Distribution/Trans/Statewide Onsite 2.10.25

Section 1: Safety Program Elements & Safety Improvement Plan

1.1) The SIP is developed, updated and communicated in an effective manner.

Criteria:

- A cross functional team or committee was involved in developing the plan.
- The plan is communicated and understood by employees.
- The plan is organized and structured appropriately.
- The plan is monitored and tracked to ensure progress on a regular basis.
- The plan is used to identify priority initiatives and ensure consistent completion.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

1.2) Review of first document and/or process selected by the observation team – related subject is _____. Observation teams to select up to six documents and/or processes for review with co-op.

Criteria:

- Documentation is clear and accurate.
- Roles and responsibilities are clearly assigned.
- Process steps are defined and understood.
- Follow up work, if needed is completed in a reasonable timeframe.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

1.3) Review of second document and/or process selected by the observation team – related subject is _____.

Criteria:

- Documentation is clear and accurate.
- Roles and responsibilities are clearly assigned.
- Process steps are defined and understood.
- Follow up work, if needed is completed in a reasonable timeframe.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

1.4) Review of third document and/or process selected by the observation team – related subject is _____.

Criteria:

- Documentation is clear and accurate.

- Roles and responsibilities are clearly assigned.
- Process steps are defined and understood.
- Follow up work, if needed is completed in a reasonable timeframe.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

1.5) The cooperative safety manual provides an effective safety reference for employees.

Criteria:

- Employees have a consistent knowledge of safety rules.
- Safety rules are consistent with actual work practices.
- Safety rules are consistent across districts and/or operation centers.
- Safety manual is reviewed and updated at intervals not to exceed 5 years.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

1.6) Information related to safety is transferred to all those working on the system including line contractors, ROW contractors, outside crews assisting in mutual aid events, and co-op employees.

Criteria:

- Documentation exists to validate information transfer.
- Checklist items covered include: characteristics of the system, conditions related to safety, coordination of rules and procedures, and system design and operational information.

Reference: 29 CFR 1910.269(a)(3); NFPA70E Article 110.3

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 1: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 2: General Facility Observations

2.1) Stairs, landings, and steps are free of any impediments, edges easy to discern, and allow safe movement in any direction.

Criteria:

- Handrails are properly secured and meet regulatory requirement 30/33.
- Steps and risers are uniform.
- Steps are well lit and marked as needed for visibility.

Reference: 29 CFR 1910.25; 29 CFR 1910.29(f).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.2) Work areas are neat and orderly, free from obvious hazards.

Criteria:

- Housekeeping is given regular attention.
- Inside trash containers appear to be emptied on a frequent basis.
- Outside trash containers are emptied on a scheduled basis.

Reference: 29 CFR 1910.141(a)(3) & 4; 29 CFR 1910.22(a)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.3) Used and oily rags are contained in metal self-closing containers that are emptied on a daily basis.

Reference: 1910.106 (e) (9) (iii)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.4) Hazard identification markings are in use as needed and meet the current requirements for background and letter coloring, size, shape, and appropriate levels of warning for the applications involved.

Criteria:

- Danger, Warning, Caution, and informational types of messages are used when appropriate.
- Low clearances, floor openings, uneven surfaces, docks, walkways, or hazardous work zones are clearly marked.
- Pictograms are legible and are not torn or excessively worn.

Reference: 29 CFR 1910.145; ANSI Z535

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.5) Hand trucks or hand carts are available and of suitable capacity for handling materials commonly stored in each area.

Criteria:

- Hand trucks or carts are well maintained and found in very good condition.
- Clearly marked with capacity ratings.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.6) Portable step devices are of adequate capacity commercial grade and designed for the typical use and users in the area.

Criteria:

- Clearly marked with capacity ratings.

Reference: 29 CFR 1910.23

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.7) Facility lighting levels and types are ideal for the work area and expected work activities.

Reference: 29 CFR 1926.56(a)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.8) Emergency egress and access lighting is operational and can be served by backup generation or batteries in facilities that are routinely occupied by employees or the public.

Criteria:

- Functional testing is completed monthly for a minimum of 30 seconds.
- Functional testing is completed annually for a minimum of 1.5 hours.
- Written records of visual inspections and tests should also be kept by the co-op.
- Annual third-party inspection performed mark as “Exceeds”.

Reference: 29 CFR 1910 Subpart E; 29 CFR 1910.37(b)(6); NFPA Life Safety Code 101, Section 7.9.3.1.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.9) Minimum capacity and appropriate category fire extinguishers are: available in all facilities, easy to

access, inspected monthly, and are ready for emergency use.

Criteria:

- All facilities have minimum 60 B:C (10 lbs.) fire extinguishers within 50 feet of any location, unless other requirements apply.
- Fire extinguishers are located within 50 feet of flammable storage areas and parts washers.
- Fire extinguishers are located within 50 feet of welding work areas and fixed battery charging locations.
- When possible, fire extinguishers are located near exits or emergency paths where access is also conducive to user escape.
- Fire extinguishers in the vicinity of data centers, data equipment, or electronic controls are of an extinguishing agent type suitable for these locations.
- Fire extinguishers in the vicinity of combustibles, flammables, or electrical sources are matched for the type of extinguishing agent.
- Located on structures to required heights of 3’ to 5’.

Reference: 29 CFR 1910.157; NFPA 10; OSHA Portable Fire Extinguishers 1910.157(d)(4)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.10) Fire suppression systems are fully operational and inspected annually according to all requirements.

Criteria:

- Systems are charged with extinguishing agent as required by the system.
- Systems are capable of being flushed and purged.
- Sprinkler heads are located at minimum 18 inches from any obstruction, stored materials, or facility structure that would interfere with the discharge.

Reference: 29 CFR 1910.159

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.11) All facility doors and marked emergency pathways leading to the outside are unobstructed, capable of being used at any time from the inside, and clearly labeled as an "Exit" or "To an Exit".

Criteria:

- Doors and emergency pathways leading to the outside that are not suitable exits shall be marked with "Not an Exit" signs.
- All "Exit" signs shall be fully operational and illuminated internally or externally.
- "Exit" signs are the proper type, size, and sign configuration.
- The door that connects any room to an exit route must swing out in the direction of exit travel if the room is designed to be occupied by more than 50 people or if the room is a high hazard area (i.e., contains contents that are likely to burn with extreme rapidity or explode).

Reference: 29 CFR 1910 Subpart E, 1910.36 (e) (2)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.12) First Aid, CPR, and Bloodborne Pathogen Kits or Stations are readily available at each work location, meet all the applicable standards, and are adequate to serve the emergency needs anticipated.

Criteria:

- Kits or stations have a checklist and corresponding supply of critical items that match the user training levels for handling first aid, CPR, and bloodborne pathogen type emergencies.
- Interviewed employees are familiar with location of these kits or stations and familiar with the use of the equipment and supplies.
- First aid kits and stations are clean, well-organized, and the equipment and supplies are inspected monthly in preparation for emergency use.

Reference: 29 CFR 1910.151; and 29 CFR 1910.269(b) through (b)(1)(ii); ANSI Z308.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.13) Automatic External Defibrillators (AEDs) are available for cardiac emergencies and ready for emergency and inspected monthly in facilities.

Criteria:

- If AED’s are provided in all facilities (evaluate as “exceeds”).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.14) Automatic External Defibrillators (AEDs) are available for cardiac emergencies and ready for emergency use on vehicles.

Criteria:

- AEDs are available on vehicles at the worksite during all working hours – evaluate as “exceeds”.
- Unit is included on a monthly inspection of safety items that are checked.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.15) Plumbed eyewash and/or body drenching equipment are in areas with chemical hazards and ready for emergency use if water is available.

Criteria:

- "Ready for emergency use" includes a weekly operational inspection, documented.
- "Readily available" is defined as "within 10 seconds" of the hazard zone or work activity that a unit is

intended to cover.

- Water at plumbed equipment is supplied for a minimum of 15 minutes continuous flushing and meets the current required temperature range (between 60 and 100° F) throughout the flushing/drenching cycle.

Reference: ANSI Z358.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.16) When an eyewash is warranted, self contained/portable eyewash equipment is available for emergency use when a water supply is not.

Criteria:

- Fluid is within recommended dates for safe use.
- Unit is inspected per manufacturer's recommendations.

Reference: 29 CFR 1910.151(c); ANSI Z358.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.17) Elevators and elevator controls are fully operational, free of any stored materials, maintained and inspected annually as required.

Reference: 29 CFR 1917.116; ASME 17.1; ASME 17.3

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.18) All facility ladders are found in good condition with commercial use class, capacity ratings, and setup instructions that are clear and fully legible.

Criteria:

- Ladders are free of any damaged components.
- Electric utility ladders that can conceivably be used for energized electrical work are constructed with nonconductive materials.
- Ladders are used and stored in a manner that will prevent damage to this equipment.
- Ladders are not exhibiting a condition known as fiber bloom. A blooming ladder, once damp or wet, can conduct up to half the voltage it comes in contact with.
- Interviewed employees can explain several critical ladder inspection details.

OSHA Standard 29 CFR 1910.25; 29 CFR 1910.26; 29 CFR 1910.27; 29 CFR 1910.269(h)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.19) Cranes and overhead lifting devices are inspected by the operators before each use and annually documented by a certified inspector.

Criteria:

- Evidence of annual inspection is readily available upon request.
- Interviewed crane equipment users can explain key items inspected before each use.

Reference: 29 CFR 1910.179 (j) (3) (i-x)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.20) Floor hoists, jacks, and jack stands are clearly marked with capacity ratings and are found in good, useable condition.

Reference: 29 CFR 1910.244(a)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.21) Battery (unsealed) charging areas/rooms are properly equipped and maintained.

Criteria:

- Battery charging areas/rooms have "No Smoking" and "Eye and Face Protection Required" signage.
- Battery charging areas/rooms have proper ventilation and racks or trays resistant to electrolyte.
- Eye and face protection, chemical gloves, and chemical aprons are provided in battery charging areas/rooms.
- Battery charging stations for batteries used on typical power tools do not apply to this question.

Reference: 29 CFR 1910.178 (g)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.22) Portable battery chargers are in good condition and clearly marked with "No Smoking" and "Eye Protection Required" signs.

Criteria:

- Battery charging stations for batteries used on typical power tools do not apply to this question.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.23) Lithium rechargeable cordless tool batteries are stored and charged properly.

Criteria:

- Battery exterior shells are not damaged.
- Stored in no-metallic containers away for flammable materials.
- Terminals are protected to avoid potential of shorts, evaluate as "exceeds".

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

2.24) Electrical enclosures meet NEC and OSHA requirements.

Criteria:

- All breakers are labeled.
- Clearance maintained; 36" in front (24" prior to 1978), 30" wide, and 72" headroom.
- All energized components guarded against accidental contact.
- Unused openings are closed with appropriate covers, plugs, or plates.
- Enclosures, switches, and receptacles are securely fastened with tight-fitting covers in place.

Reference: NEC; 29 CFR Subpart S

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 2: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 3: Warehouse and Covered Storage

3.1) Shelves, bins and racks are designed, constructed, and used in a manner that safely contains the materials and equipment in stock.

Criteria:

- Shelves, bins, and racks are rated and visibly marked with the maximum capacity of material weight.
- Shelves, bins, and racks are designed to hold materials in place to lessen chances of falling.
- Shelves, bins, and racks are designed or anchored to avoid tipping.

Reference: 29 CFR 1910 Subpart N; ANSI MH 16.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

3.2) Materials stored in a safe and orderly manner.

Criteria:

- Materials are stacked and stored according to type, size, color, length, and weight.
- Storage bins are labeled and easily identified.
- Similar type materials are stored in the same immediate area (i.e. all bolts, UG sleeves, UG elbows are grouped together).
- No sharp ends or protruding objects are extending from storage positions to catch clothing or injure a person passing in aisles.

Reference: 29 CFR 1910.176

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

3.3) Aisles and walkways are clear paths for pedestrian use and are designated accordingly where equipment crosses or shares these pathways.

Criteria:

- Aisles and walkways have no obstructions and are separated from work areas.
- Surfaces are in very good condition.
- Low clearances are marked with signs.

Reference: 29 CFR 1910.22; 29 CFR 1910.176

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

3.4) Docks and safety rails are in good condition and meet regulatory requirements.

Criteria:

- Safety rails or barriers are in place for docks with 48" or more elevation.
- Wheel chocks or other means are available for securing vehicles while loading or unloading.
- Dock plates or ramps are available to bridge the gap when using lift trucks.

Reference: 29 CFR 1910.23

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

3.5) Overhead storage is adequate, orderly and meets all related requirements - including weight ratings and capacities.

Reference: 29 CFR 1910.29 (b)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 3: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 4: Maintenance Facilities

4.1) Welding areas are properly equipped and maintained.

Criteria:

- Welding areas are clearly marked "Welding Area."
- Welding area is designed with protective shield or curtain to protect workers and other people in the vicinity of this welding activity.
- Signs are posted indicating "Eye Protection Required."
- Proper power ventilation is provided in welding areas/rooms.

Reference: 29 CFR 1910 Subpart Q

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.2) Welding safety equipment, helmets, face shields, goggles, gloves, sleeves, and aprons are available in serviceable condition and meet the applicable OSHA/ANSI standards.

Reference: 29 CFR 1910.252(b)(2); 29 CFR 1910.252(b)(3)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.3) Welding equipment, cables, connections, clamps and electrode holders are in good condition.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.4) All gas cylinders are capped when not in use, stored upright, and secured to avoid tipping.

Criteria:

- Full and empty cylinders are properly stored in areas marked "Empty" and "Full" accordingly.
- Cylinders with substances that react with other substances are stored in separate locations except those cylinders being used and/or those mounted on a welding cart during use.

