.2.S. Piping must be color coded with labels showing contents.
- 2.2.T. Any painting shall be done outside or in well-ventilated location.
- 2.2.U. Dispose of all products in accordance to manufacturer's recommendations and in appropriate containers.
- 2.2.V. Customer's trade secrets shall remain confidential and not be disclosed.

2.3. Pre-Job Hazard Analysis (PJHA)

- 2.3.A. PJHA form – Appendix B
- 2.3.B. The PJHA shall be the certified hazard assessment to determine proper PPE.
- 2.3.C. All jobs shall have a Pre-Job Hazard Analysis (PJHA) completed at least daily. This must be reviewed with all employees affected.
- 2.3.D. Prior to working alone, employees shall fill out PJHA with supervisor.
 - 1) Together both will evaluate the risk of working alone and any necessary control measures.
 - 2) During this work, a communication schedule shall be established not to exceed 2 hours between contacts.
 - 3) Workers shall carry a cell phone, or communication method acceptable to the facility, at all times when working alone.
 - 4) If no response to communication within 15 minutes, the supervisor/employee will go to site to check on safety of worker.
- 2.3.E. PJHAs must be reviewed and signed by all individuals working on that job including fire watch, attendant, and any others who are directly affected by the hazards presented by the work. If the signature is not easily recognizable to an employee, then the employee must legibly write their name.
- 2.3.F. Changes to PJHAs are required:
 - 1) When the scope of the job changes.
 - 2) A new hazard is introduced.
 - 3) The information on the PJHA is no longer accurate.
- 2.3.G. Any changes to PJHAs need to be reviewed with all parties.
- 2.3.H. PJHAs shall be turned in physically or electronically to the Safety Team at least weekly.
- 2.3.I. Stop Work shall be recorded on the PJHA and reviewed with the supervisor and the Safety Team.
- 2.3.J. After Stop Work issue has been corrected and closed, it is just as important to follow-up and ensure the issue remains corrected.

2.4. Rights Under OSHA

2.4.A. Safe & Healthful Workplace

- 1) It is under this right that any employee has the authority to stop work if there is an unsafe act/situation that could result in an incident or if the risk is not understood or established.
- 2) Once work has stopped all affected, employees shall be notified of the reason for stopping work and the issue shall be corrected immediately.
- 3) No work shall be performed until all concerns have been resolved.
- 4) Team Leaders shall be responsible for alerting the Safety Team and together ensure the stop work condition is corrected.

2.4.B. Know About Hazardous Chemicals

2.4.C. Report Injury To Employer

2.4.D. Request Hazard Correction

2.4.E. Training

2.4.F. Know What Hazards you are being exposed to

2.4.G. File A Complaint With OSHA

2.4.H. Be Free From Retaliation For Exercising Safety & Health Rights.

2.4.I. Employees responsibilities to Brecke

- 1) Employees shall understand all applicable codes, laws and policies.
- 2) Employees shall follow all applicable codes, laws and policies.
- 3) Employees shall wear all required PPE as instructed.
- 4) Employees shall inform Brecke Safety Team of any situation that may impair the employee's ability to perform their job functions.
- 5) Employees shall be physically and mentally able to do all the functions of their job.

2.5. Return To Work

2.5.A. If an employee has a condition/situation outside of work such as an injury, pregnancy, mental health, substance abuse issue:

- 1) It is the employee's responsibility to discuss his/her job with a physician and determine if changes the employee can complete his/her duties with or without accommodations.
- 2) Safety & the employee's supervisor must approve the return to work prior to employee resuming work.

2.5.B. Employees injured on the job will be given an appropriate modified/alternate duty while there are restrictions are placed on an employee's work pursuant due to the injury.

2.5.C. Employees with situations that originated outside Brecke will not be allowed to return without a full work release (no restrictions).

2.5.D. Management has the right to remove an employee from work if they are found to be emotionally, physically, or mentally unfit to perform their job.

2.6. Disciplinary Action Program

2.6.A. Supervisors, Safety Team, Team Leaders & Owners may enforce the disciplinary action program.

2.6.B. Brecke follows a progressive discipline policy with the following levels:

- 1) Verbal Warning
- 2) Written Warning
- 3) Suspension (With or Without Pay)
- 4) Termination

2.6.C. This discipline policy is in the best interest of Brecke and its employees.

- 2.6.D. Brecke may discipline an employee without the usual progression.
- 2.6.E. Workplace inspections are conducted to help employees and to ensure safety rules are being followed.
- 2.6.F. All safety infractions may be disciplined up to and including immediate termination. This includes but is not limited to:
 - 1) Ignoring policies such as stop work policy.
 - 2) Pressuring someone else to do unsafe work including horseplay.
 - 3) Retaliating against an employee for exercising their rights or reporting an incident.
 - 4) Failing to report an incident in a timely manner.

2.7. Subcontractors

- 2.7.A. Subcontractors must be competent and capable and have appropriate licenses, registrations and insurance to perform the required work in a safe and environmentally sound manner.
- 2.7.B. Prior to starting work, clear communication lines, roles, responsibilities, and an emergency action plan shall be established.
- 2.7.C. Subcontractors will be prequalified by reviewing safety programs, training documents, and safety statistics (TRIR, DART, Fatality Rate must be at or below the industry average).
- 2.7.D. Subcontractors shall be included in pre-job meetings and safety orientations.
- 2.7.E. Subcontractors shall complete PJHA and shall be included in safety inspections.
- 2.7.F. Any safety issues shall be discussed with the subcontractor immediately and during a post-job safety performance review.

Chapter 3 PPE

3.1. General

3.1.A. General

- 1) Brecke will use PJHAs to determine what PPE is necessary beyond the standard PPE.
- 2) Shorts, loose or bulky clothing are not permitted.
- 3) The Safety Team will determine what is acceptable options for PPE based on:
 - a) Customer requirements
 - b) PJHA's
 - c) Safety Audits
 - d) Scope of work
 - e) Employee preference
- 4) The Safety Team will purchase & supply all employees with necessary PPE as required per OSHA 1926.95.
- 5) Brecke will not provide PPE that is solely for protection from weather including but not limited to: winter coats, jackets, parkas, rubber boots, hats, raincoats, sunglasses and sunscreen.
 - a) Brecke will supply each field employee 1 pair of lined gloves, as determined by the Team Leader Safety Team, each year.
 - b) Only the Team Leader Safety Team shall issue lined gloves.
- 6) Employees must be fitted for some PPE: this information may be kept by the Safety Team.
- 7) All PPE must be kept clean and in good condition.
- 8) Any PPE that is damaged or defective shall be removed from service.

- 9) PPE (not including steel/safety toe shoes) shall be made available for visitors.
- 3.1.B. Training
 - 1) Brecke shall train each employee who is required to use Personal Protective Equipment (PPE). Each employee shall be trained for each piece of PPE. This training for each item will include:
 - a) Limitations
 - b) Proper use, selection & fit
 - c) How to wear, adjust and features
 - d) Proper care & inspection
 - e) End of life and disposal
 - 2) This training shall occur at or prior to time of issue.
 - 3) Training shall be required when:
 - a) Any portion of the training for an item changes
 - b) Person has not demonstrated knowledge/understanding of the item
- 3.1.C. Standard PPE required for all employees not in office.
 - 1) Hard Hat
 - 2) Safety glasses
 - 3) Gloves
 - 4) Pants
 - 5) Safety-Toe/Steel Toe Boots
- 3.1.D. Employee Owned Equipment
 - 1) Any PPE not provided by Brecke must be approved by the Team Leader Safety Team prior to use at Brecke.
 - 2) An employee must pay to replace employee owned PPE unless they wish to use what Brecke provides.
- 3.1.E. Use
 - 1) All PPE shall be worn according to manufacturer's recommendations.
 - 2) Any employee may request an evaluation of PPE if he/she does not know which PPE best suits the task at hand.
 - 3) Any employee not properly wearing their PPE will be asked to correct this and may be subject to disciplinary actions.

3.2. Hard Hats

- 3.2.A. Hard Hats shall be worn any time there is the potential for head injury from impact, electrical shock/burns, or falling/flying objects.
- 3.2.B. Hard Hats shall also be required when working on or near roads.
- 3.2.C. Brecke shall provide Jackson brand Hard Hat with Brecke Logo.
- 3.2.D. Brecke Logo must be visible.
- 3.2.E. No competitor's logo may be worn.
- 3.2.F. Any stickers applied to the hard hat must be rated for such.
- 3.2.G. Emergency Information Card shall be kept on the inside of the hard hat at all times.

3.3. Safety Glasses/Eye Protection

- 3.3.A. Brecke shall provide ANSI Z87+ rated safety glasses or over-glasses.
- 3.3.B. Employees may wear ANSI Z87+ rated prescription glasses with side shields.
- 3.3.C. Any eye protection must meet/exceed ANSI Z87+ standard.
- 3.3.D. Safety glasses shall not be tinted if worn inside.
- 3.3.E. Transition lenses are not acceptable.
- 3.3.F. Tinted glasses must be removed if asked.

3.4. Boots/Shoes

- 3.4.A. Employees shall be responsible for purchasing their own shoes/boots unless they are specialty or are not allowed to leave the premises.
- 3.4.B. Can be either Steel Toe or Composite (“Safety Toe”)
- 3.4.C. Must not have holes or have to ground down to see steel.
- 3.4.D. Other Boots/Shoes shall be required depending on the task.
- 3.4.E. Office employees must wear closed toed shoes.
- 3.4.F. Standard Steel Toe Boots will be approved as long as they meet ANSI Z41/ASTM F2412/ASTM F2413.

3.5. Gloves

- 3.5.A. Cut Resistant Gloves must be at least ANSI 4 Cut rated.
- 3.5.B. Unless Welding, Grinding or other operations requiring thermal protection the Cut Resistant gloves shall be worn.
- 3.5.C. For tasks requiring heat protection Leather gloves approved for the task shall be worn.

3.6. Hi-Vis Clothing

- 3.6.A. Anyone working in or around roadways or heavy equipment must wear hi-vis clothing or vest.
 - 1) ANSI yellow clothing is allowed for operations after sunrise and before sunset.
 - 2) Operations after sunset or before sunrise shall be of similar color and be retroreflective.
- 3.6.B. Vests shall have a D-Ring hole for use with fall protection.
- 3.6.C. Vests shall also be SE (Self-Extinguishing) rated.

3.7. Fall Protection

- 3.7.A. General
 - 1) All employees shall be trained in the use of fall protection equipment prior to being issuing.
 - 2) Fall protection retraining shall be required when:
 - a) Training has been shown ineffective.
 - b) Changes in policies.
 - c) Changes in equipment.
 - 3) Equipment
 - a) Brecke shall provide necessary fall protection equipment needed.
 - b) Equipment purchased shall meet OSHA and ANSI requirements.
 - c) Equipment shall be cared for and used per manufacturer’s instructions, including limitations due to fall protections calculations.
 - d) Hi-Vis Vests, Jackets, bulky clothing shall be worn outside of harness.
 - 4) Employee shall wear personal fall protection when:
 - a) At least 4 feet above floor or current level.
 - b) On a roof where there is no fall protection system.
 - c) Any time working not within a controlled access zone/designated area per 1910.28(b)(13).
 - d) When working in the basket of an aerial/scissor lift.
 - e) Any time a PJHA determines that fall protection is needed.
 - f) Any time required by customer/client.
- 3.7.B. Inspection
 - 1) Fall protection shall be inspected prior to each use by user.
 - 2) Fall protection shall be turned in semi-annually to the Safety Team for inspection by a competent person.

3.8. Respiratory Protection

3.8.A. General

- 1) Employees are allowed to wear non-filtering dust masks on a voluntary basis, which are not defined as a respirator.
- 2) Any respirator used shall require the application of OSHA Standard 1910.134.
- 3) Respirators shall be provided at no cost to employees and are required to be worn when:
 - a) In an oxygen deficient environment (less than 19.5% oxygen),
 - b) Chemicals or dust are present which can cause health issues,
 - c) Any Immediately Dangerous to Life and Health (IDLH) situation,
 - d) In a confined space where there is the potential for one of these conditions.
- 4) IDLH situation shall be treated the same as a confined space situation including but not limited to attendant, communications, and rescue measures in place.
- 5) For IDLH situations, supplied air respirators are required.
- 6) Fresh Air System is to be used only to provide fresh air and not respiratory relief from hazards.
- 7) Respirators shall be inspected, cleaned and disinfected by any employee upon checkout and prior to check-in of the respirator.
- 8) NIOSH certified respirators shall be selected by the Safety Team based on the hazard the employee will be exposed to.

3.8.B. Training

- 1) Training shall follow the same guidelines of all PPE.
- 2) Training for respirators shall also discuss:
 - a) Respirator Policy & 1910.134,
 - b) Reason for using a respirator,
 - c) Signs/symptoms of respirator failure,
 - d) Selection of the correct respirator,
 - e) Gas monitor usage.
- 3) Training shall be conducted:
 - a) When initially assigned a task that requires the use of a respirator,
 - b) Annually for every individual using a respirator
 - c) For misuse/lack of use of a respirator
 - d) Similar conditions that would require training for general PPE

3.8.C. Medical Evaluations

- 1) Medical Fit testing and evaluations shall be conducted in accordance with requirements of 1910.134
- 2) Evaluations shall be:
 - a) Confidential
 - b) Completed prior to fit testing,
 - c) During normal hours,
 - d) Convenient and understandable,
 - e) Conducted so the employee has a chance to discuss results with physician.
- 3) Records shall be maintained for the most recent fit testing.

3.8.D. Seals

- 1) Employees are required to pass a qualitative fit test prior to being issued a respirator and annually thereafter.
 - a) A quantitative fit test shall be required if a qualitative fit test is not applicable for the respirator.
 - b) Fit testing shall only be required for tight-fitting face pieces.

- 2) Employees who are required to wear a respirator must keep facial hair to a level that can allow for a seal to be made at all times.
- 3) Glasses or goggles cannot interfere with the seal of the respirator.
- 4) Prescription lenses shall be provided for the respirators where an employee requires prescription glasses during use of the respirator.
- 5) Seals shall be checked every time a respirator is donned.

3.8.E. Use & Care

- 1) Employees shall leave respirator-required area to wash, change cartridges or if a breakthrough or resistance is detected.
- 2) All washing and filter changes shall be done in a clean area.
- 3) Respirators shall be cleaned before and after each use to ensure they are kept clean and sanitary.
- 4) Respirators shall be stored in the supplied bag when not in use.
- 5) Respirators shall be inspected before and while cleaning.

3.9. Noise

3.9.A. General

- 1) Ear Protection must be worn for any of the following tasks
 - a) Welding,
 - b) Cutting,
 - c) Grinding,
 - d) Operating/Working in the vicinity of
 - (i) Excavation Equipment
 - (ii) Forklift
 - (iii) Impact Tools
 - (iv) Powder Actuated Tools
 - (v) Other Heavy Tools/Equipment as deemed By Safety Team
 - e) Any area where customer deems ear protection is necessary
- 2) Safety Team will periodically evaluate dBA levels and make recommendations.
 - a) Levels exceeding 85dBA TWA shall implement a hearing conservation program including monitoring program, baseline audiograms (within 6 months of employment and at least 14 hours without workplace noise), annual audiograms (notifying employees in writing within 21 days of threshold shift and re-evaluation or refitting required), audiometric testing, and necessary recordkeeping.
 - b) Brecke does not have employees who exceed 85dBA TWA exposure threshold.
- 3) Employees may select from the following Brecke provided Ear Protection:
 - a) Foam Ear Plugs NRR 30+
 - b) Multi-Use Ear Plugs NRR 27+
 - c) Earmuffs NRR 25+
 - d) Brecke supplied options shall be provided at no cost to the employee.
- 4) Dual Protection is allowed
 - a) dBA reduction is the higher NRR-2.
 - b) Shall be required if customer deems necessary or by evaluation.

3.9.B. Training

- 1) Training shall follow same guidelines as general PPE.
- 2) Employees shall also be trained on importance of Noise Control at annually.
- 3) Employees shall be trained on advantages and disadvantages of the different options of hearing protection.
- 4) Employees will be trained NRR ratings and explained decibels, dual protection, and time-weighted average.

3.10. Back Support Belts

- 3.10.A. Back Support Belts may be used by an employee on a volunteer basis.
- 3.10.B. Back Support Belts shall not be supplied or required by Brecke.

3.11. Specialty PPE

- 3.11.A. Other PPE shall be considered Specialty & controlled by the Safety Team.
- 3.11.B. Specialty PPE shall be required if customer or PJHA dictates such.
- 3.11.C. Specialty PPE shall be selected & provided on a case-by-case basis.

Chapter 4 Working Surfaces

4.1. General

- 4.1.A. Floor/wall openings shall be guarded/covered
 - 1) Permanent openings shall have toe-boards and guard rails.
 - 2) Working around unguarded/uncovered opening requires the use of fall protection.
- 4.1.B. All areas must be kept clean. Clean as you work. All spills must be cleaned up immediately. Trash/waste must be considered prior to work starting.
- 4.1.C. Recycling is encouraged if recycling facilities are available.
 - 1) Handling, organization and storage of waste and scrap materials must be completed in a manner to minimize potential impact to the environment.
 - 2) All employees will be made aware of proper waste disposal and segregation for the jobsite.
- 4.1.D. Any protruding steel from the concrete shall be guarded to eliminate impalement hazards.
- 4.1.E. Do not place loads onto any portion of concrete or concrete structure that exceeds the load limits.

4.2. Fall Protection

- 4.2.A. Fall protection retraining shall be required when:
 - 1) Training has been shown ineffective.
 - 2) Changes in policies.
 - 3) Changes in equipment.
- 4.2.B. Brecke does not use site-specific fall protection plans but will follow any rules as required by customers.
- 4.2.C. Falls, near misses or serious incident shall result in an investigation and review of the fall protection program.
- 4.2.D. In the event of a fall, employees shall:
 - 1) Deploy their suspension trauma relief device.
 - 2) Self-rescue or be rescued promptly.

4.3. In Plant Rail Safety

- 4.3.A. Employees shall follow all safety procedures and site-specific plans of the facility.
- 4.3.B. Railways are to be treated as Roadways and as such, employees must wear Hi-Vis Clothing as listed for roadways.
- 4.3.C. Cross at appropriate rail crossings where available.
- 4.3.D. Do not cross within 10 ft of a rail car. Rail equipment can move in either direction.
- 4.3.E. Always stop, look and listen when preparing to cross a railway.
- 4.3.F. Do not step on tracks.
- 4.3.G. Do not climb over/under rail cars/equipment.

- 4.3.H. Before starting work that's within 6 ft of tracks contact supervisor and site contact to take tracks out of service.

Chapter 5 Ladders & Stairs

5.1. General

- 5.1.A. Stair or ladder shall be used for change in height of more than 18".
- 5.1.B. At least one access/egress point shall be maintained at all times.
- 5.1.C. Employees shall be trained in hazard recognition for ladders and stairs.

5.2. Ladders

5.2.A. General

- 1) Employees shall be trained in selection and inspection of ladders.
- 2) Do not exceed the load ratings.
- 3) Do not use a ladder in any manner other than what is intended by the manufacturer.
- 4) For the purpose of this manual, rungs shall be used for cleats and steps as well.
- 5) Ladders shall be visibly inspected prior to use.
- 6) Brecke ladders shall be inspected at least monthly by a competent person.
- 7) Monthly ladder inspections shall have documentation submitted to Safety Team. (Appendix J)
- 8) All ladders must meet OSHA/ANSI specification or have uniformly spaced rungs 10-14 in apart.
- 9) Only fiberglass portable ladders shall be used.
- 10) No wood job-made ladders unless prior approval is given and documented.
- 11) Any ladder failing inspection shall be tagged "DO NOT USE" and be removed from service.

5.2.B. Inspection

- 1) Follow manufacturer's instructions for inspections.
- 2) Rungs shall be parallel & level.
- 3) No broken, damaged, cracked, split, missing or corroded components.
- 4) Stickers/labels shall be legible.
- 5) Clean and free of grease, oil, etc.

5.2.C. Use

- 1) Always face the ladder when ascending or descending.
- 2) Do not carry items when ascending or descending. Rather use other methods to raise tools/equipment/materials to proper height.
- 3) Only use ladders on a clean, level, non-slippery and stable surface.
- 4) If this is not possible, the ladder shall be secured to prevent the ladder from moving.
- 5) If there is a chance the ladder could be hit/moved during work on or around the ladder, the ladder must be secured.
- 6) Area around the top and bottom of the ladder shall be kept clear.
- 7) Do not move a ladder during use.
- 8) Single/extension ladders shall use 4-to-1 rule.
- 9) Do not step on the top 2 steps of a stepladder.
- 10) Ladders must extend at least 3 feet above the upper landing of a surface when used for access. This can be achieved through length of ladder. The ladder must be secured at the top and a grab device shall be installed.

- 11) Do not use a ladder use a ladder by a door unless it is blocked open, locked or guarded.
- 12) Do not tie or fasten multiple ladders together.
- 13) Do not separate/dismantle a ladder.
- 14) Fixed ladder above 7 ft shall have a cage or the employee shall use fall protection.
- 15) Employees shall maintain 3 points of contact when using a ladder.

5.3. Stairs

5.3.A. General

- 1) Stairways under construction shall not be used unless:
 - a) Handrails, landings, treads are installed
 - b) All parts are free from hazardous projections such as nails or screws
 - c) Sufficient lighting is available.
- 2) Slippery/obstructive conditions shall be corrected prior to using a stairway.
- 3) Damage to a stairway shall be reported immediately to the facility contact.
- 4) Damaged stairs shall be secured and taped off "Danger- Damaged Stairway".
- 5) Stair rails, handrails, midrails, shall not be used as an anchor point for fall protection.

5.3.B. Construction

- 1) Stairways at least 4 steps or 30 inches shall have a handrail and stair rail along any unprotected edge.
- 2) Stair rails must have a midrail, screens, mesh, or vertical beams less than 19 in apart.
- 3) Handrails and top of stair rails shall support at least 200 pounds

Chapter 6 Emergency Action Plan

6.1. General

The priority during every emergency is to protect personnel from further injury and to minimize property damage. Each person must know what to do if there is an emergency. As such, this plan shall be made available to all employees for review. This plan shall also be reviewed with employees during initial assignment and any time the plan changes or the responsibility of the employees under the plan changes. This plan covers actions to be taken under specific emergency conditions such as fire, tornado, medical emergencies or other emergency, including release (spill) of, or substantial threats of release of, hazardous substances within the Brecke facility. Anything of large scale or that would require reporting to OSHA or may require coordination with multiple entities shall fall under the Crisis Management Plan.

6.2. First Aid

- 6.2.A. First Aid Kits shall be kept in every Brecke Vehicle & Brecke Owned Facility.
 - 1) Brecke First Aid Kits will be transitioned to ANSI 2015 Class B requirements by 12/31/18.
 - 2) Class B requirements are for Industrial settings as recommended by ANSI.
 - 3) First Aid Kits shall be easily accessible.
 - 4) First Aid Kits shall be checked weekly and refilled from the office first aid kit.
 - 5) Additional fill requests shall be sent to safety by 9am Monday morning.

- 6.2.B. In the event of an accident, Medcor (licensed healthcare professional) can assist in walking through first aid operations.
- 6.2.C. Medcor will refer an employee to a clinic/hospital or inform the employee to call 911 if necessary.
- 6.2.D. The supervisor shall be responsible for ensuring the employee can get to the hospital/clinic if the employee is unable to drive him/herself.
- 6.2.E. Any first aid training shall be from the American Red Cross or similar organization.
- 6.2.F. Eye wash/safety shower or other suitable flushing methods shall be available for employees who may be exposed to corrosive materials.

6.3. Crisis Management Plan

B.G Brecke, Inc. Crisis Management Team			
NAME	TITLE	CELL PHONE	DIRECT LINE
Christian Schwartzhoff	Team Leader Safety Team	319-550-4558	319-396-7055 x1148
Terry Lange	Supervisor Safety Team	319-310-2609	319-396-7055 x1107
Bret Brecke	Vice-President	319-310-2636	319-396-7055 x1126
Bob Brecke	President	319-310-0647	319-396-7055 x1103
Brad Brecke	Vice-President	319-310-2626	319-396-7055 x1147
Bill Jensen	Controller	319-310-3840	319-396-7055 x1113

MEDIA STATEMENT

“THERE HAS BEEN AN INCIDENT AND SOMEONE WILL ARRIVE SHORTLY TO PROVIDE YOU WITH MORE INFORMATION BUT MY MAIN CONCERN RIGHT NOW IS THE SAFETY AND HEALTH OF EVERYONE ON THE JOB, SO IF YOU WILL EXCUSE ME, THANK YOU.”

