



Table Of Contents

Cover Sheet	1
Table Of Contents	2
1. System and Team Leader Identification	3
2. Common Facility Safety Equipment and Issues	5
3. Warehouse, Maintenance, & Covered Storage	11
4. Pole Yard and Outside Storage	14
5. Administration and Other Office Areas	16
6. General Vehicles (Under 10,000 lbs. GVWR)	17
7. Diggers, Buckets, etc. (over 10,000 lbs. GVWR)	18
8. Misc Vehicle (Trailers, Backhoes, etc.)	21
9. Truck and Personal Tools	23
10. Head, Eye, Face, Hearing, Foot, Hand, etc. PPE	25
11. Insulating Gloves, Sleeves, and Cover-up	27
12. Arc Rated Clothing / Systems + Fall Protection	29
13. Crew Visits	31
14. Substations	34
15. Overhead & Underground Lines, Equipment, etc.	36
16. Observation Guidelines	38
17. Acknowledgements	41

1. System and Team Leader Identification

D.1 Name of person making these on-line entries.

D.2 Email address of person making these entries.

D.3 Phone number for person doing on-line entries.

D.4 Name of the system that is being inspected:

D.5 Date or scheduled date (mm/dd/yyyy) of this inspection.

D.6 Name of the system General Manager/CEO:

D.7 Team Leader's name:

D.8 Team Leader's organization:

D.9 Name of Observer # 2:

D.10 # 2 Observer's organization:

D.11 Name of Observer # 3:

D.12 # 3 Observer's organization:

D.13 Name of Observer # 4:

N/A

1. System and Team Leader Identification

D.14 # 4 Observer's organization:

N/A

D.15 Name of Observer # 5:

N/A

D.16 # 5 Observer's organization:

N/A

D.17 Select the type of audit being performed at this system.

- RESAP observation was announced to many.
- RESAP observation was announced to a select few.
- RESAP Observation is unannounced.

D.18 Check the option that describes the results of the document verification process.

- All documents verified
- One document missing/incorrect
- Two documents missing/incorrect
- Cannot answer

2. Common Facility Safety Equipment and Issues

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.

Steps and risers are uniform.

Steps are well lit and marked as needed for visibility.

- Yes
- No
- N/A

2.2 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.

- Yes
- No
- N/A

2.3 Proper trash containers are readily available, are sufficient size for facility areas, and show evidence of proper use.

Criteria:

Inside trash containers appear to be emptied on a frequent basis.

Outside trash containers are emptied on a scheduled basis.

Used and oily rags are contained in metal self-closing containers that are emptied daily.

Special waste (components with Mercury, PCBs, Lead, etc.) is stored in separate individual containers.

- Yes
- No
- N/A

2.4 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.

Each flammable cabinet has a maximum capacity of 60 gallons for class I or class II liquids and maximum 120 gallons of class III 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.

- Yes
- No
- N/A

2. Common Facility Safety Equipment and Issues

2.5 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.

Spark suppression is designed into these containers.

Containers are marked or colored for the liquid being contained.

Containers are stored where the product will not create additional hazards.

- Yes
- No
- N/A

2.6 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.

- Yes
- No
- N/A

2.7 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.

- Yes
- No
- N/A

2.8 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.

- Yes
- No
- N/A

2.9 Portable step devices are of adequate capacity and designed for the typical use and users in the area.

- Yes
- No
- N/A

2.10 Facility lighting levels and types are ideal for the work area functions and expected activities and 95% of fixtures are operational.

- Yes
- No
- N/A

2. Common Facility Safety Equipment and Issues

2.11 Emergency egress and access lighting is available from backup generation or batteries in facilities that are routinely occupied by employees or the public.

- Yes
- No
- N/A

2.12 Minimum capacity and appropriate category fire extinguishers are available in all facilities, are very easy to access, and are ready for emergency use.

Criteria:

All facilities have minimum 40 B:C fire extinguishers within 75 feet of any location, unless other requirements apply.

Fire extinguishers are located within 50 feet of flammable storage areas.

Fire extinguishers are located within 25 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 a 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.

- Yes
- No
- N/A

2.13 Minimum capacity, type, and numbers 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 under 10,000 lbs GVWR are equipped with minimum 1 each 10 B:C fire extinguisher.

Commerical vehicles 10,000 lbs and more GVWR are equipped with minimum 2 each 60 B:C fire extinguishers in separated locations.