Reference: 29 CFR 1910.253(b)(2); 29 CFR 1910.253(b)(4)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.5) Tire changing tools and safety equipment are in good condition.

Criteria:

- Clip-on chucks, in-line valves, and pressure gauges are part of these air-line assemblies.

- Length of hose between the clip-on chuck and the in-line valve is sufficient to keep maintenance workers clear of hazards.
- Restraining device or barrier is available to constrain all rim wheel components to protect employees should an explosive separation or sudden release of the contained air occur.
- Current charts or rim manuals are available in the service area, containing instructions for the types of wheels being serviced.
- Compressors and related equipment have correct pressure valves and reducers.

Reference: 29 CFR 1910.177 / 1910.177 App A & App B

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.6) Electrical power tools and equipment have 3-wire grounding or are double-insulated and maintained in good condition in all facilities.

Criteria:

- No modifications or additions to power tools and/or equipment unless manufacturer approves the modifications/additions in writing.

Reference: 29 CFR 1910.242; 29 CFR 1910.243

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.7) All tools and equipment are in good condition and if not, they are marked “Out of Service”.

Reference: 29 CFR 1910.242; 29 CFR 1910.243

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.8) All tools are stored in special containers or designated locations.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.9) Shields/Guards are in place, adjusted properly and well maintained for power tools.

Criteria:

- No modifications or additions to power tools and/or equipment unless the manufacturer approves the modifications/additions in writing.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.10) Each power tool station has appropriate eye or face protection available (including eye protection that provides side protection), with signs posted requiring use.

Reference: 29 CFR 1910.133; 29 CFR 1910.145; ANSI Z535

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.11) Flammable cabinets are available for storage of flammable materials, without leaks or spills, and meet regulatory requirements for design and use.

Criteria:

- Flammable cabinets are labeled or marked with wording, “Flammable” and “No Smoking.”
- Flammable cabinets are closed and latched after each use.
- LP gas cylinders are not stored in flammable cabinets.
- Each flammable cabinet has a maximum capacity of 60 gallons for category I liquids or a maximum of 120 gallons for class II liquids.
- Containers with a maximum 5-gallon capacity (lower state maximum capacities may apply) are stored inside flammable cabinets.
- Flammable cabinets are either vented to the outside or the vent is capped.
- Flammable cabinets are located away from facility energized electrical equipment where feasible.
- A maximum of 3 flammable cabinets are located in any work area.
- Contents are stored in an orderly manner.

Reference: 29 CFR 1910.106(d)(3); NFPA 30 – Storage of flammable liquids; NFPA 58 – Storage of LP-Gas

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.12) Portable flammable containers are designed and labeled for the product being stored and meet current use and storage requirements.

Criteria:

- A pressure relief is available and operational.
- Containers must be either Factory Mutual (FM) or Underwriters Laboratory (U L) rated. Note – FM requires flame arrestor screens in safety cans for approval, but UL does not require them for approval (NFPA recognizes approval of FM or UL rating).
- Containers are marked or color coded (red for gasoline, blue of kerosene, yellow for diesel and green for oil) for the liquid being contained. Containers are stored where the product will not create additional hazards.
- For incidental storage or use of flammable liquid – the quantity of liquid that may be located outside an inside storage room or storage cabinet in a building should not exceed: 25 gallons of Category 1 flammable liquids (i.e., flashpoint below 73.4 °F and a boiling point at or below 95 °F) in containers; 120 gallons of

Category 2 (i.e., fp < 73.4 °F and bp > 95 °F), Category 3 (i.e., fp at or above 73.4 °F and at or below 140 °F) or Category 4 (fp > 140 °F and at or below 199.4 °F) flammable liquids.

Reference: (29 CFR 1910.106(d)(2); 1910.106(e)(2); NFPA 30)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.13) Flammable storage rooms meet the current use and design requirements.

Criteria:

- Flammable storage rooms have mechanical ventilation equipment.
- Trash receptacles in these rooms are metal containers with self-closing lids.
- All flammable materials are stored in an orderly manner and free of any leaks or spills.
- Doors are closed and latched after each use.
- These rooms are designed to capture and contain flammable materials leaks or spills.
- Explosion resistant electrical equipment is being used in flammable material rooms.
- Flammable room entrances are marked with “Flammable” and “No Smoking” signs.

Reference: (29 CFR 1910.106(d)(4); NFPA 30)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.14) Parts cleaning and other solvents (flammable or biodegradable) are stored and used properly in maintenance/repair facilities.

Criteria:

- Approved containers for dispensing solvents are available.
- Parts washer is well maintained, and UL listed.
- Parts washer has "Flammable" (if the solvent used is a flammable liquid) and "No Smoking" signs posted.
- Proper ventilation is available for solvent use and proper solvent disposal practices are in place.
- Appropriate PPE is available for use at each parts washer (rubber gloves, goggles, splash apron).
- Eye wash station is within regulatory distance to the parts washer.

Reference: 29 CFR 1910.106; ANSI standard Z358.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.15) Battery (unsealed) charging areas are properly equipped and maintained.

Criteria:

- Battery charging and storage operations include charging batteries for powered industrial trucks, uninterrupted power supplies or battery backup systems, battery systems for emergency generators or lighting systems and other similar devices. These systems may include lead acid batteries and other similar

devices.

- Battery charging areas have "No Smoking" and "Eye and Face Protection Required" signage.
- Battery charging areas have proper ventilation and racks or trays resistant to electrolyte.
- Eye and face protection, chemical gloves, and chemical aprons are provided in battery charging areas.
- Batteries systems are inspected / tested per manufacture recommendations.
- Batteries are stored off the floor.
- Evaluate as "Exceeds" if batteries are of the sealed type and have safety signage, fire protection & eye wash equipment present.

Note: Charging of low-voltage battery systems such as rechargeable NiCad batteries, Lithium-ion batteries, small consumer batteries, self-contained uninterruptible power supplies (typically used for small consumer products), etc. is not included.

Reference: 29 CFR 1910.178, 29 CFR 1926.441

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.16) "High voltage" electrical repair/test area has walls, fence, or barrier, wiring with ground connections, test status signal, disconnect switch, and separated power cables.

Criteria:

- All test areas, temporary and permanent include, as a minimum, test area guarding, grounding, and the safe use of measuring and control circuits.
- A means should be established to ensure periodic safety checks of field test areas to ensure that safety work practices and conditions are established and used.
- Guarding is provided within test areas to control access to test equipment or to apparatus under test.
- Safe grounding practices are established including conductive parts accessible to the test operator.
- System test status signals, if used, are in operable condition.
- Test power disconnects are clearly marked and readily available in an emergency.
- Ground connections are clearly identifiable;
- Personal protective equipment is provided and used.
- Signal, ground, and power cables are properly separated.

Reference: 29 CFR 1910.269(o)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.17) Explosives are properly secured and stored at the facility which is approved and licensed according to current regulations related to the class of explosives and detonators used.

Criteria:

- Approved containers are used for the class of explosive and detonators.
- Unused explosives and detonators are returned to the magazine at the end of the day as required.
- Documentation of the amount of explosives and the number of detonators received, used, and on hand must

be accurate and up to date.
- Interviewed employees, authorized to handle or use explosives, are adequately trained, licensed, and can explain their basic safety procedures for use of these materials.
- Cadweld and shoot-on type connectors are not considered explosives under this assessment question.

Reference: CFR 1910.109

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.18) Propane cylinders are properly stored and maintained.

Criteria:

- All units not in use are stored outside in cage or similar device, or otherwise secured.
- If stored indoors, must be stored in buildings not frequented by public, with units not exceeding 300 lbs. total.
- Units are stored in area with temperature below 120-degree farenheit.
- Cage is in good condition with legible safety signage.
- Units are kept at least 10' away from flammable materials and electric tools.
- Grill units stored vertically; forklift units stored vertically or horizontally.
- If stored horizontally, relief valve is kept clean, unrestricted, set in 12 o'clock position, directed upward at 45 degrees.
- For cylinders:
  - Relief valve in area of vapor space;
  - No dents or bulges in units;
  - Protective collar on units not damaged;
  - Foot ring on units not damaged;
  - Requalified in last 12 years;
- Propane tanks are stored in a safe distance from property lines (local ordinances may vary).
- Storage area inspected annually and documented; mark as "exceeds".

Reference: 29 CFR 1926.153; 29 CFR 1910.110; NFPA 58

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.19) Grinder is maintained and in ready-use status.

Criteria:

- Work rest at 1/8 inch.
- Tongue guard at 1/4 inch.
- Wheel cover present and not damaged.
- Griding wheel RPM matches grinder RPM.
- Wheel covers 65 degrees horizontal to top.
- Grinder shields present and not damaged.

- Danger signs present and legible; present at eye level and secured.
- PPE present and ready for use (safety glasses, face shield, hearing protection).
- Sign to NOT wear gloves.
- Operator understands the need to “ring test” the grinding wheel.
- Annual inspection conducted and documented; mark as “exceeds”.

Reference: 29 CFR 1910.215; ANSI B11.9-2010; ANSI B7.1 2000

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.20) Power lawn mowers are maintained and in ready-use status.

Criteria:

- Chains, belts, etc. guarded.
- Intentional reactivation on shut-off device.
- Controls are legible.
- Caution stated for “neutral” before starting.
- “Warning” for catcher or guard in place.
- “Caution” displayed near discharge.
- Lowest blade position covered.
- No interlocks disabled.
- When Roll Over Protection is provided it is in good working order and use.
- Seatbelt is available and in working order.

Reference: 29 CFR 1910.243(e)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.21) Drill press is maintained and in ready use status.

Criteria:

- Mounted on large base or anchored.
- Sign to NOT wear gloves.
- Chuck key not left in drill press.
- Adequate clearance is available at the drill press to safety handle material.
- Guard for spindle present.
- Clamp/vise present to hold in place.
- Lubrication present for drilling metals.
- Brush used to clean up shavings.
- PPE present and ready for use (safety glasses, face shield, hearing protection).
- Annual inspection conducted and documented; mark as “exceeds”.

Reference: 29 CFR 1910.212; 29 CFR 1910.217

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.22) Pneumatic tools maintained and in ready use status.

Criteria:

- Locking device for air hose to tool.
- 1/2 in. ++ diam. air hose, needs safety valve*.
- Safety clip present on tools.
- Release protection in place.
- Clamps and connections are rated for application.
- PPE present and ready for use (safety glasses, face sheild, hearing protection).
- If compressed air is used for cleaning, psi is less than 30, with clip guarding place on air gun.
- Annual inspection conducted and documented; marks as "exceeds".

Reference: 29 CFR 1926.302; 29 CFR 1910.242 *If an air hose is more than 1/2-inch (12.7 millimeters) in diameter, a safety excess flow valve must be installed at the source of the air supply to reduce pressure in case of hose failure.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.23) Stationary table circular saws are maintained and in ready-use status.

Criteria:

- Upper guard covers entire blade of saw.
- Lower guard covers teeth when not used.
- Lower guard auto returns to safe position.
- Blade > 2 in., then a guard is needed.
- Blades not cracked or shape-change.
- Suction devices present.
- Sign to NOT wear gloves.
- PPE present and ready for use (safety glasses, face shield, hearing protection).
- Annual inspection conducted and documented; mark as “exceeds”.

Reference: 29 CFR 1910.242

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

4.24) Mechanical press maintained and in ready use status.

Criteria:

- Safety interlocks operable.
- Shield curtain or guard in place.

- PPE present and ready for use (safety glasses, face shield, hearing protection).
- Annual inspection conducted and documented; mark as "exceeds".

Reference: 29 CFR 1910.217

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 4: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 5: Environmental / Hazardous Materials

5.1) Hazardous substances or wastes are managed per Federal and State EPA regulations including reporting, storage, transportation, and disposal.

Criteria:

- Hazardous substances identified under EPA regulations are managed in such a way as to ensure that all required reporting and recording paperwork is completed, and storage areas, cabinets and rooms are constructed and maintained appropriately.
- Hazardous substances and/or waste are categorized as a specified listed waste by EPA or for its characteristics such as ignitability, corrosiveness, reactivity, or toxicity. Some examples are gasoline, oil, mercury in bulbs, lead and acid in batteries, herbicides, PCB's, solvents, etc.
- Transportation of substances is performed in a way that they meet all applicable federal and state DOT requirements.
- All disposal requirements including manifests, transport, labeling, and tracking are followed per federal and state EPA requirements.
- RESAP recommends that co-ops seek to eliminate the generation of hazardous substances and waste as much as possible to reduce exposure to employee and mitigate the regulatory hurdles in this area.

Reference: 40 CFR 260; 40 CFR 761; 49 CFR 100-185

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.2) Universal waste management procedures are developed and implemented per federal and state EPA regulations.

Criteria:

- Materials such as spent CFL's, pesticides, batteries and aerosol cans must be managed in such a way as to prevent releases of any Universal Waste into the environment.
- Containers must be:
  - Closed (except when adding or removing items).
  - Structurally sound (adequate to prevent breakage).
  - Compatible with the waste.
  - Lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
  - Properly labeled or marked clearly with the appropriate "universal waste" listings.
  - Each container must be marked or labeled with the earliest date that any universal waste in the container became a waste (not to exceed one year from the earliest date); OR, • Each individual item of universal waste (e.g., each battery, lamp, or thermostat) must be marked or labeled with the date it became a waste or was received; OR,
  - Each individual item of universal waste (e.g., each battery, lamp, or thermostat) must be marked or labeled with the date it became a waste or was received; OR,
  - Maintain an inventory system on-site that identifies the date each universal waste became a waste or

was received.

Reference: 40 CFR 273

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.3) If the co-op manages hazardous substances or waste, the staff should be appropriately trained in the use and handling of these substances and certified to respond to a hazardous or special waste release per federal and state regulations.