- Start phone calls to the Crisis Management Team as shown above
 - o Person completing: _____
- Assess the scene before entering to ensure the location is secure and safe to enter.
- If necessary, notify emergency personnel (911 or customer specified number) and prepare for arrival. Designate individuals to be sent to all jobsite entrances to restrict access to the site and to ensure emergency personnel enter the site at the correct entrance. If calling from a cell phone, make sure you are very clear about your location because the call may not be able to be traced to a specific location (Time is of the essence).
 - o Person notifying emergency personnel: _____
 - Entrance: _____ Person Assigned: _____
 - _____
 - _____
 - _____
- Administer first aid to help stabilize the injured (Trained first aid responders).
- The Incident Commander shall establish a command post at the location to be determined.

- Verify the location of all employees from all contractors. All subcontractors shall utilize the established evacuation meeting point in order to facilitate a head count.
 - Personnel on site: _____
 - _____
- All non-essential personnel shall be removed and/or kept back from the area. The scene must be roped off or secured until completion of the investigation. Determine if the job should be shut down.
- Assure cameras and phones are controlled. Direct any calls appropriately.
- After the scene is secured: document ALL incident evidence. Do not move evidence unless necessary for safety reasons until after the investigation is complete. Take photos or video of everything relevant, except injured individuals. Take measurements (distances, weights, heights, etc.) and/or samples (soil, water, air, etc.)

6.4. Customer Specific Plan

A specific emergency plan for each customer facility shall be established by the custom with Brecke's assistance (if required). The Brecke employee who is responsible for operations on that site has specific responsibility for understanding Brecke's responsibilities and actions required under this plan. This person is also responsible for training the employees in emergency procedures. Information for the customer's plan will need to be filled into the Customer EAP form (Document 14.3). In the event the site is not controlled by any particular customer/General Contractor: an action plan shall be created by the person responsible for operations with the assistance of the Safety Team (if requested).

Prior to any construction or new site work, a site map of the project shall be developed or obtained if already developed. The 'Safe Work Plan' shall identify usage area, hazards, Emergency Action Plan and be reviewed with Operating Personnel that will be at the site.

6.5. Supervisors/Employee Responsibilities

All emergencies must be reported immediately to Brecke and to customer if required. During an emergency, supervisors must ensure that all parts of the emergency action plan are being followed and render assistance to the person in charge if necessary. Any employee not involved in the emergency or emergency operations shall stay away from the scene and follow all instructions. Some customers may have employees designated as "Emergency Critical Operations Specialist" or "ECOS". Each ECOS has been trained in the rapid procurement of safe operations of critical plant operations. These employees have a specific job to perform if the situation allows. They are to see that the overall safety of the plant or facility so that the emergency situation at hand does not increase the severity of the overall emergency. Brecke employees are only to be listed as an ECOS only by prior approval of the Safety Team.

6.6. Brecke Facilities Action Plan

6.6.A. Fire

1) Main office

Notify all other employees through the intercom system by dialing 460 on any Brecke Office phone. Employees are to evacuate the building using evacuation routes as posted. Any trained employee may use the appropriate fire extinguisher to fight incipient stage fires only, and only if employee feels comfortable doing so. Evacuation Point is the Brecke sign on F Ave NW. Notify Fire department by calling 911. Use Head Count Procedures (14.5.F) to ensure everyone has exited the facility. No employee is to re-enter that facility until facility is deemed safe by a

competent person.

2) Covington Location:

Notify all employees by yelling: "Fire! Fire! Fire!" Employees are to evacuate the building using evacuation routes as posted. Any trained employee may use the appropriate fire extinguisher to fight incipient stage fires only, and only if employee feels comfortable doing so. Evacuation point is the driveway at Covington Road. Notify Fire department by calling 911 then contact Brecke Safety Team. The supervisor is responsible for ensuring everyone has exited the facility. No employee is to re-enter that facility until facility is deemed safe by a competent person.

3) Dubuque Location:

Notify all employees by yelling: "Fire! Fire! Fire!" Notify other tenant employees. Employees are to evacuate the building using evacuation routes as posted. Any trained employee may use the appropriate fire extinguisher to fight incipient stage fires only, and only if employee feels comfortable doing so. Evacuation Point is the same as other tenants. Notify Fire department by calling 911 then contact Brecke Safety Team. The supervisor is responsible for ensuring everyone has exited the facility. No employee is to re-enter that facility until facility is deemed safe by a competent person.

6.6.B. Gas Leak

- 1) Notify all personnel using similar methods to Fire procedures.
- 2) All employees/visitors shall exit the building using the posted evacuation procedures.
- 3) At the headcount location: call the gas company (866-851-4261).
- 4) Notify emergency personnel, if necessary, by calling 911.
- 5) No employee is to re-enter that facility until facility is deemed safe by a competent person.

6.6.C. Power Failure

- 1) If life threatening situation call 911.
- 2) Do not attempt to move/approach someone trapped by a power line.
- 3) Call electric company (800-255-4268 or 800-595-5325)

6.6.D. Tornado/Severe Weather

- 1) Notify all personnel of impending severe weather using similar methods to Fire procedures.
- 2) All employees shall to go to closest available shelter location as shown on evacuation maps.
- 3) Employees are to remain in the shelter location until the all clear is given.

6.6.E. Blizzard

- 1) Notify all personnel.
- 2) Stay inside unless instructed otherwise by emergency personnel.
- 3) If driving
 - a) Pull over if necessary.
 - b) If stranded run the engine at 10-minute intervals to conserve fuel and heat.
Contact authorities (911) and notify Safety Team of your location.

6.6.F. Chemical Release (Large)

- 1) If inside the building; follow fire procedures.
- 2) If outside of building; stay inside facility away from doors or windows unless instructed otherwise by trained personnel.

6.6.G. Medical Emergency

- 1) Refer To accident policy (3.6)
- 2) Cardiac Arrest:
 - a) In Main Office: Notify Crisis Management Team.
 - b) Any Other Location: Call 911 then notify Safety Team

6.6.H. Head count

- 1) Visitors: - The signatures in the "Brecke. Visitor Book" will determine head count. The receptionist will take the book to the north parking lot for the head count.
- 2) Hourly Employees: - Head count will be determined by the time collection system for hourly employees. A notebook computer with Internet access will be available in the north parking lot meeting area to run the report of employees clocked in.
- 3) Salaried employees: - Receptionist will maintain a list of salaried employees in the facility by monitoring the "Out of Office" notifications. The receptionist will take the list to the north parking lot for the head count.
- 4) Off shift Supervisors are responsible to know who is in their department for head count in case of evacuation.

6.6.I. Workplace Violence/Active Shooter

- 1) Notify everyone possible of the situation
- 2) Examine the situation
 - a) How close is the incident to you?
 - b) Can you get away safely?
 - c) If in Immediate Danger, take cover/hide.
- 3) Evacuate the facility to a safe location.
- 4) Dial 911 to alert the authorities.

6.6.J. Nuclear Event

If a nuclear event occurs all employees shall follow the evacuation measures set forth by Duane Arnold Energy Center. (See Appendix C)

6.7. Vehicle and Workplace Related Incidents

All vehicle incidents, injuries, near misses, falls, radiation exposure, and property damage situations that are work related, need to be reported immediately to the Safety Team, the employee's supervisor and customer (if required by customer or relevant to the customer). Any incidents/injuries outside of work that may affect what/how work can be completed by the employee shall also be reported.

6.7.A. Workplace Injury

- 1) Assess the situation:
- 2) If person still in a dangerous location remove them if safe to do so
- 3) If necessary, call 911
- 4) Call Safety Team
- 5) Contact Supervisor
- 6) Supervisor will contact Medcor with Employee if necessary.
- 7) Follow accident investigation steps in 6.8.
- 8) Any employee taken for medical care shall be accompanied by a B.G. Brecke representative.

6.7.B. Vehicle/Property Incident

- 1) An officer of B.G. Brecke shall determine if the accident shall be turned into insurance company.
- 2) Team Leader Safety Team shall contact the Insurance company if determined it is necessary by B.G. Brecke and be the primary point of contact.

6.8. Incident/Accident Investigation

6.8.A. All incidents will be investigated; the level of investigation will be based on:

- 1) Potential frequency.
- 2) Potential severity.

6.8.B. Incident/Accident Investigation Form (Appendix D) must be used for all investigations.

- 1) Corrective Actions must include communication to employees with like exposure of lessons learned.
 - 2) Witness statement(s) need to be included in completion of Investigation Form.
- 6.8.C. The Safety Team or crisis management team will be responsible for all parts of the investigation, including proper equipment is available, with the assistance of the following if necessary:
- 1) Supervisor/Team Leader of effected employee(s)
 - 2) Effected employee(s)
 - 3) Witness(es)
 - 4) Brecke President or Vice President(s)
- 6.8.D. Initial Identification of evidence shall occur immediately or as soon after the incident as is safe to do so.
- 6.8.E. Any Evidence must be collected, preserved, and secured through:
- 1) Pictures.
 - 2) Notes/sketches.
 - 3) Barricades.
 - 4) Impounding or confiscation of equipment.
 - 5) Other means necessary/permitted (i.e. impounding/confiscation of equipment).
- 6.8.F. Safety Team and Crisis Management Team members shall be trained in their roles, responsibilities, and incident investigation techniques.
- 6.8.G. Fatalities Must be reported to OSHA & customer (if applicable) within 8 hours.

Chapter 7 Hot/Cold Weather

7.1. General

- 7.1.A. Employees shall be trained in the effects of Hot & Cold Weather at initial assignment and annually.
- 7.1.B. Supervisor training including prevention, recognition, and emergency response to heat and cold related illnesses shall be completed prior to allowing supervision of employees.
- 7.1.C. Any employee may be assigned a task that could be outside or in an area that would put the employee at a potential risk of heat/cold illness.
- 7.1.D. Prior to assigning a task where a heat/cold illness is a potential; personal risk factors shall be taken into consideration.
- 7.1.E. Personal risk factors include but are not limited to:
 - 1) Employee health/fitness
 - 2) Past history of heat/cold illness
 - 3) Recent illnesses
 - 4) Physician recommendations
 - 5) Accommodations and availability of accommodations.

7.2. Heat Illness- High heat conditions

- 7.2.A. Supervisors to routinely check on new employees to ensure they are consuming enough water and not showing symptoms of heat illness.
- 7.2.B. Risks of being getting heat related illness are greatest for new employees during first 2 weeks of work in high heat.
- 7.2.C. During high heat days, work will be adjusted, if possible, to have majority of work completed during non-peak hours.
- 7.2.D. Water shall be available to all employees.

- 7.2.E. Brecke shall provide 5-gallon water containers or bottled water for each jobsite where water is not readily available.
- 7.2.F. Employees working should drink at least 1 cup of water every 15 minutes.
- 7.2.G. Employees shall have access to shade or air conditioning for breaks.
- 7.2.H. Any employee feeling symptoms of heat illness shall report this to supervisor immediately.
- 7.2.I. Resources are available through OSHA website or OSHA Heat Safety Tool mobile app.
- 7.2.J. If someone is showing signs/symptoms of heat illness, contact Safety Team immediately.
- 7.2.K. If an emergency: call 911.

7.3. Cold

- 7.3.A. Walkways and parking lots shall be kept as clean as possible from snow and ice or salted/sanded as soon as practicable.
- 7.3.B. Cold weather supplies shall be regularly inspected and restocked.
- 7.3.C. Walk carefully in areas where there is the potential for or presence of snow/ice.
- 7.3.D. Employees shoveling snow need to be aware to not overexert themselves.
- 7.3.E. Employees must wear proper cold weather protection when working in cold, wet and windy conditions.
- 7.3.F. If clothing gets wet, change as soon as possible.
- 7.3.G. All employees shall be familiar with signs and symptoms of cold weather induced health problems such as hypothermia, frostbite and trench foot.
- 7.3.H. Do not touch any cold objects with bare hands.
- 7.3.I. Employees working outside need to drink plenty of liquids and avoid caffeine.
- 7.3.J. If possible, do not use vibrating tools.
- 7.3.K. Take measures to protect from sunburns.
- 7.3.L. In cold weather, employees should be working under constant observation by a co-worker to monitor for symptoms of cold weather illness.
- 7.3.M. All employees should be informed of the hazards caused by snow and ice buildups.

Chapter 8 Hand & Power Tools

8.1. General

- 8.1.A. Inspect All Tools Prior To Use.
- 8.1.B. Any tool failing inspection shall be tagged out and removed from service until repairs can be made. The following includes some reasons a tool would fail inspection:
 - 1) Missing or damaged parts.
 - 2) Worn or frayed cords.
 - 3) Cords that have been overheated.
- 8.1.C. Employees must be trained to operate any tool prior to initial operation.
- 8.1.D. Tools shall be kept clean and in good, safe condition.
- 8.1.E. Hoists shall be annually inspected/tested.
- 8.1.F. Any limits/controls on tools/equipment shall be clearly marked.
- 8.1.G. Secure items with clamps or vise to:
 - 1) Keep items from moving
 - 2) Free both hands for safe operation
- 8.1.H. Tools that can be anchored shall be appropriately anchored to prevent
 - 1) Unintentional movement

- 2) Tipping or falling
- 3) Excessive vibration
- 8.1.I. Always use tools for their intended purpose.
- 8.1.J. Follow all of manufacturer's instructions for operation, maintenance and use.
- 8.1.K. Use the correct tool for the job.
- 8.1.L. Employees shall not use powder actuated tools.
- 8.1.M. Do Not wear jewelry or loose clothing, and secure long hair when working with tools.
- 8.1.N. Always cut away from the body and never towards someone else.
- 8.1.O. Handles must be straight and tight.
- 8.1.P. Driven tools must be maintained to prevent/remove mushrooming.
- 8.1.Q. Setup screens when there is a chance for flying debris.
- 8.1.R. PPE shall be worn as required by the manufacturer or as the hazard dictates.

8.2. Machine Guarding

- 8.2.A. Guards shall be in place to protect against any employee coming into contact with the point of operation.
- 8.2.B. Check all machine guards before and after use to ensure
 - 1) Proper setting
 - 2) Good condition
 - 3) Properly secured
 - 4) No Missing guards
 - 5) Mounted/Positioned so as to not present a hazard
- 8.2.C. Do not disable machine guards unless instructed by the manufacturer for maintenance and only then following manufacturer's guidelines for maintenance.
- 8.2.D. Examples of some items that require guards
 - 1) Circular saws (above and below the base shoe)
 - 2) Pulleys, fans, & belts 7ft or above from the floor
 - 3) All moving chains
 - 4) Grinders (multiple guards on bench grinders)

8.3. Power Tools

- 8.3.A. Must be capable of being locked out
- 8.3.B. Electrical must have grounding plug, be double insulated or have a low voltage isolation transformer.
- 8.3.C. Extension cords must be of the same configuration and size (or larger) to the tool that is being used.
- 8.3.D. All tools/equipment shall be plugged in through a GFCI (Ground Fault Circuit Interrupter) outlet or pigtail.
- 8.3.E. All switches must work and shall not be tampered with.
- 8.3.F. Hydraulic tools shall be non-conductive when working around electrical equipment/lines.
- 8.3.G. Never carry/lift a tool by the cord/hose.
- 8.3.H. Disconnect all tools prior to completing any maintenance or changing blades.
- 8.3.I. Do not place finger on switch/trigger until you are ready to operate tool.
- 8.3.J. Electrical tools shall be kept dry and not used in damp/wet locations.
- 8.3.K. Always check pneumatic tools to ensure they are properly fastened.
- 8.3.L. Do not point a tool at anyone including yourself.
- 8.3.M. Air compressors shall be periodically drained of any moisture/oil.
- 8.3.N. Fire-resistant fluid shall be used in hydraulic tools.

8.4. Grinders/Abrasive Wheels

- 8.4.A. When replacing an abrasive wheel: always complete a ring test on the new wheel.
- 8.4.B. Do not stand in front of abrasive wheel as it accelerates in case the wheel explodes.
- 8.4.C. Guards:
 - 1) Work rest within 1/8 in of wheel
 - 2) Rest on top side of grinder within ¼ in of wheel
 - 3) Side guard covers at least 75% of wheel as well as spindle, nut and flange
- 8.4.D. Max RPM of wheel and should be at least that of the motor.

Chapter 9 Lockout/Tagout

9.1. General

- 9.1.A. Lockout/Tagout shall be referred to as LOTO.
- 9.1.B. Periodic inspections shall be completed by the Team Leader Safety Team at least annually to ensure procedures and requirements are being followed.
- 9.1.C. Documentation of inspections shall include:
 - 1) Date
 - 2) Equipment
 - 3) Employee(s)
 - 4) Inspector
 - 5) Location
 - 6) Task being completed
 - 7) Energy types locked out
- 9.1.D. Any item not locked or tagged out shall be treated as energized.
- 9.1.E. Any item shall still be treated as energized until all of the following are proven:
 - 1) Completely de-energized.
 - 2) Locked out and isolated.
 - 3) The item can't be re-energized without removing the lockout device.
 - 4) There can be no re-accumulation of energy.

9.2. Training

- 9.2.A. Every employee shall be trained in LOTO.
- 9.2.B. Training shall include:
 - 1) Recognizing energy sources
 - a) Types of energy including but not limited to: electrical, hydraulic, steam, gas, gravity, stored energy (tension), etc.
 - b) Understanding magnitude of the energy type.
 - 2) Methods for locking out energy
 - 3) Correctly using and filling out tags
 - 4) Ensuring energy is discharged.
 - 5) Unlocking procedures.
 - 6) Limitations of LOTO.
 - 7) Using an attendant and when it is necessary.
- 9.2.C. Retraining shall be completed if:
 - 1) Policies change
 - 2) Equipment changes
 - 3) New hazards
 - 4) Job assignment changes
 - 5) Any time Brecke deems or is shown there are inadequacies in the employee's knowledge or understanding of the policies/procedures. Such as

- a) Failure to remove/apply a lock/tag.
 - b) Deviating from the policy/procedure
- 9.2.D. All training shall be documented, signed and certified.

9.3. Locks and tags

- 9.3.A. Each lock shall have 1 key.
- 9.3.B. Locks shall be provided by Brecke
- 9.3.C. Employees shall follow customer's procedures for their sites/equipment.
- 9.3.D. Each lock shall be accompanied with a tag.
- 9.3.E. Each employee shall have their own lock and tag.
- 9.3.F. Each tag shall include the name and contact information for the employee.
- 9.3.G. All tags must be legible.
- 9.3.H. Only the employee whose name is on the tag shall remove the locking device.
- 9.3.I. If a lock cannot be used, then tags must be placed at all points of operation and an attendant must be used to ensure tags are followed.

9.4. Process

- 9.4.A. Shutdown must be discussed with affected employees.
- 9.4.B. The authorized employee must be knowledgeable of the type, magnitude and methods of controlling the energy and hazards.
- 9.4.C. Shutting down of equipment must be done using normal shutdown routines.
- 9.4.D. Shutdown procedures must be completed by a person trained on the equipment and not emergency shutdowns or power offs unless it is unsafe to do so.
- 9.4.E. After equipment is shut down lock out equipment to isolation devices for that equipment.
- 9.4.F. Equipment shall be tested for stored energy has been removed and isolated.
- 9.4.G. Equipment shall also be verified that no energy can return during isolation.
 - 1) In group lockout situations: the supervisor shall ensure all employees have stopped work prior to locks removing locks.
- 9.4.H. In the event that shift change or personnel change is necessary:
 - 1) Briefings shall take place at shift change and with any personnel changes.
 - 2) Briefings shall discuss work completed, work remaining and any safety concerns.
 - 3) Job Foreman/Superintendent shall be in charge of these operations.
- 9.4.I. Prior to unlocking equipment:
 - 1) Verify there is no water or other material that could cause discharge.
 - 2) Verify all work has completed and no persons are in the area of the equipment operation.
 - 3) Verify there are no other hazards that may be caused by re-energization.

Chapter 10 Electrical Safety

10.1. General

- 10.1.A. Prior to working on or near equipment or entering an area; Lockout Tagout Program shall be used where there is the potential to exposure to:
 - 1) Exposed energized parts
 - 2) Arch flash from energized parts
 - 3) Electric shock
 - 4) Direct or indirect electrical contact.

- 10.1.B. Always ensure the area is clean and dry before entering an area with energized electrical equipment unless rated for such conditions.
- 10.1.C. Only Qualified persons may work on energized parts and only then with Proper PPE. Parts are considered live/energized until proven otherwise.
- 10.1.D. Work near or under overhead power lines shall require the lines to be de-energized and grounded unless a minimum clearance can be maintained:
 - 1) 10 Feet for 50KV or less
 - 2) 10 Feet plus 4 inches for each 10KV over 50KV
- 10.1.E. Clearances are required for elevated and non-elevated work and vehicles and shall be maintained from any tool, equipment, vehicle, part, pipe, person, etc.
- 10.1.F. No Brecke employee is qualified to work on overhead power lines.
- 10.1.G. Employees may not enter spaces unless proper lighting is provided that allows the employee to work safely; especially those containing exposed energized parts.
- 10.1.H. Protective shields, barriers, or insulating materials will be provided if necessary.
- 10.1.I. Where there is a risk of electric shock non-conductive apparel including jewelry shall not be worn or shall be covered by a non-conductive means.
- 10.1.J. Flexible cords shall not be run through doorways or windows unless protected or designed for this purpose.
- 10.1.K. Flexible cords may not be used as a substitute for fixed wiring.

10.2. Training

- 10.2.A. Employees who are at risk of electric shock shall be trained in electrical safety.
- 10.2.B. Training shall include:
 - 1) Overview of applicable OSHA standards.
 - 2) Relationship to job assignments
 - 3) Electrical hazards and exposure identification
 - 4) Possible electrical injuries
 - 5) Mitigation/avoidance of hazards

Chapter 11 NFPA 70E

11.1. General

- 11.1.A. The Safety Team shall audit this policy at least annually in the field to ensure compliance, effectiveness and to determine if the policy needs updated.
- 11.1.B. The customer shall be advised of:
 - 1) Any unique hazards presented by the work to be completed
 - 2) Any unanticipated hazards found during the work
 - 3) Any hazards corrected and how they were corrected
- 11.1.C. Only Qualified employees shall be permitted to work in an arc flash potential area unless it is in an electrically safe work condition.
- 11.1.D. Limited Approach Boundary:
 - 1) Only qualified persons shall complete testing, troubleshooting and voltage measuring within these areas.
 - 2) Arc Flash hazard rating must have been established prior to work.
 - 3) PPE must follow hazard ratings.
 - 4) All electrical policies & procedures must be followed.
- 11.1.E. A PJHA and any necessary permits, such as Energized Electrical Work Permit, shall be completed and reviewed by all prior to work being completed.

- 11.1.F. The customer is responsible for determining arc flash hazard rating and necessary Cal rating for the areas. Signs, tags, attendants may be used to alert employees of the hazard.
- 11.1.G. Any evaluations or arc flash analysis that Brecke is responsible for shall be contracted to an approved licensed subcontractor.
- 11.1.H. Risk assessment review & hazard evaluation including severity, frequency, probability, and avoidance shall be completed during the PJHA process.

11.2. Training

- 11.2.A. Arc Flash training for those working within the Limited Approach Boundary shall be coordinated through the Team Leader Safety Team.
- 11.2.B. Training shall include requirements of
 - 1) NFPA 70E
 - a) Distinguishing energized exposed parts from other parts.
 - b) Determining nominal voltage of parts
 - c) Approach distances
 - d) Ways to determine the degree and extent of hazards
 - e) Job Planning
 - 2) OSHA standards including hazards associated with electrical energy
 - 3) PPE
- 11.2.C. Training instructed by a third party and maintained for duration of employment.
- 11.2.D. Retraining shall be required at least every 3 years or for:
 - 1) Non-compliance with rules and regulations
 - 2) Change in policy, procedure, equipment or regulations
 - 3) Being assigned new and unfamiliar tasks

11.3. Equipment

- 11.3.A. All equipment including test instruments and any accessories shall be rated for the circuits and equipment they are to be used on.
- 11.3.B. FR clothing will be compliant with NFPA 70E 130.7(C)(14)
- 11.3.C. Equipment shall be inspected to ensure it is in proper working order and not damaged or compromised in any way.
 - 1) Test instruments shall be verified before and after an absence of voltage test.
 - 2) PPE shall be inspected:
 - a) Prior to use each day
 - b) Prior to use after breaks
 - c) Prior to storage at the end each day
 - d) Immediately after an incident
 - 3) Test intervals for rubber insulating PPE shall not exceed:
 - a) Blankets- before first use and every 12 months after
 - b) Gloves- before first use and every 6 months after
 - c) Sleeves- before first use and every 12 months after
 - d) Covers and Line hose- if insulating value is suspect.