All miscellaneous equipment with 25 or more horsepower engines and fuel are equipped with minimum 1 each 10 B:C 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.

- Yes
- No
- N/A

2.14 Fire sprinkler 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.

- Yes
- No
- N/A

2. Common Facility Safety Equipment and Issues

2.15 All facility doors and intended 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.

- Yes
- No

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

Criteria:

Locations are well identified.

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 also familiar with the use of the equipment and supplies.

First aid kits and stations also contain the recommended materials necessary to handle bloodborne pathogen and cardio pulmonary resuscitation emergencies.

First aid kits and stations are very clean, well organized, and the equipment and supplies are inspected monthly in preparation for emergency use.

- Yes
- No
- N/A

2.17 Automatic External Defibrillators (AEDs) are in place and ready for emergency use in the facility and vehicles.

Criteria:

Interviewed employees are familiar with the location and use of these units.

Unit is included on a monthly inspection of safety items that are checked throughout the facilities.

- Yes
- No
- N/A

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

Criteria:

"Ready for emergency use" includes a weekly operational inspection.

"Readily available" is defined as "within 10 seconds" of the hazard zone or work activity that the a unit is intended to cover.

Water at plumbed equipment is supplied for a minimum of 15 minutes continuous flushing and meet the current required temperature range throughout the flushing/drenching cycle.

- Yes
- No
- N/A

2. Common Facility Safety Equipment and Issues

2.19 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.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

2.21 All facility and vehicle ladders are found in very 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.

Interviewed employees can explain several critical ladder inspection details.

- Yes
- No
- N/A

2.22 Cranes and overhead lifting devices are inspected by the operators before each use and annually 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.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

2. Common Facility Safety Equipment and Issues

2.24 Battery 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.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

3. Warehouse, Maintenance, & 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 to avoid tipping.

- Yes
- No
- N/A

3.2 Materials stored in an 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.

- Yes
- No
- N/A

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.

- Yes
- No
- N/A

3.4 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.

- Yes
- No
- N/A

3.5 Regulated waste storage areas meet current EPA regulations.

- Yes

3. Warehouse, Maintenance, & Covered Storage

- No
- N/A

3.6 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" and "No Smoking" signs posted.

Proper ventilation is available for solvent use and proper solvent disposal practices are in place.

- Yes
- No
- N/A

3.7 Welding areas/rooms 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 ventilation is provided in welding areas/rooms.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

3.9 Welding equipment, cables, connections, clamps and electrode holders are in very good condition.

- Yes
- No
- N/A

3.10 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.

- Yes
- No
- N/A

3. Warehouse, Maintenance, & Covered Storage

3.11 Tire changing tools and safety equipment are in very 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.

- Yes
- No
- N/A

3.12 Electrical power tools and equipment have 3-wire grounding or are double-insulated and maintained in very good condition.

- Yes
- No
- N/A

3.13 All tools and equipment are in very good condition and if not, they are marked "Out of Service" and repaired or replaced in a timely manner.

- Yes
- No
- N/A

3.14 All tools are stored in special containers or designated locations.

- Yes
- No
- N/A

3.15 Shields/guards are in place and well maintained for power tools.

- Yes
- No
- N/A

3.16 At each power tool station, clean goggles and face shields are in place with signs posted requiring use of these items.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

3.18 Interviewed employees are able to explain the safe use of these maintenance area tools and equipment.

- Yes
- No
- N/A

4. Pole Yard and Outside Storage

4.1 Pole yards and outside storage have gates and fences designed and used to secure these 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.

- Yes
- No
- N/A

4.2 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.

- Yes
- No
- N/A

4.3 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 very good condition.
Poles are separated by length/class.
Poles are safely stacked.
Poles are stored off the ground.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

4.5 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.

- Yes
- No
- N/A

4.6 Pole yards and outside storage are equipped with lights that can be used during hours of darkness for worker safety.

- Yes
- No
- N/A

4. Pole Yard and Outside Storage

4.7 Fueling areas are equipped and maintained with the proper safety equipment and meet current requirements for storage and monitoring of these fuels on site.

Criteria:

Each service or fueling area has at least one fire extinguisher with a minimum 120 B:C capacity rating and is located between 25 feet and 75 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 75 feet of the dispensing devices.

Islands and barriers are provided to protect the fuel pumps.

Hoses are stored out of traffic areas.