Criteria:

- Staff is trained per federal and state requirements at the appropriate level to qualify them to handle substances during operations at the facility.
- Staff meets various OSHA standards for remedial training and is refreshed annually per these standards.

Reference: 29 CFR 1910.120; OSHA Standard Letter of Interpretation (10/21/92)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.4) Above ground storage tanks meet current federal and state requirements for storage, monitoring and handling of fuels onsite. Fueling areas are equipped and maintained with proper safety equipment.

Criteria:

- Applies to above-ground storage tanks (either shop-built or field-erected tanks); above-ground bulk storage containers with a capacity of 55 gallons or more.
- Each service or fueling area has at least one fire extinguisher with a minimum 120 B:C (20 lbs.) capacity rating and is located between 25 feet and 50 feet of the pump dispensers. Conspicuous and legible signs, "No Smoking," "No Open Flames," and "Shut Off (gasoline) Motors During Fueling" are posted.
- The dispensing nozzles are equipped with approved automatic closing devices and hoses are equipped with break-away connectors.
- Clearly identified and easily accessible emergency shut-offs are provided within 50 feet of the dispensing devices. Islands and barriers are provided to protect the fuel pumps. Hoses are stored out of traffic areas.
- Staff identified for fueling are trained and certified as required under state and federal operator training requirements.
- An EPA “Ultra-Low Sulfur Highway Diesel Fuel” label must be conspicuously affixed on the upper 2/3 of all diesel fuel dispenser pumps.
- State-by-State regulation for ASTs may vary (Some types of ASTs are exempt from the regulations). Need to check with State Agency.

Reference: OSHA Portable Fire Extinguishers 1910.157(d)(4); 40 CFR Part 112; CFR.1917; NFPA 30A; EPAct 2005, Section 1524

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.5) Underground storage tanks meet current federal and state requirements for storage, monitoring and handling of fuels onsite. Fueling areas are equipped and maintained with proper safety equipment.

Criteria:

- Each service or fueling area has at least one fire extinguisher with a minimum 120 B:C (20 lbs.) capacity rating and is located between 25 feet and 50 feet of the pump dispensers. Conspicuous and legible signs, "No Smoking," "No Open Flames," and "Shut Off (gasoline) Motors During Fueling" are posted.
- The dispensing nozzles are equipped with approved automatic closing devices and hoses are equipped with break-away connectors.
- Clearly identified and easily accessible emergency shutoff *devices shall be installed not less than 20 feet or more than 100 feet from the fuel dispensing devices that they serve*. Islands and barriers are provided to protect the fuel pumps. Hoses are stored out of traffic areas.
- An EPA “Ultra-Low Sulfur Highway Diesel Fuel” label must be conspicuously affixed on the upper 2/3 of all diesel fuel dispenser pumps.
- Staff identified for fueling are trained and certified as required under state and federal operator training requirements.
- All active regulated underground storage tank facilities must have at least one designated Class A, B, and C operator:
- Class A operator. A Class A operator has primary responsibility to operate and maintain the underground storage tank system and facility.
- Class B operator. A Class B operator implements applicable underground storage tank regulatory requirements and standards in the field or at the storage tank facility.
- Class C operator. A Class C operator is the first line of response to events indicating emergency conditions.
- Written instructions or procedures shall be provided and visible at manned storage tank facilities and be readily available for unmanned facilities for persons performing duties of the Class C operator to follow and to provide notification necessary in the event of emergency conditions.
- Class A and Class B operators take annual refresher training; or, the implementing agency, at its discretion, waives this retraining requirement for either the Class A or Class B operator or both.
- Owners and operators of underground storage tank systems must maintain a list of designated Class A, Class B, and Class C operators and maintain records verifying that training and retraining, as applicable, have been completed.

Reference: OSHA Portable Fire Extinguishers 1910.157(d)(4); 40 CFR Part 112; 40 CFR Part 280; 280.242; 280.244; 280.245; CFR.1917; NFPA 30A; EPAct 2005, Section 1524

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.6) Storage, management and disposal of PCB contaminated fluids and solids are consistent with all federal and state regulations.

Criteria:

- Facilities have developed appropriate storage and management areas that will safely handle PCB contaminated materials for future disposal.
- Areas should have appropriate signage notifying the presence of PCB waste. Appropriate training and certification of staff handling PCB materials must comply with necessary OSHA and EPA criteria.
- Adequate containment and barriers, including diking of areas securing PCB contaminated materials and physical barriers limiting access to the PCB materials should be available. Appropriate spill kits (size and sorbent material) suitable for mitigating spills of PCB fluids should be readily available with appropriate labels.
- Records for PCB management should be on file at the coop for inspection frequency, handling, and disposal of all PCB materials per federal and state regulations.
- If the date of manufacture and the type of dielectric fluid are unknown, employees must assume the oil filled equipment to be PCB contaminated. (50-499).

Reference: 40 CFR 761, 761.2; 40 CFR 263.20, 263.21, 263.22; 29 CFR 1910.120

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.7) Spill Prevention, Control and Countermeasures (SPCC) regulations have been implemented and a plan has been developed for the facility as required by federal EPA regulations.

Criteria:

- An SPCC plan has been either developed by a contractor or the coop has self -certified per EPA regulations.
- The plan is either certified by a P.E. or developed under Tier Ⅱ requirements.
- The SPCC plan is current and has been updated within a 5 -year period.
- All reportable spills are handled per EPA requirements and records are maintained as required.
- Staff is trained annually on the plan and records of the annual training are available at the facility.

Reference: 40 CFR Part 112

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.8) Pesticide storage, management, and use meet federal and state EPA and Department of Agriculture regulations.

Criteria:

- Pesticides are stored in appropriate containers with required labels.
- Secondary containment is adequate to contain spills and management of liquids in the case of a release.
- Appropriate PPE is available for those handling pesticides (gloves, eye shield, splash apron and respirator if necessary).
- Adequate ventilation is provided in storage rooms. Plumbed eye wash is available within required distances in pesticide handling and mixing areas.
- Appropriate signage such as “Danger Pesticide Storage Area” with skull and cross bones, “Danger

Pesticide Storage", are placed in appropriate locations.

- Pesticide training records for all staff are kept on site and are readily accessible.

Reference: 7 U.S .Code 136(e); 7 CFR 110

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

5.9) A written hazardous communication program is in place.

Criteria:

- Employees have quick access to Safety Data Sheets (SDS).
- An inventory of all hazardous chemicals in the workplace is completed.
- Employees have been trained on these chemicals at the time of their initial assignment or whenever a new chemical is introduced into their work area.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 5: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 6: Pole Yard and Outside Storage

6.1) Gates and fencing are designed to secure pole yards and outside storage areas.

Criteria:

- "No Trespassing" and/or "Authorized Persons Only" signs are posted on all sides of pole yards and outside storage areas.
- Pole yards and outside areas are totally enclosed with a security fence that is a minimum of 6 feet high.
- No gaps more than 4" below fence.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.2) Gates and entrances to these areas are located where vehicles and equipment can safely clear the traveled portion of public roads during gate operation, locking, or unlocking.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.3) Poles are stored to preserve their condition, organized for safe selection and loading, and secured by pole stops or bunk design.

Criteria:

- Pole bunks are in good condition.
- Poles are separated by length/class.
- Poles are safely stacked.
- Poles are stored off the ground.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.4) Pole loading procedures call for the use of slings and/or proper pole lifting tongs that are inspected prior to use.

Criteria:

- Traditional skidding tongs are not considered a proper tool for loading and unloading poles.
- Pole lifting tongs are rated with proper lifting capacity.
- Employs a closed or locking keeper and a trip line designed to keep personnel out of loading area while loading and unloading poles.
- RESAP promotes the use of slings when loading and unloading poles (evaluate as "exceeds").

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.5) Pole yards and outside storage are designed for large equipment maneuverability in all weather conditions with wide driving lanes, solid surfaces, and adequate drainage.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.6) Pole yard/outside storage materials are properly stored off the bare ground, with related materials stored together, and identified by unit markings or marked storage areas.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.7) Pole yards and outside storage are adequately lit during hours of darkness for expected work activities.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

6.8) Previously used capacitors are properly shunted.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 6: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 7: Administration and Other Office Areas

7.1) Multiple types of public safety education materials for all age groups are readily available to members.

Criteria:

- Safety education material is available to members on website, social media and/or hard copies.
- Safety presentations are made on a regular basis to local fire, police, and schools (evaluate as “exceeds”).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.2) All cables, cords, and power strips are stowed, routed, bundled, and supported to be clear of areas where they could be damaged or cause other hazards.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.3) An emergency action plan is available and key information is posted in areas that may be accessible to visitors and the public.

Reference: 29 CFR 1910.38; 29 CFR 1910.39

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.4) Employees are familiar with the emergency action plan, nearest exits, the location and use of fir e extinguishers, safety data sheets, and first-aid equipment.

Criteria:

- Interviewed employees are knowledgeable about their training and planned responses, for "Mayday" emergency radio calls, taking shelter, handling bomb threats, dealing with public confrontations, and options recommended for violent workplace scenarios.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.5) Security measures are evident and interviewed employees are trained as to what information can and cannot be shared.

Criteria:

- Access to non-public areas is limited.
- Effective barriers are in place to protect front office personnel from potential of aggressive members.
- Security measures are in place, i.e., cameras, guards, panic buttons, etc.

- Cash levels for transaction activities are controlled for security considerations.
- Cash amounts, deposit methods, deposit times, personnel making deposits, and related details are not divulged.
- Public collection areas are designed for security.
- Responses to security scenarios are planned and reviewed on a regular basis.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.6) Storage and work areas are neat, clean, well-organized, and stored in a safe and orderly manner.

Criteria:

- Shelves, bins, and racks are designed, constructed, and used in a manner that safely contains the materials and equipment in stock.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.7) Processes are in place which reduce field worker exposure to non-pay members.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

7.8) Server room and related switch closets are secure, organized appropriately and in good condition.

Criteria:

- Room temperature is controlled between 68 – 71 degrees Fahrenheit.
  - Standalone monitoring system is available that triggers notifications for temperature, flooding, humidity, etc., evaluate as “exceeds”.
- Data is regularly backed up offsite.
  - 2 copies of production data made, one copy stored for off-site for disaster recovery, copies made at least daily.
  - Backup system is tested and monitored regularly, with policies in place.
- Room access is controlled via access code or card for entry to preauthorized individuals only.
  - Solid access control policy in place with historical access records kept.
  - Vendor access is minimized (allowed only with strict controls, i.e., background checks).
- No storage of office supplies or records, or use as office space.
- Primary power supply is backed up by uninterruptable power supply.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 7: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 8: General Vehicles (Under 10,000 lbs. GVWR)

8.1) Four pieces of recommended documentation (insurance card, registration, operator's manual, accident reporting guidelines) are found in all cars, pickups, vans, and SUVs.

Criteria:

- Documents are easy to locate and found in consistent locations; outdated documents have been discarded.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

8.2) Cars, pickups, vans, and SUVs are well maintained.

Criteria:

- Windows, mirrors, dash, and cab are clean and uncluttered.
- Vehicle storage areas are clean and free of trash.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

8.3) Utility cars, pickups, vans, and SUVs are equipped with applicable operational safety equipment.

Criteria:

- Strobes or utility vehicle warning lights are fixed equipment for vehicles routinely stopping and parking in road right-of-ways.
- Traffic cone(s) are available on general vehicles which are typically used for road right-of-way work.
- Reflectorized traffic control vests are available or issued to individuals.
- Flashlights are available.
- Vehicle brake, turn, marker, and headlamp lighting are 100% operational.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

8.4) Staff vehicles and pool cars are in good operational condition with appropriate safety equipment.

Criteria:

- Vehicle brake, turn, marker, and headlamp lighting are 100% operational.
- Availability of the following selected items warrant an evaluation of “exceeds” – high visibility vests, first aid kit, glow sticks (or other means of visible warning), basic tool kit, flashlight, battery jumper cables, etc).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

8.5) Tools and materials in cars, pickups, vans, and SUVs are stored in designated locations and in such a manner that they will not cause damage or be damaged.

Criteria:

- Sharp edges and points of various tools have protective guards, covers, or sheaths, which are in place.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

8.6) Cargo is firmly immobilized or secured on or within a vehicle and/or trailers.

Criteria:

- Cargo must be:
  - Secured to prevent the cargo from leaking, spilling, blowing, or falling; and/or,
  - Contained, immobilized, or secured such that vehicle stability or maneuverability is not adversely affected.

Reference: 49 CFR 393, Subpart I

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

8.7) Minimum capacity, type, and number of fire extinguishers are found in consistent locations on utility vehicles and equipment. And all units are inspected monthly to be ready for emergency use.

Criteria:

- Vehicles less than 10,000 lbs. GVWR are equipped with minimum 1 each 10 B:C (5 lbs.) fire extinguisher.
- Commercial vehicles 10,000 lbs. and more GVWR are equipped with minimum 2 each 60 B:C (10 lbs.) fire extinguishers in separate locations.
- All miscellaneous equipment with 25 or more horsepower engines and fuel are equipped with minimum 1 each 10 B:C (5lbs.) fire extinguisher.
- Fire extinguishers that are ready for emergency use shall have an indicator that shows a full charge, a pin to lock the handle, a seal to secure the pin, and the dispensing nozzle which is free of any foreign material.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 8: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance -** Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance -** Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement -** Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement -** Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 9: Diggers, Buckets, etc. (Over 10,000 lbs. GVWR)

9.1) All digger derricks, aerial devices, and other commercial vehicles over 10,000 lbs. (GVWR) have six documents: insurance card, registration form, operator's manual, accident reporting guidelines, daily post-trip inspection, and annual DOT inspections.