Chapter 12 Fire Safety

12.1. General

- 12.1.A. Fire Exits and exit routes shall remain clear at all times.
- 12.1.B. Emergency Lighting shall be maintained in accordance with NFPA 101.

- 12.1.C. Fire extinguishers shall be checked monthly and noted on the back of the tag as to who completed and the date of inspection.
- 12.1.D. Fire extinguishers shall be brought in annually on the posted date for servicing.
- 12.1.E. Tags shall be retained for a year following annual inspection.
- 12.1.F. Electric heaters must be approved by the Safety Team and may not be plugged into surge protectors/power strips.

12.2. Training

- 12.2.A. Fire extinguisher training shall occur at least annually and at orientation
- 12.2.B. Fire training shall occur:
 - 1) At orientation
 - 2) If there is a deficiency shown in the employee's knowledge
 - 3) There is a policy/procedure change.
- 12.2.C. Training shall include the following:
 - 1) Fire extinguisher training
 - a) Fire Classes
 - b) Types and sizes of fire extinguishers
 - c) Capabilities and limitations of fire extinguishers
 - d) PASS method of using a fire extinguisher
 - e) Hazards associated with fire extinguishers and incipient stage fires.
 - 2) Fire Prevention/Protection Training
 - a) Fire Classes
 - b) Fire Tetrahedron
 - c) Fire Alarm Systems
 - d) Sprinkler Systems
 - e) Fire Exits
 - f) Boiling Liquid Expanding Vapor Explosions
 - g) Flammable Chemicals/Vapors
 - h) Emergency Action Plan

Chapter 13 Welding/Hot Work

13.1. General

- 13.1.A. Hot work refers to any process that is fire, spark producing, or could cause flames/sparks: i.e. welding, cutting, grinding, brazing.
- 13.1.B. Prior to starting hot work, remove all possible flammable material from the area including sweeping potential dust.
- 13.1.C. Flammables that cannot be removed shall be guarded or covered by a flame-resistant material to protect the flammable material.
- 13.1.D. Hot work should be completed in a designated hot work area with appropriate ventilation and free from flammable materials if possible.
- 13.1.E. Work that must be completed outside of a designated hot work area must complete a hot work permit and have a constant fire watch.
- 13.1.F. If hot work cannot be completed safely, it shall not be performed.
- 13.1.G. Equipment that is defective or damaged shall not be used until a qualified person has repaired it.
- 13.1.H. Employees shall be trained in welding/cutting and other hot work prior to be assigned to hot work tasks or area.

13.1.I. Employees operating hot work equipment shall be trained in the safe operation and use of their equipment and process.

13.2. Fire Watch

13.2.A. Fire extinguishers with a minimum size of 5 lb ABC type shall be readily available.

13.2.B. Fire watch shall remain during entire operations and at least 30 minutes after work has completed unless required longer by the customer.

13.2.C. Training shall include:

- 1) Fire prevention/protection training
- 2) Fire extinguisher training
- 3) Constant supervision and other requirements/limitations of fire watch.

13.3. Specific Hazards

13.3.A. Hot work operations need to have adequate ventilation or respiratory protection for all in the area.

13.3.B. Respiratory protection needs to be appropriate for hazards based on NIOSH evaluations of PPE and OSHA's action level.

13.3.C. Local Exhaust Ventilation can be used to remove welding fumes in open areas.

13.3.D. Confined Space hot work should use supplied air respirators or fresh air system, when applicable, to ensure safe operations.

13.3.E. Where there is a potential for hazardous fumes, gases, or dust these hazards shall be mitigated via ventilation, respiratory protection or other means as deemed by the customer and Safety Team.

13.3.F. Electrodes shall be removed, or torches closed, and gasses shut off:

- 1) During lunch
- 2) End of shift
- 3) Any prolonged break in operation.

13.3.G. After completion, hot metal shall be marked or otherwise notated/signed to warn other workers.

Chapter 14 Vehicle/Equipment/DOT

14.1. General

14.1.A. Seatbelts must be worn prior to starting the engine and at all times by driver/operator and passenger(s).

14.1.B. Smoking in company vehicles/equipment is not allowed.

14.1.C. When fueling engine must be shut off, filler nozzle in contact with the tank and no smoking or open flame in the immediate area.

14.1.D. All Brecke Vehicle must have a Fire Extinguisher & First Aid Kit.

14.1.E. Only authorized employees will drive a motor vehicle/equipment.

14.1.F. Drivers must possess a current valid certification/license for the vehicle/equipment they are to operate.

14.1.G. Prior to leaving vehicle, ensure vehicle brakes are set (manual) or vehicle in park (automatic).

14.1.H. Drivers shall complete a daily inspection of their vehicle/equipment prior to operation.

14.1.I. Any issues shall be reported immediately

14.1.J. Unattended vehicles must be locked, unless prohibited.

14.1.K. Drivers shall practice defensive driving at all times.

14.1.L. Drivers shall follow safe driving practices:

- 1) Not under the influence of substances, alcohol or medication that prohibits driving or operation of vehicle/equipment.
 - 2) Use hands-free options for cell phones or pull over to use cell phone whenever possible.
 - 3) Drivers shall follow all rules/laws when operating equipment/vehicle including speed limits.
- 14.1.M. Report any accidents or traffic violations to supervisor and the Safety Team immediately.
- 14.1.N. No person shall be permitted to ride in or on a vehicle/equipment unless the riding location is designed for that purpose.
- 14.1.O. All loads shall be secured and within the manufacturer's legal limits.
- 14.1.P. Vehicles must be of the correct size and shall only be used for tasks in a manner in which they are designed and intended for.

14.2. DOT Requirements

- 14.2.A. All Drivers Shall:
- 1) Know and not exceed the capacity of the vehicle they are driving.
 - 2) Know and not exceed the capacity of anything they are towing.
 - 3) Ensure capacities are not exceeded.
 - 4) Know if the combined weight exceeds 10,000 lbs.
 - 5) Follow all DOT/FMCSA Regulations.
 - 6) Turn in completed log books quarterly to safety.
- 14.2.B. Vehicles with gross vehicle weight rating over 10,000lbs (F-350 or higher):
- 1) These vehicles must have a DOT number on the vehicle.
 - 2) If over 16,000 lbs. driver must have a CDL.
- 14.2.C. Vehicles & Trailers with combined gross weight rating over 10,000 lbs.:
- 1) Vehicles must have DOT number on the vehicle.
 - 2) Driver must have a CDL.

14.3. Heavy Equipment

- 14.3.A. Ensure that drivers/operators can see you. If you can't see the driver, the driver can't see you.
- 14.3.B. If the equipment does not have an enclosed cab, standard PPE is required.
- 14.3.C. Equipment must be equipped with a working backup alarm.
- 14.3.D. Listen for backup alarms but never assume they work.
- 14.3.E. Direct equipment from driver's side.
- 14.3.F. Do not walk or stand beneath or within fall distance of an overhead load.
- 14.3.G. Overhead loads shall be routed so that no employees are exposed to the hazards of a falling load.
- 14.3.H. Overhead loads shall be barricaded with Danger tape.
- 14.3.I. Stand clear of any equipment that is moving/dumping a load.

Chapter 15 Forklifts

15.1. General

- 15.1.A. Any employee operating a powered industrial truck (herein referred to as a forklift) shall be certified and trained to operating.
- 15.1.B. Brecke shall maintain 2 qualified trainers.
- 1) All trainers must have the ability to teach and evaluate operators.

- 2) Trainers shall be selected by Brecke.
- 15.1.C. In the event that a qualified trainer is not available, training shall be given by Altorfer Rentals.
- 15.1.D. Safety Team shall be responsible for uploading documentation into MCAI's Training Vault.
- 15.1.E. Seatbelts shall be worn for operation of a forklift.
- 15.1.F. The operator shall verify that all trailers are chocked, secured and appropriate loading/unloading equipment is used prior to loading/unloading.
- 15.1.G. The operator shall verify the forklift is chocked and secured during transport.
- 15.1.H. Trainees may operate a forklift only:
 - 1) Under the direct supervision of a trainer.
 - 2) Where the operation does not endanger the trainee or other employees.

15.2. Training

- 15.2.A. Training shall consist of formal instruction, practical training and operator evaluation.
- 15.2.B. Formal Training (Classroom) shall include, but not limited to:
 - 1) OSHA Standards
 - 2) Brecke Policies
 - 3) OSHA standards
 - 4) Requirements for maintaining certification and recertification.
 - 5) Hazards
 - 6) Stability
- 15.2.C. Practical training shall include, but not limited to:
 - 1) Daily Inspections
 - 2) Instructions
 - 3) Load capacities
 - 4) Refueling
 - 5) Controls
 - 6) Visibility
 - 7) Safety functions
 - 8) Stability
 - 9) Operation
- 15.2.D. Mandatory Refresher training shall include, but not limited to:
 - 1) Unsafe operations
 - 2) Accident
 - 3) Change in vehicles
 - 4) Change in conditions
 - 5) Policy changes
 - 6) Other situations/changes that show current training to be ineffective.
- 15.2.E. Evaluations
 - 1) All employees shall complete a written and practical (operating) evaluation upon the completion of training.
 - 2) Employees passing evaluation/re-evaluation shall be issued a new operator card.
 - 3) Employees shall be re-evaluated at least every three years.
 - 4) Failure of re-evaluation:
 - a) Employees failing to pass re-evaluation shall surrender certification to evaluator.
 - b) Employee will then be deemed a trainee and must pass an evaluation at least 24 hours later.
 - c) Evaluations and re-evaluations must occur prior to expiration of certification.
 - 5) Any employee operating a forklift shall be subject to safety evaluation by the Safety Team.

15.2.F. Certifications

- 1) Certifications shall be valid for 3 years.
- 2) Certifications shall be extended 3 years from the date of re-evaluation.
- 3) Certifications shall be immediately revoked upon failure to pass a safety evaluation.

15.3. Inspections

15.3.A. Operators need to inspect forklifts daily or before each shift.

15.3.B. Daily Checklist is Appendix I

15.3.C. Any failure/defect found in inspection shall be reported immediately and the equipment locked out/tagged out pending repair/replacement.

Chapter 16 Scaffolds/Aerial Lifts

16.1. General

16.1.A. Any employee required to work on a scaffold or in/operated a lift shall be trained as such.

16.1.B. A minimum clearance shall be maintained when working around power lines:

- 1) 10 ft for lines with less than 50KV
- 2) 10 ft plus 0.4 inches for every 1KV over 50KV

16.1.C. Modifications to equipment including lifts and scaffolding shall not be made without prior written approval from the manufacturer

16.1.D. Employees shall stand firmly on the floor and shall not climb on the rails or the edge of the basket.

16.1.E. Training

- 1) Training shall be required for any employee working on a scaffold, elevated platform or operating an aerial lift.
- 2) Training in for aerial lift/scaffold shall include but not limited to:
 - a) Hazard analysis
 - (i) Falls
 - (ii) Falling objects
 - (iii) Electrical hazard
 - b) Hazard correction
 - c) Fall protection & fall restraint systems
 - d) Proper use & inspection of scaffold/aerial lift.
 - e) Load capacities
 - f) Policies and site-specific items
- 3) Additional training shall be completed based on:
 - a) Site specific items and special hazards
 - b) Pre-Job meetings
- 4) Retraining shall occur
 - a) Changes to the policies
 - b) Employee shows inadequate knowledge
 - c) Any incident where the training could be seen as part of the problem/solution
 - d) Unsafe acts such as horseplay are observed on a scaffold.

16.2. Scaffolds

16.2.A. Responsible Persons

- 1) We do not assemble/disassemble scaffolding.

- 2) If scaffolding is required and the customer will not provide the scaffolding, we will subcontract the scaffolding.
 - a) Any scaffolding subcontractor must meet all guidelines for the subcontractor policy.
 - b) Such subcontractor's safety policies must include information about training, inspection, certification, tagging and competent person.
 - c) This subcontractor shall be responsible for the scaffolding for the entire job.
- 3) Competent Person
 - a) The company supplying the scaffolding shall be responsible for supplying the site with a competent person.
 - b) Scaffold inspections shall be conducted by a competent person prior to use.
 - c) Date, time and initials of the competent person shall be written on the tag after the passing inspection of the scaffold each day.
 - d) Any employee can bring concerns of the scaffold to the competent person.
 - e) Any issues with the competent person shall be brought to the attention of the supervisor or Safety Team immediately.

16.2.B. Tags

- 1) Scaffolds ready to be used shall be tagged as such the hazard can easily be seen.
- 2) Tag Colors:
 - a) Green-Safe: Ready to use and safe.
 - b) Yellow-Caution: 100% fall protection is required. Permission needed from competent person prior to using scaffold.
 - c) Red-Danger: Do not use any red-tagged scaffold.
- 3) Any defective or unsafe equipment shall be Red tagged and not used.

16.3. Aerial Lifts

16.3.A. Inspection

- 1) Each lift shall be inspected daily.
- 2) Follow manufacturer's visual inspection procedures.
- 3) In addition, an inspection shall include:
 - a) Inspection and testing of lift controls
 - b) Working backup alarms
 - c) Load limits are clearly marked or defined
 - d) Area shall be clear of hazards that may cause injury to the operator or cause the lift to tip.

16.3.B. Operation

- 1) Only authorized and trained individuals are to operate a lift.
- 2) Work shall not exceed load limits
- 3) If there is not a working backup alarm, a spotter is required.
- 4) When working inside an aerial lift a positioning harness shall be worn and attached to the boom/basket as a restraint system.
- 5) Lifts shall not be operated if wind exceeds the manufacturer recommendations.
- 6) Lifts shall be lowered prior to moving.

Chapter 17 Cranes, Hoisting & Rigging

17.1. General

- 17.1.A. All rigging and signaling done by Brecke shall be done by qualified employees.

- 17.1.B. Any employee may stop work at any time if a safety concern is observed.
- 17.1.C. At no time is an employee allowed under a suspended load.
- 17.1.D. All OSHA standards shall be followed.
- 17.1.E. Safety concerns must be addressed immediately.
- 17.1.F. Brecke employees will not assist in the inspection, documentation, assembly or disassembly of any crane.
- 17.1.G. Brecke involvement in operation shall be limited to rigging and signaling.
- 17.1.H. No employee is permitted to ride on a load or be suspended from equipment unless it is designed for that purpose and being used as designed.

17.2. Cranes

- 17.2.A. Brecke will contract out a crane and qualified operator if a crane is needed and one is not provided by the customer/other contractor.
- 17.2.B. The rental company/other contractor shall be responsible for all documentation, qualifications, certifications, and provide:
 - 1) A fully assembled and completion inspected crane and the removal of the crane and all persons assisting if needed:
 - a) Assembly and disassembly (A/D) shall be directed by a competent and qualified person who understands and is knowledgeable in the safe A/D procedure prior to A/D.
 - b) A/D director shall ensure that the manufacturer's procedures and prohibitions are followed.
 - c) Any persons participating in A/D must understand their tasks prior to starting and any hazards relating to A/D.
 - d) The A/D director needs to communicate with Brecke and other A/D workers of hazardous positions or locations that must be avoided.
 - e) The A/D director shall be responsible for addressing specific hazards associating with A/D including working within load limits at all times.
 - 2) A crane operator that is qualified and will follow all operational functions of the manufacturer.
 - 3) Crane that shall have manufacturer documentation and procedures in the cab at all times including documentation from the manufacturer of any modifications or additions that may affect the capacity or safe operation of the equipment.
 - 4) Any adjustments to location to ensure the ground conditions are able to safely support the equipment and any necessary materials as required by the manufacturer.
 - 5) Brecke with information prior to work starting, if any part of the equipment, line or load could reach closer than 20 ft of a live power line.
 - 6) Notification to Brecke if work cannot begin as planned (such as all safety devices are not in proper working order) and a timeline of when work can start/resume.
- 17.2.C. All inspections completed by a competent person provided and retained by the company that owns/operates the crane:
 - a) Prior to each shift
 - b) Monthly inspections
- 17.2.D. If equipment, line or load will be within 20 ft Brecke shall contact the power company/customer/general contractor to have said lines de-energized and grounded by a qualified individual.
- 17.2.E. The crane operator has the authority to stop or refuse loads for a safety concern as long as the concern is communicated to Brecke.
- 17.2.F. Brecke will mark boundaries of hazard areas identified by operator or A/D director including swing radius with warning lines or similar barriers.

17.3. Signaler

17.3.A. Signaler shall be in constant communication with the crane operator.

17.3.B. Signaler must be used if:

- 1) Crane operators view is obstructed
- 2) Site concerns require it
- 3) Crane operator determines it is necessary.

17.4. Rigging

17.4.A. All rigging equipment must be inspected prior to each use.

17.4.B. Daily inspections shall be noted on the PJHA.

17.4.C. Defective/damaged equipment shall be removed from service immediately.

17.4.D. Equipment shall be used within the safe working loads provided from the manufacturer.

17.4.E. When rigging equipment is not in use, it shall be stored away from the immediate work area.

17.4.F. Rigging equipment shall be used & stored in a manner and location as to not cause damage or excess wear on the equipment.

17.4.G. Tag lines shall be used unless they create an unsafe condition.

17.4.H. All hooks shall have latches or other acceptable method to eliminate the hook throat opening as provided/recommended by the manufacturer.

17.5. Hoists

17.5.A. Employees shall follow and adhere to manufacturer's specifications and limitations for equipment.

17.5.B. Specific hoist items refers to:

- 1) Rated local capacities
- 2) Recommended operating speeds
- 3) Special hazard warnings.

17.5.C. Employees required to use a hoist shall be trained on:

- 1) General use and operation of hoists
- 2) Specific hoist items

17.5.D. Instructions shall be posted in all operating areas including specific hoist items.

17.5.E. All rules such as "No Riders Allowed" shall be clearly visible and followed.

17.5.F. Hoists shall be inspected regularly according to manufacturer's recommendations.

17.5.G. Any item failing inspection shall be removed from service.

Chapter 18 Trenching & Excavation

18.1. General

18.1.A. Any trench or excavation greater than 4 feet deep shall follow all rules of this Chapter and OSHA regulations in 1926 Subpart P.

18.1.B. Prior to any excavation, underground services and utilities shall be located using a locate service 24 hours (unless longer time is required) prior to start.

- 1) Locates should also be verified using Brecke equipment as well.
- 2) If locate service is not available, Brecke equipment shall be used and verified by a different piece of equipment.

18.1.C. Barricade's/Cones must be set up prior to working in a roadway.

18.1.D. All employees working in excavation shall be required to wear hi-visibility clothing as outlined in Chapter 3.

- 18.1.E. No employee may work under any elevated load or equipment including digging equipment.
- 18.1.F. Any crossings or walkways must have guardrails to protect from falls.
 - 1) Top rail height 42 inches \pm 3 inches.
 - 2) If conditions warrant an additional rail above 45 inches the lower rails must remain at the height requirements
- 18.1.G. Only qualified and trained rescuers should attempt rescue operations. In the event of an emergency, call 911.

18.2. Trenches/Excavations

- 18.2.A. Prior to starting excavation, any hazard that can be shall be removed or protected.
- 18.2.B. All employees in a trench must be within 25ft, horizontally, from any ladder that can be used for egress.
- 18.2.C. Soil piles must be at least 2 feet from the edge of the excavation/trench.
- 18.2.D. Employees are not allowed in the trench during any digging or soil moving/removing operations.
- 18.2.E. Air monitors (H₂S, CO, LEL and O₂) shall be used prior to entry and periodically during operations where:
 - 1) Hazardous substances are stored or used nearby.
 - 2) Areas near gas lines or sewer lines.
 - 3) A hazard is being introduced that could cause atmospheric hazards.
 - 4) Prior monitoring shows any levels of atmospheric hazards.
 - 5) Where ventilation or heaters are used.
- 18.2.F. Underground utilities that may be exposed during excavation shall be protected, supported or removed as the situation dictates.
- 18.2.G. In the event of water accumulation, each situation shall be evaluated:
 - 1) Employees shall not enter until the competent person has determined that the hazards have been protected against.
 - 2) Possible methods of hazard mitigation:
 - a) Support or shield system
 - b) Water removal (operations evaluated by competent person)
 - c) Harness and retractable as used with confined space
- 18.2.H. Trench boxes that are capable of safely withstanding all loads applied or transmitted shall be used to protect employees from cave-ins.
- 18.2.I. Trench boxes must be used according to manufacturer's recommendations.
- 18.2.J. Sloping shall be completed at a minimum ratio of 1.5:1 and not to exceed an angle of 34°.

18.3. Competent Person

- 18.3.A. A competent person is someone capable of identifying existing hazards, predicting future hazards and has the authority to correct them.
- 18.3.B. Each excavation site shall have a competent person on-site.
- 18.3.C. Competent person shall not be allowed to enter the trench/excavation without being replaced by another competent person.
- 18.3.D. Competent person shall be responsible for:
 - 1) Completing all inspections:
 - a) Daily inspections (Appendix G) of site including cave-in potential and protection systems.
 - b) Periodic inspections throughout the day
 - c) After rainstorms or any other increasing hazard.
 - d) Complete PJHA and review with all employees.

- 2) Submitting all documentation to safety.
- 3) Creating an Excavation safety plan.
- 4) Ensuring Locates have been completed and are accurate.
- 5) Ensuring trench box and any other necessary protection systems are on-site.
- 6) Conducting soil tests if necessary
- 7) Stop work if evidence of a situation that:
 - a) Could result in a cave-in
 - b) Indicates a failure in protection systems
 - c) Hazardous atmosphere
 - d) Other hazardous condition as determined by a competent person or safety.
- 8) Prior to re-entry after stop work: updating PJHA with written authorization including hazard correction.

18.4. Soil Classification

18.4.A. Classifying Soil:

- 1) There are four types of soil classifications: Stable rock, Type A, Type B and Type C. C being the least stable.
- 2) Brecke assumes type C soil for all excavations using a visual test.
- 3) Type C soil:
 - a) Examples: gravel, sand, loamy sand, submerged rock or soil.
 - b) Compressive strength of 0.5 tons per square foot or less.
- 4) Samples are not required if assuming type C soil types.

18.4.B. Brecke assumes all soil is type C.

Chapter 19 Confined Space

19.1. General

19.1.A. Confined Space Permit and Plan is in Appendix H.

19.1.B. Confined Space must be

- 1) Large enough to enter and perform work
- 2) Not designed for continuous occupancy
- 3) Limited/restricted means of entry/exit.

19.1.C. Permit Required Confined Space must also have:

- 1) Contains or could contain a hazardous atmosphere
- 2) The possibility of entrapment, asphyxiation or engulfment.
- 3) Other hazards native to the space or introduced by the entrant.

19.1.D. Brecke employees are required to have a permit to work in a confined space regardless of permit-required status.

19.1.E. Brecke does not have any persons trained in confined space rescue and shall use non-entry rescue wherever it does not increase the risk of the entrant.

19.1.F. Rescue services shall be provided by:

- 1) The customer/host employer
- 2) An outside service, which is given an opportunity to examine the entry site, practice rescue and decline as appropriate.
- 3) Rescue services must be on-site in the event of IDLH conditions

19.1.G. Confined space program shall be reviewed by the Safety Team using canceled permits at least every 12 months and revised and necessary.

19.2. Planning & Permit

- 19.2.A. Prior to entering a confined space, a plan shall be established.
- 1) The plan shall be developed upon accepting the job between the job Forman/Superintendent and the customer via a site visit.
 - 2) The plan shall address barriers/barricades that are needed to prevent unauthorized entry.
 - 3) Plan is included in Appendix H and is available electronically on the company drive.
 - 4) The Plan shall be completely filled out and reviewed by all persons involved prior to work starting.
- 19.2.B. Plan Follow up
- 1) Once Plan is complete then the supervisor shall communicate with Team Leader or safety to ensure all equipment is or can be made available for the operations.
 - 2) Any special provisions or procedures such as road barricades have been arranged/ordered for the day of work.
 - 3) Arrange for entry rescue with customer, if necessary.
 - 4) The plan shall be used as a baseline to begin Permit writing.
- 19.2.C. After reviewing the Confined Space Plan, the Supervisor/Permit writer shall complete the entry permit with the assistance of the entrant and attendant where needed.
- 19.2.D. After reviewing stop work thresholds, the Supervisor/Permit writer shall issue the permit to the entrant/attendant.
- 19.2.E. Issued permit must be posted outside the space by the attendant.
- 19.2.F. Any adjustments not including recording of air monitoring readings shall require removal of the entrant and re-approval of the permit writer.
- 19.2.G. The permit may be suspended/canceled/terminated/alterd by the permit writer if:
- 1) Operations change to outside of the scope of work.
 - 2) Stop work thresholds have been reached.
 - 3) Work must cease temporarily for any reason (not to exceed the length of the shift for suspended).
 - 4) Time for permit has elapsed or work has completed.
 - 5) Any other safety concerns as recognized by the supervisor/permit writer.