- Yes
- No
- N/A

4.8 Previously used capacitors are properly shunted.

- Yes
- No
- N/A

5. Administration and Other Office Areas

5.1 Multiple types of public safety education materials for all age groups are conspicuously displayed and stocked in public areas or can readily be generated upon request.

- Yes
- No
- N/A

5.2 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.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

5.4 Employees are familiar with the emergency action plan, nearest exits, the location and use of fire extinguishers, material safety data sheets, first-aid equipment, and security plans.

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.

- Yes
- No
- N/A

5.5 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.

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.

- Yes
- No
- N/A

6. General Vehicles (Under 10,000 lbs. GVWR)

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

- Yes
- No
- N/A

6.2 Cars, pickups, vans and SUVs are well maintained.

Criteria:

Vehicles are washed regularly.

Windows, mirrors, dash and cab are clean and uncluttered.

Vehicle storage areas are clean and free of trash.

Body dents and dings are rare.

- Yes
- No
- N/A

6.3 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 rights of way.

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.

- Yes
- No
- N/A

6.4 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.

- Yes
- No
- N/A

7. Diggers, Buckets, etc. (over 10,000 lbs. GVWR)

7.1 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.

- Yes
- No
- N/A

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

Criteria:

Vehicles are washed regularly.

Windows, mirrors, dash and cab are clean and uncluttered.

The bed and storage areas are clean and free of trash and dirt.

Body dents and dings are rare.

- Yes
- No
- N/A

7.3 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.

Roadside emergency triangular markers are available on all of these vehicles.

Reflectorized traffic control vests are available for employees working on these vehicles.

Road hazard flares or equivalent types of highway hazard warning devices are available.

Vehicle brake, turn, marker, and headlamp lighting are 100% operational.

- Yes
- No
- N/A

7.4 Shovels, pry bars, tamps, ground rod drivers, sledges, chains, other heavy tools and materials are properly stored 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.

- Yes
- No
- N/A

7.5 Body, jib, and boom winch mechanisms, cables, ropes, mounting, and controls are properly matched for the intended use and maintained in very 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.

- Yes
- No
- N/A

7. Diggers, Buckets, etc. (over 10,000 lbs. GVWR)

7.6 Appropriate grounding and/or barricading equipment is available and in very good condition for vehicles utilized in energized work zones.

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 the vehicle.

- Yes
- No
- N/A

7.7 Vehicle ground cables are individually marked with a method of unique identification and date of most recent test.

Criteria:

Vehicle ground clamps and cables are tested for continuity to frame if permanently attached or tested for current capacity if detachable.

- Yes
- No
- N/A

7.8 At least two effective chocks are provided per large truck, properly placed when outriggers are in use, and properly stowed on each truck when not in use.

- Yes
- No
- N/A

7.9 Substantial outrigger pads are provided for all equipment outrigger legs, are properly used, and are properly stored on the vehicle when not in use.

- Yes
- No
- N/A

7.10 Manufacturer's identification, capacity ratings, warning signs, and equipment control placards for digger derrick and aerial basket devices are in place and in very 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.

- Yes
- No
- N/A

7.11 Daily operational inspections are conducted before these units leave the facility according to operator or supervisor interviews.

- Yes
- No
- N/A

7.12 Dielectric tests for these utility vehicles are conducted on insulating and isolating components semi-annually and results are available on or in these vehicles.

- Yes

7. Diggers, Buckets, etc. (over 10,000 lbs. GVWR)

- No
- N/A

8. Misc Vehicle (Trailers, Backhoes, etc.)

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

- Yes
- No
- N/A

8.2 All trenchers, backhoes, forklifts, pullers, and other motorized equipment have an operator safety and instruction manual located on these vehicles or readily available to all equipment users.

- Yes
- No
- N/A

8.3 Visual inspection of all miscellaneous vehicles indicates very good maintenance.

- Yes
- No
- N/A

8.4 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 very 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 used on traveled rights of way and multi-employer construction sites.

Seatbelts are in place and show evidence of regular use.

- Yes
- No
- N/A

8.5 Appropriate grounding/barricading equipment is available and in very good condition for fault locating, wire pulling, wire tensioning, underground boring, wet vacuuming, and other 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.

- Yes
- No
- N/A

8.6 Grounding clamps and cables are tested for miscellaneous equipment that will be used in energized work zones.

Criteria:

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

- Yes
- No
- N/A

8. Misc Vehicle (Trailers, Backhoes, etc.)

8.7 Tools and materials are stored in designated 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.

- Yes
- No
- N/A

8.8 At least two chocks, in very good condition, are available on all trailers and all towed equipment.

Criteria:

Chocks are properly stored when hitched for towing.