Criteria:

- The post-trip inspection should cover the manufacturer’s operating manual.
- The report should identify the vehicle and list any deficiencies discovered which would affect the safe operation of the vehicle.
- Procedures applicable to the operation of digger derricks, including rated capacities (load charts), recommended operating speeds, special hazard warnings, instructions, and operator’s manual, should always be readily available for use by the operator.

Reference: FMCSA 396.11(post trip) & 396.13 (pre-trip), 29 CFR 1926.1417 (c) (1)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.2) Commercial vehicles over 10,000 lbs. GVWR are well maintained.

Criteria:

- Windows, mirrors, dash and cab are clean and uncluttered.
- Vehicle storage areas are clean and free of trash.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.3) Commercial vehicles are equipped with the proper safety equipment.

Criteria:

- Warning lights or strobes are well positioned for visibility from all directions and in working condition.
- Work zone safety equipment (signs, cones, stop/slow paddles, flashlight with wand, etc.) is available.
- Mounted or portable work lighting equipment is available.
- Three bidirectional emergency reflective triangles, or at least 6 fusees or 3 liquid-burning flares, are available for use on vehicles.

Reference: 49 CFR 393.95

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.4) Body, jib, boom winch mechanisms, cables, ropes, mounting, and controls are properly matched for the intended use and maintained in good condition.

Criteria:

- Winch cables and ropes are free of flat spots, kinks, broken strands, or frayed areas.
- Winch cables and ropes are equipped with proper rated hooks, eyes, and attachments.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.5) Appropriate vehicle grounding and/or barricading equipment is available and in good condition.

Criteria:

- Size of ground exceeds system's maximum available fault current.
- One end of the grounding cable is securely connected or can readily be connected to the equipment frame with a proper attachment.
- Grounding and/or barricading equipment is properly stored on vehicles.
- If detachable, vehicle ground cables are individually marked with a method of unique identification and date of most recent test; and tested for continuity to frame.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.6) Shovels, pry bars, tamps, ground rod drivers, sledges, chains, and other heavy tools and materials are properly stored/secured in these utility vehicles.

Criteria:

- Tools and materials are stored in designated locations and in such a manner that they will not cause damage or be damaged.
- Protective guards, covers, and sheaths are in place.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.7) At least two effective wheel chocks are provided per large truck, properly placed in accordance with the safety manual, and properly stowed on each truck when not in use.

Criteria:

- An effective wheel chock should be made of sturdy material, wedge shaped, and of adequate height to prevent movement.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.8) Substantial outrigger pads are provided for all equipment outrigger legs, are properly used in accordance with manufacturer's requirements, and are properly stored on the vehicle when not in use.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.9) Manufacturer's identification, capacity ratings, warning signs, and equipment control placards for digger derrick and aerial basket devices are in place and in good condition.

Criteria:

- Signs, placards, and decals on these devices are readily visible, permanent, legible.
- Electrocution hazard warning signs for the public and employees are posted on devices that will be used in energized work zones.
- Equipment controls are clearly identified as to function and operation.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.10) Daily operational inspections are conducted before these vehicles leave the facility.

Criteria:

- Before these vehicles leave the facility, drivers should:
  - Perform pre-trip procedures per operator’s manual (pre-flight operations, etc.), co-op procedures and be satisfied that the vehicle is in safe operating condition;
  - Verify and sign the driver vehicle inspection report, if one was turned in during a prior inspection, to certify that documented repairs have been made.

Reference: FMCSA 396.11 (post trip) & 396.13 (pre-trip)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.11) Dielectric tests for these utility vehicles meet/exceed applicable OSHA/ASTM/ANSI standards and results are available on or in each vehicle.

Criteria:

- While factors vary from co-op to co-op, RESAP generally encourages dielectric tests for these utility vehicles to be conducted on insulating and isolating components semi-annually (6 months) and results to be available on or in each vehicle, to be evaluated as “exceeds” requirements on this question.
- To “satisfy” this requirement, dielectric tests can be conducted annually per regulatory requirements, on insulating and isolating components, and results are available on or in each vehicle.
- Many factors enter a cooperative’s decision to determine frequency of dielectric testing vehicles, as example, local environmental conditions, supporting work procedures, and other logistical issues. RESAP wants to ensure a system satisfy OSHA requirements by conducting an annual test but promotes using a semi-annual (6 months) dielectric test that exceeds the OSHA requirement.

- Booms are regularly cleaned and waxed according to sound operating practices.

Reference: ANSI/SAIA A92.2 (ANSI Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.12) Commercial Motor Vehicles (CMV) over 10,000 lbs. (GVWR) "if required" to haul cargo in interstate commerce - are registered with FMCSA and have a USDOT number.

Criteria:

- In select states (see list below), all registrants of commercial motor vehicles, even intrastate and Non-Motor Carrier registrants, are required to obtain a USDOT Number as a necessary condition for commercial vehicle registration**.**
- [Alabama, Alaska, Arizona, Colorado, Connecticut, Florida, Georgia, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Montana, New York, Nebraska, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Washington, West Virginia, Wisconsin, and Wyoming].
- In these cases, each CMV should be marked on both sides with:
  - Name of the cooperative.
  - An identification number preceded by the letters "USDOT"; and,
  - Letters that contrast sharply in color with the background on which the letters are placed; and, the letters are readily legible, during daylight hours, from a distance of 50 feet while the CMV is stationary.

Reference: 49 CFR 390.5; 49 CFR 390.21

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.13) Cargo is to be firmly immobilized or secured on or within a vehicle and/or pole trailers.

Criteria:

- Cargo must be:
  - Secured to prevent the cargo from leaking, spilling, blowing, or falling from the CMV; and/or,
  - Contained, immobilized, or secured such that vehicle stability or maneuverability is not adversely affected.

Reference: 49 CFR 393, Subpart I

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.14) Employees can explain or demonstrate their daily vehicle inspection procedures for commercial motor vehicles.

Reference: FMCSA 396.11(post trip) & 396.13 (pre-trip)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.15) Coupling devices and Towing Methods.

Criteria:

Pintle Hooks

- Mounting to frame:
  - Any missing or ineffective fasteners (a missing fastener consists of an empty hole in the device and the frame).
  - Mounting surface cracks extending from point of attachment (e.g., cracks in the frame at mounting bolt holes).
  - Loose mounting.
  - Frame cross member providing pintle hook attachment cracked.
- Integrity
  - Cracks anywhere in pintle hook assembly.
  - Any welded repairs to the pintle hook.
  - Any part of the horn section reduced by more than 20%.
  - Latch insecure.

Reference: 49 CFR Appendix G to Subchapter B of Chapter III

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

9.16) Minimum capacity, type, and number of fire extinguishers are found in consistent locations on utility vehicles and equipment. And all units are inspected monthly to be ready for emergency use.

Criteria:

- Vehicles less than 10,000 lbs. GVWR are equipped with minimum 1 each 10 B:C (5 lbs.) fire extinguisher.
- Commercial vehicles 10,000 lbs. and more GVWR are equipped with minimum 2 each 60 B:C (10 lbs.) fire extinguishers in separate locations.
- All miscellaneous equipment with 25 or more horsepower engines and fuel are equipped with minimum 1 each 10 B:C (5lbs.) fire extinguisher.
- Fire extinguishers that are ready for emergency use shall have an indicator that shows a full charge, a pin to lock the handle, a seal to secure the pin, and the dispensing nozzle which is free of any foreign material.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 9: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 10: Misc. Vehicle (Trailers, Backhoes, etc.)

10.1) All trenchers, backhoes, forklifts, pullers, and other motorized equipment have an operator safety instruction manual located on these vehicles or easily available to the operator.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.2) Documentation for miscellaneous trailers includes registration and DOT records as required for applicable gross vehicle weight class.

Reference: FMCSR 393.21

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.3) Visual inspection of all miscellaneous vehicles indicates very good maintenance.

Reference: 1910.178(q)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.4) Trailers and miscellaneous vehicles are equipped with appropriate and necessary safety equipment.

Criteria:

- Miscellaneous vehicles have the appropriate safety decals, seatbelts, guards, and shields in place and in good condition.
- Safety chains and hooks, electric plug, air hoses and electronic braking system (EBS) are in place and in good condition.
- Roll over protection is in place and free of alterations which may affect structural integrity.
- Utility vehicle warning lights or strobes are operational and conspicuously located for miscellaneous equipment.
- Seatbelts are in place and show evidence of regular use.

Reference: 49 CFR 393.70; 49 CFR 393.75

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.5) Appropriate grounding/barricading equipment is available and in good condition for: fault locating, wire pulling, wire tensioning, underground boring, wet vacuuming, and other equipment as per manufactory equipment used in energized work zones.

Criteria:

- Capacity rating of grounding cables exceed system's maximum available fault current with a minimum size of #2 stranded copper.
- Grounding cables can be connected to frames of equipment with proper grounding clamps and attachment points designed for this use.
- Grounding mats are available for personnel protection when operators must stand on the ground to operate this equipment.

Reference: 29 CFR 1910.269 (n)(4); 29 CFR 1926.962 (d); ASTM F855; IEEE Std 1048

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.6) Grounding clamps and cables are tested for miscellaneous equipment that will be used in energized work areas.

Criteria:

- Miscellaneous equipment grounds are individually marked with a method of unique identification and date of most recent annual test.

Reference: NFPA70E Article 250; ASTM F2249

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.7) Tools and materials are stored in designated secured locations and in such a manner that they will not cause damage or be damaged.

Criteria:

- Miscellaneous equipment tools have in place all protective guards, covers and sheaths.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.8) At least two effective wheel chocks (in very good condition), are available on all trailers and all towed equipment.

Criteria:

- An effective wheel chock should be made of sturdy material, be wedge shaped and of adequate height to prevent movement.
- Effective wheel chocks are properly stored when hitched for towing.
- When unhitched or when parked, chocks are properly positioned at the tires.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.9) Trailers and miscellaneous vehicles are equipped with appropriate safety equipment.

Criteria:

- Miscellaneous vehicles have the appropriate safety decals, seatbelts, guards, and shields in place and good condition.
- Safety chains and hooks, electric plug, air hoses, and electronic braking system (EBS) are in place and good condition.
- Roll over protection is in place and free of alterations which may affect structural integrity.
- Utility vehicle warning lights or strobes are operational and conspicuously located for miscellaneous equipment.
- Seatbelts are in place and show evidence of regular use.

Drawbar/ Towbar eye:

- Mounting
  - Any cracks in attachement welds
  - Any missing or ineffective fasteners
- Integrity
  - Any cracks and gouges
  - Any part of the eye reduced by more than 20%

Safety Chains and Hooks

- Of adequate capacity (exceed GTW), in good condition.
- Not worn to extent of measurable reduction in link cross section.
- If trailer is attached to towing vehicle, chains are:
  - Crossed
  - Not dragging on the ground
  - Not attached to any part of the hitch unless hitch is designed for such

Breakaway Braking System

- In place if required (two or less axles) and in good condition.
- Breakaway lanyard attaches to vehicle seperately from safety chains.
- Length of cable sufficient to allow for breakaway action if disconnected at hitch.
- Braking system adequately charged and operable.

Reference: 49 CFR 393.43; 49 CFR 393.70; 49 CFR 393.75; 49 CFR Appendix G to Subchapter B of Chapter Ⅲ

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.10) Cargo is firmly immobilized or secured on or within a vehicle and/or trailers.

Criteria:

- Cargo must be:
  - Secured to prevent the cargo from leaking, spilling, blowing, or falling; and/or,
  - Contained, immobolizd, or secured such that vehicle stabilty or maneueverability is not adversely

affected.

Reference: 49 CFR 393, Subpart I

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.11) Forklift is functional and ready for use.

Criteria:

- Fire extinguisher present.
- Daily inspection record present and in use.
- No excessive wear on tires.
- Forks are not cracked or damaged.
- Load back rest present – not damaged.
- Overhead guard present - not cracked.
- Load rating plate is readable.
- Warning decals present.
- Seat belt accessible and used; not oily or damaged.
- Horn, signal, and lights operational.
- Controls and levers legible.
- Backup alarm functional.

Reference: 29 CFR 1910.178

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.12) Woodchipper is functional and ready for use.

Criteria:

- Warning signs present and legible.
- Hood can latch, pins in place.
- No fluid leaks.
- PTO shaft fitted with guard.
- Fire extinguisher present.
- Instruments labeled.
- Feed control bar present (in red color).
- Chipper chute not damaged.
- Tow hitch not damaged.
- Tires ready for use with good treads.
- Wheel chocks present.
- Guards in place.
- No buildup of debris, tree limbs, etc.
- Wooden push tools present.

- Rubber curtain present.
- User is trained and authorized.

Reference: 29 CFR 1910.212(a)(1) and (a)(3); ANSI Z133.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

10.13) Skid Steer is functional and ready for use.

Reference: Skid-steer operators should be trained under CFR 1926.21(b)(2) and CFR 1926.20(b)(4) requirements.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 10: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 11: Truck and Personal Tools

11.1) Truck tools and equipment are organized and stored in a safe and orderly manner.

Criteria:

- Stored for protection from the elements and for protection from other tools and equipment.
- Bins, compartments, or containers are available for orderly storage of truck tools and other special line equipment.
- Bins, compartments, and containers have tight doors and covers for secure, clean, and dry storage of these truck tools and equipment.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.2) All sharp edges, including wood drill bits, chainsaws and pruners, have guards, sheaths or cases.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.3) Blocks, hardware, ropes, and handlines are well maintained and rated for utility uses.

Criteria:

- No frayed ropes, knots or improper splices.
- Hardware for blocks and handlines are manufacturer designed, tested, and free of user modifications.

Reference: 1910.335(a)(2); NFPA70E Article 130.7 (D)(1)(c)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.4) Live-line tools are tested in accordance with current OSHA/IEEE standards and individually marked with the appropriate dates.