19.3. Equipment

- 19.3.A. Tripods, Retrieval lifelines, air monitors, and any other necessary equipment shall be provided by Brecke and inspected/calibrated within manufacturers recommendations
- 19.3.B. Brecke air monitors are 4 gas monitors (CO, H₂S, LEL, O₂).
- 19.3.C. Brecke air monitors are calibrated each month but not to exceed 3 months without calibration.
- 19.3.D. Fresh air system CO monitor/alarm is calibrated monthly or prior to each use, whichever is longer.
- 19.3.E. Calibration processes or data from may be viewed by any entrant or representatives.
- 19.3.F. Confined space operations may use the fresh air system for supplied air if no prior atmospheric hazards are present.

19.4. Operations

- 19.4.A. Review
- 1) Review Permit with all employees including stop work limits.
 - 2) Take necessary readings
 - 3) Employees must be trained if the duties have changed, if a new hazard is on-site and/or if any deviation must be made from the plan/permit.

- 19.4.B. At least one attendant must be present at all times when the entrant is in the space.
- 19.4.C. Air monitoring (continuous with periodic recording) shall be required during operations if there is a potential change in the space or if any atmospheric hazard was witness during initial testing.
- 19.4.D. Air monitoring must be continuously monitored if continuous ventilation is applied.
- 19.4.E. Employees involved in entry operations, or their representatives, may request additional monitoring at any time.
- 19.4.F. In the event multiple employers are working in the confined space:
 - 1) A single supervisor must be determined to oversee all operations.
 - 2) Each employer may provide their own entrant or may use the same entrant as long as communication can be maintained with all entrants, attendants and rescue personnel.
 - 3) There is an acceptable means of no-entry rescue that cannot be disabled by having multiple entrants by methods such as tangling.
 - 4) All employees involved in entry operations shall review permit and hazards including those caused by other entrant's operations.

19.5. Duties

19.5.A. Entrant

- 1) Understand and be familiar with hazards and proper use of equipment
- 2) Communicate with attendant as necessary for attendant assessment.
- 3) Alert the attendant of any changes in conditions
- 4) Monitoring air in the space and communicating results to the attendant
- 5) Safely complete the work
- 6) Exit the space immediately if/when:
 - a) Communicated to do so by attendant.
 - b) A dangerous or stop work condition arises.
 - c) Evacuation alarm sounds.

19.5.B. Attendant

- 1) Attendants shall only be allowed to monitor one space at a time and shall not be allowed to leave unless relieved by another attendant as long as the entrant is in the confined space.
- 2) Understand and be familiar with hazards, equipment, work, and behavioral changes of the entrant including signs and symptoms of exposure to hazards.
- 3) Maintain continuous communication with Entrant
- 4) Maintain communication with Supervisor and Rescue personnel.
- 5) Be able to communicate with rescue or perform non-entry rescue if rescue is not on-site.
- 6) Assess the entrant, procedures, and space for hazards and exposures.
- 7) Communicate evacuation with entrant if/when necessary.
- 8) Protect the space and keep unauthorized persons from entry or alteration of the space or conditions.
- 9) Perform no duties that may interfere with the attendant duties.

19.5.C. Supervisor/Planner/Permit Writer

- 1) Verifying that all equipment necessary is on-site
- 2) Ensuring air monitoring is being completed.
- 3) Ensures permits and plans are correct and up to date.
- 4) Ensures Permit & Plans are reviewed with all employees
- 5) Terminate/cancel/suspend permit as necessary.
- 6) Verifies with entry conditions are still within conditions maintained by the permit whenever responsibilities are transferred.

19.5.D. Rescue personnel

- 1) Maintain rescue training
- 2) Be able to rescue the entrant
- 3) Be on-site during entry operations
- 4) Perform no duties that may interfere with rescue duties or entry operations.
- 5) Maintain communication with attendant.

19.6. Training

19.6.A. Employees must be trained in their roles prior to being assigned those roles.

19.6.B. Training shall be documented in the training vault and shall include:

- 1) Employee name
- 2) Trainer signature
- 3) Dates of training

19.6.C. Retraining shall be required:

- 1) Any time training/policies/procedures have changed.
- 2) Any time an employee incorrectly completes a permit.
- 3) Fails to demonstrate knowledge of confined space safety or procedures.

Chapter 20 Hazard Communication

20.1. Hazard Communication Program

20.1.A. Hazard Communication shall herein be referred to as HazCom.

20.1.B. Safety Data Sheets shall herein be referred to as SDS.

20.1.C. The Team Leader Safety Team shall maintain the written program and ensure that employees at each workplace understand:

- 1) SDS's and where to find them.
- 2) Labels and other warning signs
- 3) Training required
- 4) Communication process

20.1.D. All Parts of the program shall be followed at all times.

20.1.E. Due to working at multiple worksites the written program shall be kept on the Company Drive and available to any employee as necessary or as requested.

20.1.F. Suggestions or issues with the program need to be communicated to the Team Leader Safety Team.

20.2. Chemical List & SDS

20.2.A. A complete list of chemicals along with the SDS's provided by the manufacturer shall be kept on sdsbinderworks.com.

- 1) SDS Binderworks is available to all employees at no cost.
- 2) SDS Binderworks information shall be provided to customers as requested.
- 3) An updated Binder of SDS's shall be provided for any site where electronic access is not readily available.

20.2.B. Chemicals are listed by name on the SDS/Label and common name.

20.2.C. Any employee purchasing or receiving any chemical must obtain a SDS and provide it to the Team Leader Safety Team.

20.3. Training

20.3.A. Training shall be provided to all employees and cover:

- 1) OSHA HazCom Standard (1910.1200)

- 2) Chemicals that employee may be exposed to.
 - 3) Care and use of SDS, Labels and other means of warning.
 - a) Product Identifier
 - b) Signal Words
 - c) Pictograms
 - d) Hazard Statements
 - e) Precautionary Statements
 - f) Supplier Information
 - g) Hazard Classifications
 - h) 16 Sections of SDS
 - i) Other warning method such as HMIS diamond.
 - 4) Elements of the HazCom Program
 - 5) Exposure Routes for chemicals
 - 6) Hazards associated with chemicals:
 - a) Physical hazards
 - b) Reactivity
 - c) Toxicity including reproductive effects
 - d) Compressed Gases
 - 7) Other employers/contractors & SDS's
- 20.3.B. Training shall be completed:
- 1) At the time of initial assignment
 - 2) Updated Annually
 - 3) Retrained if deemed training has been ineffective by supervisor, Team Leader or the Safety Team and communicated to the Team Leader Safety Team.
- 20.3.C. Training shall be updated
- 1) When HazCom program/standard changes.
 - 2) When new hazards are presented
- 20.3.D. Site specific training for non-routine tasks
- 1) Chemical exposures
 - 2) Providing and receiving customer's SDS
 - 3) Providing and receiving other contractor's SDS
 - 4) All received SDS's shall be reviewed with all employees with a potential exposure as part of the PJHA process.

Chapter 21 Special Hazard Safety

21.1. General Chemical Safety

- 21.1.A. Eyewash stations, safety showers, or eyewash bottles shall be provided where necessary.
- 21.1.B. All employees shall be trained in the location, use, limitation, inspection, maintenance and disposal of any necessary PPE or equipment.
- 21.1.C. Employees reporting signs or symptoms of chemical exposure shall report the incident to the Safety Team and Medcor for evaluation.
- 21.1.D. Flammable chemicals shall be stored in a flammable cabinet and in an approved safety container.
- 21.1.E. Prior to operations that could make a contaminant airborne precautions must be in place to control fumes, contaminants and necessary oxygen. Must be reviewed with Safety Team.
- 21.1.F. Chemical exposures and spills shall be reported immediately to the Safety Team.

- 21.1.G. Chemicals shall be properly stored, and good housekeeping maintained to minimize the potential for a spill.
- 21.1.H. Spill response materials must be adequate for any anticipated spills.
- 21.1.I. Employees are trained in spill response and referring to SDS for proper cleanup.
- 21.1.J. Disposal of chemicals shall be done at either:
 - Linn County Solid Waste Agency Dubuque Metro Area Solid Waste Agency
 - 1954 County Home Road 14501 Highway 20 West
 - Marion, IA 5230 Dubuque, IA 52002
- 21.1.K. Prior to taking to disposal agencies:
 - 1) Waste Oil must be collected in 55-gallon drum.
 - 2) Other items must be stored in their own containers and stored away from any potentially reactive chemical or physical hazards.
 - 3) Do not pour chemicals onto the ground, down a drain, or in a storm drain system.
 - 4) Do not through hazardous chemicals in the trash includes spray cans.

21.2. Process Safety Management (PSM)

21.2.A. General

- 1) The purpose of PSM is to prevent or minimize catastrophic release of toxic, reactive, flammable or explosive chemicals.
- 2) PSM shall be followed on all customer sites where the process or operations involve the use, production or presence of highly hazardous chemicals.
- 3) All Customer policies and procedures shall be followed that exceed Brecke policy/procedure.
- 4) Brecke shall provide policies/procedures/SDS/other necessary documentation as required by the customer.
- 5) Brecke shall cooperate with any customer in reviewing and investigating any incidents.
- 6) Basic information regarding the process, hazard analysis and the chemicals shall be discussed during the PJHA process with employees including potential fire, explosion, or toxic release.

21.2.B. Any material replaced shall meet customer specification and have prior approval prior to installation.

21.2.C. Special Hazards

- 1) Brecke shall inform customer of any hazards presented by or found during work.
- 2) Hot work shall require a permit obtained from the customer.

21.2.D. Training

- 1) Each employee shall be trained in the all-applicable aspects of the process and hazards for the specific job during PJHA review.
- 2) General Training shall occur prior to work at a PSM facility
- 3) Training shall include information regarding:
 - a) The process involving chemicals
 - b) Hazard analysis
 - c) Chemicals used
 - d) Potential exposure and mitigation
 - e) Emergency procedures
- 4) Training records shall include: name, date and means used to verify employee understanding.

21.3. Good Manufacturing Practices (GMP)

21.3.A. Brecke shall follow all GMP policies and procedures set forth by the customer.

21.3.B. Hair nets/beard snoots shall be worn wherever required.

- 1) Hair shall be tucked inside the hairnet and shall cover the ears.
 - 2) Beard snoots shall be worn to cover all facial hair that is more than 1 day's growth.
 - 3) If facial hair exists above the upper lip, the beard snoot shall cover this as well.
- 21.3.C. Handwashing must be completed:
- 1) Before and after:
 - a) Meals
 - b) Breaks
 - c) Smoking
 - d) Using the restroom.
 - 2) Entering and Exiting Raw food areas
 - 3) Prior to entering Ready To Eat (RTE) areas.
- 21.3.D. Clothing and tools must be clean and sanitary.
- 21.3.E. Tools shall not be placed directly on the floor.
- 21.3.F. Glass shall not be taken into any food areas.
- 21.3.G. Food shall not be consumed, disposed of or stored except in designated areas.
- 21.3.H. Food containers and packaging shall be stored and disposed of in designated areas only.
- 21.3.I. Training
- 1) Employees shall be trained in customer's and Brecke's policies prior to entering GMP areas.
 - 2) Offsite/online customer training shall be recorded in MCAI's training vault.

21.4. Compressed Gas & Cylinders

21.4.A. Storage & Transportation:

- 1) Stored in areas protected from heat including sparks/slag from hot work.
- 2) Stored such that the cylinders are protected from impact or tampering.
- 3) Stored in a well-ventilated area that is protected from potential weather damage.
- 4) Stored and Transported in the upright position and secured to prevent tipping such as a basket or cart.
- 5) Cylinders storage area shall clearly define full and empty container locations, which shall be followed.
- 6) DOT placards and any other identification markings shall be clearly visible.
- 7) All compressed gas cylinders shall be clearly identified.
- 8) Valve Caps must be used at all times when not in use.
- 9) If valve/cylinder cap cannot be removed: tag as "Do Not Use" and take cylinder to servicing company.
- 10) Flammable compressed gases must be store at least 20 ft from any oxidizer or separated by a 5 ft- ½ hour rated firewall.

21.4.B. Use

- 1) Visually inspect cylinders, regulators, hoses and connections prior to use.
- 2) Do not expose cylinders to external heat sources.
- 3) Only tools provided by the supplier should be used to open/close valves.
- 4) Special shutoff/disconnect wrenches must be in place for emergency shutoff if necessary.
- 5) Valves must be closed after use even when empty.
- 6) Employees shall be trained in the proper use, handling and storage of compressed gas cylinders.
- 7) Leaking cylinders shall be isolated from other cylinders and sources of ignition. Tag cylinder "Do Not Use" and contact servicing company to immediately correct the issue.
- 8) Cylinders no longer needed shall be stored as empty and returned to the supplier.

21.5. Beryllium

- 21.5.A. Beryllium parts will and shall be transported/stored in containers labeled with:
 - 1) Beryllium (Beryllium Oxides) or
 - 2) Contains Beryllium
- 21.5.B. Cutting, grinding, hot work or other operations that will oxidize, or make airborne shall require the use of a respirator and gloves
- 21.5.C. Other operations require gloves appropriate for the work.
- 21.5.D. Contact Safety Team prior to working with Beryllium to be trained in hazards of exposure.

21.6. Cadmium

- 21.6.A. A respirator is required for hot work when using cadmium containing rods/wire or when working on cadmium-plated parts.
- 21.6.B. Spaces for hot work with cadmium or operations that create airborne cadmium must be evaluated by safety prior to starting work.
- 21.6.C. Dust must be vacuumed or wet mopped.
- 21.6.D. Contact Safety Team prior to working with Cadmium to be trained in hazards of exposure.

21.7. Lead

- 21.7.A. Brecke shall use lead-free solder on all public water systems or facility providing potable water.
- 21.7.B. 50/50 solder may be used on drainage systems only.
- 21.7.C. Area's with potential lead exposure above maximum exposure levels shall have warning signs posted.
- 21.7.D. The rest of this section applies if an employee is exposed or potentially exposed at or above the action level: 30 micrograms/cubic foot/hour averaged over an 8-hour day.
- 21.7.E. Maximum Exposure:
 - 1) 50 micrograms/cubic meter per hour
 - 2) 400 micrograms/cubic meter per day regardless of length of time.
- 21.7.F. If lead abatement is in progress by another contractor, Brecke employees shall be protected by exposure by enclosures.
- 21.7.G. Air Sampling shall be conducted such that it reflects the employee's regular daily exposure or maximum daily exposure.
 - 1) Air monitoring repeated every 6 months if above action level.
 - 2) Air monitoring repeated until 2 consecutive measurements are below action level (at least 7 days apart).
 - 3) Employees shall be given a written copy of the results and any corrective actions.
- 21.7.H. Employees who may or have be exposed to amounts at or above the action level for 1 day per year and additionally if more than 30 days during 12 consecutive months, medical consultation shall be provided including blood sampling.
- 21.7.I. Blood sampling should occur at every 6 months until 2 consecutive samples are acceptable. If levels are elevated:
 - 1) The employee shall be immediately removed from operations of lead exposure and notified in writing of elevated levels of lead.
 - 2) Sampling monthly until acceptable during removal.
- 21.7.J. Each site having lead exposure shall be reported to the Safety Team for evaluation and create a written site-specific program to reduce/eliminate exposure to below action level.

- 21.7.K. Employees exposed during the evaluation and until implementation of mitigation, exposed employees shall wear respirators.
- 21.7.L. All Lead specific PPE shall be provided at no cost to the employee including but not limited to:
- 1) Coveralls
 - 2) Gloves
 - 3) Goggles
 - 4) Respirators
- 21.7.M. Employees shall wash any skin that lead materials come into contact with.
- 21.7.N. Lunchroom, hygiene, shower & changing facilities will be provided if exposure exceeds maximum exposure.
- 21.7.O. Training
- 1) Lead awareness training is required at initial assignment to work in lead containing areas.
 - 2) Refresher training shall be completed annually
 - 3) Training recorded in the MCAI's Training Vault including employee & trainer name and date
 - 4) Training shall include:
 - a) Locations of lead
 - b) Operations with potential lead exposure
 - c) Respirator training
 - d) Medical Surveillance
 - e) Adverse Health Effects of Lead
 - f) Do not disturb any lead unless necessary for work.
 - g) Mitigation methods
 - h) Compliance plans in effect (if any)
 - i) Medical Records access
 - j) Chelating agents used only under medical supervision when instructed.

21.8. Hexavalent Chromium

- 21.8.A. Employees shall not be exposed to levels above the Permissible Exposure Limit (PEL) of $5\mu\text{g}/\text{m}^3$ TWA
- 21.8.B. Brecke uses a combination of historical data, and air monitoring to determine employee exposure.
- 21.8.C. Brecke Employees have been shown to be below $2.5\mu\text{g}/\text{m}^3$ as an 8-hour time weighted average (TWA).
- 21.8.D. Respiratory protection shall be required if exposure exceeds $2.5\mu\text{g}/\text{m}^3$.
- 21.8.E. Any employee exposed to the PEL or higher for 30 days per year or during an emergency shall be medically evaluated at no cost to the employee.
- 21.8.F. Employees shall follow customer's requirements with regards to Hexavalent Chromium including:
- 1) PPE (provided at no cost to the employee)
 - 2) Engineering and work practice controls to reduce to lowest possible level.
 - 3) Regulated Areas
 - a) Areas where exposure could be in excess of permissible exposure limit
 - b) Access restricted to authorized persons
 - c) Marked with warning signs.
 - 4) Keeping areas clean: any accumulation of chromium shall be cleaned appropriately to minimize exposure
 - 5) Facilities provided for changing and hygiene areas for decontamination.
- 21.8.G. Training must include:

- 1) Chromium hazards
- 2) Control methods
- 3) Medical Surveillance
- 4) Customer Specific policies

21.9. Hydrogen Sulfide (H₂S)

- 21.9.A. Employees shall have portable monitors that will alarm at 10 ppm whenever there is a potential exposure to H₂S.
- 21.9.B. H₂S can be found in operations that include: sewage, landfills, mining, gas and oil.
- 21.9.C. H₂S is a flammable gas that is toxic, colorless, smells like rotten eggs in low concentrations, and is soluble in water.
- 21.9.D. Health effects of H₂S exposure can include (but not limited to):
- 1) Sore eyes, nose and throat.
 - 2) Loss of smell and nausea.
 - 3) Irritated respiratory system.
 - 4) Effects oxygen utilization
 - 5) Central nervous system issues
- 21.9.E. Employees must be aware of the customer's emergency plans.
- 21.9.F. When alarm sounds all employees must evacuate the area. Any work that needs to be completed must be done with supplied air respirators.

21.10. Asbestos

- 21.10.A. General
- 1) Brecke does not remove or handle asbestos.
 - 2) Brecke strictly adheres to the guidelines by the agencies who have authority.
 - 3) Contact the Safety Team, supervisor and customer contact if any insulation that is to be removed potentially contains asbestos.
 - 4) Record of any asbestos exposure shall be documented and maintained with medical records for that employee.
- 21.10.B. Training
- 1) All field employees shall be trained upon initial assignment.
 - 2) Employees shall receive annual refresher training.
 - 3) Training is documented and maintained on MCAI's Training Vault.
 - 4) Training shall include:
 - a) Recognizing Asbestos.
 - b) Working around Asbestos abatement.
 - c) Brecke Asbestos policy.
 - d) Governing agencies with authority.
- 21.10.C. Operations
- 1) The most common form of asbestos Brecke employees would experience is pipe insulation.
 - 2) Asbestos removal will be referred to those trained and equipped to handle the removal safely and with clear documentation.
 - 3) Brecke employees shall not disturb asbestos containing material or suspected asbestos containing material.
 - 4) Upon discovering an asbestos containing material, employees shall contact their Team Leader to get verification if the material has been tested and a copy of the report.
 - 5) Brecke employees shall not disturb the material.
 - 6) If work is being completed outside of a facility, then an outside company will be contracted for testing and/or removal.

- 7) During Asbestos abatement, Brecke employees shall not be inside the containment area.
 - 8) In the event of a breach of containment, Brecke employees shall evacuate the area and contact the customer and Safety Team.
- 21.10.D. Health Effects that are possible from exposure to asbestos:
- 1) Asbestosis- serious, progressive, long-term non-cancer disease of the lungs. Asbestos fibers irritate the lungs, creating scar tissue resulting in difficulty getting oxygen to the blood.
 - 2) Cancer of the: lungs, stomach or colon
 - 3) Mesothelioma- care found in the thin lining of the lung, chest, abdomen and heart.
 - 4) Many of the health issues may not show up until many years after exposure.

21.11. Silica Dust

21.11.A. General

- 1) Silica Dust, also referred to as respirable crystalline silica, is governed by OSHA standard 1926.1153.
- 2) The Safety Team shall be responsible for making frequent job-site inspections of the operations, materials and equipment to ensure proper use.
- 3) Operations that may expose employees to silica dust over the action level shall assess the situation with the Safety Team to determine necessary protection as described in Table 1.
- 4) The Safety Team shall assess the program's effectiveness at least annually.
- 5) A written copy of this manual, policy and Table shall be provided to employees as needed/requested.

21.11.B. Operations

- 1) Exposure to silica dust can be created by cutting, grinding, drilling or removing concrete, asphalt or other silica-containing product.
- 2) Cleanup of silica operation shall be done with wet sweeping or a HEPA filtered vacuum.
- 3) Employees shall follow Table 1 in the OSHA standard for all operations that could produce silica dust including respirators to lower the level of exposure to that below the action level.
- 4) For all operation that could produce silica dust including those listed in Table 1 the area of operation shall be barricaded off with:
 - a) Marked caution/danger tape if indoors.
 - b) Cones or other barricade marked with the hazard if outdoors.
- 5) If another employer is/has completed operations resulting in silica dust in the air, Brecke employees are not enter/evacuate the area until the dust has been mitigated.
- 6) Employees exposed to levels of at least the action level for at least 30 days per year shall undergo medical surveillance as described in 1926.1153.

21.11.C. Health effects could include:

- 1) Silicosis.
- 2) Lung Cancer.
- 3) Other respiratory diseases such as: chronic bronchitis or COPD.
- 4) Kidney disease.

21.12. Ammonia

21.12.A. Potential exposure locations

- 1) Industrial refrigeration machinery rooms
- 2) Petroleum refineries

- 3) Working near agricultural fertilizer operations.
- 21.12.B. Characteristics of anhydrous ammonia
 - 1) Colorless gas
 - 2) Liquid under pressure
 - 3) Pungent suffocating odor
 - 4) Attracted to water
 - 5) Ammonia deflagrates.
- 21.12.C. Health effects include but not limited to:
 - 1) Harmful if inhaled or comes into contact with eyes or skin.
 - 2) Burning of eyes
 - 3) Temporary blindness
 - 4) Coughing
 - 5) Chest pain
 - 6) Difficulty breathing
 - 7) Liquid ammonia can cause frostbite
- 21.12.D. Operations
 - 1) If employees are to be directly exposed to Ammonia, they shall wear appropriate PPE such as impervious clothing, gloves, or face shields to prevent direct contact with skin or eyes.
 - 2) All employees shall be aware of the customer's emergency plans
 - 3) If customer does have the potential for exposure, they shall inform Brecke of this exposure and Brecke shall inform all affected employees.
 - 4) Employees shall follow all customer guidelines and safe work practices for work with/around ammonia.

21.13. Benzene

- 21.13.A. Potential Exposure locations:
 - 1) Petroleum refineries
 - 2) Tank work at pipeline/refineries
 - 3) Field maintenance work
- 21.13.B. Characteristics of Benzene include but not limited to
 - 1) Toxic
 - 2) Colorless
 - 3) Aromatic odor
 - 4) Not water soluble
 - 5) Flammable
- 21.13.C. Health effects include but not limited to:
 - 1) Irritation of eyes, nose and skin
 - 2) Difficulty breathing
 - 3) Euphoria
 - 4) Headache
 - 5) Dizziness
 - 6) Nausea
 - 7) Long term exposure: blood disorders
- 21.13.D. Operations
 - 1) PPE required beyond standard: Sleeves, apron, eye and face protection.
 - 2) Smoking is not allowed in areas where benzene is used or stored.
 - 3) Fire extinguishers shall be readily available where benzene is used or stored.
 - 4) Employees must be aware of customer's emergency procedures and follow all applicable rules and guidelines of the customer.