When unhitched or when parked, chocks are properly positioned at the tires.

- Yes
- No
- N/A

9. Truck and Personal Tools

9.1 Truck tools and equipment are stored for protection from the elements and for protection from other tools and equipment.

Criteria:

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.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

9.3 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.

- Yes
- No
- N/A

9.4 Are liveline tools tested in accordance with current OSHA/ANSI standards and individually marked with these test dates?

- Yes
- No
- N/A

9.5 Insulated/live line tools are maintained in very good condition.

Criteria:

Insulated/live line tools are clean and waxed.

Defective insulated/live line tools are replaced or repaired immediately.

- Yes
- No
- N/A

9.6 Slings and lifting hardware are in very 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.

- Yes
- No
- N/A

9. Truck and Personal Tools

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

Criteria:

Mechanical hoist hardware and all parts are free of modifications.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

9.9 Personal hand tools are in very good condition and stored properly.

- Yes
- No
- N/A

9.10 Overhead and 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.

Utility has more than adequate supply of grounds for the type of line designs on the system.

Personal protective grounds are in very good condition and properly stored.

Personal protective grounds are individually marked with a unique ID and evidence of an annual test.

- Yes
- No
- N/A

9.11 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.

Adequate numbers of mechanical jumpers are available for the work performed.

- Yes
- No
- N/A

9.12 Interviewed employees can explain the application and testing of grounding equipment.

- Yes
- No
- N/A

10. Head, Eye, Face, Hearing, Foot, Hand, etc. PPE

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

Criteria:

Head protection hazard assessment for system positions are completed.

Hard hat suspension systems are in very good condition.

Electric utility worker head protection is free of decals or decorations which may affect the dielectric protection.

- Yes
- No
- N/A

10.2 Eye and face protection meets applicable OSHA/ANSI standards and hazard assessment specifications for jobs performed.

Criteria:

Eye and face protection in use and is in very good condition.

Eye protection not in use is properly stored.

Clear and tinted safety glasses are available.

- Yes
- No
- N/A

10.3 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.

- Yes
- No
- N/A

10.4 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.

- Yes
- No
- N/A

10.5 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.

- Yes
- No
- N/A

10. Head, Eye, Face, Hearing, Foot, Hand, etc. PPE

10.6 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.

- Yes
- No
- N/A

10.7 Interviewed employees can explain when these personal protective items shall be worn, the criteria for proper use, and care needed to keep these items in good condition.

- Yes
- No
- N/A

11. Insulating Gloves, Sleeves, and Cover-up

11.1 Insulating gloves and protectors meet applicable OSHA/ANTM standards and the following specifications for use, care, and testing.

Criteria:

Insulated protective gloves shall be rated for the system's phase to phase primary and secondary distribution voltage(s). 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.

All insulated protective gloves are tested regularly at 60 days or less of field use, tested in a manner consistent with applicable standards, and marked with these test dates.

All protectors meet proper length requirements and are found in very good condition.

- Yes
- No
- N/A

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

Criteria:

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.

All insulated protective sleeves are tested regularly at 120 days or less of field use, tested in a manner consistent with applicable standards, and marked with these test dates.

- Yes
- No
- N/A

11.3 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.

- Yes
- No
- N/A

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

Criteria:

Blankets, line guards/hoses, hoods, and items used for electrical insulation are rated for the system's phase-to-phase voltage(s).

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.

All blankets, line guards/hoses, hoods, and other items used for insulating cover-up are tested on a 6 months maximum rotation and marked with the test date.

- Yes
- No
- N/A

11.5 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.

- Yes
- No
- N/A

11. Insulating Gloves, Sleeves, and Cover-up

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

- Yes
- No
- N/A

11.7 Interviewed personnel can explain the proper storage, use, and testing of cover-up materials.

- Yes
- No
- N/A

12. Arc Rated Clothing / Systems + Fall Protection

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

- Yes
- No
- N/A

12.2 Arc rated shirts are worn by affected employees.

- Yes
- No
- N/A

12.3 Arc rated pants are worn by affected employees.

- Yes
- No
- N/A

12.4 Affected employees have arc rated rainwear available.

- Yes
- No
- N/A

12.5 Affected employees have arc rated outerwear available.

- Yes
- No
- N/A

12.6 Arc rated winter liners for hard hats are available for affected employees.

- Yes
- No
- N/A

12.7 Arc rated/reflective traffic control vests are available for affected employees.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

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

Criteria:

Equipment is properly sized and fitted to the individual.