Reference: 1910.269(j)(2)(iii)(c); IEEE 516 (Guide for Maintenance Methods on Energized Power Lines)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.5) Insulated/live line tools are maintained in good condition.

Criteria:

- Insulated/live line tools are clean and waxed.
- Defective insulated/live line tools are replaced or repaired immediately.

Reference: 1910.269(j)(2)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.6) Slings and lifting hardware are in good condition and clearly rated for load capacities and lifting configurations.

Criteria:

- Slings are free of any damage or contamination which can affect the integrity of these items.
- Slings are tagged with clearly legible capacities for basket, choker, and vertical lifts.
- Defective slings and lifting hardware are removed from service immediately.

Reference: 1910.184

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.7) All mechanical hoist components are in good condition and these units are clearly marked for capacity ratings.

Criteria:

- Mechanical hoist hardware and all parts are free of modifications.

Reference: 1910.184(d) and (g)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.8) Interviewed employees can explain the proper ratings, applications, and proper care of these truck tools and equipment.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.9) Personal hand tools are in good condition and stored properly.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.10) Overhead personal protective grounds meet the following criteria for use, care, and testing.

Criteria:

- Personal protective grounds are a minimum size, #2 AWG stranded copper, and have a current capacity that exceeds the system's maximum available fault current.

- Utility has more than adequate supply of grounds for the type of line designs on the system.
- Personal protective grounds are in good condition and properly stored.
- Personal protective grounds are individually marked with a unique ID and evidence of an annual test.
- Personal protective grounds shall be carried on the vehicles.

Reference: 29 CFR 1910.269 (n)(4); ASTM 2249; NFPA70E Article 250

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.11) Underground personal protective grounds meet the following criteria for use, care and testing.

Criteria:

- Personal protective grounds are a minimum size, #2 AWG stranded copper, and have a current capacity that exceeds the system's maximum available fault current.
- Underground grounding “kit” contains an assortment of items such as insulating covers, feed-thru devices, test rods (probes), spiking tools, assortment of elbow and/or parking grounds, parking stands, grounding mats.
- Utility has more than adequate supply of grounds for the type of line designs on the system.
- Personal protective grounds are in good condition and properly stored.
- Personal protective grounds are individually marked with a unique ID and evidence of an annual test.
- Personal protective grounds should be carried on the vehicles. However, if underground grounding is rarely required in emergency situations, the underground grounding “kit” may be stored at the line shop, available for emergency use.

Reference: 29 CFR 1910.269 (n)(4); ASTM 2249; NFPA70E Article 250

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.12) Mechanical jumpers (macs) meet the following specifications for use, care, and annual testing.

Criteria:

- Mechanical jumpers are clearly identified with the most recent dielectric insulation test.
- Conductor and clamps are checked for continuity and current capacity.
- Mechanical jumpers (macs) are clean, in very good condition and well maintained.
- Adequate numbers of mechanical jumpers are available for the work performed.
- Line personnel are knowledgeable when interviewed in the proper procedure for using a mechanical jumper.
- RESAP promotes meeting the above criteria to be evaluated as ""exceeds"" on this requirement.
- Co-ops whose work rules and practices meet manufacture recommendations for use, appear in very good condition and well maintained - will “satisfy” this requirement.

Reference: ASTM F2321

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.13) A periodic inspection of truck tools and equipment is performed and documented.

Criteria:

- Monthly = Exceeds; Quarterly = Satisfies; Annually = Partially Satisfies; None = Fails

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

11.14) Chain slings receive a periodic documented inspection by a competent person every 12 months.

Criteria:

- Inspection includes wear, defective welds, deformation and increase in length.

Reference: 29 CFR 1910.184(e)(3)

Note: "Competent person" is defined as "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees; who has authorization to take prompt corrective measures to eliminate them." 29 CFR 1926.32(f)

Guidelines to consider:

- The criteria to be a "competent person" depend on the situation in which the competent person is working.
- A competent person must have the training or knowledge to identify and correct hazards encountered for the work involved.
- Based on past training and/or experience, a competent person should be knowledgeable of applicable standards that apply to the type of work involved.
- The standard does not specify training requirements for competent persons. Instead, it defines a competent person in terms of the person’s capability to identify hazards and take appropriate action.
- The employer must designate an employee as a “competent person” based upon his or her capability to identify and mitigate hazards. The type and extent of the competent person’s knowledge will vary with what is necessary to successfully perform the task required.
- The definition of a competent person requires the individual to have the authority to take prompt corrective action.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 11: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.

- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 12: Head, Eye, Face, Hearing, Foot, Hand, etc. PPE

12.1) Head protection meets applicable OSHA/ANSI standards and meets specifications for jobs performed.

Criteria:

- Head protection hazard assessment for system positions is completed.
- Hard hat suspension systems are in good condition.
- Electric utility worker head protection is free of decals or decorations as per manufacturer recommendations which may affect the dielectric protection.
- Shells are replaced at intervals required based on manufacturers recommendations.

Reference: 29 CFR 1910.132(d); 29 CFR 1910.135(a); ANSI Z89.1; 29 CFR 1926.100; NFPA70E Article 130.7

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.2) Eye and face protection meet applicable OSHA/ANSI standards and hazard assessment specifications for jobs performed.

Criteria:

- Clear and tinted safety glasses are issued to all applicable employees.
- Eye protection not in use is properly stored.
- Eye and face protection in use and are in good condition.

Reference: 29 CFR 1910.132(d); 29 CFR 1910.133(a) and (b), ANSI Z87.1, ASTM F803; 29 CFR 1926.102; NFPA70E Article 130.7

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.3) Noise hazard assessments for equipment and areas are completed.

Criteria:

- Noise hazard signs, "Hearing Protection Required", are posted in areas and on equipment where protection is needed.
- Noise exposure measurement records are available.

Reference: 1910.95(m)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.4) Hearing protection meets applicable OSHA/ANSI standards, hazard assessment, specifications for jobs performed, and exposure level needs.

Criteria:

- Multiple types of hearing protection are available for optimum individual fit and comfort.
- When in use, hearing protection is worn in the most effective manner.
- When not in use, hearing protection is properly stored.

Reference: 29 CFR 1910.95; 29 CFR 1926.101

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.5) Protective footwear meets applicable OSHA/ANSI standards and specifications for jobs being performed.

Criteria:

- Protective footwear hazard assessments have been performed.
- Protective footwear in use will provide the protection needed.

Reference: 29 CFR 1910.132(d); 29 CFR 1910.136; ASTM 2412; ASTM F2413; ASTM F1117; NFPA70E Article 130.7

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.6) Hand protection meets applicable OSHA/ANSI standards and specifications for jobs being performed.

Criteria:

- A hand protection hazard assessment has been performed.
- The hand protection provided is suitable for utility work hazards.

Reference: 29 CFR 1910.132(d); 29 CFR 1910.138; NFPA70E Article 130.7

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.7) Protective safety chaps are issued and/or available to affected employees who use chain saws.

Reference: 1910.266(d)(1)(iv)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.8) Reflective clothing and/or reflective traffic vests are issued to employees and in good condition.

Reference: 23 CFR 634; ANSI/ISEA 107

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

12.9) Respiratory protection meets applicable OSHA/ANSI standards and specifications for jobs being performed.

Criteria:

- A written respiratory protection program has been established if required for worksite use.
- Respirator hazards have been identified and evaluated and an industrial hygiene risk assessment completed to ensure mitigation of respiratory hazard and regulatory risk.
- If required, employee medical evaluations are being completed annually by a physician or other licensed health care professional (PLHCP).
- If required, employee respirator fit testing (qualitative or quantitative) is being completed annually.
- Employee respirators are NIOSH approved and appropriate for the hazard.
- Rules and procedures for respirator use have been established.
- Respirator assigned to only one person.
- Respirator clean and ready for use.
- Employee respirator training is completed annually with inspection, maintenance, cleaning, donning, cartridge change out frequencies, storing and proper use of respirators.
- Respirator cartridges have not expired.
- If the Cooperative has self-contained breathing apparatus (SCBA's), discuss inspection requirements (weekly, monthly, annual flow testing, etc.) and training.
- For voluntary respiratory use, where respirators are used as a personal preference but not required for hazard mitigation - ensure users are trained per regulatory requirement.

Reference: 29 CFR 1910.134 Appendix D - Respirator Protection

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 12: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 13: Insulating Gloves, Sleeves, and Cover-up

13.1) Insulating gloves and protectors meet/exceeds applicable OSHA/ASTM standards and the following specifications for use, care, and testing.

Criteria:

- While factors vary from co-op to co-op, RESAP generally encourages regular testing of all insulated protective gloves every 60 days or less of field use to receive an evaluation of "exceeds" on this assessment question.
- To "satisfy" this requirement all insulated protective gloves are tested regularly at a minimum of every 6 months or less of field use (OSHA's minimum requirement), and tested in a manner consistent with applicable standards, and marked with these test dates.
- All protectors meet proper size and length requirements and are found in good condition.
- Insulated protective gloves shall be rated for the system's phase to phase primary and secondary distribution voltage(s).
- Insulating gloves appear to be in good condition and to have passed visual inspection.
- Explicit control in issuing and use for multiple high voltage classes of gloves as well as for secondary voltages exists.
- A rotation program is followed to minimize shelf time.

Reference: 29 CFR 1910.137(c)(2)(xii); ASTM D120; ASTM F696; NFPA70E Article 130.7

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

13.2) Insulating sleeves meet/exceeds applicable OSHA/ASTM standards and the following specifications for use, care, and testing.

Criteria:

- While factors vary from co-op to co-op, RESAP generally encourages regular testing of all insulated protective sleeves every 120 days or less of field use to receive an evaluation of "exceeds" on this assessment question.
- To "satisfy" this requirement, all insulated protective sleeves are tested regularly at a minimum of every 12 months or less of field use (OSHA's minimum requirement), tested in a manner consistent with applicable standards, and marked with these test dates.
- Insulating sleeves shall be rated for the system's phase-to-phase distribution voltage(s).
- Explicit control in issuing and use for multiple voltage classes of sleeves exists.
- A rotation program is followed to minimize shelf time.

Reference: 29 CFR 1910.137; ASTM D1051; NFPA70E Article 130.7

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

13.3) When not in use, insulating gloves and sleeves are stored properly in bags or containers and

maintained in an environment protected from excessive light, heat, dirt, and mechanical damage.

Reference: NFPA70E Article 130.7 (B)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

13.4) Insulating cover-up materials meet applicable OSHA/ASTM standards and meet the following specifications for use, care, and testing.

Criteria:

- While factors vary from co-op to co-op, RESAP generally encourages regular testing of all blankets, line guards/hoses, hoods, and other items used for insulating cover-up on a 6-month maximum rotation and marked with test date to receive an evaluation of “exceeds” requirements on this assessment question.
- To “satisfy” this requirement all blankets are tested on a 12-month maximum rotation (OSHA’s minimum requirement) and marked with the test date.
- Blankets, line guards/hoses, hoods, and items used for electrical insulation are rated for the system's phase-to-phase voltage(s).
- Insulating cover-up material appears to be clean and in good condition, and to have passed visual inspections.
- Explicit control for classes of blankets, line guards/hoses, hoods, and other insulating cover-up materials exists in multiple voltage systems and a rotation program is followed in issuing cover-up materials.

Reference: 1910.137; ASTM D1048; ASTM D1049; ASTM D1050; NFPA70E Article 130

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

13.5) System has more than an adequate supply of cover-up materials to perform the type of job(s) being performed with the line designs that the system crews would simultaneously be exposed to.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

13.6) Personnel can explain the proper storage, use, and testing of insulated rubber gloves and sleeves.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 13: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 14: Arc Rated Clothing / Systems + Fall Protection

14.1) System has performed an arc hazard assessment for arc rated clothing needs and supervisors can explain which positions are affected.

Criteria:

- Arc hazard assessment has determined the level of arc flash protection required (measured in calories per centimeter squared) to protect employees from the minimum level of incident energy for the given work tasks required.
- Assessment includes substation high side bus, substation low side bus, primary distribution system, and secondary system.
- ARC Hazard Assessment (Incident Energy Analysis) reviewed for accuracy at intervals not to exceed 5 years.

Reference: NESC Rule 410.A.3, NFPA 70e Article 130.5 (G)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.2) Appropriate arc rated shirts are worn by affected employees.

Criteria:

- Should not be heavily soiled – such as solvents, solids, oils, petroleum products, etc.
- Should not possess thin-spots, holes or appear to have excessive wear or abrasion.
- Should not show evidence of cuts, rips, tears or open seams.
- Should not appear to be significantly altered.
- Should fit comfortably – not too big or small.

Reference: ASTM F1506; NFPA70E Article 130.7(C)(11)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.3) Appropriate Arc rated pants are worn by affected employees.

Criteria:

- Should not be heavily soiled – such as solvents, solids, oils, petroleum products, etc.
- Should not possess thin-spots, holes or appear to have excessive wear or abrasion.
- Should not show evidence of cuts, rips, tears or open seams.
- Should not appear to be significantly altered.
- Should fit comfortably – not too big or small.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.4) Arc rated rainwear is available for affected employees.

Reference: ASTM F1891; NFPA70E Article 130.7(C)(14)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.5) Arc rated outerwear is available for affected employees.

Reference: ASTM F1506; NFPA70E Article 130.7(C)(11)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.6) Arc rated winter liners are available for affected employees.

Reference: ASTM F1506; NFPA70E Article 130.7(C)(11)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.7) Arc rated traffic control garments are available for affected employees performing energized work.

Criteria:

- Traffic garments marked “FR NFPA 701” are not appropriate for use when an employee has potential exposure to arc flash hazards; Traffic garments should be “NFPA 70E / ASTM F1506” compliant for such use.