- 5) The customer must inform Brecke where benzene is used in the facility so Brecke can notify affected employees.

21.14. Other hazards not listed must go through the Team Leader Safety Team for training and hazard mitigation/control.

Chapter 22 Bloodborne Pathogens

22.1. General

- 22.1.A. Employees shall clean up their own blood wherever possible, as such Brecke does not have employees to which Brecke can “reasonably anticipate exposure” to bloodborne pathogens.
- 22.1.B. Any potential exposure shall be reported to the Safety Team immediately.
- 22.1.C. Any employee who is assisting in immediate first aid care of an injured employee shall use universal precautions (PPE provided at no cost to employees) including:
 - 1) Breathing barrier
 - 2) Safety glasses
 - 3) Latex/nitrile gloves
 - 4) Apron/body protection
- 22.1.D. Employees shall have access to the exposure control plan included in this chapter on the company drive or from safety at their request.
- 22.1.E. Handwashing facilities or antiseptic solution/towelettes shall be available at each jobsite and customer site.
- 22.1.F. Any time blood must be cleaned, it must be cleaned using universal precautions and using a 10:1 water: bleach mixture.
- 22.1.G. Any employee who has been exposed or would be evaluated to have an occupational exposure shall have the option to receive the Hepatitis B vaccine at no cost.

22.2. Training

- 22.2.A. Training must be provided before initial assignment
- 22.2.B. Refresher training must be completed annually
- 22.2.C. Training records maintained on MCAI’s Training Vault.
- 22.2.D. Training shall address the OSHA standard (1910.1030) and the Brecke policies & plan.

22.3. Exposure Control Plan

- 22.3.A. Given that Brecke does not have any employees with an “occupational exposure” as defined by OSHA an exposure control plan is not required.
- 22.3.B. The exposure control plan herein shall be reviewed annually to determine if an exposure control plan compliant with OSHA regulation 1910.1030 is necessary.
- 22.3.C. Brecke shall follow the following methods of compliance
 - 1) Bloodborne pathogens policy shall be followed including universal precautions.
 - 2) Engineering controls such as sharps containers shall be provided if deemed necessary by the Team Leader Safety Team.
 - 3) Handwashing shall occur immediately after removing gloves, using restroom facilities, before and after eating and drinking.
 - 4) Employees shall not eat, drink, smoke apply cosmetics/lip balm/Chapstick, put in contact lenses, store food or drink in an areas containing or potentially containing bloodborne pathogens.

22.3.D. Post exposure:

- 1) Hepatitis B Vaccine shall be available to any employee exposed at no cost.
 - a) If the vaccine is declined, it can be received at a later date at no cost to the employee.
 - b) Documentation of decision shall be maintained in the employee records.
- 2) Post exposure evaluation and follow up shall be completed at no cost to the employee.

22.3.E. Employees shall be trained in accordance to the Bloodborne pathogens policy.

22.3.F. Recordkeeping shall be kept in accordance with 1910.1020 and 1910.1030

Chapter 23 Drug & Alcohol-Free Workplace

23.1. Drug & Alcohol Screening/Testing for Non-DOT Employees

B.G. Brecke has a vital interest in the safety and well-being of our employees as well as the general public. It is well recognized that individuals who use illicit drugs or abuse alcohol are more likely to have workplace accidents, incur greater amounts of lost time, and perform their jobs in a substandard manner.

Therefore, it is B.G. Brecke's intent to continue to promote a safe and secure work environment, free of illicit drug use and alcohol abuse. It is also our intent to comply with, Iowa Code 730.5, the Drug Free Workplace Act of 1988, the Americans with Disabilities Act, Family and Medical Leave Act, and all other applicable laws.

This policy shall apply to all applicants and individuals employed by B.G. Brecke. Since alcohol and drug use impairs an employee's ability to perform their duties safely, this Drug and Alcohol Policy shall be applicable to all employees at any time they are actually performing, ready to perform, or immediately available to perform any paid function as designated by B.G. Brecke. All applicants will be notified of B.G. Brecke's drug and alcohol use and screening/testing policy at the time they apply for a position with B.G. Brecke and at their first interview. Education will be provided to all employees regarding the effects of drugs and alcohol, signs and symptoms of a drug or alcohol problem, information on assistance available for abuse problems, and screening/testing requirements.

One of the goals of our drug-free workplace program and the regulated DOT drug and alcohol policy is to encourage employees to voluntarily seek help with alcohol and/or drug problems. B.G Brecke encourages its employees to obtain assistance and help in dealing with substance abuse or alcohol problems. You or an immediate family member may self-refer if you have a substance abuse or alcohol problems so that rehabilitation efforts can begin before a drug or alcohol problem puts your job, the safety of you and your coworkers and your family's security in jeopardy.

Any questions or concerns regarding the Drug and Alcohol Policy chapter of B.G. Brecke's Safety Manual shall be directed to an officer of B.G. Brecke.

23.2. Prohibited Conduct

23.2.A. The following conduct is prohibited

- 1) Employees are prohibited from using, being under the influence of or possessing illegal drugs, or any look alike substances that may mimic the effects of other illicit substances, including marijuana [B.G. Brecke follows the Medical Cannabidiol Act Chapter 124E]. Substances such as these may not be regulated or scheduled by the FDA/DEA, but still pose safety or job performance issues within the workplace.
- 2) Employees are prohibited from using or being under the influence of legally prescribed drugs whose use can adversely affect the ability to work safely.

- 3) Employees are prohibited from buying, selling, soliciting to buy or sell, transporting or possessing illegal drugs while on B.G. Brecke time or property.
 - 4) Employees are prohibited from using or being under the influence of alcohol at any time while on duty, eight (8) hours post-accident, or until tested post-accident.
 - 5) Employees are prohibited from possessing any amount of alcohol (including medications or over-the-counter remedies containing alcohol) while on duty, ***unless the seal is unbroken.***
 - 6) Electronic Smoking Devices (ESD) of any kind is prohibited while on all B.G. Brecke premises including all company owned/leased vehicles, parking lots, buildings, work facilities and plants, warehouses, equipment, job sites, B.G. Brecke sponsored events or land owned, used or managed by B.G. Brecke. ESD are devices that produce a light aerosol (aka: vapor) from plant material, liquids, oils, nicotine, or other chemicals. Such devices include, but are not limited to: e-cigarettes, e-hookah, e-pens, personal vaporizers, hookah pens, vape pens and all other ESD's regardless of appearance or name.
 - 7) Employees are prohibited from testing positive for drugs and/or alcohol while on duty.
 - 8) Employees are prohibited from refusing to be screened/tested for drugs and/or alcohol when circumstances warrant.
 - 9) Employees are prohibited from substituting or adulterating a urine sample in order to alter the outcome of the drug screen/test.
 - 10) Any employee who is convicted or pleads guilty or otherwise accepts any form of legal reprimand of a drug or alcohol related matter would be subject to disciplinary action up to and including termination.
 - 11) An employee who has submitted to a drug and/or alcohol screen/test will, at B.G. Brecke's discretion, either be assigned to a non-safety sensitive function or be placed out of service, without pay, pending the results of the screening/testing.
 - 12) In the event of a confirmed positive drug or alcohol screen/test, the employer shall notify the employee/prospective employee in writing by certified mail, return receipt requested, of the results of the screen/test.
- 23.2.B. An employee whom violates any one of these prohibitions will be subject to disciplinary action by up to and including termination and will be removed from customer sites immediately. This will be at B.G Brecke's discretion.

23.3. Prescription drugs

- 23.3.A. An employee may bring to work and take a prescription drug during work hours only if the drug has been prescribed for the employee by a physician or other authorized prescriber and only if the drug is taken in accordance with the prescriber's directions.
- 23.3.B. All prescription drugs must be kept in the container in which they were received from the pharmacy or other dispenser.
- 23.3.C. Employees using prescriptions that may cause side effects or who are under the influence of any prescribed medication must advise their supervisor and the safety director of that fact before reporting to work.
- 23.3.D. Over-the-counter drugs: An employee may bring to work and take an over-the-counter drug during work hours only if the drug is used for its intended purposes and in accordance with package directions and any other directions of the employee's physician.
- 23.3.E. If a potential side effect could cause an unsafe condition in the workplace, B.G. Brecke, may determine if an employee should not work.

- 23.3.F. The legal use of prescribed drugs is permitted on the job only if it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner that does not endanger other individuals in the workplace.

23.4. Conditions for Testing

23.4.A. Pre-employment

This screen/test will be conducted before applicants are hired, after an offer to hire, and before actually performing any paid position for B.G. Brecke.

- 1) DOT and Drug Free Workplace Employee Pre-employment candidates will have a 10-panel instant pre-employment drug screen done to ensure applicant can immediately start job after an offer to hire. A DOT Federal drug test will then be administered for CDL drivers before that employee may perform and CDL duties.
- 2) When applying, if the applicant can provide documentable proof of a negative screen/test done within the last 90 days, or as required per DOT regulations, and the following conditions are met then the said applicant's pre-employment screen/test may be waived:
 - a) The drug screen/test completed was a replication of the 10-panel drug screen/test performed at B.G. Brecke.
 - b) The drug screen/test was completed by a collector at a certified urine collection facility.
- 3) Upon a positive drug or alcohol screen/test, a Drug Free Workforce applicant will not be eligible for hire without completing one of the following:
 - a) Complete a six (6) month waiting period from the date of the positive screen/test and provide a negative screen/test after the six (6) month waiting period.
 - b) At B.G. Brecke's discretion, the pre-employment test may or may not be an observed drug screen/test.
 - c) Complete all of the steps outlined in the "Return to Duty/Follow-up Screening/testing. Upon completing the steps, said applicant's pre-employment may be re-evaluated at B.G. Brecke's discretion.

23.4.B. Post-Accident

- 1) Employees shall submit to post-accident drug and alcohol screen/tests.
- 2) Vehicle Post-Accident
 - a) DOT Regulated: FMSCA regulations (§382.303)
 - (i) As soon as practicable following an occurrence involving a commercial motor vehicle operating on a public road in commerce, each employer shall test each of its surviving drivers for:
 - (a) Alcohol and controlled substances, who was performing safety-sensitive functions with respect to the vehicle, if the accident involved the loss of human life; or
 - (b) Who receives a citation under State or local law for a moving traffic violation arising from the accident, if the accident involved:
 - (1) Bodily injury to any person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or
 - (2) One or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicle to be transported away from the scene by a tow truck or other motor vehicle.
 - (3) Testing shall be for alcohol if the citation is within 8 hours of the occurrence.
 - (4) Testing shall be for controlled substances if the citation is within 32 hours of the occurrence.
 - (ii) Failure to meet time requirements

- (a) *Alcohol tests.* If a test required by this section is not administered within two hours following the accident, the employer shall prepare and maintain on file a record stating the reasons the test was not promptly administered. If a test required by this section is not administered within eight hours following the accident, the employer shall cease attempts to administer an alcohol test and shall prepare and maintain the same record. Records shall be submitted to the FMCSA upon request.
 - (b) *Controlled substance tests.* If a test required by this section is not administered within 32 hours following the accident, the employer shall cease attempts to administer a controlled substance test, and prepare and maintain on file a record stating the reasons the test was not promptly administered. Records shall be submitted to the FMCSA upon request.
 - b) Drug Free Workplace Employees: Private sector drug-free workplace (730.5)
 - (i) The accident resulted in an injury to a person, for which injury, if suffered by an employee, a record or report could be required under Chapter 88. The employee receives a citation for a moving violation, while driving a company vehicle involved in the accident.
 - (ii) For the purpose of this rule an accident is defined as an incident involving a company motor vehicle which resulted in injury or damage to property, (vehicle, permanent fixtures, buildings etc.) including equipment, in the amount reasonably estimated at the time of the accident to exceed one thousand dollars.
 - c) Screening/testing performed by a law enforcement officer may be utilized as B.G. Brecke post-accident screen/test (provided breath alcohol screening/testing is conducted with an Evidential Breath Tester on Conforming Products List and by law enforcement officer certified on the EBT.) The employee is required to contact his/her supervisor immediately with the officer's name, badge number and telephone number.
 - d) In the event a law enforcement official does not perform screening/testing on an employee involved in an accident, the employee must contact C.J. Cooper & Associates, Inc. at 319-377-5373 or 800-241-3926 or 319-491-4602 for screening/testing. Breath alcohol screening/testing should be performed within two (2) hours following the accident. Contact your DER immediately for the proper protocol to follow regarding your post-accident screening.
 - e) Drug and Alcohol Screening/testing will be performed when any company vehicle is involved in any type of collision with an animal (wild or domestic), if the following conditions apply:
 - (i) The accident involves damage to another vehicle or other property.
 - (ii) The accident involves an injury beyond first aid that requires any medical service.
 - f) An employee who has submitted to a post-accident screen/test will, at B.G. Brecke's discretion, either be assigned to a non-safety sensitive function or be placed out of service, without pay, pending the results of the screening/testing.
 - g) An employee who screen/test positive or refuses to submit to a screen/test is medically unqualified to drive, perform a safety-sensitive or work-related function. In addition, an employee who screen/tests positive, refuses to submit or fails to report for the screen/test will be subject to disciplinary action, up to and including termination.
- 3) Workplace Post Accident/Incident/Injury
- a) Drug and Alcohol screening/ testing will be performed when:

- (i) There is any physical injury beyond First Aid that would require outside medical services.
- (ii) This would be inclusive of personal injury and / or property damage that occurs on B.G. Brecke premises, vehicles or job sites. An employee who screen/tests positive or refuses to submit to a screen/test is medically unqualified to drive, perform a safety-sensitive or work-related function. In addition, an employee who screen/tests positive, refuses to submit or fails to report for the screen/test will be subject to disciplinary action, up to and including termination.
- (iii) On any Post Accident/Injury any individual whose actions or inactions that could have contributed to the incident/accident will be drug screen/tested.

23.4.C. Jobsite/Customer Required:

- 1) Drug and Alcohol screening/testing of employees will be required to go to certain jobsites as required by the customer. In the event that a customer requires a test to be completed rather than a screen, a screen shall be completed on the same sample. A negative screening will be needed to continue working.

23.4.D. Random Screening/Testing

- 1) Random screening/testing of employees is a required B.G. Brecke policy and these screen/tests must be unannounced.
- 2) Random selection must ensure every employee will have an equal chance of being selected each time.
- 3) DOT Employees will also be required to submit to random alcohol testing.
- 4) An employee will be notified of his/her selection and instructed to report to the collection site immediately.
- 5) Drug screening/testing shall be performed before, during or just after the performance of a work-related function.
- 6) If an employee is performing a safety-sensitive function at the time of notification, B.G. Brecke will ensure that the employee cease to perform that function and proceed to the screening/testing site as soon as possible.
- 7) An employee who screen/tests positive or refuses to submit to a screen/test is medically unqualified to drive, perform a safety-sensitive or work-related function. In addition, an employee who screen/tests positive, refuses to submit or fails to report for the screen/test will be subject to disciplinary action, up to and including termination

23.4.E. Reasonable Suspicion

- 1) An employee will be required to submit to a drug and alcohol screen/test when B.G. Brecke has a reasonable suspicion to believe the employee has used drugs or alcohol in violation of this policy.
- 2) Reasonable suspicion will exist when the observation of an employee's appearance, behavior, speech or odors (of breath) or physical symptoms indicate drug or alcohol use.
- 3) An observation must be personally observed and documented by at least one B.G. Brecke trained official. A "trained official" is one who has undergone the initial two (2) hours of education and subsequent annual 1-hour refresher courses. The content includes behavioral, physical, speech, and performance indicators of possible drug and alcohol use.
- 4) Whenever an employee is notified of reasonable suspicion and is to be screened/tested, he/she will be expected to immediately be taken to the collection site. Two B.G. Brecke representatives will accompany and transport the employee to the collection site. This employee will not be allowed to leave the supervision of the B.G. Brecke representative at any time.

- 5) After the drug and alcohol screen/test, a B.G. Brecke representative will transport the employee home or attempt another means of transportation by contacting a family member or another person designated by the employee.
- 6) If the employee refuses alternate transportation, B.G. Brecke reserves the right to take whatever means are appropriate to protect the employee and the public. This may include contacting local law enforcement and imposing disciplinary action, up to and including termination.
- 7) The employee being screened/tested under reasonable suspicion will be considered unqualified to work and placed on suspension without pay, pending the results of the screen/test. If the screen/test results are negative, the employee will be reimbursed for the time of suspension. If the results are positive, the employee will not be reimbursed for the time of suspension and will be subject to disciplinary action, up to and including termination.

23.4.F. Return to Duty/Follow-up Screening/testing

- 1) Upon an employee's first confirmed positive drug or alcohol screen/test, an employee is required to submit to evaluation by a B.G. Brecke approved Substance Abuse Professional (SAP) and will undergo treatment as recommended by the SAP.
 - a) If the employee successfully completes the treatment, no disciplinary action will be taken against the employee.
 - b) If the employee refuses to be evaluated or fails to successfully complete the recommended treatment, the employee will be disciplined, up to and including termination from employment. (see 23.4.G for exception)
 - c) Cost incurred for the SAP's treatment and evaluation is the responsibility of the employee.
- 2) Upon an employee's second confirmed positive drug and/or alcohol test, the employee will be terminated.
- 3) B.G. Brecke is not obligated to reinstate or retain any employee who violates any of B.G. Brecke's prohibition or requirements concerning drugs and/or alcohol.
- 4) B.G. Brecke will be responsible for all drug test costs if continued employment is contingent on taking and passing those tests.
- 5) B.G. Brecke shall pay all actual costs for drug or alcohol testing of employees and prospective employees required by the employer.
- 6) A Return to Duty test/screen is required for the following:
 - a) Any employee returning to work after substance abuse treatment (with approval of SAP and a B.G. Brecke officer).
 - b) Any employee returning to work after an extended absence of work. The timeframe required will be at the discretion of any Officer of B.G. Brecke.
- 7) Follow Up Test
 - a) Follow-up screening/testing will be required for an employee who is determined by a substance abuse professional to have a drug or alcohol-related problem.
 - b) If follow up tests commence, this will be at the treatment schedule provided to B.G. Brecke by the SAP.
 - c) All follow-up screening/testing will be unannounced and without prior notice to the employee.
- 8) In addition to penalties imposed by B.G. Brecke, an employee whose return to duty/follow-up alcohol screen/test is positive, refuses or fails to submit to a screen/test will be subject to disciplinary action, up to and including termination.

23.4.G.Exception

Upon receipt of a confirmed positive alcohol screen/test which indicates an alcohol concentration equal to or greater than the concentration level established by the employer, of .04 BAC and if the employee has been employed by the employer for at least twelve of the past eighteen months, and if the employee has not previously violated the employer's substance abuse prevention policy, the employer shall provide for rehabilitation of the employee:

- 1) If the employer has an employee benefit plan, the cost of rehabilitation shall be apportioned as provided under the employee benefit plan.
- 2) If no employee benefit plan exists and the employee has coverage for any portion of the cost of rehabilitation under any health care plan of the employee, the cost shall be apportioned as provided by the health care plan with any costs not covered by the plan apportioned equally between the employee and the employer. However, the employer shall not be required to pay more than two thousand dollars toward the cost not covered.
- 3) If the employee does not have coverage for any portion of the cost of rehabilitation, the cost shall be apportioned equally between employee and employer. However, the employer shall not be required to pay more than two thousand dollars toward the cost of rehabilitation.

23.5. Assistance

- 23.5.A. B.G. Brecke recognizes that alcohol and drug abuse and addiction are treatable illnesses. We also realize that early intervention and support improve the success of rehabilitation. To support our employees, our drug-free workplace and DOT drug and alcohol policy will have available a current list of qualified community professionals.
- 23.5.B. Treatment for alcoholism and/or other drug use disorders may be covered by the employee benefit plan. However, the ultimate financial responsibility for recommended treatment belongs to the employee.
- 23.5.C. In the event that the employer requires the employee to participate in a treatment/rehabilitation program to retain their employment, the employer shall pay all actual costs for drug or alcohol testing of employees that are required by the employer.

23.6. Screening/Testing

23.6.A. Drug Screening/Testing

- 1) Screening/testing will be performed in accordance with Iowa's procedural protocols and safeguards set forth in Iowa Code 730.5, Iowa Drug Free Workplaces.
- 2) Protocol to ensure employee's correct identity.
- 3) Employees must present personal identification. Refusal to present identification will be treated as a refusal to screen/test, and the employee will be subject to disciplinary action, up to and including termination.
- 4) Chain of custody procedure to ensure the specimen has not been tampered with.
- 5) If the initial screening results are non-negative, Brecke reserves the right to send the specimen in for confirmation drug testing and it will be performed by a laboratory certified under the Iowa DHHS and Iowa Code 730.5 and subsequent amendments thereto. A prospective employee has the option to have the specimen sent to a laboratory for confirmation and testing costs will be the prospective employee's responsibility. If the confirmation testing is negative, the employee will be reimbursed by BRECKE for all testing costs.
- 6) Confirmation screening/testing will be conducted after an initial non-negative screen. The second drug analysis will use gas chromatography/mass spectrometry (GCMS).

- 7) A qualified Medical Review Officer (MRO) prior to being reported to the designated B.G. Brecke representative will review positive drug screens.
 - 8) Urine specimens may be analyzed for, up to and including, the following drugs:
 - a) Cocaine,
 - b) Opiates,
 - c) Marijuana,
 - d) Amphetamines,
 - e) Phencyclidine (PCP),
 - f) Benzodiazepine,
 - g) Barbiturate,
 - h) Methadone,
 - i) Methamphetamines,
 - j) Oxycodone.
 - k) B.G. Brecke reserves the right to expand screening/testing in the event the Iowa State Law permits such changes.
 - 9) An employee will be permitted to give a urine specimen in privacy, unless he/she gives reason to believe the specimen may be altered or substituted.
 - 10) Specimens may be split after the initial screenings to allow for laboratory confirmation, if necessary.
 - 11) At least forty-five (45) milliliters (ml) of urine must be provided in a single voided specimen.
 - 12) If the donor is unable to provide a sufficient volume in his/her first attempt, the employee is encouraged to drink up to 40 ounces of fluids, distributed reasonably over a period of up to three hours, or until the individual has provided a sufficient urine specimen, whichever occurs first.
 - 13) The specimen will then be divided into two bottles by the collector, thirty (30) ml in one and fifteen (15) ml into a second bottle. Both bottles will be sent to the laboratory.
 - 14) The primary bottle (30 ml) will be analyzed. The second bottle will be held in the laboratory pending a request from the employee for a second screen/test in the event of a verified positive of the primary screen/test. To exercise the option to have the second bottle sent to a different laboratory, the employee must request in writing to B.G. Brecke's MRO within seventy-two (72) hours of being told the primary specimen was positive. The cost of the second screen/test is to be paid by the employee, in cash to B.G. Brecke, at the rate of \$175.00. Should the second screen/test be reported as a "negative", the employee will be reimbursed the \$175.00.
 - 15) Pending outcome of additional analysis, the employee will be considered physically unqualified to perform work duties and will be suspended without pay.
 - 16) The employee will be given the opportunity to speak with B.G. Brecke's MRO to determine if there is a medical explanation for a positive screen/test. This opportunity is given prior to the result being confirmed positive. If a medical explanation exists, the results will be reported as "negative" to B.G. Brecke. If a medical reason does not exist, the result will be reported as a "confirmed positive".
- 23.6.B. Alcohol Screening/Testing Procedures
- 1) Alcohol screen/tests will be administered using a breath specimen, given by a trained breath alcohol technician (BAT) utilizing an approved evidential breath-screening/testing device (EBT).