Equipment is free of any modifications and found in very good condition.

- Yes
- No
- N/A

12. Arc Rated Clothing / Systems + Fall Protection

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

- Yes
- No
- N/A

12.11 Fall protection equipment is properly stored where its serviceable condition can be best maintained.

Criteria:

Storage area provided on each truck for fall protection equipment or properly stored in equipment bags.

Fall protection equipment is stored clear of any items that can damage these items.

- Yes
- No
- N/A

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

Criteria:

Climbing equipment is assigned and fitted to each climber.

Space is available on utility trucks for stowing climbing tools or these tools are properly stored in protective, individual tool bags.

Stowed climbers have gaff guards in place.

Climbing belts and safety straps, or bags containing these items are stored clear of objects that would damage this equipment.

- Yes
- No
- N/A

13. Crew Visits

13.1 System work crews can be located and are available for interviews (Personnel working overhead, underground, right of way, etc.) or work observation either on the job site or other suitable locations.

- Yes
- No
- N/A

13.2 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.

- Yes
- No
- N/A

13.3 A designated person is in charge at each worksite.

- Yes
- No
- N/A

13.4 A job briefing is conducted before each job assignment.

- Yes
- No
- N/A

13.5 Personal protective equipment (PPE) is available and in use as required when applicable.

- Yes
- No
- N/A

13.6 Appropriate tools and equipment are available, or in use as the job requires.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

13.8 Operational voltage detection devices are available on each job site to determine the presence and level of system voltages.

- Yes
- No
- N/A

13. Crew Visits

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

- Yes
- No
- N/A

13.10 Employees are knowledgeable regarding work site emergency actions.

- Yes
- No
- N/A

13.11 Line personnel are knowledgeable, when questioned individually, about when rubber gloves shall be used.

- Yes
- No
- N/A

13.12 Line personnel are knowledgeable, when questioned individually, about when rubber sleeves shall be used.

- Yes
- No
- N/A

13.13 Supervisors and crew foremen are clear and consistent about when rubber gloves and sleeves shall be used.

- Yes
- No
- N/A

13.14 Line personnel are knowledgeable, when questioned individually, about when personal grounds shall be used.

- Yes
- No
- N/A

13.15 Line personnel are able to explain the proper steps for installing personal grounds.

- Yes
- N/A

13.16 Line personnel are knowledgeable, when questioned individually, about when vehicle/equipment grounds and/or barricading are required to be used.

- Yes
- No
- N/A

13.17 Line personnel are able to explain the preferred methods of vehicle/equipment grounding or methods used for barricading.

- Yes
- No
- N/A

13. Crew Visits

13.18 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.

- Yes
- No
- N/A

13.19 Supervisors and crew foremen are clear and consistent about the procedures for installing personal and vehicle/equipment grounds and/or barricading.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

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

- Yes
- No
- N/A

13.22 If work is observed, work in progress is in compliance with local safety rules and utility safe work practices.

- Yes
- No
- N/A

14. Substations

14.1 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.

- Yes
- No
- N/A

14.2 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.

- Yes
- No
- N/A

14.3 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.

Visibility and condition of the signs are very good.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

14.5 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.

Circuit and equipment identification is very good.

Gravel areas are level and free of weeds, debris, and stored materials.

- Yes
- No
- N/A

14. Substations

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

Criteria:

Battery banks include ventilation systems, pertinent hazard identification signs, appropriate electrical and light wiring.

PPE equipment for battery banks includes: splash goggles, face shield, splash apron and protective barrier gloves.

Adequate fire protection is available in banked battery locations and area is relatively free of combustible materials.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

15. Overhead & Underground Lines, Equipment, etc.

15.1 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.

A sufficient supply of system circuit maps or pertinent sections are readily available for crews in case of emergency.

- Yes
- No
- N/A

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

- Yes
- No
- N/A

15.3 Construction and maintenance of lines and structures meet the applicable NESC standards and RUS specifications.

- Yes
- No
- N/A

15.4 Right-of-ways observed are maintained and in very good condition.

- Yes
- No
- N/A

15.5 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.

- Yes
- No
- N/A

15.6 UG transformers and enclosures are properly bolted and locked.

- Yes
- No
- N/A

15.7 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.