Note: If arc rated vests are not used due to the operating procedures of the cooperative, mark as N/A.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.8) Interviewed employees are knowledgeable about the purpose and their local requirements for arc-rated clothing.

Criteria:

- Employees understand shirt tails will be tucked in pants and sleeves will be rolled down and buttoned when exposed to potential arc flash.
- Employees required to launder their own arc-rated clothing understand laundering instructions for Arc rated clothing: do not use bleach or fabric softeners; use soft water or detergent specifically designated for hard water; turn garments inside out; tumble dry on lowest setting.

Reference: NFPA 70E Article 130.7(C) (9) (d)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.9) Arc-rated face shield is available and ready for use if necessitated by work practices and arc flash study.

Criteria:

- At least 8 cal/cm^2.
- Stored in bag.
- Not scratched to deter vision.
- No defective parts on shield.
- No cracks.
- Verify whether a face shield is required or not in the co-ops arc flash study.

Reference: NFPA 70E; ASTM F2178-02; ANSI Z78.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.10) Fall protection equipment meets applicable OSHA/ANSI standards and specifications for jobs being performed.

Criteria:

- Fall protection systems receive a thorough periodic documented inspection by a competent person at least every 12 months and more often if determined by manufacturer's recommendations.
- Equipment is properly sized and fitted to the individual.
- Equipment is free of any modifications and found in very good condition.
- Labels shall be maintained on equipment and should be legible. Only full body harnesses shall be used for fall arrest.
- The fall arrest attachment point of the body harness shall be at the center of the user’s back near shoulder level and with a proper lanyard that will limit employee falls to a maximum of six (6) feet, nor contact any lower level.

Reference: ANSI/ASSE Z359.2-2017; 29 CFR 1910 Subpart F

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.11) Attachment points for fall protection on equipment or structures are designed for the potential shock loading.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.12) Fall protection equipment is properly stored where its serviceable condition can be best

maintained.

Criteria:

- Harnesses and lanyards shall be stored appropriately (in a bin, which is dry and clean, and apart from any items that could cause damage). **Note:** If this equipment is stored in fall protection equipment storage bags – evaluate as “exceeds”.

Reference: 1926.1423(d); 29 CFR 1910.132

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

14.13) Body belts, straps, and climbers meet OSHA/ANSI standards for fall positioning/fall protection equipment and the following specifications for sizing, use, and storage.

Criteria:

- Climbing equipment with 100% fall protection is assigned and fitted to each climber and work positioning systems shall be rigged so an employee can fall no more than 0.6 meters (2 feet).
- Space is available on utility trucks for stowing climbing tools with 100% fall protection or these tools are properly stored in protective, individual tool bags.
- Stowed climbers have appropriate gaff guards in place.
- Climbing tools with 100% fall protection, or bags containing these items are stored clear of objects that would damage this equipment.

Reference: 29 CFR 1910.140; ANSI Z359.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 14: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 15: Crew Visits

15.1) According to employee interviews, communication is routinely established with the office dispatcher or supervisor at each job site.

Criteria:

- Communication occurs before moving to the next job site or upon arrival.
- If the primary method of communication is weak in certain areas, an alternate method is planned in the event of an emergency.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.2) A designated person is in charge at each worksite.

Reference: 1910.269(c)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.3) A thorough job briefing is conducted before each job assignment by the person in charge, documented and all employees are clear and understand their assignments.

Criteria:

- All employees clearly understand their assignments; the Job Briefing is signed by all employees on site; employees can identify the hazards that were discussed during the briefing.

Reference: 29 CFR 1910.269(c); NFPA 70E Article 110.2 (I)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.4) A designated observer has been assigned when working within minimum approach distance.

Criteria:

- If identified on job briefing form or within app (evaluate as exceeds).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.5) Appropriate tools and equipment are available or in use as the job requires.

Criteria:

- All equipment relevant to the job and voltages, such as rubber cover ups, grounds, mechanical jumpers, arc rated clothing, face shields, etc.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.6) Operational voltage detection devices are available on each job site to determine the observed and nominal voltages.

Criteria:

- When personal voltage detection devices are available and used by employees **in addition to other voltage detection devices** (evaluate as "Exceeds").

Reference: 1910.269(n)(5)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.7) An adequate supply of traffic control devices are available or are in use as required.

Reference: Manual on Uniform Traffic Control Devices (MUTCD)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.8) Employees are knowledgeable regarding work site emergency actions.

Reference: 1910.269(a)(3)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.9) When questioned individually, line personnel are knowledgeable about when rubber gloves shall be used.

Criteria:

- Personnel shall have knowledge of system distribution voltages and associated minimum approach distances.

Reference: Safety Manual

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.10) When questioned individually, line personnel are knowledgeable about when rubber sleeves shall be used.

Reference: Safety Rules

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.11) Supervisors are clear and consistent about when rubber gloves and sleeves shall be used.

Criteria:

- Supervisors and Crew Leads understand the system Safety Manual relating to MAD and/or their application of cradle-to-cradle, ground-to-ground, lock-to-lock rule for gloves and sleeves as applicable.

Reference: Safety Manual

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.12) Line personnel are knowledgeable when questioned about when personal protective grounds shall be used on OVERHEAD systems and are able to explain proper steps for installation and removal.

Criteria:

- Crews are supplied with adequate means for effective overhead testing and personal protective grounding.

Reference: 1910.269(n); NESC Section 444D, Co-op Safety Rules

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.13) Line personnel are knowledgeable when questioned about testing and application of personal protective grounds on URD systems and can explain proper steps for installation and removal.

Criteria:

- The following items (or equally effective items) are available for effective URD testing and personal protective grounding: capacitive testers, insulating covers, feed-thru devices, test rods (probes), spiking tools, assortment of elbow and/or parking grounds, parking stands, grounding mats.

Reference: 29 CFR 1910.269(n); NESC Section 444D; Safety Manual

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.14) Interviewed personnel can explain the proper application of cover-up materials on energized lines and equipment.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.15) Line personnel are knowledgeable when questioned about when equipment grounding,

barricading and/or other acceptable forms of protection are required to be used and can explain proper application.

Criteria:

- All procedures include measures taken to keep employees and the public clear of equipment while being operated near energized lines or equipment.
- At least one pair of rubber gloves is kept off the truck and available to workers on the ground when working on or near energized lines.

Reference: 29 CFR 1910.269(p)(4); Safety Manual

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.16) Line personnel can explain the proper use of traffic control devices as required for the speed and volume of traffic through typical work zones.

Criteria:

- In states where flagger certification is required, evidence of the affected employee training is available when requested.
- In all other states, affected employees confirm, when questioned, that traffic control and flagger training are regular safety topics.

Reference: Manual on Uniform Traffic Control Devices (MUTCD)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.17) Supervisors are knowledgeable about the procedures for installing overhead and URD personal grounds, and when equipment grounding, barricading, and/ or other acceptable forms of protection are required.

Reference: 29 CFR 1910.269(p)(4); 29 CFR 1910.269(n); Safety Manual

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.18) Line personnel are knowledgeable about line clearance procedures required at their system.

Criteria:

- Personnel can clearly explain expectations and procedures needed to obtain a visual open and proper tagging procedures.

Reference: 1910.269(m); NESC Section 444

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.19) Supervisors and crew foremen are clear and consistent in their explanation of line clearance procedures required at their system.

Criteria:

- Personnel can clearly explain expectations and procedures needed to obtain a visual open and proper tagging procedures.

Reference: 1910.269(m); NESC Section 444C De-Energizing equipment or lines to protect employees

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.20) If work is in progress local safety rules and utility safe work practices are followed.

Reference: Safety Rules

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.21) Line personnel are knowledgeable when questioned about inspection and proper adjustment of climbing tool and 100% fall protection.

Reference: ANSI Z359.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.22) The person-in-charge is clear and consistent when questioned about inspection and proper adjustment of climbing tools and 100% fall protection.

Reference: ASTM F887.12; ANSI Z359.1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.23) When questioned, personnel are knowledgeable about when non-reclosing operations are required.

Criteria:

- OCRs on system are capable of non-reclosing operations, OR a process is currently being used to systematically eliminate all reclosing devices on the system which lack non-reclosing capability.

Reference: 1910.269(q)(2)(iii); 1910.269 App B IV: NESC Section 442 Switching Control Procedures

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

15.24) Line personnel have consistent understanding of the hazards and proper procedures for handling and restoring downed primary neutrals on systems where primary phase conductors are energized.

Criteria:

- Personnel understand neutral is treated as current carrying conductor.
- Interviewed employees know their Co-ops procedures.
- If neutral must be reconnected when primary is energized the conductor will be mac'd out before reconnection.

Reference: Cooperative Safety Procedures

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 15: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 16: Substations

16.1) Substations are adequately secured with walls or fences, doors or gates, and suitable locking mechanisms.

Criteria:

- Nothing on these sites would facilitate breaching these barriers.
- Fences and barbed wire strands are in very good condition.
- Fence gaps and/or washouts are four inches or less.
- Gate fastening mechanisms and hardware provide substantial barrier to unauthorized entry.
- Nearby facilities, structures, and stored materials are clear of substation.

Reference: NESC Rule Section 110A

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.2) Substation fences, structures, and equipment are interconnected to a grounding grid for safe access and operation.

Criteria:

- Fence fabric and barbed wires are connected to the grid as required.
- All gates are connected in an effective manner to the grounding grid.
- All equipment cases are connected to the grid as recommended by the manufacturers.
- All structure components are grounded to the grid.
- All switching devices are grounded as recommended and required.

Reference: NESC Rule Section 110A

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.3) Substation hazard identification signs meet the following specifications and industry standards.

Criteria:

- "Warning" signs of the proper design, wording, and color are conspicuously displayed on all sides and entrances of the substations.
- "Danger" signs of the proper design, wording, and color are displayed on the inside of substations (RUS and OSHA Standards).
- Visibility and condition of the signs are good.

Reference: NESC Rule 110A1/Section 411 D/ANSI Z535

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.4) Clearances exceed the minimum requirements of the National Electrical Safety Code in all areas for the voltages involved.

Reference: NESC Rule 124A1 Table 124-1

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.5) Substation areas and equipment show signs of regular maintenance and inspections.

Criteria:

- Structures and devices are in very good condition (no evidence of oil leaks) and properly grounded.
- Switching devices are properly secured.
- Gravel areas are level and free of weeds, debris, and stored materials.
- If storage of equipment and materials in a substation is required, it does not create an unsafe condition.

Reference: RUS Bulletin 1724E-300 Design Guide for Rural Substations

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.6) Circuits and equipment are properly identified.

Criteria:

- Individual feeders are clearly identified and marked on device.
- Switches are clearly identified and marked.
- Phasing is clearly identified and marked.
- The destination (i.e. pole number) of underground feeders, if applicable, are clearly identified at point of exit; Underground feeder riser poles, if applicable, are clearly marked with proper circuit and phasing.

Reference: NESC Section 128 Identification

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.7) Substation batteries are maintained in a safe manner and hazard precautions are evident in the following areas.

Criteria:

- Battery banks include proper ventilation systems.
- Battery banks have pertinent hazard identification signs (including "No Smoking" and "Eye and Face Protection Required").
- Banks have the appropriate electrical and light wiring WITH receptacles and lighting switches located outside of battery areas.
- Proper PPE shall be provided during battery maintenance and installation as follows: Goggles and face shield appropriate for the electrical hazard and the chemical hazard; gloves and aprons appropriate for the

chemical hazards; and, portable or stationary eye wash facilities and equipment within the work area capable of drenching or flushing of the eyes and body.

- Adequate fire protection is available in banked battery locations, and area is relatively free of combustible materials.
- Racks shall be firmly anchored, preferably to the floor; anchoring to both walls and floors is not recommended; racks made of metal shall be grounded.

Reference: IEEE-450. "Recommended Practice for Maintenance, Testing and Replacement of Large Lead Storage Batteries for Generating Stations and Substations"; NESC Section 14 - Storage Batteries; OSHA 1925.403 / OSHA 1910.178 subparagraph (g); NFPA 70e Article 320 - Safety Requirements Related to Batteries and Battery Rooms; OSHA 29 CFR 1910.151(c); NFPA 70E, Section 320.3; OSHA 29 CFR 1910.137

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.8) Interviewed employees can explain the substation switching protocols that are used for accomplishing routine procedures.

Reference: 1910.269(a)(2)(viii)(3)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.9) If a mobile substation is on location for connection to power lines, procedures are available for setup, energizing, de-energizing and travel.

Criteria:

- A Mobile Substation Setup Checklist is available and understood.
- Applicable employees can explain procedures (e.g., setup, energizing and de-energizing) for placing a mobile substation(s) in service.
- Containment plans are in place for when the mobile substation is to be utilized (may be addressed in the SPCC plan).

Reference: 1910.269(a)(2); 40 CFR 112; IEEE Std 1268

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.10) Operation of Supervisory Control and Data Acquisition (SCADA) controlled equipment is performed by a designated qualified operator.

Criteria:

- SCADA operating procedures should be clearly defined and responsibility for operation delegated to qualified operators.
- Interviewed employees can explain SCADA switching control procedures.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.11) Appropriate SCADA switching control procedures are in place for de-energizing lines and equipment.

Criteria:

- A designated employee on the line crew is in charge of the clearance.
- All switches, disconnects, jumpers, taps, and other known sources of electric energy to be de-energized are open.
- Automatic and/or remote-control switches are tagged at the points of control.
- The automatic or remote-control features are rendered inoperable (unless their design does not permit).
- Automatic and remotely controlled switches are tagged at the points of control (i.e., an electronic tag and a field tag).

Reference: NESC 442E; Section 2, 29 CFR 1910.269 (m)(2); 29 CFR 1910.269 (m)(3)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.12) Appropriate SCADA switching control procedures are in place for disabling automatic reclosing features of reclosing devices.