- 2) Employees must present personal identification and sign consent for breath alcohol screening/testing. Refusal to present identification or sign consents will be treated as a refusal to screen/test, and the employee will be subject to disciplinary action, up to and including termination.
- 3) In the event the employee is unable to provide an adequate amount of breath, the employee will be required to submit to an examination by a licensed medical physician to determine whether a valid medical condition exists. If there is no valid medical condition, the employee shall be considered to have refused to take the screen/test and will be reported as a "positive" to B.G. Brecke.
- 4) Breath alcohol screen/tests that register less than 0.04 will be reported as "negative" and no additional screening/testing is required.
- 5) Breath alcohol screen/tests that register 0.04 or greater will require a second confirmation screen/test. If the confirmation screen/test is less than 0.04, the result will be reported to B.G. Brecke as "negative".
- 6) Breath alcohol screen/tests that register 0.04 or greater but less than 0.08 will cause the employee to be removed from duty until the next regularly scheduled duty period, but no less than twenty-four (24) hours. The employee may be subject to additional disciplinary action by B.G. Brecke, up to and including termination.
- 7) Breath alcohol results that register 0.08 or greater on the confirmation screen/test will cause the employee to be immediately suspended without pay, referred to a Substance Abuse Professional in addition to disciplinary action, up to and including termination. If you have questions, call C.J. Cooper & Associates @ 319-377-5373

23.7. What Happens if I Refuse to Be Tested?

23.7.A. As part of the alcohol and drug regulations, you must submit to alcohol and drug testing. A refusal to test is treated the same as a positive test. If you refuse to be tested, you cannot continue to perform safety-sensitive or work-related functions and are subject to disciplinary action, up to and including termination.

23.7.B. "Refusal" occurs when:

- 1) You fail to appear for any test within a reasonable time.
- 2) You fail to remain at the testing site until the testing process is complete.
- 3) You fail to provide:
 - a) A urine specimen for drug testing, or
 - b) A saliva or breath specimen for alcohol testing
- 4) You fail to provide enough urine and there is no medical explanation for the failure.
- 5) In the case of a directly observed or monitored drug test collection, you fail to permit the observation or monitoring of your provision of the specimen;
- 6) You fail or decline taking a second drug test when directed by an employer or collector.
- 7) You fail to undergo a medical examination or evaluation as part of:
 - a) The verification process for drug testing or as directed by the designated employer representative (DER);
 - b) "Shy bladder" procedures for drug testing, or
 - c) Insufficient breath procedures for alcohol testing.
- 8) You fail to cooperate with any part of the testing process
- 9) A verified adulterated or substituted drug test is also considered a refusal to test.

23.8. Miscellaneous

23.8.A. Employer Immunity

- 1) A cause of action shall not arise against an employer who has established a policy and initiated a testing program in accordance with the testing and policy safeguards provided for under this section, for any of the following:
 - a) Testing or taking action based on the results of a positive drug or alcohol screen/test result, indicating the presence of drugs or alcohol, in good faith, or on the refusal of an employee or prospective employee to submit to a drug test.
 - b) Failure to screen/test for drugs or alcohol, or failure to screen/test for a specific drug or controlled substance.
 - c) Failure to screen/test for or if screened/tested for, failure to detect, any specific drug or other controlled substance.
 - d) Termination or suspension of any substance abuse prevention or screening/testing program or policy.
 - e) Any action taken related to a false negative or alcohol screen/test result.

23.8.B. Confidentiality

All communications received by an employer relevant to employee or prospective employee drug or alcohol test results are confidential. Test results and other confidential information will only be released to the employer and the substance abuse professional. Any other release of this information is only with the employee's consent as mandated by the D.O.T. 49 CFR §40.321 and the Iowa Code 730.5.

23.8.C. Definitions:

- 1) Safety Sensitive Positions
 - a) A Safety sensitive position is a job or position where the employee holding this position has the responsibility for his/her own safety or other people's safety. Safety Sensitive positions will be defined by an officer of B. G. Brecke.
- 2) BAT
 - a) Certified Breath Alcohol Technician
- 3) DER
 - a) Designated Employer Representative – An Officer of B.G. Brecke
- 4) EBT
 - a) Evidential Breath Testing Device
- 5) MRO
 - a) Dr. Philip Lopez
- 6) LAB
 - a) Alere Toxicology
- 7) TPA
 - a) CJ Cooper Drug & Alcohol Testing
- 8) SAP
 - a) Substance Abuse Professional – List Provided

23.9. FMCSA Clearinghouse

The FMCSA Clearinghouse is an electronic database that will contain information about commercial motor vehicle drivers' drug and alcohol program violations. FMCSA regulations require employers to inform drivers and driver-applicants that the following information will be reported to the Clearinghouse (beginning 1/16/2020):

- 23.9.A. A verified positive, adulterated, or substituted drug test result;
- 23.9.B. An alcohol confirmation test with a concentration of 0.04 or higher;
- 23.9.C. A refusal to submit to a drug or alcohol test required by FMCSA regulations;
- 23.9.D. An employer's report of actual knowledge of:
 - 1) On duty alcohol use (see 49 CFR § 382.205);
 - 2) Pre-duty alcohol use (see 49 CFR § 382.207);

- 3) Alcohol use following an accident (see 49 CFR § 382.209);
- 4) Controlled substance use (see 49 CFR § 382.213);
- 23.9.E. A substance abuse professional's report of the successful completion of the return-to-duty process;
- 23.9.F. A negative return-to-duty test; and,
- 23.9.G. An employer's report of completion of follow-up testing

Employee Information Section

What are the effects of Alcohol and Drugs on the Body?

Drug Name	Substances Detected in Urine	What to Look For & Physical Symptoms	Dangers	Time Detectable in Urine
Amphetamines ●Uppers ●Speed ●Meth ●Dexies ●Crank ●Black Beauties	Methamphetamine, Amphetamine	Tablets of varying colors, possible chain-smoking, long periods without rest or sleep. Loss of appetite, irritability, rapid speech, tremors, mood elevations	Disorientation, severe depression, paranoia, possible hallucinations, increase in blood pressure, fatigue	1-2 Days
Cocaine ●Coke ●Crack ●Flake ●White Candy ●Free Base ●Toot ●Blow	Benzoylcegonine	Glassine envelopes, razor, small spoons, odorless, bitter white crystalline powder, granular rocks, short-lived euphoria changing to depression, irritability, nervous, tightness of muscles	Shallow breathing, fever, anxiety, tremors, possible death from convulsions or respiratory arrest	1-3 Days
Marijuana ●Dope ●Pot ●Reefer ●Joint ●Grass ●Blow	11-Nor-delta9-tetrahydrocannabinol-9-carboxylic acid, THC	Plastic baggies, rolling paper, 'roach' clips, odor of burnt rope. Altered perception, dilated pupils, lack of concentration and coordination, craving for sweets, increased appetite, laughter	Psychological dependence, increased heart rate, impaired short-term memory, anxiety, lung damage, possible psychosis with chronic use	Occasional use: 1-3 days Chronic use: Up to 30-60 days
Opiates ● Heroin (smack, horse, junk) ●Morphine ('M', Miss Emma) ●Codeine (school boy)	Codeine, Morphine	Glassine Envelopes, needles and syringes, caps or spoons, tourniquets, needle marks on arms. Insensitivity to pain, euphoria, sedation, nausea, vomiting, itchiness, water eyes, running nose)	Lethargy, weight loss, hepatitis, slow and shallow breathing, possible death	1-3 Days
Phencyclidine ●Angel Dust ●Devil Stick ●PCP ●Dummy Dust	Phencyclidine	Liquid Capsules. White or brown powder can be put on paper stamps, sugar cubes, cigarettes or joints. May be injected. Increased pulse and heart rate, blood pressure and temperature. Mood and perception alteration possible, paranoia, panic, anxiety, nausea, tremors, suicidal urge	Unpredictable behavior, flashbacks, possible emotional instability and psychosis, hallucination	Occasional use: 1-3 days Chronic use: Up to 30 days
Barbiturates ●Downers ●Dolls ●Reds ●Tuinal ●Rainbows ●Yellows ●Blues ●Goof Balls	Secobarbital Phenobarbital Pentobarbital Butobarbital Amobarbital	Capsules of varying colors, longer periods of rest or sleep, dizziness, cold and clammy skin. Depression, decreased alertness and muscle control, intoxication and slurred speech, drowsiness	Rigidity and painful muscle contraction, emotional instability, possible overdoses and death, especially when mixed with alcohol	Pentobarbital and others: 1-3 Days Phenobarbital: 1-3 Weeks
Benzodiazepines Downers	Diazepam Chlordiazepoxide Oxazepam Nordiazepam Temazepam	Oral/Injection. Slurred speech, disorientation, drunken behavior without odor of alcohol	Shallow respiration, cold and clammy skin, dilated pupils, weak and rapid pulse, coma, possible death	1-7 Days
Methadone ● Done ●Dolophine ●Methadose	Methadone	Tablets. Liquid injection. Euphoria, drowsiness, respiratory depression, constricted pupils, nausea	Slow, shallow breathing, clammy skin, convulsions, coma, possible death	1-3 Days

Methaqualone ●Ludes ●Quaaludes	Methaqualone	Tablets. Slow heart rate and breathing, lowered blood pressure. Sleepiness, feeling of well-being, loss of coordination, dizziness, impaired perception, confusion, later hangover		1-3 Days
MDMA ●Ecstasy ●Adam ●XTC ●MDA ●MDE ●X	Methylenedioxyamphet- amine	Tablets. Euphoria, confusion, anxiety, sleeplessness, drug craving and paranoia. Used at all night RAVE dance parties	Muscle tension, teeth clenching, nausea, tremors, rapid eye movement, chills, possible death	1-2 Days
Propoxyphene	Propoxyphene	Tablets, capsules. Dizziness, drowsiness, headache, euphoria, dysphoria	Skin rash & other allergic reactions occur occasionally and may be accompanied by drug fever and mucosal lesion, stupor or coma; convulsions, respiratory depression	1-3 Days
Buprenorphine ●Buprenex ●Temgesic	Buprenorphine	Pinpoint pupils, extreme drowsiness, dizziness, blurred vision, slowed breathing		1-6 Days
Alcohol	Ethanol	Dulled mental processes, Lack of coordination, Odor of alcohol on breath, Pupils will be constricted, Sleepy condition, slowed reactions, slurred speech, Anxiety or jumpiness, Shakiness or trembling, sweating, nausea and vomiting, insomnia, Irritability, headache	depression, anxiety, and suicide, Social problems, liver damage, Inflammation of the esophagus, Aggravation of peptic ulcers, Acute and chronic pancreatitis, Malabsorption of food nutrients that will lead to malnutrition, Heart attack, Hypertension, Stroke Immune system depression, Brain damage (dementia, blackouts, seizures, hallucinations, peripheral neuropathy).	Varies - up to 8 hours

FOR MORE INFORMATION OR ASSISTANCE YOU CAN TRY SOME OF THE FOLLOWING SOURCES:

Cocaine Anonymous: (800) 347-8998
Substance Abuse: (800) WORKPLACE
Alcohol and Drug Abuse: (800) 729-6686

Center for
National Clearinghouse for
NIDA's treatment Hotline: (800) 662-

HELP

Some helpful and interesting websites are:

www.drughelp.org

www.doi.gov

www.dea.gov

www.samsha.gov

www.health.org

Certified EAP and SAP Providers in the Cedar Rapids Area

Mercy Sedlacek Center
5975 Rockwell Dr. NE
Cedar Rapids, IA 52402
Phone Number:
[\(319\) 398-6226](tel:3193986226)

.....

St Luke's Chemical Dependency
[810 First Avenue NE Cedar Rapids, IA 52402](http://www.st-lukes.org/)
<http://www.st-lukes.org/>
[\(319\) 363-4429](tel:3193634429)

.....

ASAC
317 7th Avenue SE Suite 203
Cedar Rapids IA 52401
Phone: (319) 247-4873 Fax: (319) 247-4877 Email: info@asac.us

.....

Iowa Drug & Alcohol Helpline	866-242-4111
Alcohol & Drug Dependence Hope Line	800-622-2255
Marijuana Anonymous	800-766-6779
Cocaine Hotline	800-262-2463

***B.G. Brecke does not endorse or work with any center exclusively. Being the financial part of rehabilitation is the employee's responsibility, it is their preference of where they choose to complete their substance abuse program. ***

Chapter 24 Recordkeeping

24.1. General

- 24.1.A. Brecke shall keep a record of all recordable incidents as defined by OSHA.
- 24.1.B. Items shall be recorded on the 300 Log within 7 days of the incident.
- 24.1.C. The 300A Log shall be signed by a company official and posted in a visible place February 1-April 30 each year per OSHA.
- 24.1.D. 300 and 300A Logs shall be maintained on the Company Drive for 5 years.
- 24.1.E. All incidents involving harm to an employee shall be recorded and triaged through Medcor Services.
- 24.1.F. Safety Team shall maintain Historical data and air sampling on the Company Drive.

24.2. Training Records

- 24.2.A. Safety Training Records shall be maintained on the MCAI's Training Vault.
- 24.2.B. A spreadsheet shall be maintained for all site-specific training on the Company Drive.
- 24.2.C. All training records shall be retained for at least 5 years from the date of training.

24.3. Medical & Exposure Records

- 24.3.A. Medical records shall be maintained and kept separated from training files.
- 24.3.B. This includes exposed employee monitoring, medical surveillance and exams.
- 24.3.C. Employees shall have access to their records upon request.
- 24.3.D. Medical Records for Bloodborne pathogens must be kept for the duration of employment plus 30 years.

Chapter 25 Forms/Appendix

<i>Employee Acknowledgement And Consent Form</i>	<i>65</i>
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Employee Acknowledgement And Consent Form

This acknowledgement form is to certify that the undersigned on the date indicated received a copy of the Brecke Safety Manual including the drug and alcohol policy for use while employed with by Brecke.

My employment relationship with Brecke is entered into voluntarily and is subject to termination by me or the company at will, with or without cause; at any time either I or the company believes such action to be appropriate.

I acknowledge that I have received a copy of the Brecke Safety Manual including the drug and alcohol policy and that it is my responsibility to read the manual and policy and any revisions made to it and act in accordance with its provisions. Changes made to the current revision can be found in the summary of changes.

In addition, I have received information as to the effects of alcohol misuse and controlled substance use on an individual's health, work and personal life, signs and symptoms of alcohol or a controlled substance problem, outlined in the company policy.

I understand that this policy is intended to supersede and replace all previous employee handbooks, manuals and policy statements, whether oral or written, issued by Brecke.

Employee Signature

_____/_____/_____
Date

Employee Printed Name

Appendix A – Job Safety Checklist

JOB SAFETY CHECKLIST GUIDE

The attached Job Safety Checklist is a guide for your inspections of safety conditions. Here are some suggested ways it can be used.

1. Conduct periodic safety inspections of the jobsite using the attached Site Inspection Form located on the following page.
2. Where unsafe conditions are found:
 - a. Initiate action to correct the condition
 - b. Place warning signs and guarding to keep employees away from unsafe areas as well as warning employees verbally.
 - c. Notify the safety team if you cannot correct the hazard
3. When an employee is noted performing unsafe practices:
 - a. Tell him/her of the unsafe act
 - b. Explain why the act is unsafe
 - c. Describe and show the correct safe action
 - d. Recheck employee's performance at a later time to assure that safe practice is being followed
 - e. Make all corrections in a firm, but friendly manner letting the employee know that you are interested in them and their safety
4. Send a copy of completed checklist to the Team Leader Safety Team either physically or electronically.
 - a. Checklists with any failure need to be submitted by the end of the day.
 - b. Checklists without failure need to be submitted by the end of the week.

SITE INSPECTION FORM

Job Name: _____ **Job Number:** _____

Location: _____

Inspection By: _____ **Date:** _____

	Check When Completed
A. LADDERS/STAIRWAYS	
1. Ladders inspected for defects.	_____
2. Ladders extend 3' above landing and secured.	_____
3. Ladders pitched at 1' out from vertical for every 4' of height.	_____
4. Ladders secured in place.	_____
5. Stairways equipped with stair rails and handrails.	_____
6. Stairways free of debris, slip, trip and fall hazards.	_____
B. GERNERAL FALL PROTECTION	
1. Floor openings covered or guarded. (cover secured)	_____
2. Workers exposed to falls 6' or more are protected.	_____
C. SCAFFOLDS	
1. Competent person assigned to supervising erection/disassembly.	_____
2. Competent person assigned to conduct regular or pre-use inspections.	_____
3. Working surfaces 10' or higher equipped with guardrails.	_____
4. Working surfaces clear of debris, slip, trip and fall hazards.	_____
D. EXCAVATIONS AND TRENCHES	
1. Competent person assigned to supervise operations at all times.	_____
2. All excavations and trenches 4' or deeper equipped w/ protective system.	_____
3. Ladders or other means of quick exit within 25' of each worker.	_____
4. Spoil pile at least 2' from edge of excavation or trench.	_____
E. ELECTRICAL	
1. GFCI or Assured Equipment Grounding Conductor Program in place.	_____
2. All outlets checked for proper wiring and GFCI checked if applicable.	_____
3. All tools and equipment inspected for for defects in cords and plugs.	_____
4. Extension cords are in good condition.	_____
5. Sources of electricity such as panel boxed, overhead lines, etc. marked.	_____
F. PERSONAL PROTECTIVE EQUIPMENT	
1. Eye protection provided and being utilized.	_____
2. Hearing protection provided.	_____
3. Hard Hats provided and being utilized.	_____
4. Work boots warn by employees (steel toed where required).	_____
5. Welding.cutting helmets, eye protection, gloves, bibs are available.	_____
6. Respirators/respirator protection program in place. (fit test records)	_____
G. CYLINDERS	
1. Oxygen and fuel cylinders properly separated and secure.	_____
2. Compressed gas cylinders labeled.	_____
3. Culinders turned off and valve caps in place when not in use.	_____
4. Hoses and torches free from defects.	_____

	Check When Completed
H. FIRE PREVENTION	
1. Flammable/combustible liquids stored away from ignition sources.	_____
2. Portable containers of such liquids are approved and have self-closing lids.	_____
3. Adequate number of properly charged fire extinguishers available.	_____
4. Extinguishers properly located with current inspection tag.	_____
5. Flammable/combustible, debris/trash kept from welding and cutting operations.	_____
6. Oily rags disposed of in approved self-closing waste containers.	_____
I. TOOLS AND EQUIPMENT	
1. Tools and equipment in good condition.	_____
2. Defective equipment tagged as such and removed from work area.	_____
3. Tool and equipment guards in place and in good condition.	_____
J. CONFINED SPACE	
1. Air sampling equipment calibrated.	_____
2. Air samples show acceptable oxygen concentraion. (19.5% to 23.5%)	_____
3. Air samples show space is free of toxic/flammable/explosive gases.	_____
4. Trained attendant assigned to keep constant contact with all workers inside space.	_____
5. Trained person assigned to recheck air quality frequently throughtout the project.	_____
L. HAZARD COMMUNICATION	
1. Written Hazard Communication Program in place.	_____
2. Written program includes complete list of all chemicals.	_____
3. SDS available for every chemical on list.	_____
4. Chemical containers properly labeled.	_____
M. FIRST AID	
1. First aid kits readily accessible to all workers.	_____
2. Contents of first aid kits approved by qualified health care provider.	_____
3. First aid kits include rubber gloves, eye protection and CPR mask.	_____
4. Properly trained first aid provider on site.	_____
N. HOUSEKEEPING	
1. Suitable containers available for disposal of trash and debris.	_____
2. Walkways, aisles, hallways and passageways clear of trash, debris and materials.	_____
3. Trash and debris containers empty.	_____
4. Tools not in use stored in job boxes.	_____
5. Equipment not is use stored properly.	_____
6. Pipe, conduit, ductwork and othe materials stored neatly.	_____
P. OTHER	
1. Portable water readily accessible to all workers.	_____
2. Clean, private toilets accessible to all workers.	_____
3. OSHA Job Site Poster posted.	_____
4. Emergency telephone numbers posted or made avaiable to all workers.	_____

COMMENTS

Appendix B – PJHA Form

Pre-Job Hazard Assessment TAKE TWO FOR SAFETY SAKE



Name	Date	Area	Supervisor
MECHANICAL CONTRACTORS			
Required Permits		Yes	No
Confined Space		<input type="checkbox"/>	<input type="checkbox"/>
Safety Device By-pass		<input type="checkbox"/>	<input type="checkbox"/>
Flammable and Combustible Exposure		<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Chemical		<input type="checkbox"/>	<input type="checkbox"/>
Hot Work		<input type="checkbox"/>	<input type="checkbox"/>
Line Break		<input type="checkbox"/>	<input type="checkbox"/>
Trenching and Excavation		<input type="checkbox"/>	<input type="checkbox"/>
Ignition Source Control Permit		<input type="checkbox"/>	<input type="checkbox"/>
Elevated Work Permit		<input type="checkbox"/>	<input type="checkbox"/>
Other:		<input type="checkbox"/>	<input type="checkbox"/>
General		Yes	No
Does the work require completion of a MOC?		<input type="checkbox"/>	<input type="checkbox"/>
Do you have the proper tools and/or equipment to do this job?		<input type="checkbox"/>	<input type="checkbox"/>
Have all tools and/or equipment been inspected?		<input type="checkbox"/>	<input type="checkbox"/>
Have you planned your escape route?		<input type="checkbox"/>	<input type="checkbox"/>
Safety shower location has been identified?		<input type="checkbox"/>	<input type="checkbox"/>
PPE Required			
PPE for this task: Hard hat, safety glasses with side shields, and safety/steel toe boots are required of each worker on each job. Additional PPE needed:			
<input type="checkbox"/> Gloves	<input type="checkbox"/> Hearing protection		
<input type="checkbox"/> Protective clothing	<input type="checkbox"/> Chemical goggles		
<input type="checkbox"/> Face shield	<input type="checkbox"/> Full body harness		
<input type="checkbox"/> Respiratory protection	<input type="checkbox"/> Rubber boots		
<input type="checkbox"/> Dust Mask	<input type="checkbox"/> Barricade		
<input type="checkbox"/> Cartridge	<input type="checkbox"/> Cones/posts		
<input type="checkbox"/> SCBA	<input type="checkbox"/> Caution tape		
<input type="checkbox"/> Supplied air	<input type="checkbox"/> Danger tape		
<input type="checkbox"/> PAPR			
Hand Protection		Yes	No
1. Potential exposure of hands/fingers to the following:			
Abrasions caused by friction/moving parts		<input type="checkbox"/>	<input type="checkbox"/>
Contusion caused by falling objects		<input type="checkbox"/>	<input type="checkbox"/>
Burns caused by extreme heat/cold		<input type="checkbox"/>	<input type="checkbox"/>
Irritation caused by chemicals/flammables		<input type="checkbox"/>	<input type="checkbox"/>
Shock by electricity		<input type="checkbox"/>	<input type="checkbox"/>
Crushing injury caused by pinch points		<input type="checkbox"/>	<input type="checkbox"/>
Puncture caused by sharp-pointed objects		<input type="checkbox"/>	<input type="checkbox"/>
2. Have you inspected materials for jagged edges temp extremes, splinters, rough or slippery surfaces?		<input type="checkbox"/>	<input type="checkbox"/>
3. For this task, my hands/fingers will be protected by the following type of glove:			
___ Metal Mesh	___ Cut Resistant	___ Leather	
___ Rubber/PVC/etc	___ NFPA 70E	___ Welding	
	___ Insulated gloves		
Hazard Identification		Hazard Controls	
<input type="checkbox"/> Chemical exposure			
<input type="checkbox"/> New chemical approved	<input type="checkbox"/> Barricades		
<input type="checkbox"/> Increase in chemical quantity approved	<input type="checkbox"/> Verified vessel is empty		
<input type="checkbox"/> SDS available	<input type="checkbox"/> Additional PPE		
	<input type="checkbox"/> Barricade		
	<input type="checkbox"/> Container labeled		
<input type="checkbox"/> Mobile lift equipment	Use elevated work permit		
<input type="checkbox"/> Fall	Use elevated work permit		
<input type="checkbox"/> Scaffolding	Use elevated work permit		
<input type="checkbox"/> Anchor points	Use elevated work permit		
<input type="checkbox"/> Ladders	Use elevated work permit		
<input type="checkbox"/> Slips, wet surfaces			
<input type="checkbox"/> Clean surface	<input type="checkbox"/> Eyes on path		
<input type="checkbox"/> Barricade	<input type="checkbox"/> Use alternate route		
<input type="checkbox"/> Trips			
<input type="checkbox"/> Relocate	<input type="checkbox"/> Use alternate route		
<input type="checkbox"/> Barricade	<input type="checkbox"/> Eyes on path		
Hazard Identification		Hazard Controls	
<input type="checkbox"/> Falling Objects			
<input type="checkbox"/> Secure objects	<input type="checkbox"/> PPE		
<input type="checkbox"/> Guarding, covers	<input type="checkbox"/> Barricading		
<input type="checkbox"/> Hazards from others working in vicinity			
<input type="checkbox"/> Communication	<input type="checkbox"/> Shielding		
<input type="checkbox"/> Barricading	<input type="checkbox"/> Ventilation		
<input type="checkbox"/> Housekeeping			
<input type="checkbox"/> Area kept clean of trash/debris	<input type="checkbox"/> Hoses/cords out of path/rolled		
	<input type="checkbox"/> Tools organized		
<input type="checkbox"/> Weather			
<input type="checkbox"/> Possible wind shift	<input type="checkbox"/> Consider stopping work in high winds		
<input type="checkbox"/> Secure materials/equipment	<input type="checkbox"/> Equipment erection - braced during construction		
<input type="checkbox"/> Line of fire - equipment and objects	<input type="checkbox"/> Design spec reviewed		
<input type="checkbox"/> Heat/Cold Stress			
<input type="checkbox"/> Ventilation	<input type="checkbox"/> Task rotation, shared tasks		
<input type="checkbox"/> Cooling vests, etc	<input type="checkbox"/> Work/rest regimen		
<input type="checkbox"/> Lifting, Pulling, Pushing			
<input type="checkbox"/> Proper technique	<input type="checkbox"/> Get equipment designed for the job		
<input type="checkbox"/> Small, lighter loads	<input type="checkbox"/> Prepared for "unexpected" release		
<input type="checkbox"/> Move feet to turn with load			
<input type="checkbox"/> Repetitive Motion			
<input type="checkbox"/> Proper technique	<input type="checkbox"/> Get help, take breaks		
<input type="checkbox"/> Seek advice	<input type="checkbox"/> Power tools rather than manual		
<input type="checkbox"/> Electrical Shock			
<input type="checkbox"/> Isolation, LOTO	<input type="checkbox"/> GFCI		
<input type="checkbox"/> Testing	<input type="checkbox"/> Electrically qualified		
<input type="checkbox"/> Grounding	<input type="checkbox"/> Shielding on equipment		
<input type="checkbox"/> Voltage	___ Min Clearance ___ Procedure #		
<input type="checkbox"/> Pinch Point/Line of Fire/Rotating Equipment			
<input type="checkbox"/> Guarding	<input type="checkbox"/> Positioning		
<input type="checkbox"/> Airborne/Flying Material			
<input type="checkbox"/> Cover/shield source	<input type="checkbox"/> PPE, arms & body		
<input type="checkbox"/> PPE, eye & face	<input type="checkbox"/> Positioning		
<input type="checkbox"/> Thermal Burns			
<input type="checkbox"/> Splash guard	<input type="checkbox"/> Equipment covers		
<input type="checkbox"/> Isolation, LOTO	<input type="checkbox"/> Additional PPE		
<input type="checkbox"/> Positioning			
Is LOCKOUT/TAGOUT required for this job?			
Equipment location: _____			
Foreman on satellite box: _____ Box #: _____			
Obtain lockout procedure if available and follow			
If procedure is unavailable, proceed with the following:			
1. Notify all affected people of the lockout			
2. Stop all equipment by normal means			
3. Put equipment in "field" mode			
4. Isolate all energy sources with locks and tags			
5. Verify equipment is locked out by trying to start			
6. Return equipment to service after cleaning			

Area

Plant _____
 Direction North South East West

Floor or elevation _____
 Equipment (description and number) _____
 Fire Extinguisher Yes No

Chemicals present (list):

OS Location: Binder Works Other: _____

Other hazards present in area (list):

Location: Shower/Eye Wash: _____ Operational: Yes No

Describe Job (including tools & equipment being used)

List Hazards

Eliminate or Control Hazards

Employee's signature: _____ Audited by: _____
 Note: The PJHA must be reviewed with all added personnel.