- Yes
- No
- N/A

15. Overhead & Underground Lines, Equipment, etc.

15.8 UG enclosures are marked with labels and cables are marked with durable tags to confirm the correct enclosure, to identify cables, to distinguish phases, etc. for utility worker safety during normal operation and troubleshooting activities.

- Yes
- No
- N/A

15.9 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.

- Yes
- No
- N/A

16. Observation Guidelines

16. Observation Guidelines

16.1 RESAP Process - The system RESAP application should be completed before the on-site observation takes place.

The application shall be completed in any two week window within the first 3 months of the year.

This sequence will allow the verification documents and the calculated incident rates to become valuable parts of the field observation visit.

16.2 On-site RESAP observations may be unannounced events at the agreement of the RESAP Area Administrator and the General Manager of the system.

16.3 Interviews - The team leader should remind system representatives that this observation will focus on employee safe work practices and behaviors. Employee interviews are part of this evaluation.

16.4 On-site Verification - The team leader shall verify the application documents at the time of the on-site observation. A list of random documents generated at the completion of the application will be used.

16.5 Verification Goals - The on-site verification confirms that documents provided by the system are the documents requested, whether the documents match the system's application responses, and whether the documents belong to the applicant system.

16.6 Incident Rates - The team leader shall be prepared to discuss the system's average OSHA incident rates, which are calculated in the application process, and compare these to the national statistics.

16.7 Deadline - RESAP on-site observations should be completed by November 1 each year to allow systems time to finish the RESAP process within the calendar year.

16.8 Substations, etc. - The ownership of substations, lines, and structures determines whether or not these facilities should be included in this on-site inspection.

16.9 Facilities - Building and site ownership, control of property, and employee exposures, are major criteria for determining whether or not these facilities are inspected.

16.10 Team Leader - Accordingly, the team leader determines what is to be inspected and what is not included after conferring with the system.

16.11 Grading - Team grading shall be based solely on the recommended guidelines and the criteria provided. Other regulation details or concerns may be noted and made known to the system at their closing conference.

16.12 Multiple Sites – The on-site inspection is intended to be a global observation, i.e. one deficient site increases a system's liability and negatively affects a system's RESAP score.

16.13 Vehicles - It is intended that all vehicles be inspected during RESAP observation. If not feasible because of the size of a fleet, a minimum 25% of each type of vehicle shall be inspected.

16.14 Multiple Sites - It is recommended that the RESAP inspection cover all district facilities.

16. Observation Guidelines

16.15 Substations - It is recommended that a random selection of substations shall be inspected with a minimum of one per district.

16.16 Underground - The team leader should randomly select U.G. units for inspection with a minimum of two per district. Normally two adjacent U.G. cabinets are checked at each site to determine proper cable labeling requirements.

16.17 Crew Visits - The team leader should randomly select crews for inspection in each district and include varied crew types if available, i.e. ROW, OH, UG, etc.

Employees interviews are intended to be completed either rain or shine.

16.18 Notification - The team leader is responsible for compiling inspection results, completing the on-line process, and briefing system representatives as soon as possible after the event.

16.19 Final Results - Final results will be delivered by NRECA in an email format within 2 weeks of completing the last step. A certificate with the system's Safety Performance level will be delivered to the system's Area Administrator.

17. Acknowledgements

17.1 The Rural Electric Safety Accreditation Program is administered by the National Rural Electric Cooperative Association - Copyrighted 2001

17.2 Rural Electric Safety Accreditation Program Delegates at the time of this revision.

Michael Bird, KS
Robert Richhart, IN, Chair Person
Dennis Hill, ND
Randy Crenshaw, GA
Garry Christopherson, WI
Monica Schmidt, VA
Bob Cooper, NE
Norris Nicholson, VA
Michael Finerfrock, VA Vice Chair/Secretary, IN
Shannon Clark, WI

17.3 Pilot Group and Revision Volunteers:

Kurt Kumlin - MN
Gayvin Strantz - IN
Robert Cooper - NE
Joe Selnekovic - PA
Mike Bergeaux - LA
Mary Jones - AL
Lynn Askins - OH
Tommy Greer - NC
Greg Burrell - SD
Peggy Hieatt - OH
Bobby Love - NC
Talmadge Evers - NC
Lillie Daniels - VA
Ginny Beauchemin - VA
Kenneth Brubaker - VA