Criteria:

- At the SCADA operating point:
  - (1) A signal is received by the SCADA operator confirming that the disabling operation has occurred at the reclosing device location;
  - (2) A readily visible tag or electronic display is used to inform any potential SCADA operator that a disabling operation has been initiated;
  - (3) The tag or electronic display is removed before action is taken to re-enable the automatic reclosing feature.
- At the reclosing device location:
  - (1) The reclosing feature is disabled in such a manner as to prevent manual override of the normal control by any potential on-site operator, or;
  - (2) A signal, flag, or other display is used in such a manner as to alert any potential on-site operator that the reclosing feature has been disabled.

Reference: NESC 442E; Section 2, 29 CFR 1910.269 (m)(2); 29 CFR 1910.269 (m)(3)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.13) When questioned, personnel are knowledgeable about when non-reclosing operations are required.

Criteria:

- Work procedures for one-shot and hotline tagging methods are in place and they are clearly understood by employees.

Reference: 1910.269(q)(2)(iii); 1910.269 App B IV: NESC Section 442 Switching Control Procedures

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

16.14) Communication buildings placed in substations provide a safe egress and ingress from other buildings and/or equipment.

Criteria:

- Proper security measures are in place.
- Adequate lighting is present.
- Building has proper ventilation.
- Fire protection equipment is available.
- Walkaways are clear.
- Proper signage and building identification in place.
- Substation access training is in place and provided for personnel who must work in the communication building.

Reference: NESC / ANCI C2

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 16: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 17: Overhead & Underground Lines, Equipment, etc.

17.1) Overhead and underground system circuit maps or files are available, and the master is updated every 3 months at a minimum.

Criteria:

- Procedures are in place for conveying system circuit changes to crews.
- System circuit maps or files are available in the maintenance and construction vehicles.
- Sufficient supplies of system circuit maps or pertinent sections are readily available for crews in case of emergency.
- Weekly updating of all electronic mapping information “evaluate as exceeds".

Reference: NESC Section 442 Switching Control Procedures

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.2) Guy wires observed are in tension and guys are marked for visibility.

Reference: RUS BULLETIN 1724E-153 / NESC 217C

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.3) Observed construction and maintenance of lines and structures meet the applicable NESC standards and RUS specifications.

Reference: NESC Section 214(A)(2); NESC Section 22 (Relations between various classes of line and equipment); NESC Section 23 (Clearances); RUS BULLETIN 1728F-804

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.4) Right-of-ways observed are maintained and in good condition.

Reference: NESC Section 218-A-1 (Vegetation Management)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.5) UG riser installations observed meet applicable NESC, RUS specifications, and the following industry criteria.

Criteria:

- Cables are identified and tagged to correspond with the system's underground tagging and cable identification system.

- Riser installations are numbered or identified and consistent with the overall underground system.
- Riser installations have proper clearances and proper climbing space.

Reference: NESC Section 36 (Risers); NESC 217 (A)(2)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.6) UG transformers and enclosures are properly bolted and locked.

Reference: NESC Section 381(G)(1)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.7) Appropriate hazard identification signs are in place for underground transformers, cabinets, and enclosures.

Criteria:

- Permanent WARNING signs are displayed on outside of underground transformers and enclosures.
- Permanent DANGER signs are on the inside of underground transformers and enclosures.

Reference: ANSI Z535 NESC 381(G)(2)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.8) UG enclosures are marked with labels and cables are labeled with suitable identification methods and/or durable tags to confirm the correct enclosure, to identify cables, to distinguish phases, etc. for utility worker safety during normal operation and troubleshooting activities.

Criteria:

- The identification information should match the same information shown on system maps.
- The identification method used should be durable and suitable for outside weather conditions.

Reference: NESC Section 372 (Identification)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

17.9) Underground facilities construction, maintenance, and clearances meet applicable NESC and RUS specifications.

Criteria:

- Enclosures are level and free of washouts, weeds, debris, and wildlife.
- Entrances to enclosures are unobstructed.

Reference: NESC Section 311 (Installation and Maintenance); NESC Section 313(A)(2)

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 17: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement** - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 18: Solar Generation

18.1) Solar (PV) installations are in good working condition.

Criteria:

- DC disconnect switch is installed between solar arrays before the inverter for energy isolation.
- AC disconnect switch is installed after the inverter before the electrical meter for energy isolation.
- Individual solar panels and arrays are securely mounted to the mounting structure and in good condition.
- All exposed metal parts of electrical equipment are electrically grounded and labeled, including:
  - Junction boxes
  - Combiner boxes
  - Inverter enclosures
  - Meter sockets, etc.
- All metal frames, rails and frames on panels are electrically grounded.
- Wiring is organized and managed appropriately, no wires touching the ground.
- All electrical connections are in good condition, no signs of overheating or loose and damaged connections.
- No copper wiring touching aluminum structures (causes galvanic corrosion).
- No signs of visible moisture intrusion within installed cabinets or boxes. Cabinets and electrical boxes are properly latched with gasket intact and in place.

Reference: NEC Article 250 – Grounding, NEC sections 690.41 – 690.50

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

18.2) Safety signage in place which warns against disconnection under load on specialized plug and socket connections on module (panel).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

18.3) The solar photovoltaic (PV) site has proper vegetation management and pest control practices in place.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

18.4) The solar photovoltaic (PV) site is secure. Security perimeter fencing is maintained in good condition.

Criteria:

- Entrance to the site and buildings are locked.
- Fencing should be a minimum of 7’ in height or a combination of 6’ of fence and a 1’ extension or more of

stranded barbed wire or equivalent, if fencing is installed at a height of 8’ or more, mark as “exceeds”.

- Perimeter fencing should be grounded including:
  - Driven ground rod inside the fence line, using copper-clad, stainless steel or stainless clad rods at least ½” in diameter
  - Gates should be bonded to fence posts using no smaller than #8 AWG cooper conductor
  - Fence posts should be bonded at least every 50’ in the same manner
  - Barbed wire if present, should also be bonded to the applicable fence posts.

Reference: NESC Section 11, Rule 110(A), Section 9, 092(E), Section 19; RUS Bulletin 1724E-300 (Final Draft – August 2019) – pages 472-475 on Substation Fence Grounding

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

18.5) Proper hazard warning signage is displayed on roof top installations or solar farm site security perimeter fence.

Criteria:

- For roof mounted solar panels installed on residential and commercial buildings, signage is posted to notify firefighters of hazard.
- Solar farms should have appropriate warning signage posted at the entrance and along the facility fencing at regular intervals, which is clearly visible.
- A sign at the entrance should be posted identifying the owner, address of the facility and providing emergency contact information.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 18: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance -** Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance -** Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement -** Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement -** Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 19: Wind Generation Sites

19.1) Employees are well versed with the principles of proper fall protection.

Criteria:

- Working at heights outside the nacelle, hub, or tower have secure and certified anchor points for employees to tie off for fall protection. Employees are always tied off when climbing (moving) from one location to another.
- When employees are working in the nacelle with the cover opened, they are secured with at least one safety lifeline.
- Employees have the necessary specialized fall protection equipment when working at heights including suspension trauma straps - if suspension trauma straps are utilized mark as “exceeds”.
- A fall protection rescue safety plan has been developed for the site.
- Employees are aware of the maximum wind speed that is allowed for safe climbing of wind turbine generators.
- Employees complete aerial rescue training at least semi-annually.

Reference: ANSI 359

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.2) The wind turbine generator equipment is properly labeled to be clearly identified when following procedures to safely perform maintenance.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.3) All electrical equipment within the wind turbine generator is grounded. Ground fault circuit interrupters (GFCIs) are present throughout the wind turbine generator.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.4) The Cooperative has a policy that prohibits employees climbing the wind turbine generator during severe weather conditions (high wind or lightning).

Criteria:

- Employees are aware of the maximum wind speed that is allowed for safe climbing of the wind turbine generator to perform maintenance.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.5) Approved procedures are established for the "transfer of control" between the Operational Controller and Authorized Technician to safely perform maintenance activities on the wind turbine generator.

Criteria:

- The process involves releasing the remotely operated wind turbine generator to the site for local control and vice versa.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.6) The ladder inside the conical (cone like) structural tower has a functioning ladder safety system for employees to use.

Criteria:

- **Note:** A ladder safety system means a system designed to eliminate or reduce the possibility of falling from a ladder. A ladder safety system usually consists of a carrier, safety sleeve, lanyard, connectors, and body harness. Cages and wells are not ladder safety systems.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.7) The Cooperative has safe work practices in place when icing conditions are suspected on the wind turbine generator.

Criteria:

- Danger warning signs (Ice Shedding Hazard) are place strategically to warn the public to stay away.
- Employees perform a risk assessment and use binoculars to determine if ice is present.
- Employees remotely stop the wind turbine generator from a safe distance.
- The ground area surrounding the wind turbine generator is barricaded in case of falling ice.
- Assess the wind direction and "remotely yaw" the nacelle so the turbine rotor blades are not above the entrance door into the tower. **Note:** "Remotely yaw" means to complete the task of rotating the nacelle using the technician's cell phone or laptop from a safe distance away from the wind tower generator.
- Assign a spotter to continuously observe for ice shedding before entering the tower.
- When maintenance is done, remotely start the wind turbine generator from a safe distance. Employees do not restart the wind turbine generator from the "local" bottom controller.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.8) Wind turbine generator technicians clearly understand the boundary between the high voltage system (distribution) and low voltage system (plant) of the wind turbine generator.

Criteria:

- The technician can identify the boundary located internal or external of the wind turbine generator.
- High voltage safety rules and low voltage safety rules are clearly defined.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.9) When employees are working at heights, barricades are set up at ground level preventing access to dropped/falling object hazards such as tools or parts.

Criteria:

- Tools should be tethered.
- Employees use specialized “tool bags” that can be closed and tethered while raising or lowering tools or parts within the tower, nacelle, and hub to prevent dropped or falling objects.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.10) Employee communication methods are in place at all levels of the wind turbine generator.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

19.11) Rotating shafts are guarded to reduce exposure during maintenance activities.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 19: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance -** Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance -** Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement -** Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement -** Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 20: Battery Energy Storage Systems (BESS)

20.1) Required signage posted in proper locations onsite.

Criteria:

- Proper signage is on the front of doors or in approved locations near the entrance of rooms containing BESS equipment.
- Proper signage is on approved locations of outdoor BESS that are not enclosed.
- Type of signage should include:
  - “Energy Storage Systems” with symbol of lightning bolt in triangle.
  - Type of technology identified associated with the BESS.
  - Special hazards associated.
  - Type of suppression system installed.
  - Emergency contact information.
  - A permanent sign signifying the location of all electric power source disconnecting means on or in premises is installed at each service equipment location and at the location of the disconnect for all energy sources capable of being interconnected.
  - Signage surrounding the BESS storage area should include “No Trespassing” or “Authorized Personnel Only” placards to ensure unauthorized persons stay out of the area.
  - A sign identifying ownership, address, contact information, and “If an emergency occurs” information should be installed on the front of the property.

Reference: OSHA 1910.145 Specifications for Accident Prevention Signs and Tags, ANSI Z535 Standard for Safety Signs and Labels which OSHA incorporated by reference, Energy Storage System Safety - Plan Review and Inspection Checklist from U.S. Department of Energy.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.2) BESS enclosures or rooms have fire suppression systems in place that are interconnected with smoke and fire detection systems.

Criteria:

- Fire detection alarms have audibled and visual indicators.
- Employees receive fire alarm notifications in the event of a fire.
- Inspection and maintenance of fire detection and fire suppression systems follows manufacturer guidelines and regulations.

Reference: Water Based Suppression Systems: NFPA 13 - Standard for the Installation of Sprinkler Systems, NFPA 15 – Standard for Water Spray Fixed Systems for Fire Protection, NFPA 750 – Standard on Water Mist Fire Protection Systems, OSHA 1910.159 Automatic Sprinkler Systems, OSHA 1910.160 Fixed Extinguishing Systems – General; Clean Agent Based Suppression Systems: NFPA 2001 – Standard on Clean Agent Fire Extinguishing Systems, OSHA 1910.162 Fixed Extinguishing Systems – Gaseous Agent.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.3) BESS enclosures or rooms have gas detection, thermal management, ventilation, exhaust, and deflagration (explosion pressure release) venting systems installed and operating.

Criteria:

- A maintenance schedule is in place and regularly performed that meets or exceeds manufacturer guidelines and regulations.

Reference: NFPA 68 - Standard on Explosion Protection by Deflagration Venting, NFPA 69 - Standard on Explosion Prevention Systems, EPRI – Battery Storage Fire Safety Roadmap, EPRI - Energy Storage Integration Council (ESIC) Energy Storage Reference Fire Hazard Mitigation Analysis, EPRI - Lessons Learned: Lithium-Ion Battery Storage Fire Prevention and Mitigation – 2021.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.4) BESS enclosures are in good condition, located appropriately and well protected.

Criteria:

- Spacing from fences should be greater than 10’.
- Spacing between each unlinked enclosure should be no less than 3’.
- Enclosures are installed away from oil filled equipment (transformers & main switchgear) to prevent a spill in a catastrophic event.
- Enclosures are made of noncombustible construction and free of combustible equipment inside.
- Fire Detection alarm in place with audible and visual indicators.
- Remote Emergency Monitoring in place to alert personnel of a problem.
- Emergency purge system is in place.
- There is adequate access for emergency personnel.
- Enclosures are installed away from trees and grassy areas, preferably with gravel partitions inside and outside the fence.
- Fences, Enclosures, Transformers, and Inverters are effectively grounded.

Reference: NFPA 855, Standard for the Installation of Energy Storage Systems, NEC Article 706 – Energy Storage Systems, NFPA Energy Storage Systems Safety Fact Sheet.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.5) Batteries are well maintained and protected.