Please sign below (all members of the work group):

Appendix C – Duane Arnold Energy Center Action Plan

Electronic Version May Be Found At: http://www.homelandsecurity.iowa.gov/documents/rep/REP_PIB_DAEC.pdf

Emergency Action Plan

NextEra Energy Duane Arnold Energy Center

NextEra Energy Duane Arnold Energy Center (DAEC) is Iowa's only nuclear generating station and is located nine miles north-west of Cedar Rapids near Palo. Although the NextEra Energy DAEC has safely operated since 1974, extraordinary precautions have been taken to ensure the safety of the public and plant workers in the unlikely event of an emergency at the plant.

What is a nuclear plant emergency?

In the unlikely event that protective barriers or systems fail to work properly, radioactive material in the form of gases or small particles could escape from the plant into the air. This could result in people being exposed to radioactivity and receiving unwanted radiation exposure.

The Nuclear Emergency Plan

Federal regulations require that state and county governments implement emergency plans to protect the public if there is an emergency at the NextEra Energy DAEC. The purpose of these plans is to ensure the public will know what to do in case of a nuclear emergency. Information provided in the following pages describes actions you may need to take if there is an emergency at NextEra Energy DAEC. Please keep this information and share it with your family.

Emergency Alert System (EAS)

The Emergency Alert System (EAS) is a group of radio and television stations that broadcast official information during an emergency. If the outdoor warning sirens sound, tune to **radio 600 AM or 96.5 FM** or their Internet feeds, the official designated **EAS Radio Stations** in this area, for up-to-the-minute emergency information.

How You Would Be Notified of an Emergency

The public is informed of an emergency by a system of outdoor warning sirens, radio broadcasts over the EAS station and additional warnings communicated by NOAA tone alert Weather Radio. A monthly test of the Outdoor Warning Siren System is conducted the first Wednesday of each month. It starts at approximately 8:45 am and tests the PA system plus the steady and wail tone sirens. If there is an emergency the sirens will sound with a three-to-five-minute steady tone. This alerts you to go indoors and tune to local radio stations for emergency information. You will be given specific instructions if you need to stay indoors, evacuate, or take other protective actions.


If you hear the sirens, check with neighbors and make sure they've heard the sirens and understand that they should tune to radio 600 AM or 96.5 FM, or their Internet feeds.

DO NOT use the phone unless you have a special emergency and require help.

Leave the lines open for official emergency business. Radio and TV stations will inform the public when protective actions are no longer necessary.

To supplement the warnings provided by the outdoor sirens and EAS, the public is encouraged to purchase a NOAA tone alert Weather Radio. These radios can provide valuable warning and information in any emergency situation, and are particularly helpful in situations such as severe weather when the public needs to take immediate action.

The National Weather Service conducts a weekly test of the NOAA Weather/Tone-alert Radio system each Wednesday between 11 a.m. and Noon.

The DAEC Nuclear Emergency Action Plan is available by calling
Call United Way 
2-1-1TM
Get Connected. Get Answers.
Dial 2-1-1 or 1-866-469-2211
or from a cell phone 1-319-739-4211
A 24-hour hotline number for health and human service information.

Jan. 2018

Accidental Siren Sounding

If you hear a siren but no EAS message is broadcast on radio 600 AM or 96.5 FM, please call:

Linn County Emergency Management Agency at (319) 892-6500
Off-hours at (319) 398-3511

Benton County Emergency Management Agency at (319) 472-4519
Off-hours at (319) 472-2337

DO NOT call 9-1-1 if a siren sounds.



Scan and download the Emergency Action Plan to your mobile device

Emergency Action Plan



I live in subarea: _____

Emergency Planning Zone and Subareas

An emergency plan has been developed for an area called the Emergency Planning Zone (EPZ). The EPZ is an approximate ten-mile radius around NextEra Energy DAEC. This includes part of Benton and Linn Counties. Emergency plans for the NextEra Energy DAEC are regularly demonstrated for evaluation by the Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC) to demonstrate that they are adequate to protect the health and safety of the public. The emergency plan identifies subareas within two, five, and ten miles from the NextEra Energy DAEC. Some subareas in Cedar Rapids and Marion are beyond ten miles from the NextEra Energy DAEC. If an emergency should develop at NextEra Energy DAEC, it is not likely to affect all residents in the EPZ. For example, protective actions recommended for subarea #1, an area within two miles of the plant, may not be recommended for other subareas. The EPZ map included within this information shows subareas. Find the number of the subarea where you live and note the number of the subarea in the green box above.

Emergency Classifications

Emergency classifications are divided into four categories. Each calls for a certain level of response from plant and government personnel.

- **Unusual Event:** The least serious of the four levels. The event poses no threat to you or to plant employees, but emergency officials are notified. Public action is not needed.
- **Alert:** Declared when an event has occurred that could reduce the plant's level of safety or security, but backup plant systems still work. Emergency agencies are notified and kept informed, but generally, no action by the public is necessary.
- **Site Area Emergency:** Declared when an event involving major plant operational problems or a security event has occurred. At this classification there is the potential for a minor radiation release, but the release would not exceed EPA safety standards for the general public. However, some public action may be needed. If public action is needed, the outdoor sirens are sounded and EAS (Emergency Alert System) instructions announced.
- **General Emergency:** The most serious of the four classifications is declared when an event involving major plant operational problems or a serious security event has occurred. At this classification there is the potential for a radiation release that would exceed EPA safety standards for the general public. Public action may be needed. If public action is needed, the outdoor sirens are sounded and EAS (Emergency Alert System) instructions are announced.

For Your Protection - Monitor and Prepare

When you become aware of an emergency at the nuclear plant, the best course of action is to monitor local radio or television for specific instruction directed by local authorities. While monitoring the situation you should be preparing to either evacuate or shelter in place.

Protective Actions

Concern for public safety in a nuclear emergency is due to the possibility of a radioactive release. Protective actions may be needed to avoid or limit radiation exposure to the public. Protective actions are directed by the state and county officials and are based on guidelines from the Environmental Protection Agency. Actions recommended will depend upon plant conditions at NextEra Energy DAEC and weather conditions. The actions recommended may be to shelter in place or evacuate. Respond promptly to all instructions. You do not need to rush. More information on Protective Actions can be found later in this Emergency Action Plan.

...continued on next page

Emergency Action Plan



If You Are Told to Shelter in Place

To shelter in place means that instructions are given to remain indoors if you are in an affected subarea. Shelter in place instructions may also be given to keep roadways clear so others can evacuate rapidly. The intent of sheltering in place is for the public to remain where they currently are or to seek shelter close by.

Take the Following Steps

- **DO NOT** pick up children at schools, preschools, or registered day care centers; our plans include special precautions for children in these facilities.
- Tune to the official EAS Radio Station 600 AM or 96.5 FM, monitor the situation and prepare to take additional directions from local officials.
- **Limit non-emergency phone calls.** If you must use a mobile device, texting is preferred.

If Indoors:

- Remain there until further notice.
- Shut all windows and doors.
- Turn off all ventilation (furnaces, fireplaces and air conditioning).
- Cover open food containers.

If Outdoors:

- Go indoors immediately and follow the "if indoors" instructions.
- Wash hands and face before eating and handling food.
- Take a lukewarm shower if possible.

If You Are In Your Car, At Work, or Away from Home:

- Close car windows, vents, and shut off heating and cooling systems.
- Turn your radio on and monitor the situation and follow directions.
- If your home is in an area being told to Shelter in Place, **DO NOT** try to go home. Leave the Emergency Planning Zone or enter a nearby building.
- Stay where you are, monitor the situation and await further instructions.

If You Are Told To Evacuate

- Evacuation is a precautionary move recommended for your safety. Please evacuate promptly once the recommendation is made.
- If you do not live in the area being evacuated you should **keep off roads** so the people who most need to evacuate can.
- Evacuation can last for a few hours or days. Plan for up to a three-day absence. Turn off small appliances, faucets, and ventilation systems. Lock doors and windows.
- Pack necessities. See the check list on a following page. Add items you might need.
- If directed by medical authorities, pick up relatives in nursing homes or hospitals.
- Residents with children in Benton and Linn County schools in an affected subarea will be able to pick up children at the designated Temporary Relocation Center (TRC) unless otherwise directed. See Temporary Relocation Center chart.
- Leave pets indoors with stored food and water for several days, or take them to a private kennel. Public Reception Centers do not have places for pets. All seeing eye and service animals will be received.
- Take this portion of the phone book with you and follow instructions given in EAS messages.
- Tie a white cloth to your front door. This indicates to emergency workers you have left your home. Drive safely. Use suggested evacuation routes. See map.
- Stay tuned to radio 600 AM or 96.5 FM for current information.
- Keep windows and vents closed if you are driving in a subarea that is being evacuated.
- Law enforcement agencies will provide traffic control and will maintain security in evacuated areas.
- Follow directions which are provided by local authorities to your designated Reception Center. Reception Centers are established to monitor evacuees for radiological contamination. Short-term housing and food is provided. Please go to the Reception Center for monitoring and registration even if you and your family do not need housing.
- You and your family can return to an evacuated area when informed by an EAS message or relocation center manager. State and local officials will make this decision.

Emergency Action Plan



School Information

If school relocation is recommended, parents should not go to the schools to pick up children as this causes traffic congestion, security risks, and impedes transporting children out of the area safely. Children from schools in subareas that may be affected will be moved to designated Temporary Relocation Centers (TRCs). Parents of children attending school in the EPZ can pick up children at the designated TRC as indicated in the chart below. **This chart includes all public and private schools, preschools, and registered day care centers inside the EPZ. If the general public is evacuated, any students remaining at a TRC will be taken to your designated Reception Center and reunited with parents. EAS stations will broadcast the location to which students are taken.**

My children go to school in subarea: _____

Temporary Relocation Centers (TRC) for Schools, Preschools, and Daycare Centers

Subarea If Your Child Attends

- 16** Cedar Rapids Community Schools and affiliated preschools and daycares (Northwest)
Cleveland, Harrison, Hoover, Jackson, Madison, and Truman
Relocate to Middle Amana (Amana Elementary School)

- 16** Cedar Rapids Community Schools
Roosevelt, Taft Alt., Taft Middle, Jefferson HS
- 24** Relocate to Tiffin
(Clear Creek-Amana Middle School)

- 12** Alburett Community Schools
Relocate to Troy Mills (North-Linn Schools)

- 5 14** All Metro Area Catholic Schools and affiliated preschools and daycares
- 15 16** Relocate to Iowa City
(West High School)

- 15** Good Shepherd Lutheran Day School
- 15** Isaac Newton Christian Academy and Preschool
- 15** Summit School
- 5 14 15** Other preschools and daycares not otherwise listed in subareas 5, 14, 15, 16, and 17
- 16 17** Relocate to Iowa City
(Southeast Junior High)

Subarea If Your Child Attends

- 15** Cedar Rapids Community Schools and affiliated preschools and daycares (Northeast)
Arthur, Franklin, Garfield, Harding, Kennedy, Kenwood, Pierce, Polk Alternative, Wright
Hiawatha Elementary School
Nixon Elementary School
J.N. Andrews Christian Academy
Viola Gibson Elementary
Relocate to Iowa City (West High School)

- 14** Linn-Mar Community Schools and affiliated preschools and daycares
Relocate to Mount Vernon (Cornell College)

- 23** Marion Independent Schools and affiliated preschools and daycares
- 14** Relocate to Mount Vernon
(Mount Vernon Middle School)

- 23** Cedar Valley Christian School and Preschool
- 23** Grace Baptist School
Relocate to Mount Vernon (Washington Elementary)

- 23** Other preschools and daycares not otherwise listed in subareas 23 and 24
- 24** Relocate to Mount Vernon
(Cornell College)

Subarea If Your Child Attends

- 9** Center Point- Urbana Primary School and affiliated and non-affiliated preschools and daycares
- 22** Pointer Pup Preschool
Center Point -Urbana Intermediate School
Relocate to Independence (St. John's Elementary)

- 9** Center Point-Urbana Middle and High School
Relocate to Independence (Independence Jr./Sr. High School)

- 24** Trinity Lutheran School and Preschool
- 23** Cedar Rapids Community Schools and Preschools
Erskine, Grant Wood, Johnson
Relocate to Solon (Lakeview Elementary School)

- 23** Cedar Rapids Community Schools and affiliated preschools & daycares (Southeast)
McKinley, Metro, Metro Parent-Child Center, and Washington
Relocate to Solon (High School)

- 24** Cedar Rapids Community Schools and affiliated preschools & daycares (Southwest)
- 16** *Coolidge, Grant, Taylor, Van Buren, and Wilson Middle*
Relocate to Springville (Elementary or High School)

- 18** Atkins Elementary School and affiliated and non-affiliated preschools and daycares
Relocate to Van Horne (Benton Community High School)

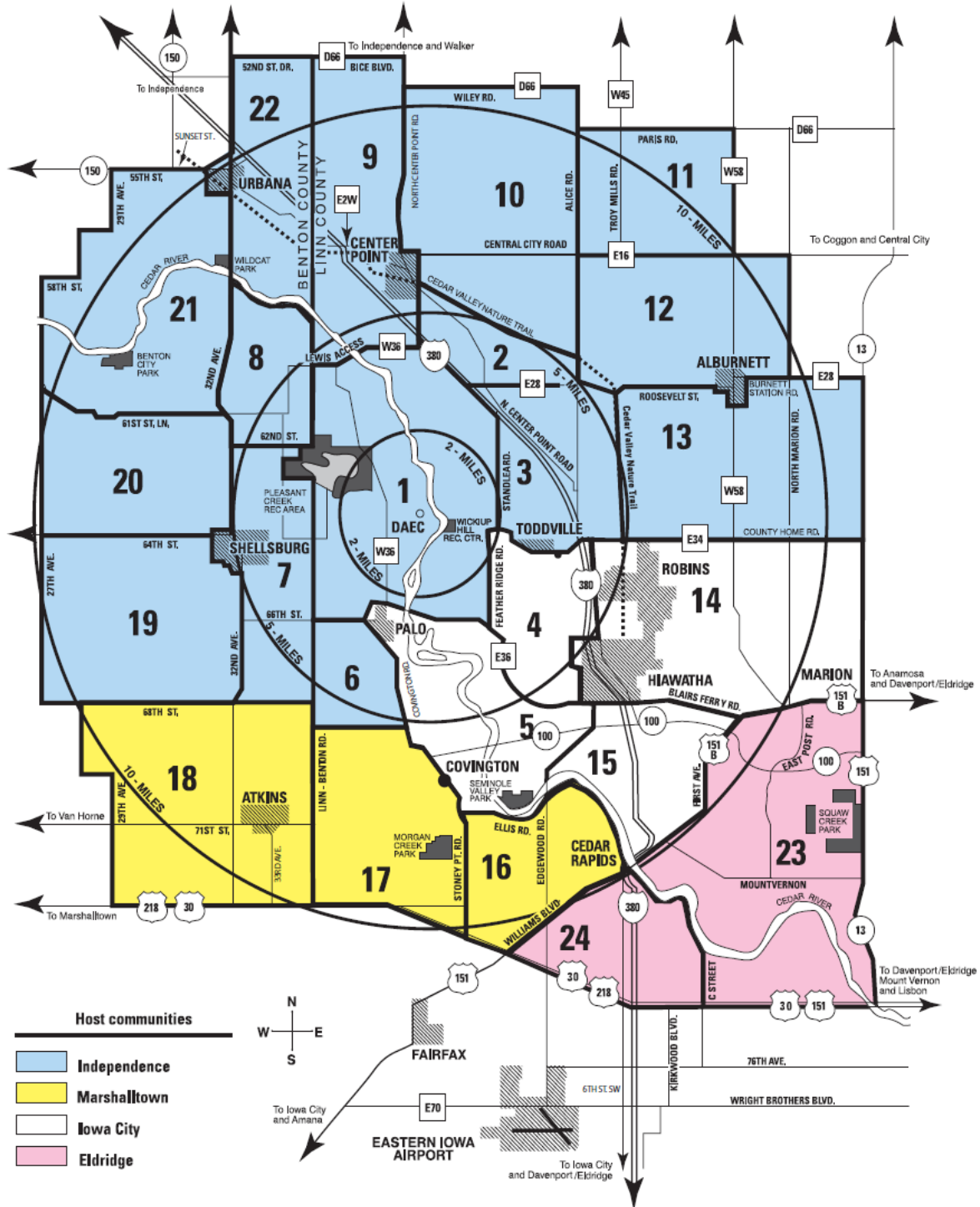
- 7** Shellsburg Elementary School and affiliated and non-affiliated preschools and daycares
Relocate to Vinton (Tilford Elementary School)

See large map on following page for subareas.

Emergency Action Plan



Emergency Planning Zone (EPZ) Map



Emergency Action Plan

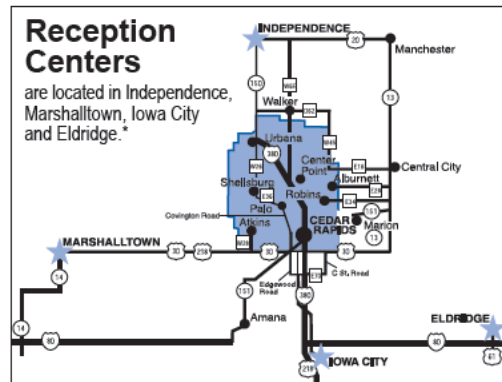
Evacuation Routes to Assigned Reception Centers



I live in subarea _____

- 1** Subarea includes immediate vicinity around NextEra Energy (DAEC) in Rural Linn County - Relocate to Independence
Evacuate via (East of Cedar River) I-380 north to Iowa 150, north to Independence OR (West of Cedar River) West on 66th Street to 32nd Avenue, north on 32nd Avenue to Iowa 150, north to Independence.
- 2** Subarea includes Rural Linn County - Relocate to Independence
Evacuate via North Center Point Road north to Spencers Grove Road, west to Iowa 150, north to Independence.
- 3** Subareas include Toddville and Rural Linn County - Relocate to Independence
Evacuate via I-380 north to Iowa 150, north to Independence OR North Center Point Road north to Spencers Grove Road, west to Iowa 150, north to Independence.
- 4** Subareas include area northwest of Cedar Rapids and Rural Linn County - Relocate to Iowa City
Evacuate via I-380 south to US 218 to Iowa City.
- 5** Subareas include NW/NE Cedar Rapids, Palo, Covington and Rural Linn County - Relocate to Iowa City
Evacuate via Covington Road (F Avenue) east and south to Edgewood Road, south to US 30/218, east to I-380, south to US 218 to Iowa City OR Blairs Ferry Road south and east to I-380, south to US 218 to Iowa City.
- 6** Subarea includes Rural Linn County - Relocate to Independence
Evacuate via Shellsburg Road/66th Street west to 32nd Avenue, north to Iowa 150, north to Independence.
- 7** Subareas include Shellsburg and Rural Benton County - Relocate to Independence
Evacuate via 32nd Avenue north to Iowa 150, north to Independence.
- 9** Subareas include Center Point and Rural Linn County - Relocate to Independence
Evacuate via I-380 north to Iowa 150, north to Independence OR North Center Point Road north to Spencers Grove Road, west to Iowa 150, north to Independence.
- 10** Subarea includes Rural Linn County - Relocate to Independence
Evacuate via north Center Point Road north to Spencers Grove Road, west to Iowa 150, north to Independence.
- 11** Subarea includes Rural Linn County - Relocate to Independence
Evacuate via Central City Road east to Iowa 13, north to US 20, west to Independence OR Troy Mills Road north to Walker Road, west to Quasqueton Road, north to Racine Avenue, north to US 20, west to Independence.
- 12** Subareas include Alburnett and Rural Linn County - Relocate to Independence
Evacuate via Central City Road to Iowa 13, north to US 20, west to Independence OR Roosevelt Street/Burnett Station Road east to Iowa 13, north to US 20, west to Independence.
- 13** Subarea includes Rural Linn County - Relocate to Independence
Evacuate via County Home Road east to Iowa 13, north to US 20, west to Independence OR Roosevelt Street/Burnett Station Road east to Iowa 13, north to US 20, west to Independence.

- 14** Subareas include Hiawatha, Robins, NE Cedar Rapids, Marion and Rural Linn County - Relocate to Iowa City
Evacuate via I-380 south to US 218 to Iowa City OR US 151B (1st Avenue) west to I-380, south to US 218 to Iowa City OR US 151/Iowa 13 south to US 30/151, west to I-380, south to US 218 to Iowa City.
- 15** Subarea includes NE Cedar Rapids - Relocate to Iowa City
Evacuate via I-380 south to US 218 to Iowa City
- 16** Subarea includes SW/NW Cedar Rapids - Relocate to Marshalltown
Evacuate via US 30/218 west to Marshalltown OR US 151 south to I-80, west to Iowa 14, north to Marshalltown.
- 17** Subareas include SW/NW Cedar Rapids and Rural Linn County - Relocate to Marshalltown
Evacuate via US 30/218 west to Marshalltown.
- 18** Subareas include Atkins and Rural Benton County - Relocate to Marshalltown
Evacuate via US 30/218 west to Marshalltown OR south on 33rd Avenue to US 30/218, west to Marshalltown
- 19 20 21** Subarea includes Rural Benton County - Relocate to Independence
Evacuate via 32nd Avenue north to Iowa 150, north to Independence.
- 22** Subareas include Urbana and Rural Benton County - Relocate to Independence
Evacuate via Iowa 150 north to Independence
- 23** Subareas include SE/SW Cedar Rapids, Marion, and Rural Linn County - Relocate to Eldridge (Davenport area)
Evacuate via US 151/Iowa 13 south to US 30/151, west to I-380, south to I-80, east to US 61, north to Eldridge OR US 30/151 west to I-380, south to I-80, east to US 61, north to Eldridge OR I-380 south to I-80, east to US 61, north to Eldridge.
- 24** Subarea includes SW Cedar Rapids - Relocate to Eldridge (Davenport area)
Evacuate via I-380 south to I-80, east to US 61, north to Eldridge OR Kirkwood Blvd., south to Wright Brothers Blvd., west to I-380 or 6th Street SW, south to I-80, east to US 61, north to Eldridge OR Edgewood Road south to Wright Brothers Blvd., east to I-380 or 6th Street SW, south to I-80, east to US 61, north to Eldridge.



* Local authorities will direct you to the Reception Center in the city listed.

Emergency Action Plan



Farm Information

“What do I have to do?”

Farmers, food processors, and distributors in Linn and Benton counties are provided a separate brochure. This brochure gives information about actions needed to protect the food chain if there is an emergency at the NextEra Energy DAEC. Farmers may need to put livestock in buildings and, if possible, provide them with feed stored in sheds or silos and protected water from covered stock tanks. In an emergency, information is provided to those who are affected. Copies of the brochure, “State of Iowa Radiological Emergency Information for Farmers, Food Processors, and Food Distributors,” are available from your Linn County Extension Service. In Linn County call 319-377-9839. In Benton County call 319-472-4739.

Health Conditions

Because of physical, medical or other functional or access needs, you or members of your household may need assistance in an evacuation. To plan for your transportation and shelter needs, local emergency management officials ask that you register with them. All information is kept confidential.

What options do I have for registering?

- Complete and return a Registration Form, which is located in the Yellow Book Telephone Directory.
- Call United Way 2-1-1 by dialing 2-1-1 or 1-866-469-2211 or from a cell phone 1-319-739-4211 and trained staff will register you over the telephone.
- Contact your local emergency management agency office and request a registration form or register online at linncounty-ema.org.
- Many local health and human service providers may have registration forms on hand - just ask for one.

What if I am elderly, disabled, or have other functional or access needs?

If you have not registered and need special transportation or shelter assistance in case of an evacuation contact:

Benton County residents - Benton County Emergency Management Agency at 319-472-4519.

Linn County residents - Linn County Emergency Management Agency at 319-892-6500.

What if I am hearing impaired?

If you are hearing impaired you can receive emergency information on your Telephone Device for the Deaf (TDD) by calling these phone numbers:

Benton County residents - Benton County Sheriff's Office at 319-472-2337.

Linn County residents - Linn County Emergency Management Agency at 319-892-6586 OR Linn County Sheriff at 319-398-4016.

What if I am in the hospital or a nursing home?

If there is an emergency at the DAEC, hospitals and nursing homes may be asked to provide shelter or evacuate patients. Depending on medical conditions, patients may be released to friends or relatives, or relocated to facilities outside the EPZ. Intensive care and other patients unable to be evacuated will be sheltered at their care facility. Information about hospital and nursing home patients will be issued in the EAS messages.

If Told to Evacuate

Transportation:

If possible, use your own transportation. If you can't, follow these guidelines:

If you are in an area served by Cedar Rapids bus line: go to nearest bus stop and wait for free pickup and ride to a Reception Center.

If you are not in an area served by Cedar Rapids bus line: In Linn County call the Linn County Emergency Management Agency at 319-892-6500 for assistance. In Benton County call the Benton County Emergency Management Agency at 319-472-4519 for assistance.

Things to take:

Medical Items

- Medicine(s)
- Glasses
- Special diet foods

Personal Items

- Special soaps
- Shaving items
- Toothbrush/toothpaste
- Sanitary items

Bedding

- 2 blankets per person
- or sleeping bag
- Pillow(s)

Extra Clothing

- Clothes for two days for each person
- Shoes

Identification and Important Papers

- Driver's License
- Social Security Card
- List of medicines being taken

Baby Supplies

- Baby food/formula
- Diapers
- Baby bottles

Miscellaneous

- Cash/checkbook/credit cards
- Flashlight
- Portable radio with batteries
- Extra car keys
- mobile phone and charger
- _____

The EPZ Primary Emergency Alert Radio Station (EAS) is 600 AM or 96.5 FM

Nuclear Power Plants & Radiation

How Nuclear Power Plants Work

Power plants create electricity by running steam turbines, which are powered either by fossil fuels — coal, oil, natural gas — or by nuclear power. Nuclear technology produces energy by splitting uranium atoms in a process called fission. Fission generates heat that boils water for the steam that runs the turbines, which produce the electricity that we all use.

In a nuclear power plant, pea-sized uranium pellets are stacked inside long, thin fuel rods which are grouped in “assemblies” inside a reactor “core”. The core is encased in a very thick steel capsule, and the entire reactor is further protected by an airtight steel and concrete containment structure. This complex structure is designed to help ensure the safe utilization of nuclear power.

Radiation...A Fact of Life

Essentially, radiation is a form of energy that can travel through the air, just like light, heat or radio waves. Small amounts of radiation are naturally generated by different elements in the environment. Food, water, air and sunlight all expose us daily to tiny amounts of radiation.

Radiation is measured in rems or in millirem (thousandths of a rem). On average, a person living in the Midwest receives about 300 millirem of radiation annually from natural sources and another 300 millirem or so from x-rays and other medical procedures. It takes more than 35 times this much — over 20,000 millirem in a single day — to produce identifiable effects in the body. Federal regulations allow workers to receive up to 5,000 millirem of radiation in the course of a year’s work.

Contacts for Emergency Information

This information has been prepared by the NextEra Energy Duane Arnold Energy Center in cooperation with the Iowa Department of Homeland Security and Emergency Management, Benton County Emergency Management Agency, and Linn County Emergency Management Agency. You may obtain further information from any of the following organizations:

Iowa Department of Homeland Security and Emergency Management

Mark Schouten
 Director
 7900 Hickman Road, Suite 500
 Windsor Heights, IA 50324
 515-725-3231
homelandsecurity.iowa.gov

Linn County Emergency Management Agency

Coordinator
 6301 Kirkwood Blvd. SW
 Cedar Rapids, IA 52404
 319-892-6500
linncounty-ema.org

Benton County Emergency Management Agency

Scott E. Hansen
 Coordinator
 213 2nd Ave.
 Vinton, IA 52349
 319-472-4519
bentoncountyema.com

NextEra Energy Duane Arnold Energy Center (DAEC)

Physical Address

3277 DAEC Rd.
 Palo, IA 52324

For Emergency Plan Inquiries Contact



Mark Fritz
 Emergency Preparedness Manager
 319-851-7961 or 319-851-7010

For Media Inquiries Contact

Communications Manager
 561-694-4442

*** PLEASE READ AND KEEP THIS EMERGENCY INFORMATION ***

Appendix D – Incident Form:

		<h2>Incident Investigation Report</h2>			
Calendar Date of Incident:			Responsible Department:		
Time of Incident:			Area Superintendent:		
Date/Time of Investigation:			Location of Incident:		
Supervisor on Duty:			Employee Involved:		
Employee's Shift: <input type="checkbox"/> Days <input type="checkbox"/> Nights <input type="checkbox"/> Weekend			Job Assignment:		
Incident Coordinator:			What time did employee start work?		
Other Individuals Involved:					
Check mark the level of consequence (Incident or Near Miss) and related or potential factors:		INCIDENT <input type="checkbox"/> Fire/Explosion Related <input type="checkbox"/> Injury/Illness Related <input type="checkbox"/> Property Damage Related <input type="checkbox"/> Reputation Related <input type="checkbox"/> Transportation Related		NEAR MISS <input type="checkbox"/> Potential Fire/Explosion <input type="checkbox"/> Potential Injury/Illness <input type="checkbox"/> Potential Property Damage <input type="checkbox"/> Potential Reputation <input type="checkbox"/> Potential Transportation	
Type of Incident:	<input type="checkbox"/> Struck Against	<input type="checkbox"/> Personal Injury	<input type="checkbox"/> Fall from Elevation		
	<input type="checkbox"/> Struck By	<input type="checkbox"/> Contacted By	<input type="checkbox"/> Fall on Same Level		
	<input type="checkbox"/> Line of Fire	<input type="checkbox"/> Chemical Exposure	<input type="checkbox"/> Slip/Trip without Fall		
	<input type="checkbox"/> Overexertion, Strain	<input type="checkbox"/> Caught In, Under, Between	<input type="checkbox"/> Other		
Describe the Incident:					
Nature of Injury:	<input type="checkbox"/> N/A-No Injury	<input type="checkbox"/> Dislocation	<input type="checkbox"/> Heart Attack	<input type="checkbox"/> Insect Bite	<input type="checkbox"/> Smashed
	<input type="checkbox"/> Asphyxiation	<input type="checkbox"/> Emotional	<input type="checkbox"/> Heat Stress	<input type="checkbox"/> Irritation	<input type="checkbox"/> Sprain/Strain
	<input type="checkbox"/> Bruises	<input type="checkbox"/> Fractures	<input type="checkbox"/> Hemia	<input type="checkbox"/> Laceration	<input type="checkbox"/> Other:
	<input type="checkbox"/> Burn	<input type="checkbox"/> Hearing Loss	<input type="checkbox"/> Inhalation	<input type="checkbox"/> Scrape/Cut	
Body Part Injured:	<input type="checkbox"/> Back	<input type="checkbox"/> Arm	<input type="checkbox"/> Hand	<input type="checkbox"/> Face	<input type="checkbox"/> Leg
	<input type="checkbox"/> N/A	<input type="checkbox"/> Torso	<input type="checkbox"/> Shoulder	<input type="checkbox"/> Head	<input type="checkbox"/> Eye
		<input type="checkbox"/> Knee			
Location of Injury:	<input type="checkbox"/> N/A-No Injury	<input type="checkbox"/> Right	<input type="checkbox"/> Left	<input type="checkbox"/> Front	<input type="checkbox"/> Back
Medical Care:	<input type="checkbox"/> N/A, No care needed	<input type="checkbox"/> First Aid	<input type="checkbox"/> Off Site Medical Care		
Environmental Factors					
Weather Conditions:	<input type="checkbox"/> Indoor	<input type="checkbox"/> Dusty	<input type="checkbox"/> Hazy	<input type="checkbox"/> Mist	<input type="checkbox"/> Rain
	<input type="checkbox"/> Clear	<input type="checkbox"/> Fog	<input type="checkbox"/> Ice	<input type="checkbox"/> Overcast	<input type="checkbox"/> Sleet
	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Hail	<input type="checkbox"/> Lightning	<input type="checkbox"/> Partly Cloudy	<input type="checkbox"/> Snow
Lighting in area:	<input type="checkbox"/> Indoor	<input type="checkbox"/> Dawn	<input type="checkbox"/> Day	<input type="checkbox"/> Dusk	<input type="checkbox"/> Night
Involved Employee:	<input type="checkbox"/> Agree with Incident description <input type="checkbox"/> Disagree with Incident description <input type="checkbox"/> Unable to sign				
Name and Signature of employee filling out form:	Name:		Signature	Date	

On Site Investigation

Select the IMMEDIATE/DIRECT CAUSES of the incident

Substandard Acts

- Failure to use PPE properly
- Failure to check/monitor
- Failure to communicate/coordinate
- Failure to follow procedure/policy/practice
- Failure to identify hazard/risk
- Failure to secure
- Failure to warn
- Improper lifting
- Improper loading
- Improper placement
- Improper position for task
- Making safety devices inoperative
- Operating at improper speed
- Operating equipment without authority
- Servicing equipment in operation
- Under the influence of alcohol/drugs
- Using defective equipment
- Using equipment improperly

Substandard Conditions

- Congestion or restricted action
- Defective tools, equipment, or materials
- Fire & explosion hazards
- Inadequate communication hardware/software
- Inadequate guards/barriers
- Inadequate instructions/procedures
- Inadequate or excess illumination
- Inadequate or improper protective equipment
- Inadequate preparation/planning
- Inadequate support/assistance
- Inadequate ventilation
- Inadequate warning system
- Inadequate information/data
- Noise exposure
- Poor housekeeping/disorder
- Presence of harmful materials
- Radiation exposure
- Road conditions
- Temperature extremes
- Weather conditions

Write any additional comments/notes below:


List Corrective Actions:

	Name of Person Responsible	Target Completion Date
1		
2		
3		

Others Involved In The Investigation:

Signature:	Date:
Signature:	Date:
Signature:	Date:
Signature:	Date:

Appendix E – Hot Work Permit

		<h2 style="margin: 0;">HOT WORK PERMIT</h2>	
Personnel Sign In:		Time	
Work to be done by:	_____	_____	AM / PM
Firewatch Start by:	_____	_____	AM / PM
Fire extinguisher:	check for yes <input type="checkbox"/>		
Flammable materials moved or covered:	<input type="checkbox"/>		
Other Needs:	_____		
Firewatch Transferred to:	_____	_____	AM / PM
Firewatch Stop by:	_____	_____	AM / PM
Check after 30 Min: (G.C. to check work area)	_____	_____	AM / PM

Appendix F – CMV Pre-Trip Inspection DRIVER'S DAILY PRE-TRIP VEHICLE INSPECTION REPORT

Operator: _____
 Vehicle: _____ Tractor/Truck#: _____ Odom. _____
 Date: _____ Time: _____ am or pm

<input type="checkbox"/> Air compressor	<input type="checkbox"/> Horn	<input type="checkbox"/> Suspension System
<input type="checkbox"/> Air Lines	<input type="checkbox"/> Head Lights	<input type="checkbox"/> Starter
<input type="checkbox"/> Battery	<input type="checkbox"/> Taillights	<input type="checkbox"/> Steering – Fluid
<input type="checkbox"/> Body	<input type="checkbox"/> Stop Lights	<input type="checkbox"/> Tires – Pressure
<input type="checkbox"/> Brake Accessories	<input type="checkbox"/> Dash Lights	<input type="checkbox"/> Transmission – Fluid
<input type="checkbox"/> Brakes – Parking	<input type="checkbox"/> Turn Indicators	<input type="checkbox"/> Wheels & Rims
<input type="checkbox"/> Brakes – Primary	<input type="checkbox"/> Mirrors	<input type="checkbox"/> Windows
<input type="checkbox"/> Clutch	<input type="checkbox"/> Muffler	<input type="checkbox"/> Windshield Wipers
<input type="checkbox"/> Coupling Devices	<input type="checkbox"/> Oil Pressure	<input type="checkbox"/> Defroster – Heater
<input type="checkbox"/> Drive Line	<input type="checkbox"/> Radiator	<input type="checkbox"/> Engine
<input type="checkbox"/> Exhaust	<input type="checkbox"/> Rear End	<input type="checkbox"/> Reflectors
<input type="checkbox"/> Engine	<input type="checkbox"/> Oil & Fluid Levels	<input type="checkbox"/> Frame & Assembly
<input type="checkbox"/> Front Axle	<input type="checkbox"/> Rear Axle	<input type="checkbox"/> Fuel Tanks
<input type="checkbox"/> Seat Belt	<input type="checkbox"/> Trailer Connections	<input type="checkbox"/> Trailer Hitch
<input type="checkbox"/> First Aid Kit	<input type="checkbox"/> SDS Book Or App	<input type="checkbox"/> Tires - Condition
<input type="checkbox"/> Safety Equipment – fire extinguisher, reflective triangles, flags, flares, spare fuses, bulbs, seal beams	<input type="checkbox"/> Interior Cab – seats, dash, floor mats, windows, mirror, etc.	<input type="checkbox"/> Other:

Trailer # _____

<input type="checkbox"/> Brake Connections	<input type="checkbox"/> Hitch	<input type="checkbox"/> Tarpaulin
<input type="checkbox"/> Brakes	<input type="checkbox"/> Landing Gear	<input type="checkbox"/> Tires
<input type="checkbox"/> Coupling Devices	<input type="checkbox"/> Running Lights	<input type="checkbox"/> Brake Lights
<input type="checkbox"/> Turn Signals	<input type="checkbox"/> Wheels & Rims	<input type="checkbox"/> Coupling (king) Pin
<input type="checkbox"/> Roof	<input type="checkbox"/> Doors	<input type="checkbox"/> Suspension System
<input type="checkbox"/> Other:		

Remarks: _____

Condition of this vehicle is satisfactory.
 Driver's Signature _____

- Above Defects have been corrected.
- Above defects do not need to be corrected for safe operation of this vehicle.

Mechanic's Signature _____

Driver's Signature _____

Appendix G – Daily Inspection For Trenches And Excavation

Project:		Date:	Weather:	Soil Type:
Trench Depth:	Length:	Width:	Type of Protective System:	
Yes	No	N/A	Excavation	
			Excavations and Protective Systems Inspected by Competent Person Daily, Before Start of Work?	
			Surface obstructions supported or removed?	
			Spoils, materials and equipment set back a minimum of 2' from edge of excavation?	
			Barriers provided at all excavations, wells, pits, shafts, etc.?	
			Hard hats, work boots, and other P.P.E. worn by employees?	
			Hi-visibility vests worn by all employees?	
			Employees prevented from working or walking under suspended loads?	
			Employees prevented from working above other employees on sloped area and benched areas?	
			Warning system established when equipment is operating near edge of excavations?	
			Employees protected from loose rock and materials?	
			Competent person has authority to remove workers from excavation immediately?	
			Walkways or bridges over excavations have guardrails?	
Yes	No	N/A	Utilities	
			Has "Iowa One Call" been contacted?	
			Has utilities companies contacted and/or located on site?	
			Has exact location of underground utilities been located on site?	
			Have underground utilities been protected, supported and/or removed when excavation is open?	
			Have "unmarked" or "unknown" private utilities been located? Are any on site?	
			Do any underground utilities, piping or lines, need to be replaced?	
Yes	No	N/A	Wet Conditions	
			Have precautions been taken to protect employees from accumulation of water?	
			Has water removal equipment been monitored by competent person?	
			Has surface water been controlled or diverted?	
			Has inspections been made by competent person after each rainstorm?	
Yes	No	N/A	Hazardous Atmosphere	
			Has competent person examined trench condition to see if it qualifies as a "confined space"?	
			Has atmosphere been tested for oxygen content (19.5% to 21%) or hazardous gas build up by competent person.	
			Has ventilation been provided to prevent gas build up?	
			Is atmosphere testing on going to ensure that air remains safe?	
			Is emergency response equipment readily available where conditions would require usage?	
			Are your employees trained in use of personal protective and emergency response equipment?	
			Are "confined space" procedures being used as required, is harness in use? Is attendant on site?	
Yes	No	N/A	Housekeeping and Clean-Up	
			If being left overnight, has barricades, fencing and/or appropriate warnings been installed?	
			Has all rubble and/or spoils been removed?	
			Has unpaved areas been backfilled and compacted?	
			Has concrete been repaired per codes or standards?	
			Has asphalt been repaired per codes or standards?	
			Has barricades and/or fencing been removed?	
			Has all trash and debris from our work been cleaned-up and disposed of in appropriate manner?	
			Has site been returned to original condition with regard to drainage and outward appearance?	
			Will grass seed or sod be needed?	
			Has the customers sewer and/or water been returned to service?	
Signature by Competent Person:			Date:	

Appendix H – Confined Space Entry Permit/Plan

Confined Space Entry Plan

Plan Writer: _____

Today's Date: _____

Date & Time of Entry: _____

Location of confined space: _____

Purpose of entry: _____

Entry Supervisor: _____

Permit Writer (If Different From Entry Supervisor): _____

Entrant(s): _____

Attendant(s): _____

SPECIAL REQUIREMENTS

1. Is there a hazardous or potentially hazardous atmosphere? YES NO

If yes, what chemicals/hazards: _____

2. Rescue equipment needed: _____

If rescue personnel are needed who will provide: _____

3. Is Lockout/Tagout needed? YES NO

If yes, what energy sources: _____

3. Piping

Piping to confined space shut down; lines broken and/or blanked YES NO

4. Purging

Does space need to be purged, cleaned, flushed, etc.? YES NO

5. Ventilation needs

Does air need to be withdrawn? YES NO

Does air need to be blown into confined space? YES NO

Is explosion-proof equipment being used? YES NO

6. Special Communications required YES NO

7. Other know hazards: _____

8: Ways to eliminate/control known hazards: _____

9: Other required Permits: _____

10: Attach photos of space if possible.

Confined Space Entry Permit

If the Competent Person determines that the area is a confined space, this confined space entry permit must be completed.

Location and reason of the confined space: _____

Work to be performed: _____

Date & time issued: _____ Date & time expires: _____

Known Hazards: _____

Measures to eliminate or control the hazard: _____

Authorized Supervisor/Permit Writer: (Print & Sign) _____

Authorized Entrant(s): _____

Authorized Attendant(s): _____

Entry Time: _____ Exit Time: _____

1. Source isolation (no entry):	N/A	Yes	No
Power sources locked out and tagged out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Door slide locked out tagged out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot Work Permit Issued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Atmospheric check before entry using a four-gas monitor

Oxygen: _____ %	19.5% - 23.5%	<input type="checkbox"/>	<input type="checkbox"/>
HC LEL: _____ %	Below 10%	<input type="checkbox"/>	<input type="checkbox"/>
CO: _____ ppm	Below 25 ppm	<input type="checkbox"/>	<input type="checkbox"/>
H2S: _____ ppm	Below 5 ppm	<input type="checkbox"/>	<input type="checkbox"/>
Time: _____	Tester's signature _____		

3. Atmospheric checks using a four-gas monitor: (Shall be taken continuously and recorded at least every 2 hours)

Oxygen: _____	HC LEL: _____	CO: _____	H2S: _____	Time: _____	Int: _____
Oxygen: _____	HC LEL: _____	CO: _____	H2S: _____	Time: _____	Int: _____
Oxygen: _____	HC LEL: _____	CO: _____	H2S: _____	Time: _____	Int: _____
Oxygen: _____	HC LEL: _____	CO: _____	H2S: _____	Time: _____	Int: _____
Oxygen: _____	HC LEL: _____	CO: _____	H2S: _____	Time: _____	Int: _____

(Additional tests shall be recorded on the back)

4. Communication procedures to be used between entrant and attendant: _____

5. Rescue procedures: _____

6. Any other required Permits: _____

Appendix I – Forklift Daily Pre-Operational Checklist

Forklift Daily Pre-Operational Checklist

Safety & Operational Checks	OK
Previous Deficiency Corrected- Verify	
Leaks	
Tires – Condition and Pressure	
Hydraulic Hoses, Mast Chains, Cables, and Stops – Check	
Battery – Check Water/Electrolyte Level and Charge	
All Engine Belts – Check Visually	
Hydraulic Fluid Level – Check Level	
Engine Oil Level - Dipstick	
Transmission Fluid Level – Dipstick	
Radiator Coolant- Check Level	
Brake Fluid – Check Level	
Seat Belt – Functioning Smoothly	
Horn - Functioning	
Lights & Alarms - Functioning	

Date: _____

Time: _____

OK to use: Yes No

(If no, report to supervisor and supervisor write maintenance request.)

Operator: _____

Appendix J – Ladder Inspection Form

Ladder Inspection Form

Complete Monthly And Turn In To Safety.

Ladder S/N:	Pass: (Y/N)
Legible Labels	
Proper Hardware (braces, rivets, spreaders, nuts, feet, etc.)	
Cracks In Wood, Metal or Fiberglass	
Rot	
Rigidity	
Extreme Discoloration	
Splinters	
Condition Of Steps/Rungs	
Corrosion (Interior/Exterior)	
Dents Or Bends/Bowing	
Condition Of Extension Ropes and Pulleys	
Safety Feet	
Tie-off Ropes Attached To All Straight/Extension \geq 8Ft Tall	

Name: _____ Date: _____

Location: _____

If there are any failures:

- Tagged "DO NOT USE"
- Removed From Service
- Contacted Safety: Date: _____ and your supervisor