Criteria:

- A Battery Management System (BMS) is in place that: Monitors battery status and operational state:
  - Provides battery protection.
  - Reports operational status to an external device.
- In the event of fire an alarm detection for automatic shutdown is in place.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.6) Procedures for inspection and testing of associated alarms, interlocks, and controls have been established to ensure safe operation or shutdown of the BESS.

Criteria:

- Proper preventative maintenance (PM's) is in place for employees to follow at set intervals.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.7) Emergency Response Plan & Procedures are in place.

Criteria:

- Emergency Response Plan includes:
  - Procedures for safe shutdown, deenergizing, or isolation of equipment and systems under emergency conditions.
  - Procedures for inspection and testing of associated alarms, interlocks, and controls.
  - Procedures to be followed in response to notifications of potentially dangerous conditions, including, summoning service and repair personnel, and providing agreed upon notification to fire department personnel.
  - Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions.
  - A clear understanding of employee roles and responsibilities.

Reference: Energy Storage Association (ESA) – Energy Storage Corporate Responsibility Initiative Emergency Response Plan 2019.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.8) Proper training has been provided for affected employees.

Criteria:

- Employees are trained and qualified to perform the procedures within the Emergency Response Plan.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.9) Annual training is completed for the fire department emergency responders. Training includes the site Emergency Response Plan and hazards of the BESS.

Criteria:

- Training should cover these hazards:
  - Thermal Runaway – Rapid uncontrolled release of heat energy from a battery cell. This can create a chain reaction that heats up neighboring cells which result in a battery fire or explosion.
  - Toxic and flammable gases present from thermal runaway – explosion hazards.
  - Stranded Energy - Stranded energy can be difficult to discharge with terminals being damaged and can cause reignition of the fire hours or even days later.
  - Electrical shock – no means of complete electrical disconnect, batteries will remain energized.
  - Battery chemistry – Review Safety Data Sheets (SDS).
  - Additional water usage for extinguishing deep seated fires when batteries are housed in protective metal or plastic casing within larger cabinets.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.10) Safe Start-Up Procedures for System & Associated Equipment are in place.

Criteria:

- Written procedures have been established. The procedures follow the manufacturer's safe practices for start-up of the BESS.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

20.11) Proper maintenance and inspection processes are in place and performed.

Criteria:

- A maintenance schedule is in place and regularly performed that meets or exceeds manufacturer guidelines.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 20: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance** - Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance** - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement** - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement -** Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments:

Section 21: Broadband Operations

21.1) Communication facilities are installed and maintained using all NESC-required clearances.

Criteria:

- Communications facilities are installed and maintained at least 40” below the lowest energized conductor, which includes the neutral, electrical equipment and secondary service drops to provide a safe work zone for qualified fiber optic employees. This communication space may be reduced to 30” for fiber or insulated communication supply cables on an effectively grounded messenger wire. Effectively grounded means grounded at intervals of 4 times per mile.
- Communications facilities are installed and maintained at a distance of least 30” from effectively grounded apparatus (e.g., transformers, regulators, etc.) while maintaining a clearance of at least 40” from all energized conductors.
- Communications facilities are installed and maintained at least 12” from the drip loop, bracket, or through bolt of luminaires.
- Communication facilities that move in and out of the power supply space and communication space adheres to the requirements of NESC 224A4, including no mid-span transitions. These requirements apply to all communication cable installations including ADSS cable.

References: NESC Table 235-5; NESC Section 235, 238, and 239; NESC 224A4

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.2) Interviewed employees demonstrate knowledge of proper clearances and the required qualifications for workers when working on communications facilities in various situations.

Criteria:

- Proper spacing requirements for fiber installation (communication space) from the power supply space.
- Fiber located within the power supply space installed and maintained only by an electrically qualified employee.
- Fiber located within the communication space installed and maintained by a qualified fiber optic employee or electrically qualified employee.

References: 29 CFR 1910.269(a); 29 CFR 1910.268; NESC Sections 238 and 239

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.3) Training is in place for qualified fiber optic employees and fiber optic employees in training* and interviewed employees verify training is effective.

Criteria:

- Applicable training records should be kept on file for each fiber optic employee and regularly updated.
- Fiber optic qualified employees should be knowledgeable in the following areas:

- Recognition of electrical hazards, including, but not limited to.
    1. Hazards of messenger strand running parallel with primary and secondary neutrals in a bonded system.
    2. The possibility and hazards of current diversion from a primary or secondary neutral to any communications conductor which has been bonded to the electrical system.
- Safety-related work practices necessary for performing their specific work assignments.
- Safe work zones set up.
- Recognition of the hazards related to working with and around laser light.

- A qualified fiber optic employee in training works under direct supervision of a qualified fiber optic employee and works to the level of training they have demonstrated an ability to perform safely.

References: 29 CFR 1910.268 Telecommunications, NESC Part 4, Sections 41-43, applicable 1910 and 1926 standards

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.4) When questioned individually, interviewed qualified fiber optic employees verify that they have the skills and techniques necessary to distinguish exposed live parts, determine nominal voltages, identify, and maintain minimum approach distances, and safe work practices as it pertains to electrical equipment.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.5) When questioned individually, interviewed qualified fiber optic employees demonstrate knowledge of Minimum Approach Distances (MAD).

Criteria:

- Qualified fiber optic employees and qualified fiber optic employees in training have consistent understanding of the minimum approach distance (MAD) requirements from energized distribution lines at their cooperative.
- Qualified fiber optic employees do not approach energized lines or take any conductive objects within the MAD to any current carrying conductors &/or line equipment unless the line has been deenergized and grounded.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.6) Lashing tool is stored properly and in good working condition.

Criteria:

- Stored in a secured bin or designated area.
- Lashing mechanisms appear to be working properly, moving parts are free from jams.

- Clean, neat and appears to be well maintained.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.7) Fusion splicer tool is stored properly and in good working condition.

Criteria:

- Stored in a protective box.
- Stored in secured bin or area to protect against theft or abuse.
- In clean condition, free from fiber scraps and glass shards.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.8) Cleaver tool is stored properly and in good working condition.

Criteria:

- Stored in a protective self-contained box (typically within the Fusion Splicer box).
- Clean and free of glass shards.
- All glass shards disposed of properly (typically in a fiber scrap disposal container).

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.9) Insulating rubber gloves and protectors are issued if required and meet/exceed applicable OSHA/ASTM standards.

Criteria:

- Insulating rubber gloves are issued to qualified fiber optic employees if they are expected to perform any of the following tasks:
  - Attach or remove temporary grounds or bonds – 1910.268(m)(5).
  - Handle suspension strand on a pole carrying energized conductors – 1910.268(n)(1)(i) .
  - Installing or removing poles near energized conductors – 1910.268(n)(11)(iv).
- Rubber gloves issued for qualified fiber optic employees are rotated out of service at a minimum of 6-month intervals.
- Rubber gloves are stored properly in bags or containers and maintained in an environment protecting them from excessive light, heat, dirt, and mechanical damage.
- Rubber glove protectors are in good condition and have passed visual inspection with no signs of use as work gloves.
- A rotation program is followed to minimize shelf time to 12-month intervals.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.10) When questioned individually, qualified fiber optic employees understand proper application and use of rubber gloves and cover-up equipment.

Criteria:

- These employees understand they are required to wear rubber gloves if ever they perform the following tasks:
  - Attach or remove temporary grounds or bonds – 1910.268(m)(5)
  - Handle suspension strand on a pole carrying energized conductors – 1910.268(n)(1)(i)
  - Installing or removing poles near energized conductors – 1910.268(n)(11)(iv)
- These employees understand that, while using rubber gloves, they are to avoid bodily contact with messenger cable until it has been tensioned, dead-ended, and permanently grounded.
- Employees who have been issued rubber gloves understand they are never used to perform “hands on” operations with energized conductors but only used as secondary protection.
- Examples of proper use would include the three items listed above as well as using them as supplemental protection when working near energized conductors or treating the fiber as energized during storm repair. Examples of improper use would include encroaching minimum approach distances or touching energized conductors.
- If it has been determined that cover-up material is needed on energized conductors or equipment to perform a task safely, these employees understand only an electrically qualified employee may perform such operations, and the qualified fiber optic employee will seek assistance before proceeding.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.11) PPE required to handle and work with optical fiber cable is available.

Criteria:

- PPE is in good condition with no signs of defects or damage.
- PPE used to safely handle optical fiber cable should consist of the following as a minimum:
  - Safety goggles or glasses with side shield.
  - Disposable aprons.
  - Safety belts.
  - Protective hard hats.
  - Protective cut-resistant work gloves.
  - High vise traffic vests.
- Hearing protection is available when sound levels exceed acceptable limits.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.12) Interviewed employees can discuss details of a job briefing that identifies work hazards and

procedures before work begins.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.13) Good housekeeping and special work practices are in place when handling and/or splicing optical fiber cable.

Criteria:

- Special work practices are in place for handling optical fibers:
  - Avoid sticking broken ends of fiber into fingers.
  - Avoid dropping fiber pieces onto the floor where they can be carried elsewhere.
  - Scraps are properly disposed of.
  - Eating and drinking near the installation area is prohibited.
  - Do not touch your eyes while working with fiber optic systems prior to washing.
  - Employees who wear contact lenses thoroughly wash their hands before handling their lenses after handling optical fibers.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.14) Safety precautions are in place for working on and around laser light.

Criteria:

- Employees know:
  - To avoid looking directly into fiber that may have laser light coupled to it.
  - That In the event of eye exposure to a laser in a fiber optic cable, they should seek immediate medical attention even if no pain or obvious symptoms are experienced. **Note:** to determine if the visible light is present, the worker may view it from an angle of 6 inches minimum away from the eye.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.15) Safe work practices are in place for working in crawl spaces and attics.

Criteria:

- Appropriate PPE is available:
  - Eye protection.
  - Work gloves.
  - Respirators / Face Masks – N95 suffice for most airborne fibers.
  - Long sleeve shirts & long pants (protection from insulation and other skin irritants).
  - Appropriate head protection.
- Head lamps or portable lamps are available to provide adequate lighting.

- Appropriate fall protection procedures and/or systems are in place.
- Risk of heat exposure is addressed – ventilation methods, procedures to prevent dehydration, or heat stroke. **Note:** Some states are moving toward attics being defined as permit defined confined spaces.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.16) Safety Data Sheets (SDS) sheets are maintained and available for applicable cleaners and adhesives used for splicing, terminating, and cleaning fiber optic; required PPE is available.

Criteria:

- Chemical protective equipment is provided:
  - Protective gloves.
  - Aprons.
  - Face protection.
  - Other protective clothing.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.17) Fiber optic splicing trailer meets all requirements, is in good condition, and is properly maintained.

Criteria:

- Clean and well kept – no fiber scraps or particles present.
- Proper container with contents marked is available to disposal of fiber scraps.
- Temperature-controlled environment.
- Adequate lighting is available.
- Ventilation is available to prevent accumulation of flammable gases.
- Proper signage in place: “No Smoking”, “No Flammables”, “Eye Protection Required”.
- First aid kit and fire extinguisher available with proper inspection documentation.
- No food or beverages kept in work area.
- Generator frame is grounded to the vehicle frame.
- Fuel for generator not stored in trailer – stored and transported in accordance with OSHA and DOT requirements.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.18) A Confined Space Program meeting all requirements has been established, if required.

Criteria:

- All permit required confined spaces have been identified and labeled appropriately.

- Confined space hazard assessments have been completed for each permit required confined space.

"Confined space" means a space that:
(1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
(2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
(3) Is not designed for continuous employee occupancy.

Note: All three items above need to be present to be called a confined space.

"Permit-required confined space (permit space)" means a confined space that has one or more of the following characteristics:
(1) Contains or has a potential to contain a hazardous atmosphere;
(2) Contains a material that has the potential for engulfing an entrant;
(3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
(4) Contains any other recognized serious safety or health hazard.

OSHA refers to the wording in #4 above, that a serious safety or health hazard exposure within a confined space refers to the employee acquiring an acute illness or immediately disabling injury that could impair his or her ability to escape unaided (self-rescue).

- Air monitoring equipment is available, properly maintained and calibrated before use. Air monitoring of the confined space occurs prior to employees entering.
- A confined space entry permit form has been established.
- Rescue equipment is available and set up before entering. E.g., rescue tripod, davit arm, full body harness, sked stretcher, etc.
- All affected employees have been trained and receive annual refresher training. Annual refresher training must also include employees practicing confined space rescue.
- When questioned, employees can demonstrate and communicate at least a basic understanding of confined space requirements. Employees understand their roles and responsibilities as an entrant, attendant, or entry supervisor.

Reference: 29 CFR 1910.146

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

21.19) The directional boring machine meets all requirements, is in good condition, and is properly maintained.

Criteria:

- Operating manual available.
- Ability for two-way communication available to continually track bore head.
- Handheld UG utility locator available to identify existing UG facilities.
- Machine appears in good condition and to receive regular maintenance.
- No hydraulics leaks – pumps, motors, valves, hoses.
- Drill frame – is straight and aligned properly, no undue wear or visible cracks.
- Track condition – no excessive wear, check for proper tension.
- Operator station - seat acceptable condition, instrument panel is protected by a cover to protect from the elements.

( ) Exceeds Requirements	( ) Satisfies All Requirements	( ) Partially Satisfies Requirements	( ) Attention Area	( ) N/A

Comments:

SECTION 21: SUMMARY

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria:

- **Strong performance -** Questions evaluated as exceeds or satisfies all requirements.
- **Satisfactory performance -** Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- **Generally satisfactory with minor areas for improvement -** Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- **Key attention areas for improvement -** Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance	( ) Satisfactory Performance	( ) Generally Satisfactory	( ) Key Attention Areas for Improvement	( ) N/A

Comments: